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<i>Verwysing:</i> 12/1/1/3/10	<i>Navrae:</i> R Stevens	<i>Datum:</i> 03 June 2020
<i>Reference:</i>	<i>Enquiries:</i>	<i>Date:</i>

OFFICE OF THE MUNICIPAL MANAGER

NATIONAL TREASURY GTAC PUBLIC PRIVATE PARTNERSHIP

ATTENTION: MS D KAYA

Per email: Dorcas.Kayo@treasury.gov.za

INOVASURE ENERGY VAULT PRODUCT – PUBLIC PRIVATE PARTNERSHIP PROJECT REGISTRATION NUMBER M 180

PURPOSE

1. To adhere to your formal request on 1 June 2020, by:
 - (i) Informing you of the progress till date of the above matter and satisfy you that the Municipality intends to fully comply with the following prescripts:
 - (a) Municipal Finance Management Act, 2003 (Act 56 of 2003) – [MFMA], section 33(1), as the intended contract will exceed 3 financial years, i.e. 25 years.
 - (b) Supply Chain Management Regulations of 1 July 2005 –[SCMR], Regulation 37(3), in consideration of an unsolicited bid.
 - (c) MFMA section 120(6) read with the Public Private Partnership Regulations of 1 April 2005 – [PPPR], Regulation 4, in consideration of the public private partnership agreement.
 - (ii) Giving you access to the necessary documents.
 - (iii) Soliciting your views and recommendations

STRUCTURE

2. For easy reference, the letter is structured as follows:
 - A. Background.
 - B. Problem statement.
 - C. MFMA section 120: Public Private Partnership [PPP].
 - D. MFMA section 33: Contract longer than 3-years.
 - E. MFMA section 113: Unsolicited bid.
 - F. Index of relevant documents.
 - G. Specific Treasury request.

H. Conclusion.

A. BACKGROUND

3. With the intermittent and endemic shortage of lifegiving energy to the municipal area for which the Council approved a very innovative but simple, paid-for by-the-supplier, renewable energy storage and generation solution, being called the Invasure Energy Vault project, on 9 October 2018.
4. The project entails the linking of the substation/s to the InovaSure 'Energy Vault', at InovaSure's own cost, which creates the real and substantial value for the Municipality in that, amongst other benefits, an approximate 33% increase in capacity will immediately occur. In addition, the equipment value for this process (approximately R1.2 billion per Energy Vault) will be passed onto the Municipality's balance sheet after a period of 25 years (Build Operate Transfer ['BOT']). After conversion of the relevant substation/s to include the InovaSure Energy Vault, the referenced substation/s will no longer be under pressure in terms of performance during peak periods and will be in a position to act in concert with the other InovaSure Energy Vaults and so very significantly increase their efficiency and performance capabilities. In addition, the InovaSure Energy Vault proposal further allow for the enhancing of the capabilities of the distribution network.
5. The project is detailed in various feasibility studies, which studies have been independently reviewed and supported by Steffanulli Stocks and Fairbridges attorneys.
6. The intention is for the project to be executed as a Public Private Partnership with the support from the DBSA. The project is registered at National Treasury [NT] under M180 and the GTAC under TASM 180.
7. The Municipality embarked on extensive consultation processes inclusive of various community participation sessions to announce the intention and the project and to solicit support. The various feasibility studies were also available on the municipal website since November 2018 – ***Refer to Annexure A1 attached hereto.***
8. The Municipality has now reached the point of project implementation and needs to formally procure the services.

B. PROBLEM STATEMENT

9. For the past 19-months however the Municipality has been challenged in receiving appropriate feedback and/or guidance from the National Treasury's GTAC team with the latter's interpretation 12 of the next steps and support in the implementation of the Invasure Energy Vault project, as a PPP.
10. Mindful of the risk of the impending winter season and higher demand for consistent electricity as well as the potential loss of funding, the Municipality **MUST** urgently continue with the project imperatives and it requires a solution to legally progress.
11. Pursuant to the above, to confirm legal compliance, an independent adviser was appointed to review the evidence and advise the municipality on the way forward – ***Refer to Annexure A attached hereto.***
12. After extensive endeavours, you kindly allowed us to have a Teams-meeting on 1 June 2020, where you requested our response to the matters listed in paragraph 1 above and to which we hereby comply with.

C. PUBLIC PRIVATE PARTNERSHIP = MFMA SECTION 120 READ WITH PPPR's

13. From the beginning it was the intention to formally treat the product solution as a Public Private Partnership.
14. The Municipality wishes to continue with an unsolicited bid process to appoint Inovasure as the preferred bidder aligned with the MFMA requirements for a contract longer than 3-yrs as well as the PPP requirements and where feasible the PPP guidelines¹.
15. On 18 April 2019 the NT GTAC team confirmed that it has no objection with the intended project and on 21 November 2019 the NT GTAC team provided the municipality with a project reference number TASM 180, which was confirmed by the National Treasury on 26 November 2019.
16. The evidence on record reflects that the municipality made more than 44 attempts to meet with the NT and NT GTAC to discuss the level of the latter's support as per MFMA s120(5) – *Refer to Annexure A1.2 attached hereto*.
17. The Municipality holds the following opinion with regards to its legal obligations towards the NT with regards to the approval for a PPP:
 - (i) Notwithstanding the current perception that NT and/or GTAC formal approvals are required to continue with a municipal PPP process, there is no such a prescript in either the MFMA or PPPR's.
 - (ii) The only legislative prescripts available to Municipalities in relation to PPP's are found in the MFMA, section 120 and the relevant PPPR's 1 to 12.
 - (iii) MFMA section 168 provides that the NT may issue guidelines to municipalities. In this regard in 2016, the following guidelines were issued, namely the NT GTAC Guidelines for Municipal Service Delivery through PPP's. MFMA section 168(3) very specifically prescribes that guidelines issued are not binding on municipalities unless it was adopted as such by Council. As the NT GTAC Guidelines for Municipal Service Delivery through PPP's, 2016, were not formally adopted by the Kannaland Municipal Council, these guidelines have no power in law and cannot be enforced.
 - (iv) Mindful of the fact that the said PPP guidelines have no power in law, the only prescripts the municipality must comply with are MFMA, section 120 and the PPPR's.
 - (v) MFMA, section 120 does not prescribe the requirement for Treasury Approvals during PPP's, but merely refer to the solicitation of the National Treasury's views and recommendations on the feasibility study in terms of section 120(6)(c).
 - (vi) The PPPR's also do not prescribe the requirement for Treasury Approvals during PPP's, but merely refer to the:
 - a) Notification of the relevant treasuries when it wishes to conduct a MFMA section 120(4) feasibility study as per PPPR 2(1)(a).
 - b) To solicit the views and recommendations of the relevant treasuries on the evaluation of the bid of a preferred bidder as per PPPR 4(1)(b).

¹ In the event that the PPP process cannot be successfully concluded, the municipality intends to continue with the procurement process and enter into a Service Delivery Agreement with the preferred bidder in order to activate the DBSA funding.

- c) To solicit the views and recommendations of the National Treasury on the content of the PPP-agreement and the capacity of the preferred bidder to comply with his or her obligations in terms of the public-private partnership agreement.
 - (vii) From the evidence on record and after completion of the processes currently underway, the Municipality will have had fully complied with its prescribed consultation with the National Treasury – ***Refer to Annexures A, A1, A1.2 and A2 attached hereto.***
18. Mindful of the above, the contract attached to this notification as per MFMA section 33, is the same contract provided to GTAC on 22 March 2019 as contemplated by MFMA section 20(6) read with PPPR 4(3).

D. UNSOLICITED BID = MFMA SECTION 113 READ WITH SCMR 37

19. MFMA section 113 provides that when a Municipality considers an unsolicited bid, it must do so within a prescribed framework which is provided by SCMR 37.
20. SCMR 37(3) and (4) provide the requirements for a public participation process and consultation with the necessary treasuries and prescribe that:
- i. The public and potential suppliers must be provided with the reasons why the bid is not open and an explanation of potential benefits.
 - ii. Submit all written comments received, including any responses from the unsolicited bidder, to the relevant treasuries for comment.
21. Following please find the responses as per SCMR 37(3) which will be advertised shortly and where after you will be informed as prescribed by SCMR 37(4) for your comments.

Reasons why the bid is not open:

22. Following is a brief discussion of why the invitation of open competitive bids is impractical:
- (i) The product offering has been designed and patented specifically for the requirements of the municipality and consists of extensive protected commercial private information.
 - (ii) Detailed feasibility and legal studies have been concluded and independently confirmed for the project.
 - (iii) Inovasure expressed the willingness to accept a significant portion of financial and commercial risks.
 - (iv) The product offering is a new initiative in the country, and it is not possible to identify detailed tender specifications.
 - (v) The product offering and team bring extensive international expertise to the country
 - (vi) Inovasure already secured funding support for the project.
 - (vii) The product offering is supported by ESKOM and the DBSA.
 - (viii) Inovasure is the sole provider of the product.

Explanation of potential benefits:

23. ***The product is demonstrably a unique innovative concept:*** The uniqueness and innovation of the Inovasure Energy Vault project have been extensively considered and reported on in the feasibility studies concluded for the project as referenced in Parts A and B of the Inovasure Feasibility study report of 1

November 2018, which was independently supported by Stefanutti Stocks and Fairbridges Attorneys on 20 March 2019 and the DBSA on 14 February 2020.

24. **The product will be exceptionally beneficial or have exception cost benefits for the municipality.** Except for the benefits already discussed above, other benefits, from a socio-economic, financial, sustainability and environmentally friendly perspective have been extensively considered and reported on in the feasibility studies concluded for the project as referenced in Part C of the Inovasure Feasibility study report of 1 November 2018, which was independently supported by Stefanutti Stocks and Fairbridges Attorneys on 20 March 2019.

NT GTAC PPP Guidelines:

25. Notwithstanding the fact that the PPP Guidelines do not have the power of law, the Municipality considered the requirements of Module 5 dealing with Procurement, where specific provision is made for the management and treatment of an unsolicited bid (page 188 onwards) – **refer to Annexure A2, items 31 to 39.**
26. Aligning its processes as per the above, the NT is therefore provided with the following documentation:
- (i) Project specific requirements/specifications – **refer to Annexure B.**
 - (ii) Invitation to other potential suppliers to submit alternative offers – **refer to Annexures B, D and E.**
 - (iii) Compliance with MFMA section 33, as per Part E below of this report read with the relevant feasibility studies.

E. 25-YEAR CONTRACT = MFMA SECTION 33

27. MFMA, section 33(1)(a) prescribes the processes to be followed by a municipality should it enter into a contract that will impose financial obligations on the municipality beyond the three financial years. The Municipal Manager must make public the draft contract and an information statement summarising the Municipality's obligations and invite the public and the relevant treasuries to comment.
28. Attention is directed to the fact that as per the feasibility studies and confirmed commitment from Inovasure, the majority of the project risk will be carried by it and it will also take responsibility for securing funding for the majority infrastructure and capital investments for this multi-billion project. These aspects have been dependently considered and supported by Steffanutti Stocks and Fairbridges attorneys on 20 March 2019.
29. The municipality's financial risk is limited to the same or less than its current exposure to ESKOM.
30. The relevant draft contract is found hereto, and your attention is specifically directed to the following clauses which deals with the responsibilities, obligations, and rights of the Municipality – **refer to Annexure G:**

2. THE EMPLOYER

2.1 Right of Access to the Site

2.2 Permits, Licences or Approvals

2.3 Employer's Personnel

2.4 Employer Obligations

3. THE EMPLOYER'S ADMINISTRATION

3.1 The Employer's Representative

- 3.2 Other Employer's Personnel
 - 3.3 Delegated Persons
 - 3.4 Instructions
 - 3.5 Determinations
- 10. EMPLOYER'S TAKING OVER
 - 10.1 Taking Over of the Works and Sections
 - 10.2 Taking Over of Parts of the Works
 - 10.3 Interference with Tests on Completion
- 20. TERMINATION BY EMPLOYER
 - 20.1 Notice to Correct
 - 20.2 Termination by Employer
 - 20.3 Valuation at Date of Termination
 - 20.4 Payment after Termination
- 22. RISK AND RESPONSIBILITY
 - 22.1 Indemnities
 - 22.2 Contractor's Care of the Works
 - 22.3 Employer's Risks
 - 22.4 Consequences of Employer's Risks
 - 22.5 Intellectual and Industrial Property Rights
 - 22.6 Limitation of Liability

F. RELEVANT DOCUMENTS

31. The following annexures are attached as support for this letter:

- (i) Annexure A: Independent report.
- (ii) Annexure A1: Timeline schedule.
- (iii) Annexure A1.2: Timeline schedule of interaction with NT/GTAC.
- (iv) Annexure A2: Legal requirements and due diligence.
- (v) Annexure B: Project specific requirements/specifications.
- (vi) Annexure C: Unsolicited bid Municipal Manager memorandum.
- (vii) Annexure D: Draft advert for local newspaper.
- (viii) Annexure E: Draft Notice at municipal office and website.
- (ix) Annexure F: Council Resolution of 9 October 2018.
- (x) Annexure G: Draft PPP agreement submitted to GTAC on 22 March 2019.
- (xi) Annexure H: Municipality's plan to manage contract.
- (xii) Annexure I: Inovasure ability and capability to execute contract.

32. Due to its size, the following relevant documentation, additional to the Annexures attached to this letter, is available for perusal by visiting the municipal website at

[<https://www.kannaland.gov.za/inovasure-energy-project-kannaland-municipality>] and you can open the documents by clicking on the relevant link:

- (i) Feasibility study of 1 November 2018 – Executive Summary.
- (ii) Feasibility study of 1 November 2018 – Part A: Introduction and interventions.
- (iii) Feasibility study of 1 November 2018 – PART B: Feasibility of interventions.
- (iv) Feasibility study of 1 November 2018 – PART C: Investment and finance.

G. SPECIFIC TREASURY REQUEST

2. Once you have reviewed the contents of this letter and relevant attachments and other available documentation, it would be appreciated if you would provide us with your views and recommendations as contemplated by the following prescripts:
3. With reference to the PPP, as per MFMA section 120(6)(c) read with PPPR 4(1) you are specifically requested to submit your views and recommendations on:
 - i. The proposed terms and conditions of the attached draft public-private partnership agreement – **refer to Annexure G.**
 - ii. The municipality's plan for the effective management of the agreement after its conclusion, which is inclusive of the draft PPP-agreement and as specified by the feasibility studies – **refer to Annexure H.**
 - iii. The preferred bidder's competency to enter into the public-private partnership agreement; and capacity to comply with his or her obligations in terms of the public-private partnership agreement – **refer to Annexure I.**
4. With reference to the unsolicited bid, as per Module 5 of the PPP Guidelines, you are specifically requested to submit your views and recommendations on the following:
 - (i) Project specific requirements/specifications – **refer to Annexure B.**
 - (ii) Invitation to other potential suppliers to submit alternative offers – **refer to Annexures B, D and E.**
5. With reference to the 25-year period of the contract, as per MFMA section 33, you are specifically requested to submit your views and recommendations as per Part E of this report read with the relevant feasibility studies

H. CONCLUSION

6. Understanding the urgency of this matter which has been significantly delayed and the risk of losing potential DBSA funding, it will be greatly appreciated if we could receive your views and recommendations before or on **06 July 2020** to **wilmie@kannaland.gov.za**.
7. In the absence of your views and recommendations, we will in good faith accept that you have no objection with us continuing with this matter as set out.

Yours faithfully,



R. STEVENS
MUNICIPAL MANAGER

Ann A: Inovasure Report



Brasika

Adv Helen Venter

Cell: 082 440 1886 – hventer@brasika.co.za

TO: Reynold Stevens
Municipal Manager
Kannaland Municipality

BY e-mail

MEMORANDUM: TREATMENT OF INOVASURE (PTY) LTD ENERGY VAULT PRODUCT AS AN UNSOLICITED BID

PURPOSE

1. To provide the municipality with a report advising on the following:
 - (i) Treatment of the Inovasure (Pty) Ltd product offering as an unsolicited bid.
 - (ii) Consideration of the Public Private Partnership [PPP] processes.
 - (iii) Provision of draft documents to ensure legal compliance with prescripts.

INSTRUCTION

2. Author received the instruction for advice on 29 May 2020.

PART B: PROBLEM STATEMENT

3. With the intermittent and endemic shortage of lifegiving energy to the municipal area for which the Council approved a very innovative but simple, paid-for by-us, renewable energy storage and generation solution in October 2018.
4. For the past 19-months however the Municipality has been challenged in receiving appropriate feedback and/or guidance from the National Treasury with the latter's interpretation of the next steps and support in the implementation of the Inovasure Energy Vault project, as a PPP.

5. Mindful of the risk of the impending winter season and higher demand for consistent electricity as well as the potential loss of funding, the Municipality **MUST** urgently continue with the project imperatives and it requires a solution to legally progress.

APPROACH

6. In considering the legal and legislative requirements for the treatment of the Inovasure (Pty) Ltd [Inovasure] product offering as an unsolicited bid, author reviewed various resources as referenced in the text of the memorandum and the necessary attachments.

7. This memorandum is structured in the following Parts:

- Background discussion.
- Relevant prescripts.
- Alignment between the PPP processes and an unsolicited bid.
- Required and prescribed actions.
- Recommendations.

8. **NOTE, that for purposes of this report the following are not considered or discussed:**

- (i) The initial appointment and contracting with Inovasure
- (ii) The feasibility of the project offering.
- (iii) The validity of the appointment of Stefanutti Stocks.
- (iv) The strategy to follow a Public Private Partnership [PPP] process.

BACKGROUND

9. The following is a summary of the sequence of events in relation to the Inovasure product offering followed by the Municipality and which forms the basis of this report [Refer to Annexure A1 for a detailed timeline reference]:

- (i) The Council resolved on 9 October 2018, that the Municipality must continue with the implementation of the Inovasure Energy Vault project subject to the legal requirements for a PPP.
- (ii) During November 2018, the Municipality, as per the Council mandate, conducted the following activities:
 - a. Concluded the MoA and ESMA agreements with Inovasure.
 - b. Submitted the feasibility reports and solicited the views and recommendations of the National Treasury's GTAC PPP unit.

- c. Submitted the feasibility reports and solicited the support of the Development Bank of South-Africa [DBSA].
 - d. Appointed Stefanutti Stocks to act as transaction advisors and to independently verify the feasibility reports as prepared by Inovasure.
 - e. Informed and solicited support from the other institutions:
 - i. Department of Energy Affairs.
 - ii. South African Local Government Association [SALGA].
 - iii. Department of Cooperative Governance and Traditional Affairs [COGTA].
 - iv. ESKOM.
 - v. CSAAWU.
- (iii) On **20 March 2019**, Stefanutti Stocks, with the legal support of Fairbridges, confirmed that it supports the viability of the feasibility studies for the Inovasure Energy Vault project and provided the municipality with a draft PPP agreement.
- (iv) On **22 March 2019** the NT was informed of, and provided with, the Stefanutti Stocks's report as well as the draft PPP agreement.
- (v) On **18 April 2019** the NT GTAC team confirmed that it has no objection with the intended project and on 21 November 2019 the NT GTAC team provided the municipality with a project reference number TASM 180, which was confirmed by the National Treasury on 26 November 2019. Since then, the evidence indicates that a number of endeavours were made to meet with the NT and NT GTAC to discuss the level of the latter's support as per MFMA s120(5) – refer to Annexure A1, item 26.
- (vi) On **14 February 2020**, the DBSA confirmed its support subject to the:
- a) Positive appraisal of project addressing confirmation of IS as preferred bidder in terms of MFMA and NERA and the financial, commercial, technical, socio-economic, institutional, and environmental aspects of the project are viable.
 - b) Positive conclusion of appointment process.
 - c) Negotiation of term sheets.
 - d) Approval by DBSA credit committees and Board of Directors.
 - e) Negotiation and execution of satisfactorily contractual documents.

- (vii) It is further author's instructions that various community participation sessions were held during this period and the project proposal as well as the feasibility studies were available on the municipal website since November 2018.

RELEVANT PRESCRIPTS

10. The required solution must consider the following related prescripts:

- (i) The management and treatment of an unsolicited bid.
- (ii) The alignment with PPP prescripts.
- (iii) Compliance with the requirements for a contract longer than 3-years.
- (iv) Public participation and consultation with treasuries and other organs of state.

11. The following is a summary of the required legal and legislative requirements *[Refer to Annexure A2 for a detailed discussion of the prescripts and the legal due diligence requirements]:*

- (i) The MFMA¹ provides the requirements for the management of contracts exceeding 3-yrs², PPP's³ and procurement via unsolicited bids⁴, which mostly prescribes a public participation process and where relevant soliciting views and recommendations from the treasuries and relevant organs of state as well as a PPP feasibility study.

- (ii) The PPPR's⁵ provide the detailed requirements for a PPP, which prescribes:

- a) A feasibility study.
- b) Soliciting views and recommendations from the relevant treasuries.
- c) A public participation process.

- (iii) The SCMR's⁶ provide the detailed requirements for an unsolicited bid, which prescribes:

- a) A consideration.
- b) A public participation process.
- c) Soliciting views from the treasuries when public comments were received.

- (iv) The MSA⁷ provides the requirements related to public communication as well as the displaying of documents during public participation processes.

¹ Municipal Finance Management Act, 2003 (Act 56 of 2003) - MFMA

² MFMA, section 33.

³ MFMA, section 120.

⁴ MFMA, section 113.

⁵ Public Private Partnership Regulations, 1 April 2005 - PPPR.

⁶ MFMA SCM Regulations, 1 July 2005 - SCMR.

⁷ Municipal Systems Act, 2000 (Act 32 of 2000) - MSA.

- (v) **The new COGTA⁸ Directions**, issued as per the Disaster Management Act due to the COVID-19 pandemic, augments the MSA requirements somewhat, prescribing that communities are consulted using media platforms and alternative methods of consultation, instead of contact meetings.

12. The **NT GTAC Guidelines for Municipal Service Delivery through PPP's⁹**, especially Module 5 (page 188), provides for an unsolicited bid process during a PPP.

ALIGNMENT BETWEEN THE PPP PROCESSES AND AN UNSOLICITED BID

13. As the parties were busy with a PPP process during the past 19-months, one needs to consider the alignment between the current PPP activities and prescripts vis-à-vis the unsolicited bid prescripts. In addressing this matter, author will discuss the following:

- (i) PPP prescripts on involvement of NT/GTAC.
- (ii) Alignment between PPP prescripts and unsolicited bid prescripts.

PPP prescripts on involvement of NT/GTAC:

14. It appears that various stakeholders are of the view that National Treasury and/or GTAC formal approvals are required in order to continue with a PPP process, which author could not find in any prescript.
15. The only legislative prescripts available to Municipalities in relation to PPP's are found in the MFMA, section 120 and the relevant PPP's 1 to 12 – *refer to Annexure A2, items 5 to 11 and 17 to 21.*
16. MFMA section 168 provides that the NT may issue guidelines to municipalities. In this regard in 2016, the following guidelines were issued, namely the **NT GTAC Guidelines for Municipal Service Delivery through PPP's**.
17. MFMA section 168(3) very specifically prescribes that guidelines issued are not binding on municipalities unless it was adopted as such by Council.

⁸ Issued in terms of the Disaster Management Act – refer to Government Gazetted references in Annexure A2.

⁹ Issued by NT GTAC on 16 February 2016 – PPP guidelines.

18. As the NT GTAC Guidelines for Municipal Service Delivery through PPP's, 2016, were not formally adopted by the Kannaland Municipal Council, these guidelines have no power in law and cannot be enforced.
19. Mindful of the fact that the said PPP guidelines have no power in law, the only prescripts the municipality must comply with are MFMA, section 120 and the PPPR's.
20. MFMA, section 120 does not prescribe the requirement for Treasury Approvals during PPP's, but merely refer to the solicitation of the National Treasury's views and recommendations on the feasibility study in terms of section 120(6)(c).
21. The PPPR's also do not prescribe the requirement for Treasury Approvals during PPP's, but merely refer to the:
- (i) Notification of the relevant treasuries when it wishes to conduct a MFMA section 120(4) feasibility study as per PPPR 2(1)(a).
 - (ii) To solicit the views and recommendations of the relevant treasuries on the evaluation of the bid of a preferred bidder as per PPPR 4(1)(b)¹⁰.
 - (iii) To solicit the views and recommendations of the National Treasury on the following:
 - (a) The proposed terms and conditions of the draft public-private partnership agreement.
 - (b) The municipality's plan for the effective management of the agreement after its conclusion.
 - (c) The preferred bidder's—
 - (i) competency to enter into the public-private partnership agreement; and
 - (ii) capacity to comply with his or her obligations in terms of the public-private partnership agreement.
22. It is author's considered opinion that the evidence on record and after completion of the processes as recommended in this report, the Municipality will have had fully complied with its prescribed consultation with the National Treasury.

¹⁰ It is argued that the provision of the bid documents to the treasuries as per PPPR 4(1)(a) is not applicable in this instance as the Municipality is applying an unsolicited bid process in terms of SCM 37 and not a competitive tender process.

Alignment between PPP prescripts and unsolicited bid prescripts:

23. MFMA section 120(7) and PPPR 4(1) prescribe that the MFMA SCM prescripts apply to PPP's which means that ANY procurement activity must be compliant with the SCM prescripts in the MFMA and the SCMR's.
24. With reference to the relevant SCM prescripts, MFMA section 113 provides for the consideration of unsolicited bids subject to a framework, which framework is provided for in SCMR 37 – *refer to detailed discussion in Annexure A1, items 22 to 30.*
25. It is therefore author's considered opinion that there is an alignment between PPP activities and an unsolicited bid, and that full compliance are feasible.
26. Additionally, in the PPP Guidelines, under the Module dealing with Procurement, namely Module 5, specific provision is made for the management and treatment of an unsolicited bid (page 188 onwards) – *refer to Annexure A1, items 31 to 39.*
27. Notwithstanding the fact that the PPP Guidelines do not have the power of law¹¹, author did consider the requirements and remains of the opinion that the evidence on record and after completion of the processes as recommended in this report, the Municipality will have achieved the objectives of the PPP Guidelines.

REQUIRED AND PRESCRIBED ACTIONS

28. When reading the prescripts in context and mindful of the earlier discussions in this report, the following processes are required:
 - (i) **STEP 1: Consider unsolicited bid.**
 - (ii) **STEP 2: Prepare documents for public participation, treasuries and other organs of state.**
 - (iii) **STEP 3: Deal with comments.**
 - (iv) **STEP 4: Unsolicited bid award.**
 - (v) **STEP 5: Council resolution.**
 - (vi) **STEP 6: Conclude agreement¹².**

¹¹ Refer to discussion in paragraphs 16 to 18 above.

¹² It is authors' opinion that the agreement can either be a PPP-agreement or a service delivery agreement if the project does not progress to a formal PPP. A separate legal opinion can be provided in this regard.

29. The table below reference the relevant prescripts in the same order as the steps recommended above, together of an indication of whether compliance was achieved or will be achieved from the recommendations of and documentation delivered by this report OR already achieved:

#	PRESCRIPT	REQUIREMENT	REFERENCE
STEP 1: CONSIDER UNSOLICITED BID			
1.	MFMA s113 & SCMR 37(2)	The Municipality must consider the following: (i) Product is demonstrably a unique innovative concept (ii) Product will be exceptionally beneficial or have exception cost benefits for the municipality. (iii) Person who made the bid is the sole provider. (iv) The reasons for not going through a normal procurement process are found to be sound by the AO.	Will be achieved on approval of Annexure C
2.			
3.			
4.			
5.			
6.	PPPR 2 & NTG, Item 1	Prior to SCMR 37(3) consultation, initiate the following:	Complied with – refer to Annexure A1 timeline
7.		(i) Identify project	
8.		(ii) Notify government	
9.		(iii) Appoint project officer	
10.		(iv) Assess budgets	
11.		(v) Set-up project team	
12.	MFMA s120(4), 120(6)(a) & PPPR 3 & NTG, Item 2	When a feasibility study has been completed, the AO of the municipality must submit the report on the feasibility study together with all other relevant documents to the council.	Complied with – refer to Annexure A1 timeline
13.	MFMA s120(6)(b)(i) & (ii)	Make public particulars of the proposed PPP, including the report on the feasibility study; and invite the local community and other interested persons to submit to the municipality comments or representations in respect of the proposed PPP.	Complied with – refer to Annexure A1 timeline
14.	MFMA s120(6)(c)(i)	Solicit the views and recommendations of the NT.	Complied with – refer to Annexure A1 timeline
15.	MFMA s120(6)(c)(ii)	Solicit the views and recommendations of the national department responsible for local government.	Complied with – refer to Annexure A1 timeline
16.	MFMA s120(6)(c)(iii)	Solicit the views and recommendations of if the PPP involves the provision of electricity, the responsible national department.	Complied with – refer to Annexure A1 timeline
17.	NTG, Item 3	Prepare and issue RFQ as per SCMR 37(3)(c)	Will be achieved on approval of Annexures B and C
STEP 2: DOCUMENTS FOR PUBLIC PARTICIPATION AND CONSULTATION WITH ORGANS OF STATE			
18.	MSA 21A	Documents that must be made public, by: (i) Displaying the documents at the municipality's offices and libraries.	Will be achieved on approval of Annexures B, D, E and J

#	PRESCRIPT	REQUIREMENT	REFERENCE
		(ii) Displaying the documents on its official website. (iii) Including the website address, where particulars of the documents can be obtained and invite public to submit written comments.	
19.	Direction 6.7.4(b)	Ensure that communities are consulted using media platforms and alternative methods of consultation, instead of contact meetings.	Will be achieved on approval of Annexures B, D, E and J
20.	SCMR 37(3)	Follow a public participation process as per MSA 21A, with: (i) Reasons why bid is not open. (ii) Explanation of potential benefits. (iii) Invitation to public and potential suppliers to submit comments within 30-days.	Will be achieved on approval of Annexures B, D, E and J
21.	MFMA s33(1)(a)(i) & MFMA s120(7)	Make public the draft contract and an information statement summarising the Municipality's obligations and invite the public to comment	Will be achieved on approval of Annexures B, D, E and J
22.	MFMA s 33(1)(a)(ii)	Solicit views and inputs from: (i) NT (ii) PT (iii) COGTA (iv) Department of Electricity.	Will be achieved on approval of Annexures B, C, F, G, H, I and J
STEP 3: TREATING COMMENTS			
23.	SCMR 37(4)	The AO must submit all written comments received pursuant to subparagraph 37(3), including any responses from the unsolicited bidder, to the NT and the relevant PT for comment.	Will depend on outcome
24.	PPPR 4(1)	When complying with SCM prescripts, the AO must solicit the views and recommendations of the NT and the relevant PT on— (a) the proposed bid documentation at least 30 days before bids are publicly invited. (b) the evaluation of the bids received and of any preferred bidder at least 30 days before any award is made.	Will depend on outcome ¹³
STEP 4: AWARD CONSIDERATION			
25.	SCMR 37(5) to 37(7)	The adjudication committee, in a meeting open to the public, must consider the unsolicited bid and make a recommendation to the AO, considering: (a) any comments submitted by the public. (b) any written comments and recommendations of the NT or the relevant PT.	Submission to be drafted in compliance
26.	PPPR 4(2)	An award of a PPP agreement— (a) may be made only after the process set out in MFMA s120(6)	Partially complied with

¹³ Attention is directed to a letter from the National Treasury on 17 May 2016, which advised that SCMR 37(4) is only relevant if comments were received and if no comments were received, the treasuries do not have to be consulted (available on request).

#	PRESCRIPT	REQUIREMENT	REFERENCE
		has been completed. (b) is subject to compliance with MFMA s33.	and with this process a further round of consultation will occur
STEP 5: COUNCIL RESOLUTION			
27.	MFMA s 33(1)(b)	Council to consider: (i) Projected financial obligations for each financial year. (ii) Impact of obligations on the Municipal tariffs and revenue. (iii) Comments received from local community. (iv) Written views from certain organs of state such as the relevant Treasuries.	Submission to be drafted in compliance
28.	MFMA s 33(1)(c)	Council to resolve: (i) The Municipality will secure a significant capital investment or will derive significant financial economic or financial benefit. (ii) Approves entire contract exactly as it is to be executed. (iii) Authorises the AO to sign the contract on behalf of the Municipality.	
29.	MFMA s 33(3)	Contract must be made available to Council in totality.	
STEP 6: AGREEMENT CONCLUSION			
30.	MFMA s 120(2)	A PPP agreement must comply with any prescribed regulatory framework for PPP's.	Not reviewed as part of this report
31.	PPPR 5	Content of PPP Agreement	
32.	PPPR 6	Only the accounting officer may sign a PPP agreement after completion of MFMA s33	

RECOMMENDATIONS

30. It is recommended that the Municipality continue with the unsolicited bid process aligned with the MFMA requirements for a contract longer than 3-yrs as well as the PPP requirements and where feasible the PPP guidelines.

31. If acceptable, the following actions are recommended as per the attachments referenced:

#	ACTION	REFERENCE
1.	Review this report and its attachments.	Annexures A, A1 and A2
2.	Approve the unsolicited bid proposal report.	Annexure C
3.	Approve the unsolicited bid project specific requirements.	Annexure B
4.	Approve the following public participation documents:	
	(i) Advert for local newspaper.	Annexure D

#	ACTION	REFERENCE
5.	(ii) Notice at municipal office and on website.	Annexure E
6.	(iii) Letter to NT.	Annexure F
7.	(iv) Letter to PT.	Annexure G
8.	(v) Letter to COGTA.	Annexure H
9.	(vi) Letter to Department of Electricity.	Annexure I
10.	Approve index of documents to be made public and prepare pack.	Annexure J

32. Once the above has been completed and after a period of 30-days has lapsed, you are welcome to contact author on the actions going forward, if necessary.

33. Alternatively, the process as per paragraph 29, items 23 to 32, can be concluded.

[Not signed if submitted electronically]

Adv Helen Venter

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small seeds to promote sustainable governance growth

Date: 31 May 2020

ANNEXURES:

ANNEXURE A1: TIMELINE SCHEDULE *(included in this report)*

ANNEXURE A2: LEGAL REQUIREMENT AND DUE DILIGENCE SCHEDULE *(included in this report)*

ANNEXURE B: PROJECT SPECIFIC REQUIREMENTS *(separately provided)*

ANNEXURE C: UNSOLICITED BID MUNICIPAL MANAGER MEMORANDUM *(separately provided)*

ANNEXURE D: ADVERT FOR LOCAL NEWSPAPER *(separately provided)*

ANNEXURE E: NOTICE AT MUNICIPAL OFFICE AND ON WEBSITE *(separately provided)*

ANNEXURE F: LETTER TO NT *(separately provided)*

ANNEXURE G: LETTER TO PT *(separately provided)*

ANNEXURE H: LETTER TO COGTA *(separately provided)*

ANNEXURE I: LETTER TO DEPARTMENT OF ELECTRICITY *(separately provided)*

ANNEXURE J: INDEX OF DOCUMENTS TO BE MADE PUBLIC *(separately provided)*

Annexure A1

ANNEXURE A1 – TIMELINE SCHEDULE as @ 31 May 2020				
KANNALAND [KL] / INOVASURE [IS]				
Item	DATE	ACTION	PRESCRIPT	DISCUSSION
1.	17/09/2012	MOU concluded between KL and Sungraff to identify feasible electricity and grey water solutions	NA	Was valid for 3-years as per clause 9 and as per Council Resolution of 9 October 2018, was extended on an annual basis.
2.	1/12/2016	Contract ceded by Sungraff to Inovasure and approved by KL.	GCC, 19	None
3.	17/09/2018	IS letter to KL submitting Energy Security Program and Energy Vault Implementation process, reference PPP process	MFMA s 120, MFMA s 113 & SCMR 37	Refer to Annexure B: Legal requirement schedule
4.	9/10/2018	Council resolved to support signing of MoA, ESMA and relevant documentation, as per a PPP Process	MFMA s 120(1), 120(4) & 120(5)	i. MM to continue to appoint BIGEN Africa to conduct feasibility study and to draw up the PPP agreement. ii. Supports PPP process with a 25-year contract period on a Built-Own-Operate-Transfer [BOOT] basis. iii. Supports the involvement of NT GTAC PPP-unit.
5.	5/11/2018	KL letter to SS to submit proposal to conduct feasibility study	MFMA s 120(4)	NOTE that Stefanutti Stocks [SS] were appointed after BIGEN Africa, LDM and SS were requested for proposals.
6.	5/11/2018	KL letter to DBSA to solicit advice.	Council Resolution of 9 Oct 2018	No Objection NOTE that all letters refer to PPP arrangement with Inovasure.
7.	16/11/2018	KL letter to DoE requesting views and comments.	MFMA s 33(1)(b)	No Objection
8.	18/11/2018	KL letter to CSAAWU to solicit support.	MFMA s 33(1)(b)	No Objection
9.	19/11/2018	MoA signed between KL and IS	Council	Note following clauses:

ANNEXURE A1 – TIMELINE SCHEDULE as @ 31 May 2020

KANNALAND [KL] / INOVASURE [IS]

Item	DATE	ACTION	PRESCRIPT	DISCUSSION
			Resolution of 9 Oct 2018	<p>3.1. Suspensive condition of DBSA funding within 30-days.</p> <p>4.2. Sets the following conditions:</p> <p>(1) NT approves PPP under auspices of DBSA.</p> <p>(2) DBSA/NDB approves project(s).</p> <p>(3) IS procures written support for funding.</p> <p>(4) Implementation be reviewed by NT after 3-yrs.</p> <p>8. MoA to superseded by PPP agreement in future.</p>
10.	20/11/2018	IS mail to KL with draft letters, draft advert and confirmation of payment for SS services.	MFMA s 33(1)(a)	<i>Get copies of adverts placed</i>
11.	20/11/2018	KL letter to SALGA soliciting support.	MFMA s 33(1)(b)	No Objection
12.	20/11/2018	SS submit proposal to KL	NA	Project cost = R 1 500 000 and that payment will be made by IS.
13.	20/11/2018	MM confirms SS appointment	NA	No Objection
14.	20/11/2018	KL letter to COGTA soliciting support	MFMA s 33(1)(b)	No Objection
15.	20/11/2018	KL letter to NT GTAC soliciting views and comments	PPPR 2(1)(a)	<i>Any letters to PT?</i>
16.	20/11/2018	KL letter to ESKOM soliciting co-operation	MFMA s 33(1)(b) & NERA	No Objection
17.	20/03/2019	SS letter to KL confirming completion of project and confirmation that project is feasible	MFMA s 33 & MFMA s 120(4) & PPPR 3	Letter attached a copy of PPP agreement and advised KL to submit copy to NT for approval/non-objection.

ANNEXURE A1 – TIMELINE SCHEDULE as @ 31 May 2020

KANNALAND [KL]/ INOVASURE [IS]

Item	DATE	ACTION	PRESCRIPT	DISCUSSION
18.	18/04/2019	GTAC letter to KL, referencing letter of 20 Nov 2018, confirming that it is not opposed to project and confirm that it needs a letter of request to register project as per PPP Regs.	MFMA s 120(5) & PPPR 2(1)	Use MFMA and PPPR wording.
19.	26/04/2019	KL submit letter to NT GTAC for registration of project.	MFMA s 120(5) & PPPR 2(1)	NOTE that letter says: “..Kannaland Municipality has entered into a PPP with Inovasure..”
20.	21/11/2019	GTAC confirmed that project was registered as potential PPP = TASM 180.	MFMA s 120(5) & PPPR 2(1)	Mr. Strover Maganedisa appointed as GTAC project advisor.
21.	26/11/2019	NT confirmed that project was registered as potential PPP = M180.	MFMA s 120(5) & PPPR 2(1)	NT confirmed that GTAC will assist with regulatory approvals for project.
22.	27/11/2019	KL confirmed receipt of letters and request meeting during December 2019.		Refer to item 25 on challenges to meet with NT/GTAC
23.	14/02/2020	DBSA letter to IS confirming funding.	MoA, clause 3 & Council Resolution of 9 Oct 2018	Funding subject to: (i) Positive appraisal of project addressing confirmation of IS as preferred bidder in terms of MFMA and NERA and the financial, commercial, technical, socio-economic, institutional, and environmental aspects of the project are viable. (ii) Positive conclusion of appointment process. (iii) Negotiation of term sheets.

ANNEXURE A1 – TIMELINE SCHEDULE as @ 31 May 2020

KANNALAND [KL] / INOVASURE [IS]

Item	DATE	ACTION	PRESCRIPT	DISCUSSION
				(iv) Approval by DBSA credit committees and Board of Directors. (v) Negotiation and execution of satisfactorily contractual documents.
24.	6/04/2020	IS letter to DBSA to provide further information and evidence.	NA	None
25.	22/05/2020	Draft RFT prepared between IS and KL and Brasika inputs	SCMR 37(3) & MFMA s 33 & NTG Module 5, points 1 to 3	<p>Firstly, please allow me to express my gratitude to assist you with you this 'first world' country specific solution to our country's unique electricity challenges.</p> <p>Secondly, Being a specific beneficial solution for both the municipality and an international 'first world' solution bespoke to S-A, and not creating a situation for any potential argument of a 'conflict of interest', please accept the following points and advice, as follows, ex gratia:</p> <p>(i) The documentation I reviewed reflects extreme care and due diligence to protect the interests of this country and the specific municipality.</p> <p>(ii) It is my considered opinion that this solution can be achieved through a Public Participation Process or a municipal specific procurement solution.</p> <p>(iii) In this proposal the supplier accepts ALL undue risk and financial exposure the Municipality would have been exposed to.</p> <p>(iv) The proposal complies with ALL requirements of an unsolicited bid as prescribed by MFMA section 113 read with SCMR 37.</p>

ANNEXURE A1 – TIMELINE SCHEDULE as @ 31 May 2020

KANNALAND [KL] / INOVASURE [IS]

Item	DATE	ACTION	PRESCRIPT	DISCUSSION
				<p>(v) The attached graphical representation of the prescribed requirements and timelines represents the process and evidence required to achieve compliance.</p> <p>(vi) The draft document received, albeit in the incorrect format, provides sufficient information to address the prescribed requirements to achieve legal and legislative compliance.</p> <p>It is author's understanding that there is sufficient evidence to achieve compliance to the above.</p>
26.	1/4/2019 to 29/5/2020	32 e-mail attempts to arrange a meeting with NT/GTAC or alternative solicit guidance.	Various	It appears a meeting may take place in first week of June 2020

Annexure A2

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE				
KANNALAND / INOVASURE				
Item	Prescript	Section	Content	Comply Reference
MUNICIPAL FINANCE MANAGEMENT ACT, 2003 - MFMA				
27.	MFMA	33(1)(a)	MFMA section 33(1)(a) prescribes the processes to be followed by a municipality should it enters into a contract that will impose financial obligations on the municipality beyond the three years, that 60-days before the Council meeting where the contract is approved, the Municipal Manager must: <ol style="list-style-type: none"> Make public the draft contract and an information statement summarising the Municipality's obligations and invite the public to comment; and Solicit views and inputs from certain organs of state such as the relevant Treasuries. 	YES Annexures D to J
28.	MFMA	33(1)(b)	Prescribes the considerations to be taken by Council, namely: <ol style="list-style-type: none"> Projected financial obligations for each financial year. Impact of obligations on the Municipal tariffs and revenue. Comments received from local community. Written views from certain organs of state such as the relevant Treasuries. 	NA Only once comments were received
29.	MFMA	33(1)(c)	Prescribes the content of the Council resolution, namely: <ol style="list-style-type: none"> The Municipality will secure a significant capital investment or will derive significant financial economic or financial benefit. Approves entire contract exactly as it is to be executed. Authorises the Municipal Manager to sign the contract on behalf of the Municipality. 	NA
30.	MFMA	113	(1) A municipality is not obliged to consider an unsolicited bid received outside its normal bidding process. (2) If a municipality decides to consider an unsolicited bid it may do so only in accordance with a prescribed framework.	YES Annexures C to J

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

KANNALAND / INOVASURE

Item	Prescript	Section	Content	Comply	Reference
			(3) The framework must strictly regulate and limit the power of municipalities to approve unsolicited bids.		
31.	MFMA	120(1)	A municipality may enter into a public-private partnership agreement, but only if the municipality can demonstrate that the agreement will— (a) provide value for money to the municipality. (b) be affordable for the municipality. (c) transfer appropriate technical, operational, and financial risk to the private party.	YES	Feasibility study of 1/11/2018
32.	MFMA	120(2)	A public-private partnership agreement must comply with any prescribed regulatory framework for public-private partnerships.	YES	Stefanutti Stocks on 20 March 2019
33.	MFMA	120(3)	If the public-private partnership involves the provision of a municipal service, Chapter 8 of the Municipal Systems Act must also be complied with.	YES	
34.	MFMA	120(4)	Before a public-private partnership is concluded, the municipality must conduct a feasibility study	YES	
35.	MFMA	120(5)	The national government may assist municipalities in carrying out and assessing feasibility studies referred to in subsection (4).	YES	Various communication – refer to Ann A1, item 26
36.	MFMA	120(6)	(6) When a feasibility study has been completed, the accounting officer of the municipality must— (a) submit the report on the feasibility study together with all other relevant documents to the council.	YES	Various communication – refer to Ann

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

KANNALAND / INOVASURE

Item	Prescript	Section	Content	Comply	Reference
			<p>(b) at least 60 days prior to the meeting of the council at which the matter is to be considered, in accordance with section 21A of the Municipal Systems Act—</p> <p>(i) make public particulars of the proposed public-private partnership, including the report on the feasibility study; and</p> <p>(ii) invite the local community and other interested persons to submit to the municipality comments or representations in respect of the proposed public-private partnership; and</p> <p>(c) solicit the views and recommendations of—</p> <p>(i) the National Treasury.</p> <p>(ii) the national department responsible for local government.</p> <p>(iii) if the public-private partnership involves the provision of water, sanitation, electricity, or any other service as may be prescribed, the responsible national department; and</p> <p>(iv) any other national or provincial organ of state as may be prescribed.</p>		A1, items 6, 7, 8, 11, 14, 15, 16 and 26
37.	MFMA	120(7)	Part 1 of this Chapter applies to the procurement of public-private partnership agreements. Section 33 also applies if the agreement will have multi-year budgetary implications for the municipality within the meaning of that section.	YES	Annexures C to J

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE				
KANNALAND / INOVASURE				
Item	Prescript	Section	Content	Comply Reference
MUNICIPAL SYSTEMS ACT, 2000				
38.	MSA	21	Deals with communication to the local community and prescribes the following as a minimum: (i) A notice must be done in local newspaper(s) or newspaper(s) circulating OR by means of radio broadcasts. (ii) Notifications must be in the official languages as determined by Council or having regard to the language preferences and usage within the area. (iii) A copy of a notice published as prescribed by the MSA, must be displayed at the municipal offices. (iv) When the municipality invites written comments, the notice must provide for persons who cannot read or write to come during office hours to a nominated place and person to assist them.	YES Annexure D and E
39.	MSA	21A	Deals with documents that must be made public, by: (iv) Displaying the documents at the municipality's offices and libraries. (v) Displaying the documents on its official website. (vi) By notifying the public in accordance with MSA section 21 of the place, including the website address, where particulars of the documents can be obtained 14 and invite public to submit written comments.	YES Annexure D and E
COVID-19: COGTA DIRECTIONS [Government Gazette 43147 of 25 March 2020, Government Gazette R399 of 30 March 2020 & Government Gazette 43291 of 7 May 2020]				
40.	Direction	6.5.2(a)(iii)	All municipal libraries must be closed.	YES NA

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

KANNALAND / INOVASURE

Item	Prescript	Section	Content	Comply	Reference
41.		6.7.3	All meetings of Council must be done using media platforms such as teleconferencing and videoconferencing.	YES	Annexures D and E
42.		6.7.4(b)	Ensure that communities are consulted using media platforms and alternative methods of consultation, instead of contact meetings, to provide comments on the draft IDP and Budget.	YES	Annexures D and E

PUBLIC PRIVATE PARTNERSHIP REGULATIONS, 1 APRIL 2005 - PPPR

43.	PPPR	2(1)	Before a municipality initiates a feasibility study for a public-private partnership contemplated in section 120(4) of the Act, the accounting officer of the municipality must— (a) notify the National Treasury and the relevant provincial treasury in writing of the municipality's intention, together with information on the expertise within the municipality to comply with that section of the Act. (b) If requested to do so by the National Treasury or the relevant provincial treasury, appoint a person with appropriate skills and experience, either from within or outside the municipality, as the transaction advisor to assist and advise the municipality on the preparation and procurement of the public-private partnership agreement.	YES	Various communication – refer to Ann A1, items 15, 18, 19, 20, 21, 22 and 26
44.	PPPR	4(1)	When complying with Part 1 of Chapter 11 of the Act, the accounting officer of the municipality must solicit the views and recommendations of the National Treasury and the relevant provincial treasury on— (a) the proposed bid documentation at least 30 days before bids are publicly invited.	YES	Annexures A, C, F and G

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

KANNALAND / INOVASURE

Item	Prescript	Section	Content	Comply	Reference
			(b) the evaluation of the bids received and of any preferred bidder at least 30 days before any award is made.		
45.	PPPR	4(2)	An award of a public-private partnership agreement— (a) may be made only after the process set out in section 120(6) of the Act has been completed. (b) is subject to compliance with section 33 of the Act.	YES	Annexures A - J
46.	PPPR	4(3)	When complying with section 120(6)(c)(i) of the Act, the municipality must specifically solicit the views and recommendations of the National Treasury on— (a) the proposed terms and conditions of the draft public-private partnership agreement. (b) the municipality's plan for the effective management of the agreement after its conclusion. (c) the preferred bidder's— (i) competency to enter into the public-private partnership agreement; and (ii) capacity to comply with his or her obligations in terms of the public-private partnership agreement.	YES	Refer to timeline communication at Ann A1, items 15, 18, 19, 20, 21, 22 & 26 and Annexures A & F
47.	PPPR	4(4)	A provincial treasury is a prescribed organ of state for purposes of section 120(6)(c)(iv) of the Act, and when complying with this section the municipality must specifically solicit the views and recommendations also of the relevant provincial treasury on the matters set out in paragraphs (a) to (c) of sub regulation (3).	YES	Annexures A and G

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

KANNALAND / INOVASURE

Item	Prescript	Section	Content	Comply	Reference
SUPPLY CHAIN MANAGEMENT REGULATIONS, 30 MAY 2005 - SCMR					
48.	SCMR	37(1)	In accordance with section 113 of the Act there is no obligation to consider unsolicited bids received outside a normal bidding process.	YES	Annexure A
49.	SCMR	37(2)	The Accounting Officer may decide in terms of section 113(2) of the Act to consider an unsolicited bid, only if – (a) the product or service offered in terms of the bid is a demonstrably or proven unique innovative concept. (b) the product or service will be exceptionally beneficial to or have exceptional cost advantages. (c) the person who made the bid is the sole provider of the product or service. (d) the reasons for not going through the normal bidding processes are found to be sound by the Accounting Officer.	YES	Annexures A and C
50.	SCMR	37(3)	If the Accounting Officer decides to consider an unsolicited bid that complies with subparagraph 37(2) of this policy, the decision must be made public in accordance with section 21A of the Municipal Systems Act, together with – (a) reasons as to why the bid should not be open to other competitors. (b) an explanation of the potential benefits if the unsolicited bid were accepted. (c) an invitation to the public or other potential suppliers to submit their comments within 30 days of the notice.	YES	Annexures A, B, C to E

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE				
KANNALAND / INOVASURE				
Item	Prescript	Section	Content	Reference
51.	SCMR	37(4)	The Accounting Officer must submit all written comments received pursuant to subparagraph 37(3), including any responses from the unsolicited bidder, to the National Treasury and the relevant provincial treasury for comment.	Annexure A
52.	SCMR	37(5)	The adjudication committee must consider the unsolicited bid and may award the bid or make a recommendation to the Accounting Officer, depending on its delegations.	Once consultation is complete
53.	SCMR	37(6)	A meeting of the adjudication committee to consider an unsolicited bid must be open to the public.	
54.	SCMR	37(7)	When considering the matter, the adjudication committee must consider – (a) any comments submitted by the public. (b) any written comments and recommendations of the National Treasury or the relevant provincial treasury.	
55.	SCMR	37(8)	If any recommendations of the National Treasury or provincial treasury are rejected or not followed, the Accounting Officer must submit to the Auditor General, the relevant provincial treasury and the National Treasury the reasons for rejecting or not following those recommendations.	Depends on comments – Annexures F & G
56.	SCMR	37(9)	Such submission must be made within seven days after the decision on the award of the unsolicited bid is taken, but no contract committing the Municipality to the bid may be entered into or signed within 30 days of the submission.	
MUNICIPAL PPP NT GUIDELINES – NTG - NOTE DISCUSSION ON LEGAL ENFORCEMENT OF GUIDELINES AT ANNEXURE A, paragraphs 14 to 22				
57.	NTG	1	The municipality must, prior to initiating the processes described in section 37 (3) of the Municipal	Refer to

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

KANNALAND / NOVASURE

Item	Prescript	Section	Content	Comply	Reference
	Module 5 (page 188)		SCM Regulations, initiate the processes described in stage 1 of Module 3. In addition to the matters discussed in step 1 of part 2 of stage 1 of Module 3, discussions with the PPP unit will include which party will fund the feasibility study in terms of Module 4, and the time frame for this study. A municipality may seek PDF funding for the feasibility study and following processes, in terms of Module 3.		timeline communication at Ann A1, items 15, 18, 19, 20, 21, 22 & 26 and Annexures A, C, F & G
58.		2	At the conclusion of the feasibility study, an application for TVR I must be undertaken and the applicable provisions section 120 (6) of the MFMA complied with, including the publication and public notice requirements.	YES	Annexures A, C, F & G
59.		3	Should TVR I be provided by the National Treasury and an "in principle" decision made by council, the municipality must prepare and issue an RFQ to comply with the provisions of section 37 (3) (c) of the Municipal SCM Regulation. The processes set forth in stage 1, the RFQ, of this module shall be undertaken, including consultation with the PPP unit prior to issuance of the RFQ.	YES	Annexures A to J
60.		4	If there are no appropriate responses from other potential service providers to the RFQ, the municipality may proceed in accordance with the provisions in section 37 (4) and (5) of the Municipal SCM Regulation, provided that the municipality must prepare the proposed PPP agreement and obtain TVR III, and, if applicable, the MFMA section 33 council resolution referenced in this module.	NA	Pending
61.		5	If there are appropriate responses from other potential service providers, the municipality must determine a short-list of qualified bidders in terms of steps 4 and 5 of stage 1, the RFQ, and prepare	NA	Pending

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE				
KANNALAND / INOVASURE				
Item	Prescript	Section	Content	Comply Reference
			an RFP, including a draft PPP agreement, in terms of stage 2: The RFP, in this module and obtain TVR IIA prior to issuance to the short-listed bidders.	
62.		6	Determination of the preferred bidder shall be in terms of the Municipal SCM Regulations and stage 3: Choose the preferred bidder, in this module and also in terms of providing a value assessment report and obtaining TVR IIB.	Pending
63.		7	Negotiations with the preferred bidder shall be undertaken by the municipality in terms of the provisions of stage 4: Negotiations in this module.	Pending
64.		8	At the conclusion of negotiations, the municipality must obtain TVR III, and, as applicable, an MFMA of section 33 council resolution in terms of the provisions of stage 5: TVR III/section 33 of the MFMA of this module.	Pending
65.		9	Where the preferred bidder is not the proponent of the unsolicited bid, and a PPP agreement is concluded with another bidder, the municipality shall compensate the proponent of the unsolicited bid its audited costs for participating in the procurement from the date of submission of the unsolicited bid to the date of selection of the preferred bidder only.	Pending

ANNEXURE A1 – TIMELINE SCHEDULE

ANNEXURE A1 – TIMELINE SCHEDULE as @ 31 May 2020

KANNALAND [KL] / INOVASURE [IS]

Item	DATE	ACTION	PRESCRIPT	DISCUSSION
1.	17/09/2012	MOU concluded between KL and Sungraft to identify feasible electricity and grey water solutions	NA	Was valid for 3-years as per clause 9 and as per Council Resolution of 9 October 2018, was extended on an annual basis.
2.	1/12/2016	Contract ceded by Sungraft to Inovasure and approved by KL.	GCC, 19	None
3.	17/09/2018	IS letter to KL submitting Energy Security Program and Energy Vault Implementation process, reference PPP process	MFMA, s 120, MFMA s 113 & SCMR 37	Refer to Annexure A2: Legal requirement schedule
4.	9/10/2018	Council resolved to support signing of MoA, ESMA and relevant documentation, as per a PPP Process	MFMA s 120(1), 120(4) & 120(5)	i. MM to continue to appoint BIGEN Africa to conduct feasibility study and to draw up the PPP agreement. ii. Supports PPP process with a 25-year contract period on a Built-Own-Operate-Transfer [BOOT] basis. iii. Supports the involvement of NT GTAC PPP-unit.
5.	5/11/2018	KL letter to SS to submit proposal to conduct feasibility study	MFMA s 120(4)	NOTE that Stefanutti Stocks [SS] were appointed after process where 3 suppliers: BIGEN Africa, LDM and SS were requested for proposals.
6.	5/11/2018	KL letter to DBSA to solicit advice.	Council Resolution of 9 Oct 2018	No Objection
7.	16/11/2018	KL letter to DoE requesting views and comments.	MFMA s 33(1)(b)	NOTE that all letters refer to PPP arrangement with Inovasure. No Objection
8.	18/11/2018	KL letter to CSAAWU to solicit support.	MFMA s 33(1)(b)	No Objection
9.	19/11/2018	MoA signed between KL and IS	Council	Note following clauses:

ANNEXURE A1.2 – TIMELINE SCHEDULE

GTAC

ANNEXURE A1.1 – TREASURY COMMUNICATION TIMELINE SCHEDULE as @ 2 June 2020

KANNALAND [KLJ] / INOVASURE [IS] – excluding phone calls or phone messages

Item	DATE	FORM	CONTENT	TREASURY PERSONS
1.	20/11/2018	Letter	Letter to NT GTAC soliciting views and comments on PPP	Tunising Moleke
2.	22/03/2019	e-mail @ 11:51	Inform GTAC on progress, attach all documents and reference communicate of October 2018	Strover Maganedisa
3.	1/04/2019	e-mail @ 17:13	Forward e-mail to GTAC of 22 March 2019 requesting meeting to discuss	Tunising Moleke
4.	18/04/2019	Letter	GTAC letter referencing letter of 20 Nov 2018, confirming that it is not opposed to project and confirm that it needs a letter of request to register project as per PPP Regs.	Lindokuhle Hlatshwayo
5.	26/04/2019	Letter	Letter to NT GTAC for registration of project.	Lindokuhle Hlatshwayo
6.	24/10/2019	e-mail @ 8:55	GTAC requesting Council Resolution	Tessa Schoeman
7.	24/10/2019	e-mail @ 9:16	Provide Council Resolution to GTAC	Tessa Schoeman
8.	25/10/2019	e-mail @ 10:04	Request update on progress from GTAC	Tessa Schoeman
9.	29/10/2019	e-mail @ 14:02	Request update on progress from GTAC	Tessa Schoeman
10.	31/10/2019	e-mail @ 9:50	Request update and meeting from GTAC	Tessa Schoeman
11.	4/11/2019	e-mail @ 15:53	Request update from GTAC	Tessa Schoeman, Strover Maganedisa
12.	5/11/2019	e-mail @ 9:01	GTAC, spoke to Head of PPP unit and request clarification if PPP agreement was concluded	Tessa Schoeman
13.	5/11/2019	e-mail @ 10:02	Confirm to GTAC that PPP was concluded and sent to GTAC in April 2019. Attached it again and requested whether amendments are required.	Tessa Schoeman, Strover Maganedisa
14.	5/11/2019	e-mail @ 9:50	Provide GTAC with link to all documents and confirm again that amendments	Tessa Schoeman, Strover Maganedisa

ANNEXURE A1.2 – TIMELINE SCHEDULE

ANNEXURE A1.1 – TREASURY COMMUNICATION TIMELINE SCHEDULE as @ 2 June 2020				
KANNALAND [KL] / INOVASURE [IS] – excluding phone calls or phone messages				
Item	DATE	FORM	CONTENT	TREASURY PERSONS
			to PPP may be affected if necessary.	
15.	15/11/2019	e-mail @ 6:35	Informed GTAC: Tessa Schoeman that Strover per wasapp advised that Tessa deals with registrations. Request clarification.	Tessa Schoeman, Strover Maganedis
16.	18/11/2019	e-mail @ 7:43	Request update from GTAC and further advice.	Tessa Schoeman, Strover Maganedis
17.	18/11/2019	e-mail @ 13:49	GTAC responds that it awaits letter from Treasury to forward.	Tessa Schoeman
18.	20/11/2019	e-mail @ 5:30	Request update from GTAC.	Tessa Schoeman, Strover Maganedis
19.	20/11/2019	e-mail @ 8:23	GTAC spoke to NT and letter will be received today then GTAC will also register it.	Tessa Schoeman, Strover Maganedis
20.	21/11/2019	Letter	GTAC confirmed that project was registered as potential PPP = TASM 180.	Tumi Moleke
21.	21/11/2019	e-mail @ 11:09	GTAC provide registration letter	Tessa Schoeman, Strover Maganedis, Michele Chamley & Annah Maleka
22.	22/11/2019	e-mail @ 8:19	Informed GTAC requesting some corrections on the registration letter and request a meeting	Tessa Schoeman, Strover Maganedis
23.	25/11/2019	e-mail @ 8:40	GTAC confirmed that corrections will be made, indicating that a meeting must be arranged Strover Maganedis	Tessa Schoeman, Strover Maganedis & Michele Chamley
24.	26/11/2019	Letter	NT confirmed that project was registered as potential PPP = M180.	Dorcas Kayo
25.	27/11/2019	Letter	Municipality request meeting from GTAC during December 2019.	Strover Maganedis
26.	27/11/2019	e-mail @ 12:20	Strover Maganedis request Michele Chamley to respond	Strover Maganedis & Michele Chamley

ANNEXURE A1.2 – TIMELINE SCHEDULE

ANNEXURE A1.1 – TREASURY COMMUNICATION TIMELINE SCHEDULE as @ 2 June 2020

KANNALAND [KL] / INOVASURE [IS] – excluding phone calls or phone messages				TREASURY PERSONS
Item	DATE	FORM	CONTENT	
27.	27/11/2019	e-mail @ 12:59	GTAC request municipality to call them to arrangement meeting with Strover Maganedesi	Michele Charnley and Annah Maleka
28.	4/12/2019	e-mail @ 4:00	Request GTAC for potential meeting on 11 December 2019.	Strover Maganedisa, Michele Charnley, Annah Maleka, Natalie van Reenen, Dorcas Kayo & Tessa Schoeman
29.	5/12/2019	e-mail @ 10:55	GTAC informed the municipality that Strover Maganedisa is not available and request meeting to be in new year	Michelle Charnley
30.	5/12/2019	e-mail @ 13:49	Municipality request GTAC meeting for 12 or 13 December 2019	Strover Maganedisa, Michele Charnley, Annah Maleka, Natalie van Reenen, Dorcas Kayo & Tessa Schoeman
31.	10/01/2020	e-mail @ 9:34	Municipality request urgent response from GTAC for meeting with Strover Maganedisa	Strover Maganedisa, Michele Charnley, Annah Maleka, Natalie van Reenen, Dorcas Kayo & Tessa Schoeman
32.	10/02/2020	e-mail	Various mails informing GTAC of mails to date and all relevant documents	Themba Mdletshe
33.	12/02/2020	e-mail @ 17:49	Informed GTAC and NT officials that project is registered but no movement as no further information was provided	Themba Mdletshe, Strover Maganedisa, Wayne McComans, Tumising Moleke, TV Pillay and Tessa Schoeman
34.	15/02/2020	e-mail @ 13:27	Inform GTAC of DBSA response of 14 February 2020, reconfirming registration letters and request advice on the way forward	Tumising Moleke, Strover Maganedisa, Dorcas Kaya & Thembe Mdletshe
35.	17/02/2020	e-mail @ 10:02	GTAC indicated that all mails were forwarded to Strover as he is the GTAC's advisor on the project.	Themba Mdletshe
36.	27/02/2020	e-mail @ 10:56	GTAC send response to the Western Cape PT stating: 'As promised see	Themba Mdletshe & Gertruida Barnes

ANNEXURE A1.2 – TIMELINE SCHEDULE

ANNEXURE A1.1 – TREASURY COMMUNICATION TIMELINE SCHEDULE as @ 2 June 2020			
KANNALAND [KL] / INOVASURE [IS] – excluding phone calls or phone messages			
Item	DATE	FORM	TREASURY PERSONS
			CONTENT
			<i>below</i> .
37.	28/02/2020	e-mail @ 10:20	Western Cape PT forwarded document to MM as per discussion that was held.
38.	28/04/2020	e-mail @ 1:55	Detailed explanation to GTAC on processes and risks till date and ask for urgent guidance on the way forward.
39.	22/05/2020	e-mail @ 13:12	Detailed explanation to NT on processes and risks till date and ask for urgent guidance on the way forward.
40.	26/05/2020	e-mail @ 13:59	Internal NT e-mail indicating: <i>'This may have fallen between the cracks'</i>
41.	28/05/2020	e-mail @ 9:01	Request for Teams-meeting.
42.	28/05/2020	e-mail @ 9:22	Enquire from NT why Knysna officials were invited to meeting as matter relates to Kannaland Municipality.
43.	29/05/2020	e-mail @ 15:01	Follow-up enquiry on meeting
44.	29/05/2020	e-mail @ 3:39	NT responded that relevant people will be invited to meeting.

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE				
KANNALAND / INOVASURE				
Item	Prescript	Section	Content	Reference
MUNICIPAL FINANCE MANAGEMENT ACT, 2003 - MFMA				
1.	MFMA	33(1)(a)	MFMA section 33(1)(a) prescribes the processes to be followed by a municipality should it enters into a contract that will impose financial obligations on the municipality beyond the three years, that 60-days before the Council meeting where the contract is approved, the Municipal Manager must: <ul style="list-style-type: none"> a. Make public the draft contract and an information statement summarising the Municipality's obligations and invite the public to comment; and b. Solicit views and inputs from certain organs of state such as the relevant Treasuries. 	Annexures D to J
2.	MFMA	33(1)(b)	Prescribes the considerations to be taken by Council, namely: <ul style="list-style-type: none"> i. Projected financial obligations for each financial year. ii. Impact of obligations on the Municipal tariffs and revenue. iii. Comments received from local community. iv. Written views from certain organs of state such as the relevant Treasuries. 	Only once comments were received
3.	MFMA	33(1)(c)	Prescribes the content of the Council resolution, namely: <ul style="list-style-type: none"> i. The Municipality will secure a significant capital investment or will derive significant financial economic or financial benefit. ii. Approves entire contract exactly as it is to be executed. iii. Authorises the Municipal Manager to sign the contract on behalf of the Municipality. 	
4.	MFMA	113	(1) A municipality is not obliged to consider an unsolicited bid received outside its normal bidding	

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE				
KANNALAND / INOVASURE				
Item	Prescript	Section	Content	Comply Reference
			<p>process.</p> <p>(2) If a municipality decides to consider an unsolicited bid it may do so only in accordance with a prescribed framework.</p> <p>(3) The framework must strictly regulate and limit the power of municipalities to approve unsolicited bids.</p>	J
5.	MFMA	120(1)	<p>A municipality may enter into a public-private partnership agreement, but only if the municipality can demonstrate that the agreement will—</p> <p>(a) provide value for money to the municipality.</p> <p>(b) be affordable for the municipality.</p> <p>(c) transfer appropriate technical, operational, and financial risk to the private party.</p>	YES Feasibility study of 1/11/2018
6.	MFMA	120(2)	A public-private partnership agreement must comply with any prescribed regulatory framework for public-private partnerships.	YES Stefanutti Stocks on 20 March 2019
7.	MFMA	120(3)	If the public-private partnership involves the provision of a municipal service, Chapter 8 of the Municipal Systems Act must also be complied with.	YES
8.	MFMA	120(4)	Before a public-private partnership is concluded, the municipality must conduct a feasibility study	YES
9.	MFMA	120(5)	The national government may assist municipalities in carrying out and assessing feasibility studies referred to in subsection (4).	YES Various communication – refer to Ann A1, item 26

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE				
KANNALAND / INOVASURE				
Item	Prescript	Section	Content	Comply Reference
10.	MFMA	120(6)	<p>(6) When a feasibility study has been completed, the accounting officer of the municipality must—</p> <p>(a) submit the report on the feasibility study together with all other relevant documents to the council.</p> <p>(b) at least 60 days prior to the meeting of the council at which the matter is to be considered, in accordance with section 21A of the Municipal Systems Act—</p> <p>(i) make public particulars of the proposed public-private partnership, including the report on the feasibility study; and</p> <p>(ii) invite the local community and other interested persons to submit to the municipality comments or representations in respect of the proposed public-private partnership; and</p> <p>(c) solicit the views and recommendations of—</p> <p>(i) the National Treasury.</p> <p>(ii) the national department responsible for local government.</p> <p>(iii) if the public-private partnership involves the provision of water, sanitation, electricity, or any other service as may be prescribed, the responsible national department; and</p> <p>(iv) any other national or provincial organ of state as may be prescribed.</p>	<p>YES</p> <p>Various communication – refer to Annex A1, items 6, 7, 8, 11, 14, 15, 16 and 26</p>
11.	MFMA	120(7)	<p>Part 1 of this Chapter applies to the procurement of public-private partnership agreements. Section 33 also applies if the agreement will have multi-year budgetary implications for the municipality within the meaning of that section.</p>	<p>YES</p> <p>Annexures C to J</p>

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE					
KANNALAND / INOVASURE					
Item	Prescript	Section	Content	Comply	Reference
MUNICIPAL SYSTEMS ACT, 2000					
12.	MSA	21	Deals with communication to the local community and prescribes the following as a minimum: (i) A notice must be done in local newspaper(s) or newspaper(s) circulating OR by means of radio broadcasts. (ii) Notifications must be in the official languages as determined by Council or having regard to the language preferences and usage within the area. (iii) A copy of a notice published as prescribed by the MSA, must be displayed at the municipal offices. (iv) When the municipality invites written comments, the notice must provide for persons who cannot read or write to come during office hours to a nominated place and person to assist them.	YES	Annexure D and E
13.	MSA	21A	Deals with documents that must be made public, by: (i) Displaying the documents at the municipality's offices and libraries. (ii) Displaying the documents on its official website. (iii) By notifying the public in accordance with MSA section 21 of the place, including the website address, where particulars of the documents can be obtained ¹ and invite public to submit written comments.	YES	Annexure D and E

¹ MSA section 21A(1)(c).

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE				
KANNALAND / INOVASURE				
Item	Prescript	Section	Content	Comply Reference
COVID-19: COGTA DIRECTIONS [Government Gazette 43147 of 25 March 2020, Government Gazette R399 of 30 March 2020 & Government Gazette 43291 of 7 May 2020]				
14.	Direction	6.5.2(a)(iii)	All municipal libraries must be closed.	YES NA
15.		6.7.3	All meetings of Council must be done using media platforms such as teleconferencing and videoconferencing.	YES Annexures D and E
16.		6.7.4(b)	Ensure that communities are consulted using media platforms and alternative methods of consultation, instead of contact meetings, to provide comments on the draft IDP and Budget.	YES Annexures D and E
PUBLIC PRIVATE PARTNERSHIP REGULATIONS, 1 APRIL 2005 - PPPR				
17.	PPPR	2(1)	Before a municipality initiates a feasibility study for a public-private partnership contemplated in section 120(4) of the Act, the accounting officer of the municipality must— (a) notify the National Treasury and the relevant provincial treasury in writing of the municipality's intention, together with information on the expertise within the municipality to comply with that section of the Act. (b) If requested to do so by the National Treasury or the relevant provincial treasury, appoint a person with appropriate skills and experience, either from within or outside the municipality, as the transaction advisor to assist and advise the municipality on the preparation and procurement of the public-private partnership agreement.	YES Various communication – refer to Ann A1, items 15, 18, 19, 20, 21, 22 and 26
18.	PPPR	4(1)	When complying with Part 1 of Chapter 11 of the Act, the accounting officer of the municipality must	YES Annexures A,

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE				
KANNALAND / INOVASURE				
Item	Prescript	Section	Content	Comply Reference
			solicit the views and recommendations of the National Treasury and the relevant provincial treasury on— (a) the proposed bid documentation at least 30 days before bids are publicly invited. (b) the evaluation of the bids received and of any preferred bidder at least 30 days before any award is made.	C, F and G
19.	PPPR	4(2)	An award of a public-private partnership agreement— (a) may be made only after the process set out in section 120(6) of the Act has been completed. (b) is subject to compliance with section 33 of the Act.	YES Annexures A - J
20.	PPPR	4(3)	When complying with section 120(6)(c)(i) of the Act, the municipality must specifically solicit the views and recommendations of the National Treasury on— (a) the proposed terms and conditions of the draft public-private partnership agreement. (b) the municipality's plan for the effective management of the agreement after its conclusion. (c) the preferred bidder's— (i) competency to enter into the public-private partnership agreement; and (ii) capacity to comply with his or her obligations in terms of the public-private partnership agreement.	YES Refer to timeline communication at Ann A1, items 15, 18, 19, 20, 21, 22 & 26 and Annexures A & F
21.	PPPR	4(4)	A provincial treasury is a prescribed organ of state for purposes of section 120(6)(c)(iv) of the Act, and when complying with this section the municipality must specifically solicit the views and	YES Annexures A and G

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE				
KANNALAND / INOVASURE				
Item	Prescript	Section	Content	Reference
			recommendations also of the relevant provincial treasury on the matters set out in paragraphs (a) to (c) of sub regulation (3).	
SUPPLY CHAIN MANAGEMENT REGULATIONS, 30 MAY 2005 - SCMR				
22.	SCMR	37(1)	In accordance with section 113 of the Act there is no obligation to consider unsolicited bids received outside a normal bidding process.	Annexure A
23.	SCMR	37(2)	The Accounting Officer may decide in terms of section 113(2) of the Act to consider an unsolicited bid, only if – (a) the product or service offered in terms of the bid is a demonstrably or proven unique innovative concept. (b) the product or service will be exceptionally beneficial to or have exceptional cost advantages. (c) the person who made the bid is the sole provider of the product or service. (d) the reasons for not going through the normal bidding processes are found to be sound by the Accounting Officer.	Annexures A and C
24.	SCMR	37(3)	If the Accounting Officer decides to consider an unsolicited bid that complies with subparagraph 37(2) of this policy, the decision must be made public in accordance with section 21A of the Municipal Systems Act, together with – (a) reasons as to why the bid should not be open to other competitors. (b) an explanation of the potential benefits if the unsolicited bid were accepted.	Annexures A, B, C to E

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE				
KANNALAND / INOVASURE				
Item	Prescript	Section	Content	Comply Reference
			(c) an invitation to the public or other potential suppliers to submit their comments within 30 days of the notice.	
25.	SCMR	37(4)	The Accounting Officer must submit all written comments received pursuant to subparagraph 37(3), including any responses from the unsolicited bidder, to the National Treasury and the relevant provincial treasury for comment.	YES Annexure A
26.	SCMR	37(5)	The adjudication committee must consider the unsolicited bid and may award the bid or make a recommendation to the Accounting Officer, depending on its delegations.	NA Once consultation is complete
27.	SCMR	37(6)	A meeting of the adjudication committee to consider an unsolicited bid must be open to the public.	NA
28.	SCMR	37(7)	When considering the matter, the adjudication committee must consider – (a) any comments submitted by the public. (b) any written comments and recommendations of the National Treasury or the relevant provincial treasury.	NA
29.	SCMR	37(8)	If any recommendations of the National Treasury or provincial treasury are rejected or not followed, the Accounting Officer must submit to the Auditor General, the relevant provincial treasury and the National Treasury the reasons for rejecting or not following those recommendations.	NA Depends on comments – Annexures F & G
30.	SCMR	37(9)	Such submission must be made within seven days after the decision on the award of the unsolicited bid is taken, but no contract committing the Municipality to the bid may be entered into or signed within 30 days of the submission.	NA

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE				
KANNALAND / INOVASURE				
Item	Prescript	Section	Content	Reference
MUNICIPAL PPP NT GUIDELINES - NTG - <i>NOTE DISCUSSION ON LEGAL ENFORCEMENT OF GUIDELINES AT ANNEXURE A, paragraphs 14 to 22</i>				
31.	NTG Module 5 (page 188)	1	The municipality must, prior to initiating the processes described in section 37 (3) of the Municipal SCM Regulations, initiate the processes described in stage 1 of Module 3. In addition to the matters discussed in step 1 of part 2 of stage 1 of Module 3, discussions with the PPP unit will include which party will fund the feasibility study in terms of Module 4, and the time frame for this study. A municipality may seek PDF funding for the feasibility study and following processes, in terms of Module 3.	Refer to timeline communication at Ann A1, items 15, 18, 19, 20, 21, 22 & 26 and Annexures A, C, F & G
32.		2	At the conclusion of the feasibility study, an application for TVR I must be undertaken and the applicable provisions section 120 (6) of the MFMA complied with, including the publication and public notice requirements.	YES
33.		3	Should TVR I be provided by the National Treasury and an “in principle” decision made by council, the municipality must prepare and issue an RFQ to comply with the provisions of section 37 (3) (c) of the Municipal SCM Regulation. The processes set forth in stage 1, the RFQ, of this module shall be undertaken, including consultation with the PPP unit prior to issuance of the RFQ.	YES
34.		4	If there are no appropriate responses from other potential service providers to the RFQ, the municipality may proceed in accordance with the provisions in section 37 (4) and (5) of the Municipal SCM Regulation, provided that the municipality must prepare the proposed PPP agreement and obtain TVR III, and, if applicable, the MFMA section 33 council resolution referenced in this module.	Annexures A to J
				Pending

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE

ANNEXURE A2 – LEGAL REQUIREMENTS AND DUE DILIGENCE SCHEDULE				
KANNALAND / INOVASURE				
Item	Prescript	Section	Content	Comply Reference
35.		5	If there are appropriate responses from other potential service providers, the municipality must determine a short-list of qualified bidders in terms of steps 4 and 5 of stage 1, the RFQ, and prepare an RFP, including a draft PPP agreement, in terms of stage 2: The RFP, in this module and obtain TVR IIA prior to issuance to the short-listed bidders.	NA Pending
36.		6	Determination of the preferred bidder shall be in terms of the Municipal SCM Regulations and stage 3: Choose the preferred bidder, in this module and also in terms of providing a value assessment report and obtaining TVR IIB.	NA Pending
37.		7	Negotiations with the preferred bidder shall be undertaken by the municipality in terms of the provisions of stage 4: Negotiations in this module.	NA Pending
38.		8	At the conclusion of negotiations, the municipality must obtain TVR III, and, as applicable, an MFMA section 33 council resolution in terms of the provisions of stage 5: TVR III/section 33 of the MFMA of this module.	NA Pending
39.		9	Where the preferred bidder is not the proponent of the unsolicited bid, and a PPP agreement is concluded with another bidder, the municipality shall compensate the proponent of the unsolicited bid its audited costs for participating in the procurement from the date of submission of the unsolicited bid to the date of selection of the preferred bidder only.	NA Pending

Annexure B



KANNALAND
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OFFICE OF THE MUNICIPAL MANAGER

ANNEXURE B: UNSOLICITED BID PROJECT SPECIFIC REQUIREMENTS

TO INTERESTED PARTIES

UNSOLICITED BID: PROJECT SPECIFIC REQUIREMENTS

IMPORTANT NOTICE: THE PROJECT SPECIFIC REQUIREMENTS MUST BE READ WITH THE SUPPORTING ADVERT/NOTICE. IF A POTENTIAL BIDDER IS SATISFIED THAT IT IS ABLE TO SUBMIT AN EQUAL OR BETTER ALTERNATIVE OFFER AS PER SCMR 37(3)(c), ALL SPECIFICATIONS, REQUIREMENTS, RISK ABSORPTION AND TIMELINES AS PER THIS DOCUMENT MUST BE MET AND EVIDENCE THEREOF MUST BE PROVIDED.

RENEWABLE ENERGY AND POWER STORAGE RISK MITIGATION PROJECT FOR RENEWABLE ENERGY POWER AND CONCOMITANT POWER STORAGE PLANTS FOR INTEGRATION INTO THE DISTRIBUTION NETWORK OF THE MUNICIPALITY IN ORDER TO MITIGATE THE RISKS AND EFFECT OF LOAD SHEDDING BY ESKOM, ASSIST ESKOM WITH PEAK PERIOD CO-GENERATION, ADDRESS CARBON TAX MATTERS AND PROVIDE ENERGY AND WATER SECURITY TO THE MUNICIPALITY

A. BACKGROUND

1. In its endeavours to find mechanisms for Energy and Water Security for the Municipality and through experience over the years with the insight of many consultants who are leaders in their field, the Kannaland Local Municipality has learned that power generation is a technology that is

conceptually simple, but practically very challenging to execute. It is understandable that individuals would form strong opinions on the proposed solutions, having gained an understanding of the simplified concepts, yet without insight into the complexities of the various technologies available, as well as the challenges of connecting such technologies to an electricity distribution grid with the objective to deliver electricity at 240V, 50Hz 24x7x365, such opinions would appear to fall short of the reality.

2. The Kannaland Local Municipality determined that the most prominent argument to date has centred around the "cost of power" for the various technologies, with claims of unfair support of some and oppression of others, for whatever the reasons. This Tender document, which includes the Tender Specifications, and the opportunity that it affords to the successful Contractor, will provide the basis for the Contractor to prepare a proposal for (Renewable) Energy and Water Security for the Kannaland Local Municipality that will quantify the cost of power (and water) on a basis that allows for comparison, both for the cost of generation and storage on the one hand and the cost to the grid of connecting to the various modes of generating power currently employed in South Africa on the other hand.
3. The Municipality has determined that power projects, as the basis of Energy Security and the precursors of Water Security for the area, are notoriously complex and as a result we have not been in a position to source convenient examples of successful power projects using diverse technologies built on the same standard and executable basis with the same financial parameters. We have also not been able to design power and water systems for the District that make one-on-one comparisons feasible. It has become clear that the vast number of variables that equally contribute to the cost and sensitivity of the financial success of power projects as the basis of Energy Security, make such comparison both difficult and costly, leaving most of our questions and challenges unanswered.
4. As a result of the above challenges experienced and highlighted during the past years and the various investigations that the Kannaland Local Municipality has carried out in order to attempt to source solutions that would result in Energy and Water Security for the area, it has been determined that attempting to find out whether the private sector can provide the sought after solutions would be the prudent step for the Municipality to take in the light of the current challenges to Energy and Water Security in the District.
5. In consequence, this document sets the general requirements and specifications for the immediately available and ready to deploy design, funding mechanism, establishment, operation

and maintenance of integrated Renewable Energy and Power Storage Plant(s), which also allow for the integration of Water Security systems and installations, to be determined by the Contractor in terms of the size and number of Plants and water systems required in order to ensure full Energy Security and concomitant Water Security for the Kannaland Local Municipality, as well as the concomitant load management software, telecommunications and secure power and water collections platform therefore, to be designed, funded, implemented and managed by the Contractor in all aspects, in a joint suitable relationship with the Kannaland Local Municipality, by means of integration into the relevant Distribution Networks at the various towns of Ladismith, Zoar and Calitzdorp, on a turnkey Build Own Operate and Transfer ("BOOT") basis, as well as similar small-scale off-grid nano Plants and water systems that will allow for the reticulation, electrification and provision of telecommunications, water and sanitation to informal settlement dwellings in the Municipality in a suitable manner.

6. The referenced Plants and water systems, in their entirety and as further described specifically below, shall be designed, installed, operated and maintained by the successful Contractor at its own costs for the period of 25 years and thereafter proceed to be transferred to the Municipality (for reflection on its balance sheet) where the Plants and water systems are located at the various identified and relevant site/s in the area.

B. ENERGY ACQUISITION, DISTRIBUTION, CO-GENERATION, SHAVING, SHIFTING AND MANAGING

(i) Energy Acquisition

7. The successful Contractor shall be required to have a detailed understanding of the relationship between the Municipalities and ESKOM, including detail related to the interconnect agreements, Power Purchase Agreements, Peak Demand Management, Penalties, and Tariffs. The Contractor shall also be required to present the ability to advise on proposed amendments to manage the cost of energy acquisition in the Municipality. In addition, the Contractor must be in a position to demonstrably present its understanding of the current cost structures in order to advise on the impact of proposed changes to the cost of power acquisition.

(ii) Energy Distribution

8. The Contractor must present an in-depth understanding of the current challenges of distribution of power, including illegal connections, unmetered legal connections, inaccurate metering, Debtors

Management, vandalism, and distribution equipment protection. The Contractor must exhibit the ability to deploy advanced SCADA systems for the implementation throughout the distribution network to enhance its operation, protect the equipment, and calculate its condition. It shall be of paramount importance for the Contractor to exhibit the ability to protect, enhance, and maintain, the most valuable asset of the Municipalities in question – their distribution networks.

9. The Contractor must have a detailed understanding of the distribution network and the software required to effectively install management and communications systems to effect the above.

(iii) Distribution devices

10. Since it is deemed to be the most suitable, reliable, cost effective and expeditious format of ensuring Power Security payment capability, the Contractor shall, at its own cost, be required to replace and / or re-calibrate all the existing electricity (and water) meters in the Municipal area as part of the Plants (and water systems) design and operation in such a manner that the electricity (and water) meters can effect metering, allow for pre-paid collections, effect load management, act as a conduit for telecommunications and collections in terms of suitable software by means of interaction with a router and in general utilise technology/ies which allow for the safe and secure operation, in a Virtual Private Network which shall be proven to have a negligible risk of integrity breach, of all aspects listed above.
11. In this regard the Contractor shall be required to safely and securely effect the collections of the pre-paid electricity (and water) income, with proven software packages, as part of the operation of the Plants (and water systems), in conjunction with the Municipality, and with oversight of the Treasury. Only mature and proven technologies, products and product suppliers which are capable of carrying out the functions listed above shall qualify for use by the Contractor.
12. In this regard the Contractor will be required to provide guarantees by the relevant product/s supplier, a credible International insurer / re-insurer for the full Capex of the electricity (and water) meter and router communications aspects of the Plants (and water systems) and the Multilateral Investment Guarantee Agency (MIGA) of the World Bank (in terms of full cover for, at minimum, Expropriation) for the operation and maintenance of the relevant electricity (and water) meter and communications router collection and load management aspects of the Plants (and water systems), in conjunction with the Municipality, for the full 25 year period.
13. The Municipality has determined that many of the current prepaid and post-paid electricity (and water) meters do not meet the requirements of the Municipality. The Contractor therefore needs to

demonstrate the ability to deploy distribution devices, for both electricity and water, capable of, but not limited to, the following features:

- a) Insuring Payments by clients;
- b) Combating illegal connections;
- c) Combatting device circumvention;
- d) Combatting payment animosity with value added services;
- e) Time of Use Tariff implementation;
- f) Using the distribution network to further national Government goals such as Public connection to the internet, cheaper and more effective methods of communication and access to free educational content;
- g) Real time energy audits;
- h) Protection of distribution infrastructure;
- i) Demand Side management;
- j) Micro Load Shedding;
- k) Load management i.e load shedding without discontinuing critical network service.

14. Since it is deemed to be the most suitable, mature, reliable, cost effective and expeditious format of telecommunications in terms of installation time and technological capacity, only technologies in the field of Wimax will be considered for the telecommunications aspects of the sought Plants (and water systems), to be provided by suppliers who have proven national installed systems in operation and where the Contractor shall carry the costs and be in a position to provide guarantees by the relevant product supplier, a credible International insurer / re-insurer for the full Capex of the Wimax telecommunications aspects of the Plants (and water systems) and the Multilateral Investment Guarantee Agency (MIGA) of the World Bank (in terms of full cover for, at minimum, Expropriation) for the operation and maintenance of the relevant telecommunications aspects of the Plants for the full 25 year period.

(iv) Demand side management

15. The successful Contractor shall be required to exhibit in its proposal the capability and ability to effect demand side management within the distribution network of the Municipality. A specific, substantiated, load management platform shall be required to be designed, developed and instituted along with the supporting actuarial models which shall indicate definitively how the Plants will integrate with the network, the substation/s, all the electricity meters, the storage and

generation aspects of the Plants and the current network, ESKOM, any other relevant facilities and the National transmission grid.

(v) Collection, Payment Systems, Settlement Systems

16. The successful Contractor shall be required to exhibit in its proposal the capability and ability to effect pre-paid collection activities, which shall be covered in terms of all aspects thereof in an insurable manner, in a safe and secure environment and with suitable software which has been proven in the field and which interfaces with all reliable and suitable payment mechanisms by power and water users in the Municipal area in both the formal and informal settlement areas.
17. In addition, the Contractor must be in a position to provide guarantees by the relevant product software supplier for such collection activities, a credible International insurer / re-insurer for the full Capex of the collection aspects of the Plants and water systems and the Multilateral Investment Guarantee Agency (MIGA) of the World Bank (in terms of full cover for, at minimum, Expropriation) for the operation and maintenance of the relevant collection aspects of the Plants and water systems for the full 25 year period.

(vi) Dealing with the animosity of non-payment

18. Since the Municipality has determined that the risk of illegal connections in the Municipality, disconnection of electricity (and water) meters by power (and water) users and the acceptance of power provided in the informal settlement areas is significantly lowered when the electricity meter is provided with the capacity to provide WIFI, receive educational and other entertainment related content, it shall be required that the Contractor provide such services at its own costs as part of the operation of the Plants and the management of the electricity (and water) meters and the routers which shall allow for the load management and pre-paid electricity collections.
19. In this regard the Contractor shall be required to provide, as part of the Plants, at its own costs, the provision of suitable content, through suitable delivery mechanisms, which is deemed fit and proper, with at minimum the full CAPS curriculum and other entertainment content which shall serve to render the electricity meters indispensable to the home dwellers and power users, to all the power users in dwellings in the formal settlement areas throughout the Municipality, as well as a plan to provide this same service to home dwellers in the informal settlements in the Municipal area.

20. In this regard the Contractor will be required to provide guarantees by the relevant product supplier and service provider, a credible International insurer / re-insurer for the full Capex of the educational and entertainment content provision aspects of the Plants and the Multilateral Investment Guarantee Agency (MIGA) of the World Bank (in terms of full cover for, at minimum, Expropriation) for the operation and maintenance of the relevant educational and content provision aspects of the Plants, in conjunction with the Municipality, for the full 25 period.

(vii) Energy Shifting & Battery Storage

21. Since it is deemed to be the most suitable, mature, reliable, cost effective and expeditious format of energy storage in terms of installation time, only technologies in the field of Lithium Ion battery storage will be considered for the storage aspects of the sought Plants, where the Contractor shall carry the costs and the equipment and technology shall be provided by suppliers who have proven global installed capacity and operation in excess of 10GW of storage capacity and where the Contractor is in a position to provide guarantees by the relevant product supplier, a credible International insurer / re-insurer for the full Capex of the battery storage aspects of the Plants and the Multilateral Investment Guarantee Agency (MIGA) of the World Bank (in terms of full cover for, at minimum, Expropriation) for the operation and maintenance of the relevant storage aspects of the Plants for the full 25 year period.

22. Further with regard to the energy storage aspects of the proposed Energy Security to be provided by the Plants that the Contractor shall install, the following general characteristics shall be required to be exhibited:

- (i) Energy cost savings of up to 60% of total cost of acquisition;
- (ii) Energy shifting capability for tariff profit;
- (iii) Ensuring off-peak energy storage and peak injection of the full required capacity in terms of MWh in the morning peak timeslot for each relevant Local Municipality where the Plants are located;
- (iv) Large capacity energy storage to be able to deal with at least two peak periods twice a day for full discharge of the full required capacity in terms of MWh for each relevant Local Municipality where the Plants are located;
- (v) Interconnect peak demand management;
- (vi) Energy shaving by means of peak tariff determination;
- (vii) Equipment protection by means of substation overload protection;
- (viii) Large scale distribution device capacity integration and management;

- (ix) Power Factor correction capability;
- (x) Phase balancing capability;
- (xi) Voltage and Frequency quality control capability.

23. It is re-iterated that the primary objective of the storage aspects of the proposed solutions – taking the interests of the Municipality into consideration - is the protection of the distribution network. It is also in the interest of the Municipality that the Contractor maximises localised renewable energy production whilst minimising peak energy consumption from the grid – this implies maximising utilisation of stored energy.
24. In this regard we have determined that the capacity allocated to ESKOM through the storage installation can be traded as a peak production capacity, typically using a "capacity charge" plus "generation charge" cost structure, which is not as dependant on actual generation produced. The capacity allocated to ESKOM is therefore for the benefit of the whole grid, not just the local Municipal area where the storage capacity resides. In this regard we have ascertained that practically all energy management technologies available are focussed on demand-side management, whilst none make provision for the control of generation from the utility grid side, which the suitable Contractor shall be required to demonstrate.
25. The successful Contractor, as part of the storage (and generation) aspects of the Plants, will be required to show the working of the control system required for the Plants in the Municipal area. Balancing overall capacity on the national grid is required and there are several complexities related to line stability caused by the envisaged highly localised generation of the Plants and long non-symmetrical transmission routes. The proposal for the Plants will need to exhibit how they will resolve these issues by means of a so-called "Virtual Power Plant" software platform capability, which will house the software management systems and dashboard management actions of the of the Plants and the overall Energy Security solution proposed by the Contractor.
26. In this regard the Contractor must be in a position to provide guarantees by the relevant software supplier for the Virtual Power Station software platform, a credible International insurer / re-insurer for the full Capex of the software Virtual Power Station management aspects of the Plants and cover by the Multilateral Investment Guarantee Agency (MIGA) of the World Bank (in terms of full cover for, at minimum, Expropriation) for the operation and maintenance of the relevant software management aspects of the Plants for the full 25 year period.

27. We have taken note that the National Energy Regulator (NERSA) has ranked the following important objectives for the power market in South Africa:

1. Reliable provision of service;
2. Quality of supply and service, in accordance with appropriate standards;
3. Customer satisfaction with the participants in the industry;
4. Resolution of complaints and disputes.

28. It is therefore envisaged that the introduction of the successful Consultant's Plants in the Kannaland Local Municipality will:

1. Present a significant capacity increase in the distribution networks of at least 30%;
2. Provide Energy Reliability to the Municipality as we envisage that the ability to centrally have access to the Plants energy storage capabilities will allow the Municipality, and concomitantly ESKOM, to fully control the load. We also envisage that the reliability will increase significantly for shorter interruptions as well and due to the enhancement of the distribution capacity and the quality of supply, will impact positively to the reliability of the delivery.
3. Radically reduce the occurrence of transgressions of the peak demand agreement between the Municipality and ESKOM currently amounting to a notable percentage of energy costs.
4. Dramatically reduce the real net tariff paid by the Municipality by reducing the volume of energy purchased in peak by up to 80%.

C. CO-GENERATION BY MEANS OF PHOTO VOLTAIC POWER AND OTHER SUITABLE TECHNOLOGIES

(i) Photo Voltaic Power

29. Since it is deemed to be the most suitable, mature, reliable, cost effective and expeditious format of renewable energy in terms of installation time, only technologies in the field of solar power will be considered for the power generation aspects of the sought Plants and water systems, the costs for which shall be carried by the Contractor, to be established at suitable sites where the required Environmental Impact Assessments have already been concluded and Records of Decision issued, (whether on the Contractor's own property or the relevant Local Municipality's property) to be established at the suitable site(s) to be identified by the successful Contractor, and furthermore to be provided by suppliers who have proven global installed capacity and operation in excess of

10GW of generation capacity and where the Contractor is in a position to provide guarantees by the relevant product supplier/s, a credible international insurer / re-insurer for the full Capex of the solar energy generation Capex of the Plants and the Multilateral Investment Guarantee Agency (MIGA) of the World Bank (in terms of full cover for, at minimum, Expropriation) for the operation and maintenance of the relevant renewable energy generation aspects of the Plants for the full 25 year period.

30. Further with regard to the renewable energy generation aspects of the proposed Energy Security to be provided by the Plants that the Contractor shall install, the following general characteristics shall be required to be exhibited:

- i. Installed capacity in modules of between 4 and 25MW_p;
- ii. Energy production at a tariff of a maximum of R0.73 kWh;
- iii. Suitable energy production to inject into the full evening peak time slot requirement for the Municipality;
- iv. Significant tariff profit capability.

(ii) Other Power Technologies

31. The Contractor will be required to exhibit the capability and ability, as part of the proposal, to further design, implement and manage, at its own costs, further suitable power generation technologies in the field of gas fired generation power stations, in order to augment the generation capacity of ESKOM during peak periods, as well as to supply power to the storage facilities of the Plants in the Municipality during off-peak night hours, at suitable tariffs, as well as the ability to inject, wheel and manage the load of such generation technologies, by means of the Virtual Power Station software platform capability mentioned above, in conjunction with the Plants in the Municipal area.

32. It is specifically required that the Contractor be in a position to develop the referenced gas fired generation capacity either in the Garden Route District, under the auspices and in conjunction with the relevant Local Municipality/s and/or the District Municipality, or at sites outside of the District or the borders of South Africa, with the requisite licenses for the generation plant, gas supply, import permits for gas and/or energy, proposed wheeling capability and mechanisms and all other aspects required to effect such power generation and sales.

33. In this regard, the Municipality intends to enter into a suitable Power Purchase Agreement for such suitable augmented gas fired power generation facilities and as a result the Contractor must be in a

position to provide a suitable draft Power Purchase Agreement and other related arrangements as part of the Proposal.

34. In this regard the Contractor must be in a position to provide guarantees for the introduction and installation of the relevant gas fired power generation facility/s, wherever, it/they may be located, a credible International insurer / re-insurer for the full Capex of the relevant gas fired generation facility aspects of the Plants, as well as cover by the Multilateral Investment Guarantee Agency (MIGA) of the World Bank (in terms of full cover for, at minimum, Expropriation) for the operation and maintenance of the relevant gas fired generation facility/s aspects of the Plants for the full 25 year period.
35. In addition, the Contractor must be in a position to exhibit the capability of carrying out such activities in the field of gas fired power generation within the same timeframe as the period for development, design and introduction of the various Plants in the Municipal area.

(iii) Refurbishment of Defunct Power Stations in the District

36. It shall be required for the successful Contractor to indicate in the overall proposal for the Plants, that it has the capability and ability to identify any defunct power station/s, if applicable, design a suitable repurposing and funding model therefore, and present a specific and general business model therefore which will allow for the re-introduction thereof into the grid by means of integration with the Plants.
37. In this regard, the Municipality intends to enter into a suitable Power Purchase and/or other Agreement/s for such suitable repurposed power generation facilities, depending on whether they are owned by the Municipality and/or third party/s with whom the successful Contractor may be required to contract, in conjunction with the Municipality, and as a result the Contractor must be in a position to provide a suitable draft Power Purchase and/or other Agreement and other related arrangements as part of the Proposal.
38. In this regard the Contractor must be in a position to provide guarantees for the re-introduction of the relevant repurposed power generation facility/s, wherever, it/they may be located, a credible International insurer / re-insurer for the full Capex of the relevant repurposed generation facility aspects of the Plants, as well as cover by the Multilateral Investment Guarantee Agency (MIGA) of the World Bank (in terms of full cover for, at minimum, Expropriation) for the operation and maintenance of the relevant repurposed generation facility/s aspects of the Plants for the full 25 year period.

39. In addition, the Contractor must be in a position to exhibit the capability of carrying out such activities in the field of repurposed power station generation within the same timeframe as the period for development, design and introduction of the various Plants in the Municipal area.

D. OFF-GRID (NANO) POWER PLANTS

(i) Purpose

40. The purpose of the required off-grid nano power aspects of the project that the Contractor will be required to include in the Plants and water systems as part of the proposal, is to provide Energy and Water Security to the indigent and other dwellers in the informal settlements of the Municipality.

(ii) Indigent Supply Nano Grids

41. Complimentary to the Plants and water systems in the Municipal area that will address Power and Water Security, the Contractor will be required to design, develop, fund and install suitable DC powered nano-grid installations in informal settlement areas which shall have the capability to provide, at minimum, power, water, sanitation and telecommunications services to the residents.
42. The specific services or products which the Contractor shall be required to indicate that these nano grid Plants shall be capable to provide to the informal settlements in a cohesive manner, shall be at least, but not limited to, the following:
- 1) housing services,
 - 2) electrification services,
 - 3) telecommunications services,
 - 4) education services,
 - 5) entertainment services,
 - 6) information technology services,
 - 7) co-operative finance services,
 - 8) co-operative funding services,
 - 9) pre-paid energy services and concomitant products,
 - 10) pre-paid data services,
 - 11) water provision and sanitation systems and services,
 - 12) VOIP telephony services,
 - 13) fractional software services,
 - 14) internet and/or server access services,
 - 15) co-operative banking services,

- 16) co-operative and Members insurance services and products,
- 17) member value optimisation and exit strategies services and systems,
- 18) financial metric analysis systems and services,
- 19) cashflow and forecast management services,
- 20) securitisation and bond issues programs,
- 21) real-time funds-tracking services,
- 22) land value capturing and real rights management services,
- 23) engineering procurement and construction (EPC) and building contract management services,
- 24) tender adjudication services,
- 25) facility and plant operational advisory services,
- 26) purchasing procedure systems services,
- 27) inventory and costing advice services,
- 28) competition analysis services and products,
- 29) research and development services,
- 30) business information management (BIM) services (with webmaster assistance),
- 31) risk profiling services,
- 32) environmental implications and carbon credit management services and products, virtual or shared office services and products,
- 33) co-working systems and procedures services,
- 34) shared virtual and physical meeting rooms services,
- 35) travel assistance services,
- 36) legal services (including patent protection services),
- 37) accounting services,
- 38) dispute settlement and arbitration services,
- 39) spaza finance package services,
- 40) education funding package services,
- 41) financial savings products and services, grant funding facilitation services,
- 42) internet web master services.

43. The result of the proposed nano grid installations by the Contractor shall be required to be that - at minimum - electricity and telecommunications connectivity shall be delivered for urban township dwellers who do not have access to these services, as well as rural and peri-urban informal settlement areas that exist beyond the national grid.

44. Since the nano grid installations envisage, as part of the Plants that the Contractor will install and manage, the provision of DC power as a safe and cost-effective manner of providing Energy Security in these areas, the Contractor shall in addition be required to facilitate and manage the retail of the appropriate appliances for this environment, such as deep-freezes, fridges, fans, and other communications devices, including Voice over Internet Protocol [VOIP] devices, provide potable water and sanitation options by means of suitable delivery mechanisms, as well as to provide integrated thermal solutions (such as , for instance, but not limited to, gas cooking) and suitable communications technology that will in addition allow for the management and collections of the income for the proposed services over the water, gas and electricity meters in a safe, secure and cost effective manner. The outcome to achieve in this regard is, through innovation, the creation of local jobs through the electrification, connectivity and lighting of informal dwellings with the concomitant access to other essential human requirements.
45. In addition to the ability to provide electrification, telecommunications, thermal options and potable water, the Contractor shall be required to indicate its ability and capability to facilitate and/or provide access to NHBRC approved, cost effective alternative housing structures to transform shacks into proper dwellings in those instances where the occupants are in a position to pay for these services.
46. The Contractor, in showing its capability to provide the nano grid services described above, shall be required to indicate in its proposal the specific funding methodology and management structure of the Plants and water systems in the informal settlement areas, such as, for instance, but not limited to, suitable Co-operative structure(s) or similar community structures.
47. Since one of the objectives of the nano grid electrification process which is required to be provided as part of the Plants and water systems that the successful Contractor will install in the Municipal area, is to provide access to educational and other content, in order to allow access by these community members to the benefits thereof, in a cost effective manner, the Contractor will be required to source, curate, provide and manage suitable educational content to these communities, with at minimum the CAPS curriculum being made available as Video on Demand (VOD), wherever the nano grids are installed, which shall be inclusive of, inter alia, an Internet Protocol (IP) router and a base computer executing an operating system (such as Linux and Android), interfacing with broadband devices enabling communication via Wimax and route data packets to an internal WIFI communication protocol for the various dwellings.

48. In this regard the Contractor must be in a position to provide guarantees and underwriting for the introduction and installation of the relevant nano grids, wherever they may be located in the Municipal area, a credible International insurer / re-insurer for the full Capex of the relevant nano grid facilities as well as for the payment capability of the informal settlement dwellers, as well as for the operation and maintenance of the relevant nano grids for a minimum period of 10 years.

(iii) Virtual Power Station Software platform

49. Since the sought Plants cannot operate in isolation in any Local Municipality but require integration into the distribution network/s, as well as further integration into the transmission network as they operate in various towns in the District and the Country, the Contractor shall be required to provide, at its own cost, a suitable so-called "Virtual Power Station" software platform for all aspects of the grid, the generation and storage facilities, the electricity meters and in general any element of the Plants (and water systems). In this regard the Contractor shall be required to present suitable actuarial models and other suitable representations with regard to the operation of the referenced Virtual Power Station software platform.
50. The equipment, software and technology so proposed to be utilised by the Contractor shall be provided by suppliers who have proven global capacity to effect all aspects of the required Virtual Power Station software platform and the Contractor must be in a position to provide guarantees by the relevant product supplier, a credible International insurer / re-insurer for the full Capex of the Virtual Power Station software platform aspects of the Plants and the Multilateral Investment Guarantee Agency (MIGA) of the World Bank (in terms of full cover for, at minimum, Expropriation) for the operation and maintenance of the relevant Virtual Power Station software platform aspects of the Plants for the full 25 year period.

E. WATER ACQUISITION, DISTRIBUTION AND MANAGEMENT

51. The Municipality takes note that the National Water and Sanitation Master Plan calls South Africa "to action" to avoid a projected water shortage of 17% by 2030. South Africa is a semi-arid country with limited surface and ground water resources. The average rainfall is 450 mm/a, which is well below the world average of 860mm/a. Utilizable water is only 275 cubic meters per capita per year and climate change is aggravating this further. Poor infrastructure maintenance, high water losses, deteriorating water quality and a lack of investment has led to Government's Call-for-Action.

52. Understanding the above process within the Municipality is of critical importance for the development of a Water Security strategy and concomitant water services delivery plan, which the Municipality requires the successful Contractor to provide and be in a position to implement and fund as part of the operation and management of the Plants.

(i) Water Resources

53. Surface and groundwater resources are scarce and often removed from the communities and industries that need the water. Water availability is also highly variable subject to climate (rainfall and evaporation), land use changes, pollution and competing water demands up-stream and down-stream of river and aquifer abstraction points. Water must thus be collected and stored by building dams and drilling boreholes. Abstraction must be managed using operating rules to ensure that water is available during climate and demand variations.

(ii) Bulk Water Supply

54. This involves water treatment works, pump stations, bulk pipelines and in some cases also canals to bring the water from water sources to the towns. Some of this may involve bulk service providers such as water boards and irrigation boards.

(iii) Internal Water Distribution

55. Water is stored in distribution reservoirs from where it is reticulated to individual households, businesses, industries and a variety of social, commercial and industrial users. Water storage is typically limited to 48 hours and thus implies that bulk water supply interruptions and reticulation maintenance cannot exceed this period for reliable services.

(iv) Wastewater Collection

56. Sewage and wastewater is collected from households via gravity-feed sewers and sewer pump stations (if required) to outfall sewers which take the wastewater to treatment works.

(v) Wastewater Treatment and Disposal

57. After treating the wastewater to specified water quality standards, the effluent is released back into rivers considering the assimilative capacity of the receiving water body and the water quality requirements of down-stream users. Irrigated disposal, evaporation ponds and sludge disposal trenches may also be required to dispose of non-compliant effluent quality.

58. The water sector is currently experiencing several constraints which are negatively impacting on the reliability and sustainability of water services. This includes an economic recession, accumulating debt, financial mismanagement, ageing infrastructure, high water losses, drought and unhappy customers. The Municipality therefore urgently needs a "turn-around" to financially viable, reliable and sustainable water service delivery. We believe that it requires skilled strategic intervention actions in a logical process, starting with a status quo assessment (evaluating Municipal data and conducting on-site verification with mobile devices), addressing the enabling actions and functionality hot-spots before progressing to forward planning, detailed infrastructure condition assessments, Water Security interventions and new infrastructure development that will integrate with the Plants that the successful Contractor will propose to install.

59. As part of the proposal for Water Security, and in a detailed manner with supporting strategies and capabilities, the Contractor shall be required to address the following 5 required interventions:

(1) Resource

60. Maintain water security by managing existing water resources, protecting the source (ecology and land use), maintain acceptable water quality and developing new water resources when needed. Water resources can be improved through water harvesting, increased storage and reduced storage losses. This can be done at a Municipal level by reducing evaporation losses from dams using, for instance, floating panels, instituting improved dam operating rules for optimal use of existing storage capacity, and by increasing storage of dams (where possible). This can be further augmented at household and housing complex levels by installing rainwater harvesting tanks.

(2) Reduce

61. Reduce water losses by conducting leak-detection and leak-repair programs in the Municipal reticulation network and in households (e.g. leaking taps and toilets). Addressing water wastage through customer awareness and compliance to Municipal bylaws. Reduce water use by installing or subsidizing water-saving devices in households (e.g. low-flush toilets, "drop-a-bloc", low-flow showers, etc) and instituting water demand rules (e.g. no garden watering during day hours, promoting indigent water-saving plants, covering swimming pools, etc.).

(3) Re-use

62. Water demand can further be reduced by promoting re-use of water at household, housing-complex or town levels. Rainwater harvesting combined with greywater harvesting from showers and baths

can effectively be used for garden irrigation, thereby reducing the freshwater import/use of households by up to 50%. This can also be implemented at housing complexes by collecting the greywater from all houses into a central greywater tank, applying basic filtering and treatment before reusing the water for irrigation of gardens. At a town-level, this implies using stormwater stored in urban ponds and acceptable final effluent from wastewater works for irrigation of parks, sport fields, communal gardens and other recreation facilities.

(4) Recycle

63. Water can also be cleaned at advanced wastewater treatment works (e.g. desalination through reverse-osmosis) to "renewed" drinking water quality standards and recycled back to the water resource / water input of the Municipality. Similar package plants can be constructed at housing-complexes where water is extremely scarce, albeit at a higher water cost. This demands high-level technology and good management to ensure that water quality remains fully compliant to drinking water quality standards.

(5) Revenue

64. Interested Contractors should note that water services can only be sustained if funds are available to pay for the above capital investments and related operation, maintenance, upgrade and renewal needs. Revenue collection includes smart metering of water, fair tariffs, effective billing and revenue collection. The Contractor would therefore be required to exhibit a suitable suite of equipment and expertise available, along with the funds, to install and instil the above-mentioned elements as part of a focused revenue enhancement plan for the Municipality.
65. Since the proposed Plants shall be required to be designed to provide Energy Security for the Municipality, it shall therefore in addition be required from the successful Contractor to present, as part of the proposal, a comprehensive plan for concomitant Water Security based on the above principles which shall operate in conjunction with the proposed Plants. In this regard the Water Security proposal shall include the design, funding, implementation and management of the water Security systems and mechanisms.
66. The equipment, software and technology so proposed to be utilised by the Contractor for the Water Security aspects of the Plants and water systems shall be provided by suppliers who have proven national capacity to effect all aspects of the required Water Security systems and installations and the Contractor must be in a position to provide guarantees by the relevant product supplier/s, a credible International insurer / re-insurer for the full Capex of the Water Security systems and

installations aspects of the Plants and the Multilateral Investment Guarantee Agency (MIGA) of the World Bank (in terms of full cover for, at minimum, Expropriation) for the operation and maintenance of the relevant Water Security aspects of the Plants and water systems for the full 25 year period.

F. SPATIAL PLANNING, E-LODGEEMENT, ELECTRONIC REPORTING, ASSET MANAGEMENT, CONTROL, SETTLEMENT, EFFECTIVE TAX COLLECTIONS AND INFORMATION MANAGEMENT

67. In conjunction with the Plants and water systems that the successful Contractor will be required to implement and manage, the Municipality in addition requires the proposal to include a detailed plan to support the planning and management process of the Plants and water systems, integrated with all the other relevant Municipal systems, by means of an Integrated Spatial Information & Management System, with associated land use zoning and operational dashboards to allow for effective management by the Contractor, in conjunction with the Municipality, and in addition to support good governance by the Municipality.
68. The required web-based spatial information system, which the Contractor will be required to exhibit as part of the proposal in term of design, funding and management, shall be provided by reputable national supplier/s who have a proven track record in the field, must offer compatible data linking between the separate energy generating aspects of the Plants and the storage aspects, as well as all other components of the proposed Plants and water systems, a centralized control room, external parties and stakeholders such as Eskom or other Independent Power Producers, whilst also offering a spatial interface to residential, industrial and commercial users in the District being served with water, electric power, broadband and associated services through a suitable metering system and user-friendly, web-based customer interface.
69. The proposal in this regard must address planning and management elements which may in full or in part be required for the successful project Plants and water systems implementation and post-construction operations based on functional needs and legislative requirements which may have to be refined, expanded or reduced during final scoping and inception of the project Plants and water systems.
70. The spatial planning aspects of the required systems shall include the capability to integrate the Plants and water systems into the Municipal SDF, update the developments plans of the Municipality, deal with land use zoning aspects for the Plants and water systems and include an

integrated Land Use Management and e-lodgement system. The intention is for professionally registered town planners, information system specialists and development engineers to undertake the identified tasks highlighted by the Contractor in the proposal in a cost-effective and professional manner.

71. The Contractor will be required to address the following aspects in terms of the Plants and water systems proposed for the Municipal area:

- (i) Amendment of the existing Spatial Development Framework (SDF) to accommodate the proposed land uses (and ancillary uses);
- (ii) Development of a Transportation and Infrastructure Services Plan(s) to accommodate and support the proposed developments (high impact development);
- (iii) Review and or Develop a Sustainable Human Settlements Plan to plan and accommodate new housing needs that would be created through the respective projects that could improve the overall housing situation of the Municipality.
- (iv) Carry out a detailed land use survey to obtain current land uses which must include the capturing of existing metering systems that must be is linked to the electricity and water meters and required electronic management system. This will allow for sustainable monitoring and evaluation of electricity, water and telecommunications services in the Municipality; and
- (v) To provide a suitable electronic lodgement and land use management system to the Municipality to facilitate, manage and monitor all land use applications. This requirement, termed "E-Lodgement", must be a fully integrated SPLUMA compliant platform designed to improve land use management, economic development and external investment into the Municipality. The Contractor shall be required to exhibit proof of the successful implementation of such systems in South Africa.

72. The equipment, software and technology so proposed to be utilised by the Contractor for the Spatial Planning and related aspects of the Plants and water systems must be in a position to provide guarantees by the relevant product supplier/s, a credible International insurer / re-insurer for the full Capex thereof and the Multilateral Investment Guarantee Agency (MIGA) of the World Bank (in terms of full cover for, at minimum, Expropriation) for the operation and maintenance of the relevant Spatial Planning and related aspects of the Plants and water systems for the full 25 year period.

G. SECURING MUNICIPAL INCOME STREAM AND REVENUE ENHANCEMENT.

73. Since it is prudent to ensure that the Municipality is best suited to cope with the envisioned benefits of the sought Plants and water systems by means of the appropriate software package/s that are focused on Revenue Enhancement and capable of allowing for the integration and management of the sought Plants and water systems, it shall be required that the Contractor utilise and integrate into its software platform for the operation of the Plants and water systems in the Municipal area, a Treasury approved supplier and software package for the enhancement of the revenues that will be implemented by the Contractor, which shall be at the discretion and cost of the Contractor.
74. In this regard the Contractor will be required to provide guarantees by the relevant product supplier, a credible International insurer / re-insurer for the full Capex of the Revenue Enhancement software aspects of the Plants and the Multilateral Investment Guarantee Agency (MIGA) of the World Bank (in terms of full cover for, at minimum, Expropriation) for the operation and maintenance of the relevant Revenue Enhancement Software aspects of the Plants, in conjunction with the Municipality, for the full 25 year period.

H. INSURANCE AND RE-INSURANCE

75. The recent downgrade of the South African Government credit rating has adversely affected the credit rating of the Municipalities which at best can reach the rating by the State by default. The Municipality realises that this poses several challenges to the successful Contractor in the execution of the project Plants as required by this Tender.
76. The Municipality realises that the practical result of the downgrading of the Government credit rating is that the proposal by the Contractor for the design, sourcing, funding, installation and management of the Plants and water systems on a Build Own Operate and Transfer process will need to be executed by the Contractor without any guarantees from the Central Government or from the Municipality. In this regard it is clearly stated that the Contractor will be required to rely on the contractual obligations with the Municipality alone. It is, however, a requirement for the successful Contractor to provide proof of its capability to guarantee all of its obligations with regard to the Plants and water systems for a period in excess of the period of where a debt remains unpaid with regard to the equipment of the Plants and water systems.
77. The Contractor will in addition be required to supply proof of guarantees ensuring the ability to supply the equipment, the technology, the implementation process, the long term maintenance

thereof, and in general the successful execution of the proposed project Plants and water systems over the proposed project period. These financial guarantees that the Contractor will be expected to provide will need to ensure due and full performance on each level of the project to install the various Plants and water systems.

I. FUNDING

78. The Contractor must demonstrate the ability to fund the total project in terms of the Capex (Capital Expenditure) and Opex (Operating Expenditure) of the various Plants and water systems. The Contractor must in addition be in a position to demonstrate its ability to ensure business continuity for the full period of the contract/s and also to supply suitable performance guarantees toward the Municipality in order to underwrite its ability to service the long-term Power Purchase Agreements entered into with either the Municipality or other third parties. In this regard, the Contractor will also be required to demonstrate that the portion of the profit share of the enhanced Municipal income due to the project intervention in terms of the Plants and water systems installed and managed will be shared equally between the Contractor and the Municipality.

J. GENERAL

79. At minimum, the technical and timeline aspects applicable to the design, construction, establishment and maintenance of the Plants and water systems shall be managed in terms of General Conditions of Contract for Construction Works (Third Edition) 2015 (GCC), prepared by the South African Institution of Civil Engineering (SAICE) shall apply to this contract.
80. Service level and / or Power / Water Purchase Agreement/s between the Municipality and the successful Contractor will be entered into to manage the long term running of the Plants and water systems.
81. It is not envisaged that the registration of the Plants with NERSA by the Municipality will be part of this process as the Plants will be operated by the Municipality under its Constitutional right to do so, in conjunction with the Contractor, in a suitable manner. However, should it be deemed suitable or required in the circumstances, the Municipality shall provide all assistance required to the Contractor to affect such registration with Nersa or any other body or organisation.
82. The Plants and water systems design and specifications, the expected performance requirements of the Plants, quality management and minimum codes and standards of operation, shall be required to be detailed and presented by the Contractor in the proposal.

83. It is the responsibility of the Contractor to deliver a turnkey project, at its own costs, complete with all the legal required certification, to the Municipality, including all environmental and other approvals required to operate.
84. The installations to be provided by the Contractor must comply with this Tender Specification. Workmanship must be of the best available quality nationally and internationally and be carried out in accordance with the Occupational Health and Safety (Act 85 of 1993) and Environmental Conservation Act, 2003 (Act No.50 of 2003).
85. This document describes the general nature of the work and specific details are not provided so as to allow the scope to the Contractor to do so – thereby indicating its capability to effect the design, funding, implementation and management of the Plants and water systems. The responsibility lies with the Contractor to provide all equipment and materials in order to furnish a complete functional turnkey installation for all the required Plants and water systems.
86. The Contractor shall be responsible to establish the proposed Plants and water systems with the applicable statutory processes and approvals, applicable to the specific type of Plant/s and water systems, in collaboration with the Municipality.

K. OBJECTIVES

87. The main objectives for the project in implementing the Plants are as follows:
1. To achieve Energy and Water Security for the Municipality;
 2. To procure alternative energy from privately operated Plants, the costs for which shall be carried by the Plant owners, which will in turn allow for the introduction of systems and installations that will promote Water Security;
 3. To implement suitable Plants into the various networks as described above , as well as the water systems and installations and other concomitant components, in order to achieve the referenced Energy and Water Security for the Kannaland Local Municipality.
 4. To establish grid tied renewable energy generation and storage Plants at suitable sites in the Municipal area or the District, as well as suitable water systems, chosen by the Contractor, to be owned and operated by the Contractor to the satisfaction of the Municipality, for a minimum of 25 years, providing power and access to water resources at specific cost effective tariffs to be agreed to, after which the Kannaland Local Municipality requires that the ownership of the Plants and water systems be transferred to it, with the further understanding that the Contractor shall be required to be in a position to offer further services for the operation of the Plants and

water systems after such transfer, at fees and rates to be agreed to in the final agreement/s entered into between the Contractor and the Municipality.

L. MANNER OF CONTRACT

88. It shall be required that as part of the proposal, the Contractor shall propose and suitably motivate the manner of contracting with the Kannaland Local Municipality. In this regard the following options are available, but not exclusive:

- (i) Power and/or Water Purchase Agreement/s;
- (ii) Multi-party agreement/s;
- (iii) PPP Agreement/s;
- (iv) Transversal Agreement/s

89. The specific terms and requirements of the relevant agreement/s will be negotiated with the successful Contractor.

M. CONTRACTOR BUSINESS MODEL

90. The Contractor shall be required to deliver a suitable Business Model for the operation of each Plant and water system and all the Plants and water systems together as part of the proposal for Energy and Water Security in the Municipal area.

N. CONTRACTOR CAPABILITY

91. The Contractor shall be required to deliver proof of capability and ability in terms of similar projects successfully completed for the proposed installations and business systems and procedures for the operation of each Plant and water system and all the Plants and water systems together as part of the proposal for Energy and Water Security in the Municipal area.

O. CONTRACTOR FEASIBILITY STUDY

92. The Contractor shall be required to deliver, as and when required, a suitable desktop Feasibility Study for the operation of each Plant and water system and all the Plants and water systems together as part of the proposal for Energy and Water Security in the Municipal area, which Feasibility Study must be suitable for delivery to the Treasury and various Governmental Departments to take note of, as well as to the relevant funding agencies for the concomitant approval of funding for the projects by the Contractors financiers.

P. CONTRACTOR TIMELINE FOR DELIVERY OF THE PROPOSAL AND THE PLANTS CONTAINED IN ITS PROPOSAL

93. The Municipality is aware that the scope of the Tender hereby advertised is wide, but also expresses herewith the requirement for immediately available technologies and funding by tenderers due to the urgent requirement for the products and services envisaged in the light of the energy and water crises being experienced in the Country and the Municipality, as well as the state of emergency in the Country occasioned by the Covid-19 pandemic and its repercussions.
94. In order to achieve these goals, the Tender objective is to select a proposal from willing and able bidding Contractors and to suitably contract with the successful Contractor expeditiously in order to implement the project/s with alacrity.
95. No Tender briefing will be held as the contents of this Tender Document and its specifications are fully comprehensive. Interested bidders, however, are welcome to contact the Municipality's representative in order to request any clarifications that may be required.
96. Tenderers are required to respond to this Tender with their written proposal by 12h00 on 29 May 2020 by means of two copies of the Tender document in Hard Copy and an electronic version on a suitable memory stick, to be delivered to the Tender representative at the address indicated in the Tender Advertisement.
97. Contractors who respond to this Tender are required to be in a position to proceed to deploy with due diligence activities and specific Feasibility Studies for the Plants and water systems immediately upon acceptance of their tender by the Municipality, and in addition be in a position to provide proof of the funding capability for the whole proposal delivered, the project Plants and water systems, as well as the preferred method of contracting for the project Plants and water systems, including providing suitable draft agreement/s therefore.
98. The proposal provided by the successful Contractor shall be required to include and justify, by means of suitable Project Plants and Water Systems Delivery Models, the completion of the design, funding, implementation and commissioning of the proposed project Plants and water systems within a period of at minimum 12 months from appointment of the Contractor.

Q. TENDER CONDITIONS

99. **General and Special Conditions of Contract**

The General Conditions of Contract (GCC) as well as Special Conditions of Contract (SCC) forming part of this set of tender documents will be applicable to this tender in addition to the conditions of tender. Where the GCC and SCC are in conflict with one another, the stipulations of the SCC will prevail.

100. Acceptance or Rejection of a Tender

The Municipality reserves the right to withdraw any invitation to tender and/or to re-advertise or to reject any tender or to accept a part of it. The Municipality does not bind itself to accepting the lowest tender or the tender scoring the highest points.

101. Validity Period

Bids shall remain valid for 120-days after the tender closure date.

102. Registration on Accredited Supplier Database

It is expected of all prospective service providers who are not yet registered on the CSD to register without delay. The Municipality reserves the right not to award tenders to prospective suppliers who are not registered on the CSD.

103. Functionality Criteria

Tender will be evaluated according to the ability, capability and feasibility of offering.

104. Completion of Tender Documents

105. The original tender document must be completed fully in black pen ink and signed by the authorised signatory to validate the tender. All the pages must be initialled by the authorised signatory and returned. Failure to do so may result in the disqualification of the tender.

Compulsory Documentation

106. Income Tax Clearance Certificate

A valid original Income Tax Clearance Certificate and/or SARS unique PIN must accompany the bid documents unless the bidder is registered on the Accredited Supplier Database of the Municipality and the Municipality has a valid original Income Tax Clearance Certificate for the bidder on record. The onus is on the bidder to ensure that the Municipality has an original Income Tax Clearance Certificate on record and obtain written confirmation from the Supply Chain Management Unit of the Municipality. The letter of confirmation must be included in the tender documents. If the South African Revenue Services (SARS) cannot provide a valid original Income Tax Clearance Certificate, the bidder must submit a letter from SARS on an original

SARS letterhead that their tax matters are in order. Bids not supported by a valid original Income Tax Clearance Certificate, either as an attachment to the bid documents or on record in the case of suppliers registered on the Supplier Database of the Municipality, will be disqualified.

107. Construction Industry Development Board (CIDB)

When applicable, a certified copy of the bidder's registration and grading certificate with the CIDB must be included with the tender. Failure to do so will result in the disqualification of the tender.

108. Municipal Rates, Taxes and Charges

A certified copy of the bidder's municipal account for the month preceding the tender closure date must accompany the tender documents.

Any bidder which is or whose directors are in arrears with their municipal rates and taxes or municipal charges due to any Municipality or any of its entities for more than three months will be disqualified.

109. Authorised Signatory

A copy of the recorded Resolution taken by the Board of Directors, members, partners or trustees authorising the representative to submit this bid on the bidder's behalf must be attached to the Bid Document on submission of same. A bid shall be eligible for consideration only if it bears the signature of the bidder or of some person duly and lawfully authorised to sign it for and on behalf of the bidder.

110. Samples

Samples, if requested, are to be provided to the Municipality with the tender document.

111. Quantities of Specific Items

If tenders are called for a specific number of items, Council reserves the right to change the number of such items to be higher or lower. The successful bidder will then be given an opportunity to evaluate the new scenario and inform the Municipality if it is acceptable. If the successful bidder does not accept the new scenario, it will be offered to the second-placed bidder. The process will be continued to the Municipality's satisfaction.

112. Submission of Tender

The tender must be placed in a sealed envelope, or envelopes when the two-envelope system is specified, clearly marked with the tender number, title as well as closing date and time and be placed in the tender box on the ... by not later than 12:00 on, ...2020.

Faxed, e-mailed and late tenders will not be accepted. Tenders may be delivered by hand, by courier, or posted at the bidder's risk and must be received by the deadline specified above, irrespective of how they are sent or delivered.

113. Expenses Incurred in Preparation of Tender

The Municipality shall not be liable for any expenses incurred in the preparation and submission of the tender.

114. Contact with Municipality after Tender Closure Date

Bidders shall not contact the Kannaland Municipality on any matter relating to their bid from the time of the opening of the bid to the time the contract is awarded. If a bidder wishes to bring additional information to the notice of the Kannaland Municipality, it should do so in writing to the Kannaland Municipality. Any effort by the firm to influence the Kannaland Municipality in the bid evaluation, bid comparison or contract award decisions may result in the rejection of the bid.

115. Opening, Recording and Publications of Tenders Received

Tenders will be opened on the closing date immediately after the closing time specified in the tender documents. If requested by any bidder present, the names of the bidders, and if practical, the total amount of each bid and of any alternative bids will be read out aloud. Details of tenders received in time will be published on the Municipality's website as well as recorded in a register which is open to public inspection.

116. Evaluation of Tenders

Tenders will be evaluated in terms of their responsiveness to the tender specifications and requirements as well as such additional criteria as set out in this set of tender documents.

117. Procurement Policy

Bids will be awarded in accordance with the Preferential Procurement Policy Framework Act, No 5 of 2000, the Preferential Procurement Regulations, 2017 as well as the Municipality's Supply Chain Management Policy.

118. Contract

An additional Agreement which, together with the signed tender document, will constitute the full agreement between the Municipality and the successful bidder. Upon acceptance of the preferred proposal by the Kannaland Municipality, the Service Provider agrees and undertakes to be bound by the terms of the proposal submitted.

119. Language of Contract

The contract documents will be compiled in English and the English versions of all referred documents will be taken as applicable.

120. Extension of Contract

The contract with the successful bidder may be extended should additional funds become available.

121. Stamp and Other Duties

The successful bidder will be liable for all duties and costs on legal documents resulting in the establishment of a contract and for the surety and retentions.

122. Wrong Information Furnished

Where a contract has been awarded on the strength of the information furnished by the bidder which, after the conclusion of the relevant agreement, is proved to have been incorrect, the Municipality may, in addition to any other legal remedy it may have, recover from the contractor all costs, losses or damages incurred or sustained by the Municipality as a result of the award of the contract.

123. FORMS TO COMPLETE AND SUBMIT WITH TENDER OFFER

The bidder must contact the relevant person at the Municipality to obtain the following documents for completion and attachment to the offer:

DOCUMENT	CONFIRMATION YES/NO	REF IN PROPOSAL
1. COMPLETED AND SIGNED BID DOCUMENT, INCLUSIVE OF:		
2. MBD1: BID FOR REQUIREMENTS OF HESSEQUA MUNICIPALITY		
3. MBD4: DECLARATION OF INTEREST		
4. MBD8: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES		
5. MBD9: CERTIFICATE OF INDEPENDENT BID DETERMINATION		
6. DECLARATION OF BIDDER'S PAST EXPERIENCE		
7. MBD2: TAX CLEARANCE CERTIFICATE REQUIREMENTS		
8. MBD6.1: PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS OF 2017		
9. MUNICIPAL RATES AND TAXES		
10. AUTHORISED SIGNATORY		
11. IDENTITY DOCUMENTS OF ALL THOSE WITH EQUITY OWNERSHIP IN THE ORGANISATION. IN THE CASE OF A COMPANY PLEASE INCLUDE ONLY THOSE ID DOCUMENTS OF THE DIRECTORS WITH EQUITY OWNERSHIP (AS PER SECTION 3.1 OF PREFERENCE POINTS CLAIM FORM)		
12. COMPANY REGISTRATION FORMS		
13. PROOF OF CSD (CENTRAL SUPPLIER DATABASE) REGISTRATION		
14. BANK REGISTRATION FORM		
15. SERVICE PROVIDER'S OWN CONDITIONS TO TENDER (IF APPLICABLE)		
16. RECORD OF ADDENDA (IF APPLICABLE)		

Annexure C



KANNALAND

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TO THE ACCOUNTING OFFICER

TREATMENT OF INOVASURE (PTY) LTD ENERGY VAULT PRODUCT AS AN UNSOLICITED BID

PURPOSE

1. To obtain approval to:

- (i) Treat the Inovasure Energy Vault project as an unsolicited bid.
- (ii) Align the unsolicited bid process with the Municipal Finance Management Act [MFMA] prescripts on contracts longer than 3-years as well as the Public Private Partnership [PPP] prescripts.
- (iii) Continue with the public participation, relevant treasuries and other organs of state prescribed consultations.

BACKGROUND

2. With the intermittent and endemic shortage of lifegiving energy to the municipal area for which the Council approved a very innovative but simple, paid-for by-the-supplier, renewable energy storage and generation solution in October 2018.
3. For the past 19-months however the Municipality has been challenged in receiving appropriate feedback and/or guidance from the National Treasury with the latter's interpretation of the next steps and support in the implementation of the Inovasure Energy Vault project, as a PPP.



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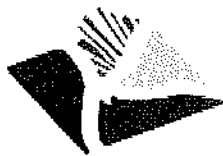
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- (i) The Council resolved on **9 October 2018**, that the Municipality must continue with the implementation of the Inovasure Energy Vault project subject to the legal requirements for a PPP.
- (ii) During **November 2018**, the Municipality, as per the Council mandate, conducted the following activities:
 - a. Concluded the MoA and ESMA agreements with Inovasure.
 - b. Submitted the feasibility reports and solicited the views and recommendations of the National Treasury's GTAC PPP unit.
 - c. Submitted the feasibility reports and solicited the support of the Development Bank of South-Africa [DBSA].
 - d. Appointed Stefanutti Stocks to act as transaction advisors and to independently verify the feasibility reports as prepared by Inovasure.
 - e. Informed and solicited support from the other institutions:
 - i. Department of Energy Affairs.
 - ii. South African Local Government Association [SALGA].
 - iii. Department of Cooperative Governance and Traditional Affairs [COGTA].
 - iv. ESKOM.
 - v. CSAAWU.
- (iii) On **20 March 2019**, Stefanutti Stocks, with the legal support of Fairbridges, confirmed that it supports the viability of the feasibility studies for the Inovasure Energy Vault project and provided the municipality with a draft PPP agreement.



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- (iv) On 22 March 2019 the NT was informed of, and provided with, the Stefanutti Stocks's report as well as the draft PPP agreement.
 - (v) On 18 April 2019 the NT GTAC team confirmed that it has no objection with the intended project and on 21 November 2019 the NT GTAC team provided the municipality with a project reference number TASM 180, which was confirmed by the National Treasury on 26 November 2019. Since then, the evidence indicates that a number of endeavours were made to meet with the NT and NT GTAC to discuss the level of the latter's support as per MFMA s120(5) – refer to Annexure A1, item 26.
 - (vi) On 14 February 2020, the DBSA confirmed its support subject to the:
 - a) Positive appraisal of project addressing confirmation of IS as preferred bidder in terms of MFMA and NERA and the financial, commercial, technical, socio-economic, institutional, and environmental aspects of the project are viable.
 - b) Positive conclusion of appointment process.
 - c) Negotiation of term sheets.
 - d) Approval by DBSA credit committees and Board of Directors.
 - e) Negotiation and execution of satisfactorily contractual documents.
 - (vii) Various community participation sessions were held during this period and the project proposal as well as the feasibility studies were available on the municipal website since November 2018.
4. Mindful of the risk of the impending winter season and higher demand for consistent electricity as well as the potential loss of funding, the Municipality **MUST** urgently continue with the project imperatives and it requires a solution to legally progress.



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5. Pursuant to the above, to confirm legal compliance, Brasika Consulting was appointed to review the evidence and advise the municipality on the way forward, which report is attached hereto marked Annexure A.

MOTIVATION

6. The following legal requirements are relevant to ensure an unsolicited bid process aligned with a PPP project:

- (i) The MFMA sections 33, 113 and 120 provides the requirements for the management of contracts exceeding 3-yrs, procurement via unsolicited bids and PPP's, which mostly prescribes a public participation process and where relevant soliciting views and recommendations from the treasuries and relevant organs of state as well as a PPP feasibility study.
- (ii) The PPPR's provide the detailed requirements for a PPP, which prescribes:
 - a. A feasibility study.
 - b. Soliciting views and recommendations from the relevant treasuries.
 - c. A public participation process.
- (iii) The SCMR's provide the detailed requirements for an unsolicited bid, which prescribes:
 - a. A consideration.
 - b. A public participation process.
 - c. Soliciting views from the treasuries when public comments were received.
- (iv) The MSA provides the details for communication, notices and displaying of documents during public participation processes.



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- (v) The new COGTA Directions, issued as per the Disaster Management Act due to the COVID-19 pandemic, augments the MSA requirements somewhat, prescribing that communities are consulted using media platforms and alternative methods of consultation, instead of contact meetings.
- (vi) The NT GTAC PPP Guidelines for Municipal Service Delivery through PPP's, especially Module 5 (page 188), provides for an unsolicited bid process during a PPP.

7. The Brasika-report concluded with the following salient points:

- (i) It appears that various stakeholders are of the view that National Treasury and/or GTAC formal approvals are required in order to continue with a PPP process, which author could not find in any prescript.
- (ii) The only legislative prescripts available to Municipalities in relation to PPP's are found in the MFMA, section 120 and the relevant PPP's 1 to 12.
- (iii) MFMA section 168 provides that the NT may issue guidelines to municipalities. In this regard in 2016, the following guidelines were issued, namely the NT GTAC Guidelines for Municipal Service Delivery through PPP's.
- (iv) MFMA section 168(3) very specifically prescribes that guidelines issued are not binding on municipalities unless it was adopted as such by Council. As the NT GTAC Guidelines for Municipal Service Delivery through PPP's, 2016, were not formally adopted by the Kannaland Municipal Council, these guidelines have no power in law and cannot be enforced.



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ANNEXURE C: UNSOLICITED BID MUNICIPAL MANAGER MEMORANDUM

- (v) Mindful of the fact that the said PPP guidelines have no power in law, the only prescripts the municipality must comply with are MFMA, section 120 and the PPPR's.
- (vi) MFMA, section 120 does not prescribe the requirement for Treasury Approvals during PPP's, but merely refer to the solicitation of the National Treasury's views and recommendations on the feasibility study in terms of section 120(6)(c).
- (vii) The PPPR's also do not prescribe the requirement for Treasury Approvals during PPP's, but merely refer to the:
 - a) Notification of the relevant treasuries when it wishes to conduct a MFMA section 120(4) feasibility study as per PPPR 2(1)(a).
 - b) To solicit the views and recommendations of the relevant treasuries on the evaluation of the bid of a preferred bidder as per PPPR 4(1)(b).
 - c) To solicit the views and recommendations of the National Treasury on the content of the PPP-agreement and the capacity of the preferred bidder to comply with his or her obligations in terms of the public-private partnership agreement.
- (viii) It was confirmed that with the evidence on record and after completion of the processes as recommended in the Brasika report, the Municipality will have had fully complied with its prescribed consultation with the National Treasury.
- (ix) It was further confirmed that there is an alignment between PPP activities and an unsolicited bid, and that full compliance is feasible.
- (x) The Brasika report stipulated the following steps to ensure a legal unsolicited bid process and conclusion:



KANNALAND

MUNISIPALITEIT | MUNICIPALITY

Posbus 30 P.O. Box
LADISMITH
6655

info@kannaland.gov.za
Tel : (028) 551 8000
Fax : (028) 551 1766

Kerkstr. 32 Church St.
LADISMITH
6655

Verwysing:
Reference:

Navrae:
Enquiries:

Datum:
Date:

OFFICE OF THE MUNICIPAL MANAGER

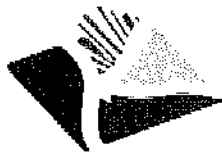
ANNEXURE C: UNSOLICITED BID MUNICIPAL MANAGER MEMORANDUM

- 1) STEP 1: Consider unsolicited bid.
- 2) STEP 2: Prepare documents for public participation, treasuries and other organs of state.
- 3) STEP 3: Deal with comments.
- 4) STEP 4: Unsolicited bid award.
- 5) STEP 5: Council resolution.
- 6) STEP 6: Conclude agreement.

SCMR 37(2) CONSIDERATIONS:

8. In compliance with MFMA section 113 read with SCMR 37(2), the municipality must consider the following elements, which were also positively reviewed and confirmed by Council on 9 October 2018:

- (i) **Product is demonstrably a unique innovative concept:** The uniqueness and innovation of the Inovasure Energy Vault project have been extensively considered and reported on in the feasibility studies concluded for the project as referenced in Parts A and B of the Inovasure Feasibility study report of 1 November 2018, which was independently supported by Stefanutti Stocks and Fairbridges Attorneys on 20 March 2019.
- (ii) **Product will be exceptionally beneficial or have exception cost benefits for the municipality:** The benefits, from a socio-economic, financial, sustainability and environmentally friendly perspective have been extensively considered and reported on in the feasibility studies concluded for the project as referenced in Part C of the Inovasure Feasibility study report of 1 November 2018, which was independently supported by Stefanutti Stocks and Fairbridges Attorneys on 20 March 2019.



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ANNEXURE C: UNSOLICITED BID MUNICIPAL MANAGER MEMORANDUM

- (iii) Person who made the bid is the sole provider: Inovasure is confirmed as the sole provider for the Inovasure Energy Vault project.
- (iv) The reasons for not going through a normal procurement process are found to be sound as:
- The product offering has been designed and patented specifically for the requirements of the municipality and consists of extensive protected commercial private information.
 - Detailed feasibility studies have been concluded and independently confirmed for the project.
 - Inovasure expressed the willingness to accept a significant portion of financial and commercial risks.
 - The product offering is a new initiative in the country, and it is not possible to identify detailed tender specifications.
 - The product offering and team bring extensive international expertise to the country
 - Inovasure already secured funding support for the project.
 - The product offering is supported by ESKOM and the DBSA.
9. As per MFMA section 120(4) to 120(6) read with PPPR 3 and the NT PPP Guideline, items 1 to 2, the Municipality completed the feasibility report and submitted it to Council and all other prescribed persons and institutions for consideration.
10. As per SCMR 37(3)(c) and PPPR 4(1) read with the NT PPP Guideline, item 3, the necessary project specific requirements have been recorded and is attached hereto as Annexure B.
11. To ensure compliance with MFMA section 33, MSA section 21A and PPPR 4(2), the appropriate consultation information is included in the consultation processes as prescribed and is attached hereto as Annexures D to J.



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OFFICE OF THE MUNICIPAL MANAGER

ANNEXURE C: UNSOLICITED BID MUNICIPAL MANAGER MEMORANDUM

WAY FORWARD ACTIONS

12. Once you have approved this report together with Annexures A and D to J, the following actions will have to be taken:

- (i) The approved adverts and notices as per MSA section 21A to be executed.
- (ii) The approved letters to be forwarded to the prescribed institutions.
- (iii) 30-days after the advert and letters the comments and inputs received to be consolidated.
- (iv) If relevant, the received comments and inputs received as per SCMR 34(7), will be submitted to the relevant treasuries for comment.
- (v) Once completed a bid adjudication committee meeting to be arranged, open to the public, to consider the final award of the unsolicited bid.
- (vi) Thereafter a Council meeting will have to be arranged to consider the conclusion of the final PPP agreement as per MFMA section 33 read with MFMA section 120(7).

RECOMMENDATION

13. It is recommended that approval be granted as set out in the aim as per paragraph 1 above.

APPROVED	SIGNATURE	DATE
MUNICIPAL MANAGER		
RESOLVED BY THE MUNICIPAL MANAGER IN TERMS OF THE AUTHORITY ASSIGNED TO HIM AS PER MFMA sections 33, 113 and 120 read with SCMR 37		
that approval be granted as per the recommendation.		
APPROVED		



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OFFICE OF THE MUNICIPAL MANAGER

ANNEXURE C: UNSOLICITED BID MUNICIPAL MANAGER MEMORANDUM

MUNICIPAL MANAGER

DATE



Ann D: Advert

KANNALAND

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Posbus 30 P.O. Box
LADISMITH
6655

info@kannaland.gov.za
Tel : (028) 551 8000
Fax : (028) 551 1766

Kerkstr. 32 Church St.
LADISMITH
6655

Verwysing: 41/2020
Reference:

Navrae: R Stevens
Enquiries:

Datum: 04 June 2020
Date:

OFFICE OF THE MUNICIPAL MANAGER

PUBLIC NOTICE TO THE KANNALAND MUNICIPAL COMMUNITY AND POTENTIAL SUPPLIERS

CONSIDERATION OF THE APPOINTMENT OF INOVASURE (PTY) LTD FOR THE PROCUREMENT OF ITS ENERGY VAULT PRODUCT AS AN UNSOLICITED BID, OVER A PERIOD OF 25-YEARS ON THE PRINCIPLES OF A PUBLIC PRIVATE PARTNERSHIP

You are hereby informed of the above intention of the Kannaland Municipality and to solicit your comments as prescribed.

With the intermittent and endemic shortage of lifegiving energy to the municipal area for which the Council approved a very innovative but simple, paid-for by-the-supplier, renewable energy storage and generation solution, being called the Inovasure Energy Vault project, on 9 October 2018.

The Municipality has now reached the point of project implementation and needs to formally procure the services.

You are kindly directed to visit our office or our municipal website at <https://www.kannaland.gov.za/inovasure-energy-project-kannaland-municipality>

where you will find a notice detailing the following:

- (a) As per the Supply Chain Management Regulations of 1 July 2005, Regulation 37(3), the reasons why the bid is not open and an explanation of potential benefits.
- (b) As per the Municipal Finance Management Act, 2003 (Act 56 of 2003), section 33(1)(a) informing you of the duration of the contract, making public the draft contract and an information statement summarising the Municipality's obligations.

- (c) As per MFMA section 120(6)(c)(iii) read with the Public Private Partnership Regulations of 1 April 2005 – [PPPR], Regulation 4, inform you of the public private partnership agreement
- (d) Links to other important and relevant documents for your perusal.
- (e) Arrangements regarding access to documents, support to those who cannot write as well as the arrangement for submitting comments.

NOTE THAT ALL INPUTS OR COMMENTS MUST REACH THIS OFFICE BY CLOSE OF BUSINESS ON [06 July 2020], IN HARDCOPY AT [32 CHURCHSTREET, LADISMITH, WESTERN CAPE, 6655] OR BY e-mail AT [wilmie@kannaland.gov.za].

Signed: 
Municipal Manager:

Date: 03.06.2020

Annexure E



KANNALAND

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OFFICE OF THE MUNICIPAL MANAGER

ANNEXURE E: NOTICE AT MUNICIPAL OFFICE AND WEBSITE

TO THE KANNALAND MUNICIPAL COMMUNITY AND POTENTIAL SUPPLIERS

CONSIDERATION OF THE APPOINTMENT OF INOVASURE (PTY) LTD FOR THE PROCUREMENT OF ITS ENERGY VAULT PRODUCT AS AN UNSOLICITED BID, OVER A PERIOD OF 25-YEARS ON THE PRINCIPLES OF A PUBLIC PRIVATE PARTNERSHIP

PURPOSE

1. To inform you of the above intention of the Kannaland Municipality and to solicit your comments in compliance with the following prescripts:
 - i. Municipal Finance Management Act, 2003 (Act 56 of 2003) – [MFMA], section 33(1), as the intended contract will exceed 3 financial years, i.e. 25 years.
 - ii. Supply Chain Management Regulations of 1 July 2005 –[SCMR], Regulation 37(3), in consideration of the unsolicited bid.
 - iii. MFMA section 120(6)(c)(iii) read with Public Private Partnership Regulations of 1 April 2005 – [PPPR], Regulation 4, in consideration of the public private partnership agreement.
2. To provide you with the reasons for the intention as prescribed.
3. To explain how this process is aligned with the Public Private Partnership processes underway.
4. To give you access to the necessary documents for public scrutiny.

BACKGROUND

5. With the intermittent and endemic shortage of lifegiving energy to the municipal area for which the Council approved a very innovative but simple, paid-for by-the-supplier, renewable energy storage and generation solution, being called the Inovasure Energy Vault project, on 9 October 2018.
6. The project entails the linking of the substation/s to the InovaSure 'Energy Vault', at InovaSure's own cost, which creates the real and substantial value for the Municipality in that, amongst other benefits, an approximate 33% increase in capacity will immediately occur. In addition, the equipment value for this process (approximately R1.2 billion per Energy Vault) will be passed onto the Municipality's balance sheet after a period of 25 years (Build Operate Transfer ['BOT']). After conversion of the relevant substation/s to include the InovaSure Energy Vault, the referenced substation/s will no longer be under pressure in terms of performance during peak periods and will be in a position to act in concert with the other InovaSure Energy Vaults and so very significantly increase their efficiency and performance capabilities. In addition, the InovaSure Energy Vault proposal further allow for the enhancing of the capabilities of the distribution network.
7. For the past 19-months the Municipality embarked on extensive consultation processes inclusive of various community participation sessions to announce the intention and the project and to solicit support. The various feasibility studies were also available on the municipal website since November 2018
8. The Municipality has now reached the point of project implementation and needs to formally procure the services.
9. As the renewable energy solution adopted by the Council is a patented product of Inovasure (Pty) Ltd, it is the intention to adopt their product solution which was submitted as an unsolicited bid.
10. Additionally, to ensure a sustainable and financially viable product solution as recommended and supported by the various feasibility studies, the project duration will be at least 25-years.
11. Lastly, it is also the intention to formally register the product solution as a Public Private Partnership, and if successful, the benefit of this solution may also be shared with our neighbouring municipalities.
12. The achievement of the above is based on the principle of transparency and for that reason we hereby communicate with you.

UNSOLICITED BID COMPLIANCE REQUIREMENTS – SCMR 37

13. SCMR 37(3) provides the requirements for a public participation process and prescribes that the public and potential suppliers must be provided with:

- i. Reasons why the bid is not open.
- ii. An explanation of potential benefits.

Reasons why the bid is not open:

14. Following is a brief discussion of why the invitation of open competitive bids is impractical:

- (i) The product offering has been designed and patented specifically for the requirements of the municipality and consists of extensive protected commercial private information.
- (ii) Detailed feasibility and legal studies have been concluded and independently confirmed for the project.
- (iii) Inovasure expressed the willingness to accept a significant portion of financial and commercial risks.
- (iv) The product offering is a new initiative in the country, and it is not possible to identify detailed tender specifications.
- (v) The product offering and team bring extensive international expertise to the country
- (vi) Inovasure already secured funding support for the project.
- (vii) The product offering is supported by ESKOM and the DBSA.
- (viii) Inovasure is the sole provider of the product.

Explanation of potential benefits:

15. ***The product is demonstrably a unique innovative concept:*** The uniqueness and innovation of the Inovasure Energy Vault project have been extensively considered and reported on in the feasibility studies concluded for the project as referenced in Parts A and B of the Inovasure Feasibility study report of 1 November 2018, which was independently supported by Stefanutti Stocks and Fairbridges Attorneys on 20 March 2019 and the DBSA on 14 February 2020.

16. ***The product will be exceptionally beneficial or have exception cost benefits for the municipality.*** Except for the benefits already discussed above, other benefits, from a socio-economic, financial, sustainability and environmentally friendly perspective have been extensively considered and reported on in the feasibility studies concluded for the project as referenced in Part C of the Inovasure Feasibility study report of 1 November 2018, which was independently supported by Stefanutti Stocks and Fairbridges Attorneys on 20 March 2019.

25-YEAR CONTRACT COMPLIANCE REQUIREMENTS - MFMA SECTION 33

17. MFMA, section 33(1)(a) prescribes the processes to be followed by a municipality should it enters into a contract that will impose financial obligations on the municipality beyond the three financial years, requiring from the Municipal Manager to make public the draft contract and an information statement summarising the Municipality's obligations and invite the public to comment.
18. Attention is directed to the fact that as per the feasibility studies and confirmed commitment from Inovasure, the majority of the project risk will be carried by it and it will also take responsibility for securing funding for the majority infrastructure and capital investments for this multi-billion project.
19. The municipality's financial risk is limited to the same or less than its current exposure to Eskom.
20. The relevant draft contract is found under <https://www.kannaland.gov.za/inovasure-energy-project-kannaland-municipality> and your attention is specifically directed to the following clauses which deals with the responsibilities, obligations, and rights of the Municipality:

2.	<u>THE EMPLOYER</u>	23
2.1	<u>Right of Access to the Site</u>	23
2.2	<u>Permits, Licences or Approvals</u>	24
2.3	<u>Employer's Personnel</u>	Error! Bookmark not defined.
2.4	<u>Employer Obligations</u>	Error! Bookmark not defined.
3.	<u>THE EMPLOYER'S ADMINISTRATION</u>	ERROR! BOOKMARK NOT DEFINED.
3.1	<u>The Employer's Representative</u>	Error! Bookmark not defined.
3.2	<u>Other Employer's Personnel</u>	Error! Bookmark not defined.
3.3	<u>Delegated Persons</u>	Error! Bookmark not defined.
3.4	<u>Instructions</u>	Error! Bookmark not defined.
3.5	<u>Determinations</u>	Error! Bookmark not defined.
10.	<u>EMPLOYER'S TAKING OVER</u>	ERROR! BOOKMARK NOT DEFINED.
10.1	<u>Taking Over of the Works and Sections</u>	Error! Bookmark not defined.
10.2	<u>Taking Over of Parts of the Works</u>	Error! Bookmark not defined.
10.3	<u>Interference with Tests on Completion</u>	Error! Bookmark not defined.
20.	<u>TERMINATION BY EMPLOYER</u>	61
20.1	<u>Notice to Correct</u>	61
20.2	<u>Termination by Employer</u>	61
20.3	<u>Valuation at Date of Termination</u>	63
20.4	<u>Payment after Termination</u>	63

<u>22.</u>	<u>RISK AND RESPONSIBILITY</u>	65
<u>22.1</u>	<u>Indemnities</u>	65
<u>22.2</u>	<u>Contractor's Care of the Works</u>	Error! Bookmark not defined.
<u>22.3</u>	<u>Employer's Risks</u>	Error! Bookmark not defined.
<u>22.4</u>	<u>Consequences of Employer's Risks</u>	Error! Bookmark not defined.
<u>22.5</u>	<u>Intellectual and Industrial Property Rights</u>	Error! Bookmark not defined.
<u>22.6</u>	<u>Limitation of Liability</u>	Error! Bookmark not defined.

PUBLIC PRIVATE PARTNERSHIP (PPP) ALIGNMENT

21. From the beginning it was the intention to formally register the product solution as a Public Private Partnership, and if successful, the benefit of this solution may also be shared with neighbouring municipalities.
22. On 18 April 2019 the NT GTAC team confirmed that it has no objection with the intended project and on 21 November 2019 the NT GTAC team provided the municipality with a project reference number TASM 180, which was confirmed by the National Treasury on 26 November 2019.
23. The contract attached to this notification as per MFMA section 33, is therefore the same contract provided to the relevant NT PPP-unit and GTAC on 22 March 2019 and serves as compliance with the PPPR 4(3).

OTHER IMPORTANT DOCUMENTS

24. The following relevant documentation is available for perusal by visiting the municipal website at <https://www.kannaland.gov.za/innovasure-energy-project-kannaland-municipality> and you can open the documents by clicking on the relevant link:
 - (i) Project specific requirements.
 - (ii) Council Resolution of 9 October 2018.
 - (iii) Feasibility study of 1 November 2018 – Executive Summary.
 - (iv) Feasibility study of 1 November 2018 – Part A: Introduction and interventions.
 - (v) Feasibility study of 1 November 2018 – PART B: Feasibility of interventions.
 - (vi) Feasibility study of 1 November 2018 – PART C: Investment and finance.
 - (vii) Draft Public Private Partnership Agreement.

WAY FORWARD ACTIONS

25. The documents may be perused at the Municipal offices during office hours, but due to the current COVID-19 pandemic related prescripts, to ensure a safe and healthy environment whilst observing social distancing, it will be appreciated if you could make prior arrangements for review of the documents with **MR G BREDÁ, 028 5511023/0738806697**
26. Enquiries may be directed to **MS W Viljoen, 0285511023/ 078 3944966**
27. Persons who cannot write but who wish to make representations, are welcome to make an appointment with **MR G BREDÁ, 028 5511023/0738806697**
28. Please note that if a potential bidder is satisfied that it is able to submit an equal or better alternative offer as per SCMR 37(3)(c), he or she must refer to and meet or exceed the project specific requirements and all specifications, risk absorption and timelines as per this document. Evidence thereof must be provided.

**NOTE THAT ALL INPUTS OR COMMENTS MUST REACH THIS
OFFICE BY CLOSE OF BUSINESS ON [06 June 2020], IN HARDCOPY
AT [32 CHURCHSTREET, LADISMITH, WESTERN CAPE, 6655] OR BY
e-MAIL AT [wilmie@kannaland.gov.za].**

Signed:
Municipal Manager:
Date:

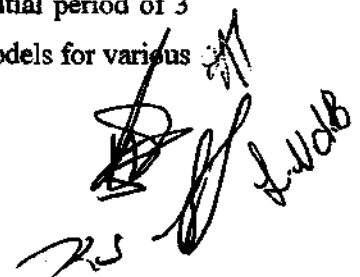
Annexure F

UITTREKSEL UIT NOTULE VAN 'N SPESIALE RAADSVERGADERING VAN KANNALAND MUNISIPALITEIT SOOS GEHOUD DINSDAG, 09 OKTOBER 2018 IN DIE RAADSAAL TE LADISMITH.

COUNCIL 09/10/18: MEMORANDUM OF AGREEMENT BETWEEN KANNALAND LOCAL MUNICIPALITY AND INOVASURE (PROPRIETARY) LTD

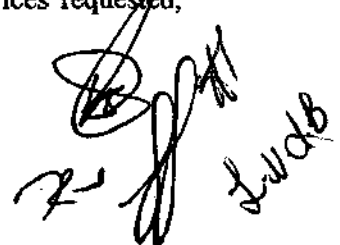
BESLUIT

1. That Council approves the attached Resolution and concomitant ESMA Agreement, MOA and its attachments for presentation to National Treasury and the DBSA as a matter of urgency.
2. That the KANNALAND LOCAL MUNICIPALITY Council takes a formal Resolution, as attached to this Item, to mandate the Kannaland Municipal Manager to sign, following the conclusion of the referenced Resolution, the relevant MOA and its attachments and send it, together with a suitable covering letter, to National Treasury / Government Technical Advisory Centre (GTAC) PPP division to initiate the process by facilitating the appointment of the chosen Transactional Advisors on the National Treasury GTAC PPP division panel, Bigen Africa, to assess and report on the Legal, Technical and Financial aspects of the proposed transaction, draw the required PPP Agreement as based on the ESMA Agreement, and to therein define the benefits for the KANNALAND LOCAL MUNICIPALITY.
3. That the Kannaland Local Municipality is tasked with sourcing and implementing suitable strategies and agreements with suitable collaborators for the implementation of Water Security (as well as Energy Security due to the high energy requirements for the provision of water to its citizens) in terms of existing Legislation, including Disaster Management Legislation, Bylaws and regulations;
4. That in line with the suitable strategies mentioned in clause 1 above, the Kannaland Local Municipality had entered into a Memorandum of Understanding (MOU) with Sun Graft on 17 September 2012, the rights of which were in due course transferred to InovaSure (Pty) Ltd as its leasing implementation agent in terms of a cession document. In addition, the period of the MOU in question was extended annually after its initial period of 3 years, in order to allow for various Feasibility Studies and Financial Models for various



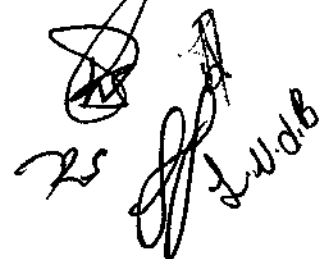
Project Proposals in terms of the MOU to be completed. Subsequent to this transfer of rights and in terms of the MOU, various various Feasibility Studies were carried out and Project Proposals prepared with Financial Models by InovaSure and presented to the Council on various occasions, all of which were subsequently accumulated in an Energy Security Management and Administration Agreement (ESMA Agreement) which was concluded by the Municipality with InovaSure;

5. That the ESMA Agreement referenced in 2 above is approved of by the Kannaland Local Municipality Council which authorises the Municipal Manager to conclude and sign the agreement, and that the Council and Municipal Manager shall furthermore undertake to provide all required assistance in order to have the referenced ESMA Agreement converted to a Public Private Partnership arrangement by means of the assistance of the National Treasury GTAC PPP division
6. That following the conclusion of the Energy Security Management and Administration Agreement (ESMA Agreement) with InovaSure (Pty) Ltd, the Municipal Manager be mandated to request the services of Transactional Advisors, as approved of by National Treasury GTAC PPP division, being Bigen Africa, to investigate and adjudicate the Legal, Technical and Financial aspects of the said ESMA Agreement and the proposed conversion thereof to a Public Private Partnership Agreement with InovaSure (Pty) Limited, for the implementation of an Energy and Water Vault on the basis of a future Public Private Partnership (PPP) agreement over a 25 year period, as well as an application to the Development Bank of Southern Africa (DBSA), or any other suitable Development Finance Institute, to act as the Mandated Lead Arranger for the funding of the referenced Energy Vault project.
7. That the Municipal Manager be mandated to conclude the referenced letter/s of appointment with the Transactional Advisors referred to in item 4 above, being Bigen Africa, or any other suitable Transactional Advisor on the panel of National Treasury GTAC PPP division and the Development Bank of Southern Africa (DBSA).
8. That, should the referenced Transactional Advisors proceed and draft the Public Private Partnership Agreement and provide the Legal advice to the proposed transaction, as well as provide the Technical and Financial advisory and adjudication services requested,

Handwritten signature and initials, possibly reading 'Z. [Signature] LwAB'.

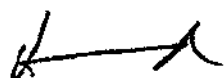
these reports and agreements be provided to the National Treasury GTAC PPP division and the Development Bank of Southern Africa for final consideration and approval, or not, as the case may be, following which the Kannaland Local Municipality shall be in a position to conclude the Public Private Partnership Agreement so produced and approved, or not, as the case may be.

9. That the Kannaland Local Municipality shall provide all assistance required (and that it is able to provide in terms of its status as an organ of State) to InovaSure (Pty) Ltd, the National Treasury, the DBSA, any other Development Finance Institute, the relevant Transactional Advisors to National Treasury and/or the DBSA, the New Development Bank and its African Regional Centre, and any other relevant stakeholder, Governmental Department or State Owned Enterprise in order to facilitate the adjudication and finalisation of the Kannaland Energy Vault Project.
10. That the Municipal Manager be authorized and mandated, should the referenced Transactional Advisors produce the PPP Agreement as based on the ESMA Agreement content, and find the proposed project to be feasible and in the best interests of the Municipality and to its benefit in in terms of its Legal, Financial and Technical aspects, and should it be approved by the National Treasury GTAC PPP division and / or the New Development Bank (NDB) / DBSA for funding (or any other Development Funding Institution), the PPP Agreement so approved of, and the Project Feasibility report/s and Financial Model/s so approved, to likewise approve and conclude the said Public Partnership Agreement for the Energy Vault Project.
11. That the DBSA or the NDB or any other suitable Development Finance Institute be solicited by Kannaland Local Municipality and it's proposed future Private Company partner, InovaSure, to act as the Mandated Lead Arranger (MLA) for the proposed Energy, Water and Education Security project/s implementation project/s to be undertaken at the Kannaland Local Municipality, as a Public Private Partnership arrangement, in respect of the proposed InovaSure Energy and Water Vault implementations along with the concomitant Thin Client Technology, being:
The facilitation of Energy, Water and Education Security, provided to the Kannaland Municipality, by means of the Service Level Agreement (called "Energy (and Water) Security Management and Administration Agreement" or "ESMA" Agreement, which

Handwritten signatures and initials in black ink, including a large stylized signature and the initials 'RS' and 'LWAB'.

is in effect a Public Private Partnership (PPP) arrangement) and the installation of, amongst other things, a Utility Scale so-called "Energy Vault" device (effectively a large [20MW-53MWh] battery storage device supported by balance of systems [electricity meters and LTE communication] and renewable energy sources [such as 25MW Photo Voltaic plants]), as well as related water purification and metering management systems and communication management devices at the Kannaland Local Municipality ("the Implementation Project");

12. That InovaSure be tasked with sourcing the required funding on suitable terms for the referenced Energy and Water Vault projects from agencies such as the NDB or any other suitable financial institution/s;
13. That the Kannaland Local Municipality Implementation Project be reviewed after a 3-year period from commencement of the flow of funds for the Project/s by various agencies and key stakeholders such as the NDB and the DBSA and the relevant funding agency/ies;
14. That the Department of Energy (DoE) of the South African Government and the Central Energy Fund (CEF) and the National Treasury be requested to provide their views and recommendations for the Implementation Project during its implementation process.
15. That the Municipal Manager is authorized to obtain legal advice to ensure that the contracts contain the desired principles of the proposal.



Die Speaker

2018.11.19
Datum


25-11-2018

Annexure G

PUBLIC PRIVATE PARTNERSHIP AGREEMENT (PPP)

Between the

KANNALAND LOCAL MUNICIPALITY

as the first Pilot Implementation Site and Participating
Municipality in the PPP and

INOVASURE (PTY) LTD

As a further guideline to the ensuing Participating Municipalities who take
Resolutions to take part in similar PPP Agreements by means of similar
documentation

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THIS CONTRACT ("PPP Agreement") is made

Between:

- (1) **Kannaland Local Municipality**, 32 Church Street, Ladismith, Western Cape (email reyno.stev@yahoo.com), as Employer and First Party; and
- (2) **InovaSure Proprietary Limited**, a company duly and legally incorporated in South Africa with registration number 2015/333853/07, with registered office at 263 Oak Avenue, Rapid Blue Building, Randburg, Johannesburg (email: max@inovasure.com) as Contractor and Second Party;

with the understanding that further Local, District and Metropolitan Municipalities may wish to enter into similar PPP Agreements as Further Parties by means of similar, terms and conditions as contained in this PPP Agreement and its Schedules, Appendices and Annexures, with specific recordal of its/their Financial Model for their specific Energy Vault Project/s which will in turn be executed by separate suitable special purpose vehicles implemented by the Contractor.

RECORDALS

- (A) The First Party (and future Employer/s in terms of future PPPs) require/s Energy, Water and Information Communications Technology ("ICT") Security, management and administration services, to:
 - a. upgrade, and/or convert and/or refurbish existing power generation, distribution, storage and trading facilities and/or to construct new Renewable Energy power generation, distribution, storage and trading facilities in both formal (in AC power supply) and informal (in DC power supply) settlement areas (which is understood to include the refurbishment of existing Power Plants, whether currently owned by the Employer/s or in future to be transferred to its/their balance sheets for refurbishment and management through the Contractor's Energy Vault/s installation/s);
 - b. in due course and once Energy Security has been established in the relevant Municipal area, upgrade, and/or convert and/or refurbish existing water supply, storage, purification, waste-water recycling and distribution facilities and/or to construct new water supply, storage, purification, waste-water recycling and distribution facilities in both formal and informal settlement areas;
 - c. as part of the Energy Vault/s installation and management process, upgrade, and/or convert and/or refurbish existing ICT telecommunications facilities and/or to construct new telecommunications facilities in both formal and informal settlement areas;
 - d. manage energy generation, distribution, storage and dispatch facilities, energy metering, payments and settlements, collections, risk and all other relevant administrative and management activities, including the relevant Municipal assets involved;
 - e. in due course and once the Energy Security has been established in the relevant Municipal area, manage water supply, storage, purification, waste-water recycling and distribution facilities, water metering, payments and settlements, collections, risk and all other relevant administrative and management activities, including the relevant Municipal assets involved;

- f. manage, as part of the Energy Vault/s operational procedures, telecommunications facilities, metering, connectivity, WIFI services, payments and settlements, collections, risk and all other relevant administrative and management activities, including the relevant Municipal assets involved;
 - g. and, generally, to establish and ensure a continuous supply of energy and in due course water and telecommunications to the First Party (and future Employer/s) as Municipality/ies tasked with service delivery, on behalf of the First Party (and the future relevant Participating Municipality/ies), which includes the design, execution, construction and post Take Over management of the of the Works.
- (B) The Employer/s has/have provided the Contractor with the Employer's Requirements which are included in schedule 4 attached to this PPP Agreement and amplified in the Contractor's Feasibility Study and Financial Model which is attached to this PPP Agreement on USB Drive as Appendix 3.
- (C) In response to the Employer's Requirements, as well as the general requirements of Future Parties as Participating Municipalities in their own PPP Agreement/s, the Contractor has supplied to the First Party and/or Employer/s the documents showing and describing the Contractor's proposals for the Works, initially, and thereafter for the Energy management and administrative services (herein referred to, jointly, as the Contractor's Proposals).
- (D) The Contractor has examined the Employer's Requirements as a Municipality specifically and as an organ of State generally and collectively and is satisfied that the Contractor's Proposals satisfy the First Party Employer's Requirements as well as the Requirements of future Employer/s as Participating Municipalities to their own PPP Agreement/s.
- (E) The Contractor, as part of the initial process of engagement with the First Party Employer, entered into a process of procurement for its services during 2012 and subsequently engaged with the First Party Employer over the years to date to produce various pre-feasibility and feasibility studies for various aspects of the proposed Works, which process involved the Council of the First Party Employer.
- (F) All required Resolutions for the process and proposed Works were taken and the required notice of the process and relevant Resolution taken provided to the public on an ongoing basis and specifically during October 2019 by means of publication of the final reports on its website and relevant newspapers and to the key stakeholders in government to request comment and confirmation of non-objection to the proposed Project/s and Work/s, including, but limited to, the Central Energy Fund, the Department of Energy, COGTA, SALGA, the National Treasury GTAC division, the Development Bank of Southern Africa, various Trade Unions and Eskom. Various support letters from the key stakeholders were received by the First Party and the Contractor and no objections were received by either the First Party of the Contractor to the publications and Feasibility Study and Financial Model pertaining to the First Party Employer as published to the public and key stakeholders. The Feasibility Study and Financial Model so published indicates the financial implications and benefit of the Energy Vault Project/s for the First Party Employer in Kannaland Local Municipality as a pilot implementation Project and all future Participating Municipalities as Employer/s, as well as Eskom as the nett receiver of the benefit of stored energy from the Energy Vault/s provided by the Participating Municipalities to the distribution network/s during peak periods.
- (G) The First Party Employer, together with its Transactional Advisors, Stefanutti Stocks, which it employed to determine the Financial, Technical and Legal viability of the proposed Energy Vault Project for its Municipal area and in general for all future Participating Municipalities up to 200 (Two hundred) similar Energy Vault sites situated at various other sites around

the Country, has conducted a thorough due diligence in respect of and relating to the Contractor and the Feasibility Study and Financial Model that it has provided, and has satisfied itself as to the ability of the Contractor to meet the Employer's Requirements as well as the requirements of all Future Parties as Participating Municipalities in their own similar PPP Agreements.

- (H) During the engagement/s with the First Party Employer and other Participating Municipalities over the years, after the engagement and contract with the First Party in September 2012 to provide various energy and water and related services, the Contractor also engaged with National Treasury GTAC division with regard to the possible arrangement of a Public Private Partnership for the Project, as well as future Project/s with other Participating Municipalities. The GTAC division provided its support for the proposals as PPP arrangement and encouraged the Contractor to execute the process under the auspices of the Development Bank of Southern Africa (DBSA) and to finalise the process for a specific Municipality, being the First Party's Municipality of Kannaland, and well as with other interested Municipalities who may wish to also take part in similar PPP arrangement/s. The Contractor duly finalised Resolutions for the introduction of Energy Vault/s similar to that of the First Party's Energy Vault in the Kannaland Local Municipality with other Municipality/s and is in the process of finalising other similar engagements with other Municipalities for Resolutions in a similar manner, with the understanding that the Kannaland Local Municipality will serve as a pilot implementation site for an Energy Vault and its concomitant systems and installations.
- (I) In designing the Energy Vault installation and project, over the years since its first engagement during 2012 at the Kannaland Local Municipality and other Participating Municipalities such as the Garden Route District Municipality, the Contractor investigated various social inequalities with regard to housing, electrification and telecommunications in informal settlements and formal settlements and the implications thereof with regard to the service delivery mandate of specifically energy and water and education of the various Municipalities as organs of state with delegated power in terms of the Constitution of South Africa. During the process of formulation of the Energy Vault installation for the First Party Employer, as well as all other future Participating Municipalities, the Contractor developed a system of electrification of informal dwellings in DC format and the provision of telecommunications and other services such as water and access to educational content and other media. This installation, the so-called "InovaSure LivPak" installation, is included in the Financial Model and Feasibility Study for the Energy Vault installation at the First Party Employer's Municipality as well as all Future Parties Municipalities where there is a need for it. The LivPak installation is executed within a Co-operative structure which is registered for each informal settlement and the Contractor provides the Co-operative, itself and through its collaborators, with the services and products required at cost effective monthly rates. In this manner, the Contractor postulates, all of the dwellings in the informal settlements located within the Municipal area of the First Party Employer and all Future Parties which are not electrified, can be electrified at the cost of the Contractor and provided with other services and products such as potable water and sanitation and educational content by means of the provision of video streaming over the WIFI networks which are included in the LivPak installations.
- (J) Further in designing the Energy Vault installation and project, both prior to and post its engagement with the various Participating Municipalities in South Africa, the Contractor investigated the possibility of refurbishing defunct, or soon to be defunct, hydro or coal-fired power stations which it proposes be transferred to the closest Municipality and thereafter incorporated into the Energy Vault/s Project/s for full refurbishment at the cost of the Contractor. In this regard, although there is not a power station within the First Party's Municipality that can be so dealt with, other Future Municipality/s with their own PPP

Agreement/s may indeed wish to do so, such as the Middleburg Local Municipality with regard to the Hendrina Power Station, which the Contractor has obtained the funding commitment for from the financial institution providing the funding for the Project/s, as well as the integrated Feasibility Study and Financial Model, as well as for all other power stations which will become defunct in the coming years. Once the relevant Municipality/ies has/have the defunct power station on their balance sheet, which is then refurbished, it may enter into a Power Purchase Agreement with Eskom (or any other relevant party under the applicable Laws), which in turn may be securitised to generate immediate cashflow for the organ of State to deploy against the current liability of Treasury towards the distribution networks and/or Eskom.

- (K) After following due process, the Employer has agreed to appoint the Contractor for the implementation and management of the Project, as detailed in the Feasibility Study and Financial Model completed and adjudicated, and the Contractor has agreed to execute and complete the Works and thereafter manage them in accordance with the provisions of this PPP Contract and as according to the proposal contained in the Feasibility Study and Financial Model.

1. GENERAL CONDITIONS

1.1 Definitions

In this Contract, the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

- 1.1.1 **"Affiliate"** means any person that directly or indirectly through any one or more intermediaries controls or is controlled by or is under common control with any person, where "control" means the ability to direct or cause the direction of the business affairs and management policies or practices of a person;
- 1.1.2 **"Agreed Form"** means, in relation to any document not executed simultaneously with this PPP Agreement, the terms and conditions of that document that have been agreed by the Parties and initialled by each of them for identification purposes on or before the Signature Date and which may also be included as an addendum to this PPP Agreement after the Signature Date;
- 1.1.3 **"All Resources Account"** means, following the Take Over of the Works by the Employer/s and concomitant management thereof by the Contractor, the single, combined monthly account from the Contractor submitted to the Employer/s with respect to the management activities all of the Contractor's products and services costs programs and activities, including the provision of its warranties for the provision of power through the Energy Vault/s, and in due course water through the Water Vault, and ICT services through its telecommunications system/s, as well as all other related services, and which becomes due and payable within 7 (Seven) days of presentation to the Employer;
- 1.1.4 **"Availability Certificate"** means the certificate to be issued by the Contractor certifying that the relevant Services are available to the Employer/s;
- 1.1.5 **"Balance of Month Transaction"** means the facilitation by the Contractor of the purchase or sale of electric energy, capacity and / or other related attributes, as well as in due course water and telecommunications services, for a term not greater than 1 (one) month, to be performed or delivered by the Contractor through the intervention of the Energy and/or in due course the Water Vault/s and/or the ICT

System/s on behalf of the Employer/s within the current or next succeeding calendar month;

- 1.1.6 **"Business Day"** means any day except a Saturday, Sunday or a public holiday in the Republic of South Africa;
- 1.1.7 **"Calendar Day"** means all days including Saturdays, Sundays and public holidays;
- 1.1.8 **"Capital Expenditure"** means any expenditure treated as capital expenditure under GAAP and which is detailed in the attached Feasibility Study and Financial Model and marked as such;
- 1.1.9 **"CDM Regulations"** means the Construction Design and Management Regulations of the country in which the Contractor is conducting the Works, being South Africa;
- 1.1.10 **"Commencement Date"** means the date notified under Sub-Clause 8.1 [*Commencement of Works*].
- 1.1.11 **"Compensation Events"** means those events specified in the attached Feasibility Study and Financial Model;
- 1.1.12 **"Completion Certificate/s"** means the certificate/s to be issued by the Independent Certifier declaring that the Works have been completed in accordance with the terms of this PPP Agreement and/or its Annexures, Appendices and Addendums;
- 1.1.13 **"Consents"** means the consents to be obtained by the Employer/s or Contractor for any aspect of this PPP Agreement and its Schedules, Annexures or Appendices;
- 1.1.14 **"Contract"** means the conditions of this PPP Agreement, the Particular Conditions, and all Schedules, Annexures and Appendices (including the Employer's Requirements, if any, and the Contractor's Proposals which are encapsulated in the attached Feasibility Study and Financial Model);
- 1.1.15 **"Contractor's Equipment"** means all apparatus, machinery, vehicles, vessels and other things required for the execution and completion of the Works and the remedying of any Defects. However, Contractor's Equipment excludes Temporary Works, Employer's Equipment (if any), Plant/s, Materials and any other things intended to form or forming part of the Permanent Works;
- 1.1.16 **"Contractor's Documents"** means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature supplied or to be created or compiled by the Contractor under the Contract and otherwise as described in Sub-Clause 5.2 [*Contractor's Documents*];
- 1.1.17 **"Contractor's Personnel"** means the Contractor's Representative and all personnel whom the Contractor engages in connection with the Works, who may include the staff, labour and other employees of the Contractor and of each Subcontractor and/or Consultant; and any other personnel assisting the Contractor in the execution of the Works;
- 1.1.18 **"Contractor's Proposals"** means the document so named included in the Contract as Appendix 3 and which is the Feasibility Study and Financial Model completed for the Project and adjudicated and approved by the relevant Transactional Advisors;

- 1.1.19 "**Contractor's Representative**" means the person named by the Contractor in the Contract or appointed from time to time by the Contractor under Sub-Clause 4.3 [*Contractor's Representative*], who acts on behalf of the Contractor;
- 1.1.20 "**Construction Subcontract/s**" means the contract/s between the Contractor and the Construction Subcontractor in respect of the Works;
- 1.1.21 "**Construction Subcontractor**" means the person/s appointed by the Contractor to undertake the Works;
- 1.1.22 "**Corrupt Act**" means a bribe, gift, gratuity, commission or other thing of value, as an inducement or reward as set forth in clause 20.2(f) below;
- 1.1.23 "**Cost**" means all costs, losses and expenditure reasonably directly and properly incurred (or to be incurred) by the Contractor, whether on or off the Site/s, but does not include profit or any allowances or contingency sums for the assumption of any risks under or in connection with the Contract;
- 1.1.24 "**Country**" means the country in which the Site/s (or most of it/them) is located, where the Permanent Works are to be executed, being South Africa;
- 1.1.25 "**CPI**" means the consumer price index excluding interest on mortgage bonds for the metropolitan and other urban areas published from time to time by the Statistics South Africa provided that, if:
- 1.1.25.1 such index ceases to be published; or
- 1.1.25.2 the Employer/s and the Contractor agree (or, failing agreement, if it is determined by the Independent Expert that due to a change in circumstances such index is no longer representative, then from the date when the index was last published, the Parties shall use such other index as agreed between them or, failing agreement, as determined by the Independent Expert as being a fair and reasonable replacement index;
- 1.1.26 "**day**" means a calendar day and "year" means 365 days;
- 1.1.27 "**Debt**" means, at any date, all amounts due and payable by the Contractor that are outstanding under any financing agreements which it has entered into as at that date, but excluding all default interest, breakage premiums as well as fees, costs and expenses whatsoever in connection with any hedging arrangements entered into by the Contractor;
- 1.1.28 "**Debt Relief Services**" means any form of debt relief services which the Contractor may provide or facilitate and arrange to provide, upon specific request, to the Employer/s by means of a separate agreement, with regard to any amount which may be owing to Eskom or any other party;
- 1.1.29 "**Defects Notification Period**" means 3 years (with any extension under Sub-Clause 11.3 [*Extension of Defects Notification Period*]), calculated from the date on which the Works or Section is completed as certified under Sub-Clause 10.1 [*Taking Over of the Works and Sections*];
- 1.1.30 "**Defect**" means any error, defect or damage in or to the Works (including in any design, materials or workmanship) and any failure of the Works to comply with the requirements of the Contract, and includes all damage to the Works or to any other property arising from such error, defect, damage or failure;

- 1.1.31 **"Delay Damages"** means the delay damages set out in the Particular Conditions;
- 1.1.32 **"Demand Side Management"** shall mean the way in which the Contractor shall, on behalf of the Employer/s, install the Energy Vault/s and all its components and provide Energy Security products and services in order to alleviate pressure on the relevant Municipal or Eskom substations through the hybrid utilisation of Renewable Energy, battery storage facilities and the management input of Eskom power at optimum times;
- 1.1.33 **"Dispute"** means any dispute or difference between the Employer and Contractor in connection with or arising out of the Contract or the execution of the Works;
- 1.1.34 **"Distribution Network"** shall mean the demand side network of assets of the Employer/s which shall be provided by the Employer/s for utilisation by the Contractor on its behalf as it may deem fit in the provision of the Energy Security services by means of the Energy Vault/s, and which Distribution Network the Employer/s undertakes, at its/their own cost, to maintain, service, and operate as separate from the Energy Vault/s and also to provide the Contractor, as collateral, in the provision of any Debt Relief Services which the Contractor may provide to the Employer/s by means of a separate agreement/s;
- 1.1.35 **"Electric System"** means all property/s and other assets (including but not limited to those real and personal and tangible and intangible) of the Employer/s, which the Employer/s owns or will own in the future, used for or in relation to the generation for sale, transmission, transformation, distribution, storage or utilisation of electric capacity and energy, provided that, where the Employer/s is/are not the sole owner of an asset or property or to the extent that an asset or property is used in part for generation for resale, transmission, distribution, storage or sale of electric capacity and energy, only the Employer/s ownership interest in such asset or property shall be considered to be part of its/their Electric System;
- 1.1.36 **"Employer/s"** means the First Party and/or Participating Municipality/s named as the Employer/s and its/their legal successors in title and permitted assigns;
- 1.1.37 **"Employer/s Equipment"** means the apparatus, machinery and vehicles (if any) made available by the Employer/s for the use of the Contractor in the execution of the Works, as stated in the Employer/s Requirements, but does not include Plant/s which has/have not been taken over by the Employer/s;
- 1.1.38 **"Employer/s Personnel"** means the Employer/s Representative, the assistants referred to in Sub-Clause 3.2 [*Other Employer/s Personnel*] and all other staff, labour and other employees of the Employer/s and of the Employer/s Representative; and any other personnel notified to the Contractor, by the Employer/s or the Employer/s Representative, as Employer/s Personnel;
- 1.1.39 **"Employer/s Representative"** means the person named by the Employer/s in the Contract or appointed from time to time by the Employer/s under Sub-Clause 3.1 [*The Employer/s Representative*], who acts on behalf of the Employer/s;
- 1.1.40 **"Employer/s Requirements"** means the document entitled "Employer's Requirements", as included in this PPP Contract as an Appendix and any additions and modifications to such document in accordance with the Contract. Such document specifies the purpose, scope, and/or design and/or other technical criteria, for the Works and may refer to the Feasibility Study and Financial Model as developed and provided by the Contractor;

- 1.1.41 **“Energy and/or Water and/or ICT Risk Management Policy/s”** means the Contractor’s energy and in due course water and/or ICT risk management policy/s, as published from time to time, and applicable to the Employer/s;
- 1.1.42 **“Energy, Water and ICT Security”** means the provision of a continuous supply of power and in due course water and/or ICT services to the Employer/s resulting in the reduction of the risk of blackouts and load shedding and the provision of cost-effective electricity and in due course the provision of cost effective potable water and ICT services;
- 1.1.43 **“Energy and/or Water and/or ICT Security Management”** means to upgrade, convert or establish facilities, staff and the capability for providing and managing, on behalf of the Employer/s, Energy and in due course Water and/or ICT Security including, but not limited to, conversion, upgrade or introduction of new technology types, refurbishment and/or new build of existing, defunct and/or new power generation and in due course water purification and/or telecommunications plants and facilities, substations, piping and cabling, renewable energy facilities, real-time dispatch management, resource management, storage management, energy distribution and in due course water and/or telecommunications meter management, settlements management, payments management, collections management, risk management, and all other relevant management and administrative activities;
- 1.1.44 **“Energy and/or Water and/or ICT Security Scoping Due Diligence Process”** means the process that the Contractor has employed to determine the readiness and capability for the Employer/s to receive the benefit of the minimum levels of power through the Energy Vault/s, and in due course water through the Water Vault/s and ICT services through the telecommunications system/s;
- 1.1.45 **“Energy and/or Water and/or ICT Security Warranty”** means the warranty provided by or facilitated by the Contractor and/or the Energy Vault/s and/or in due course the Water Vault/s and/or ICT services, component suppliers, by separate agreement, to the Employer/s for the provision of the services and minimum levels of performance as agreed to and set out in this Agreement and/or the Schedules, Appendices and Annexure(s) hereto;
- 1.1.46 **“Energy and/or Water and/or ICT Security Penalties”** means the penalties which may be imposed for payment (with a concomitant reconciliation with regard to the monthly payment amount) by the Company to the Employee in the event of load shedding, blackouts and/or service delivery defaults in terms of the Energy Security and/or in due course Water Security and/or ICT Security Warranty provided, other than those caused by force majeure and/or which are beyond the control of the Contractor, as according to the pre-determined Contractor Energy, and in due course Water and ICT Security, penalties list as published from time to time by the relevant component suppliers to the Energy Vault/s and/or in due course the Water Vault/s and/or ICT telecommunications installation/s;
- 1.1.47 **“Energy Security Commissioner”** means the commissioner appointed to act on behalf of the Employer/s in all dealings with the Contractor;
- 1.1.48 **“Equity”** means the entire issued share capital of the Contractor;
- 1.1.49 **“Eskom”** means the Eskom Holdings SOC Limited;

- 1.1.50 **"Expiry Date"** means the 25th anniversary of the Take Over date of the Works in terms of this PPP Contract, or any extension period thereof;
- 1.1.51 **"First and Second Parties"** means InovaSure (Pty) Ltd and Kannaland Local Municipality as the First and Second Parties respectively to this PPP Agreement;
- 1.1.52 **"Facilities"** means the buildings and other facilities together with all supporting infrastructure, plant and equipment as required to enable the Contractor to exercise its rights and perform its obligations included in the Project/s Deliverables;
- 1.1.53 **"Feasibility Study"** means the studies undertaken by the Contractor and its collaborators in order to determine final parameters for the Project/s cost with relation to the Works and the various Site/s, as well as the management services costs that will be charged by the Contractor to the Employer/s during the period of the management of the Works and the Project/s following the Take Over by the Employer/s;
- 1.1.54 **"FIDIC"** means the Fédération Internationale des Ingénieurs-Conseils, the international federation of consulting engineers;
- 1.1.55 **"Final Statement"** means the statement defined in Sub-Clause 14.9 [*Application for Final Payment*] with regard to the Works up to the point of Take Over and prior to the inception of the management period of this PPP Agreement;
- 1.1.56 **"Financial Model"** means the financial base case for the Project/s for the Employer/s in terms of the Energy and in due course the Water and/or ICT aspects thereof as reflected in the draft computer model attached to this PPP Agreement on USB Drive as Appendix 3, which model/s may be provided in various stages, phases and Time/s with regard to the Works at various Site/s and which incorporates the forecast cash flow statements of the Contractor, including all expenditure, revenues, taxation and financing of the Project/s Deliverables together with the income statements and balance sheets for the Contractor over the Project/s Term and thereafter during the envisaged 25 (Twenty five) year management term, or extensions thereof in multiples of 10 (Ten) years, and details of all assumptions, calculations and methodology used in the compilation thereof;
- 1.1.57 **"Financing Agreement/s"** means the confidential agreement/s relating to the Debt as entered into between the Contractor and the financial institution providing the funding for the Project/s and which shall be disclosed in summary format to the Employer/s upon request;
- 1.1.58 **"First Phase"** means the initial planning, scoping and due diligence process that was conducted by the Contractor with regard to the Employer/s and the Project and which in due course may be conducted by the Contractor with other Participating Municipality/es;
- 1.1.59 **"Fiscal Year"** shall mean the Contractor's fiscal year which, as at the Signature Date is the 12 (twelve) month period commencing 1 March and ending on the 28th of February on the following year;
- 1.1.60 **"Force Majeure"** is defined in Clause 24 [*Force Majeure*];
- 1.1.61 **"Foreign Currency"** means a currency in which part (or all) of the Contract Price may be payable, but not the Local Currency;

- 1.1.62 **"Further Parties"** means any further Participating Municipality, whether District or Local, which may decide by resolution to become a Party to their own similar PPP Agreement, either by signing as a party to it, or by means of incorporation of this whole agreement and its terms as an attachment to a separate agreement which is or shall be designed to incorporate this PPP Agreement and its salient terms in totality;
- 1.1.63 **"Funder"** means any person, company, bank or other financial institution at any time providing finance in connection with the Works for the Project/s and/or any part thereof;
- 1.1.64 **"Funder's Representative"** means any the person appointed by the Funder from time to time who acts on behalf of the Funder, as notified in writing by the Contractor to the Employer/s;
- 1.1.65 **"General Manager"** means the General Manager of the Contractor who shall represent the Contractor in all dealings with the Employer/s in respect of the implementation of this PPP Agreement and all its Annexures, Schedules and Appendices;
- 1.1.66 **"Good Industry Practice"** means the manner in which the Works and the Services are rendered, the standards, methods and procedures conforming to applicable law and exercising that degree of skill, care, diligence, prudence and foresight that would reasonably and ordinarily be expected from a skilled and experienced person engaged in a similar type of undertaking under similar circumstances;
- 1.1.67 **"Goods"** means Contractor's Equipment, Materials, Plant/s, and Temporary Works, or any of them as appropriate;
- 1.1.68 **"ICT System"** means the system designed, implemented and managed by the Contractor for the provision of telecommunications and related management services with regard to the various components and aspects of the Energy Vault/s and in due course the Water Vault/s;
- 1.1.69 **"Independent Certifier"** means the independent certifier appointed by the Parties who shall be responsible for the issue of the Completion Certificate/s for the Works at the various Site/s and at the various Time/s;
- 1.1.70 **"Installation Date/s"** means the date/s identified for installation of the Works at the various Site/s in the Particular Conditions, as may be amended by the Contractor in conjunction with the Employer/s pursuant to Sub-Clause 2.6;
- 1.1.71 **"Institution"** means the Employer/s, being Participating Municipality/s as organs of State;
- 1.1.72 **"Institution Assets"** means any assets made available by the Employer/s to the Contractor for use in the Project/s, including, if applicable, the Project Site/s;
- 1.1.73 **"Intellectual Property"** means all intellectual property whatsoever used from time to time by the Contractor (as the Private Party to this PPP Agreement) in connection with the Works and the Services whether capable of registration, registered or not;
- 1.1.74 **"Laws"** means all international and national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority that apply in respect of the Works, and the performance thereof;

- 1.1.75 "**Lender/s**" means the same as Funder/s which is any financial institution providing finance to the Contractor for the Project/s under the Financing Agreement/s;
- 1.1.76 "**Lien**" means any charge, lien, pledge, claim, mortgage, lease, easement, security interest or encumbrance of any kind;
- 1.1.77 "**Licensed Intellectual Property**" means all intellectual property to be used under license from any third party;
- 1.1.78 "**Local Currency**" means the currency of South Africa;
- 1.1.79 "**Making Good Defects Certificate**" means the certificate issued under Sub-Clause 11.9;
- 1.1.80 "**Materials**" means things of all kinds (other than Plant/s) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under this PPP Agreement;
- 1.1.81 "**Net Cash Flow**" means, on any date:
- 1.1.81.1 all monetary sums of any income nature received by the Contractor under the Financing Agreements at that date;
 - 1.1.81.2 all amounts drawn down by the Contractor under the Financing Agreements at that date, less
 - 1.1.81.3 all expenditure of the Contractor at that date in relation to the Project Deliverables (excluding interest);
- 1.1.82 "**O&M Agreement**" means the agreement/s between the Employer and the O&M Contractor/s, and/or the Contractor itself, for the operation and maintenance of the Plant/s in terms of the period post Take Over when the Contractor will provide Energy security management and administrative services to the Employer/s at the costs and fees indicated in the attached Feasibility Study and Financial Model;
- 1.1.83 "**O&M Contractor**" means the person/s appointed by the Employer to operate and maintain the Energy Vault/s and in due course the Water Vault/s and/or Telecommunications systems and the Services following Take Over, which may be the same entity as the Contractor;
- 1.1.84 "**Operating Expenditure**" means any expenditure treated as operating expenditure under GAAP and specifically detailed in the attached Financial Model and Feasibility Study;
- 1.1.85 "**Operations Sub Contract/s**" means the contract/s between the Contractor and the relevant Sub Contractor/s;
- 1.1.86 "**Operations Sub Contractor/s**" means the person/s appointed by the Contractor to perform the various Services;
- 1.1.87 "**Other Contractors**" means any other contractors appointed by the Contractor to undertake works or perform services in relation to the Site/s, building/s, Plant/s, installations or surrounding areas;

- 1.1.88 **"Party"** means the First Party Employer or the Contractor (or in due course other Participating Municipality/s to their own similar PPP Agreements), as the context requires;
- 1.1.89 **"Participating Municipality"** means any Municipality which is situated in South Africa and which is or becomes a Party to a similar PPP Agreement/s to this PPP Agreement;
- 1.1.90 **"Performance Certificate/s"** means the certificate/s issued under Sub-Clause 12.2 [*Performance Certificate*];
- 1.1.91 **"Performance Criterion"** means any of the performance criteria required in the energy industry and as specifically set out in the attached Financial Model and Feasibility Study (being, with regard to power, the output, electrical efficiency, thermal efficiency and plant availability, and in due course with regard to water and ICT services the suitable industry related performance criteria));
- 1.1.92 **"Performance Damages"** means, if any, the performance damages set out in the Particular Conditions which in turn refer to the attached Feasibility Study and Financial Model;
- 1.1.93 **"Performance Guarantees"** means the document/s so named (if any), as included in the either this PPP Agreement and its attached Financial Model and Feasibility Study or attached as addendums;
- 1.1.94 **"Performance Security"** means an advance payment bond, if required by the Lender, in the form set out at Schedule 3, for the security, (or securities) under Sub-Clause 4.2 [*Performance Security*];
- 1.1.95 **"Permanent Works"** means the permanent works to be designed and executed by the Contractor for the Project/s under this PPP Agreement;
- 1.1.96 **"Plant/s"** means the Energy Vault and in due course Water Vault/s and/or ICT services installations and systems, the Balance of Plant/s and the Services and the apparatus, machinery and vehicles intended to form or forming part of the Permanent Works of the Project/s;
- 1.1.97 **"PPP"** means this Public Private Partnership Agreement between the Parties;
- 1.1.98 **"Project/s"** means the design, introduction and management of the InovaSure Kannaland Energy Vault and/or any other Future Party Participating Municipality/s Energy Vault/s in terms of such similar PPP Agreement/s, and in due course Water Vault/s and ICT telecommunications systems and the ensuing management thereof by the Contractor on behalf of the Employer/s for a further period of 25 (Twenty five) years following the Take Over of the Works and Project/s, as well as any further extension of the management period, upon the terms and conditions as contained in the attached Financial Model and Feasibility Study and further Addendums added in due course;
- 1.1.99 **"Project/s Assets"** means all assets as are required to design, construct, develop, install, commission, operate and maintain the Project/s including the Facilities, any books and records, any spare parts and tools as well as the Intellectual Property and the Institution Assets, but excluding all cash;
- 1.1.100 **"Project/s Deliverables"** means the carrying out of the Works, the installation, commissioning, operation of the Project/s Assets including the repair, renewal or

replacement thereof, the management and provision of the Services and the exercise and performance of all other rights and obligations of the Contractor under this PPP Agreement from time to time;

1.1.101 "**Project/s Documents**" means the Financing Agreements, the Shareholders Agreements, the Subcontracts, the relevant service level agreement/s (either existing as attached to this PPP Agreement or to be provided in due course as Addenda), the Feasibility Study and Financial Model and all other relevant documents relating to the performance of the Project/s Deliverables, each executed by the Parties thereto simultaneously with this PPP Agreement or thereafter or otherwise in the Agreed Form;

1.1.102 "**Project/s Insurances**" means all formats and types of the required and necessary Project/s Insurances, of all manner and type, as facilitated and provided by the Contractor for all aspects of the Project/s at all times;

1.1.103 "**Project/s Officer**" means the official designated by the accounting officer of the Employer/s in notice to the Contractor as the Project Officer/s for the Project/s. The Employer/s may replace the Project Officer/s from time to time on prior written notice to the Contractor;

1.1.104 "**Project/s Term/s**" means the period from the Signature Date to the Expiry Date or the Termination Date, whichever occurs first;

1.1.105 "**Provisional Sum**" means a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant/s, Materials or services under Sub-Clause 13.6 [*Provisional Sums*];

1.1.106 "**Required Testing Performance**" means the testing of:

- (a) contracted outputs:
- (b) contracted efficiency levels,

for the Plant/s and Works by the suitable agent's as agreed to between the Parties;

1.1.107 "**Responsible Authority**" means any ministry, minister, organ of state, any official in public administration, or any other governmental or regulatory department, commission, institution, entity, service utility, board, agency, instrumentality or authority (in each case whether national, provincial or municipal) or any court, each having jurisdiction over the matter in question but excluding, in all instances, the Employer/s;

1.1.108 "**Revenue**" means, with respect to the Employer/s, all income, rents, rates, fees, charges, and other moneys derived by the Employer/s from the facilitated operation of its Electric System and in due course when applicable its Water System and/or ICT System, including, without limiting the generality of the foregoing: (a) all income, rents, rates, fees, charges or other moneys derived from the sale, furnishing and supplying of electric capacity and energy and in due course when applicable, potable water and/or ICT services and other related services, facilities, and commodities sold, furnished, or supplied through the facilities of its Electric System and in due course the Water System and/or ICT System; (b) the earnings on and income derived from the investment of such income, rents, rates, fees, charges or other moneys to the extent that the use of such earnings and income is limited by or pursuant to law to its Electric System and in due course the Water System and/or

ICT System; and (c) the proceeds derived by the Employer directly or indirectly from the sale, lease or other disposition of all or a part of the Electric System and in due course the Water System and/or ICT System, but the term Revenues shall not include (i) customers' deposits or any other deposits subject to refund until such deposits have become the property of the Employer or (ii) contributions from customers for the payment of costs of construction of facilities to serve them;

- 1.1.109 "**Servitude/s**" means the Right of Use Servitude/s and/or Usufruct Servitude/s which the Employer/s shall grant to the Contractor in order to allow for the minimum period of 25 (Twenty Five) years, renewable for at least another 10 (Ten) years, with regard to a suitable property/s with suitable zoning rights, for the installation of the Energy Vault/s and in due course the Water Vault/s and/or ICT Systems at the various relevant Site/s adjacent to the suitable substations or, in due course, the water storage facilities or other relevant municipal installations and which the Employer/s shall allow the Contractor to take all steps necessary, and sign all agreements and documents necessary, for the registration of said Servitude/s in the relevant Deeds Office/s;
- 1.1.110 "**Service Level Agreements**" means the relevant portions of this PPP Agreement or other agreements for Energy management and administration services which may be entered into between the Parties, as Addenda, in relation to the supply of Services during and/or after the completion of the Project/s at its various relevant Site/s and at the various relevant Term/s after Take Over;
- 1.1.111 "**Schedule of Payments**" means the schedule of payments as agreed to between the Contractor and the financial institution providing the funding for the Project/s;
- 1.1.112 "**Scheduled Service Commencement Date**" means the date stipulated in the Works Program for the Project/s as the day after the date on which the Availability Certificate/s is/are scheduled to be issued and the Services are due to commence;
- 1.1.113 "**Second Phase**" means planning, design and development of the installation of the Energy Vault and in due course the Water Vault/s and/or ICT Systems or other Project/s to be conducted by the Contractor, or which may have already been conducted in the case of the First Party Employer;
- 1.1.114 "**Section**" means a part of the Works specified in the Particular Conditions as a Section (if any);
- 1.1.115 "**Service Commencement**" means the actual commencement of the Services subsequent to the issue of the Availability Certificate/s in accordance with the terms of this PPP Agreement or Addenda which may be included in the future;
- 1.1.116 "**Service Commencement Date**" means the date of service commencement as provided in the Availability Certificate/s issue by the Contractor in accordance with the terms of this PPP Agreement or its Addenda, Schedules or Annexures;
- 1.1.117 "**Service Period**" means the period from the Service Commencement Date to the Expiry Date unless this PPP is terminated earlier in accordance with its terms;
- 1.1.118 "**Services**" means the operational services to be performed by or on behalf of the Contractor for the Employer/s as set forth in the attached Feasibility Study and Financial Model as may be subsequently amended in accordance with the relevant Addenda to be formulated and attached;

- 1.1.119 "**Shareholder/s**" means the holder/s of the Equity in the Contractor;
- 1.1.120 "**Shareholder's Loans**" means, at any date, in relation to any financing, other than the Equity and the financing under any Financing Agreement, made available for the Project/s by the Shareholder/s at any stage, all principal unpaid at that date;
- 1.1.121 "**Signature Date**" means the date of signature of this PPP Agreement by the last signing Party with regard to the First Party Employer and any Future Party Participating Municipality of either this PPP Agreement or any Addenda incorporating this PPP Agreement;
- 1.1.122 "**Site/s or Project Site/s**" means the places where the Permanent Works are to be executed and to which Plant/s and Materials are to be delivered as described in the attached Feasibility Study, and any other places as may be specified in the Contract as forming part of the Site/s of the Project/s;
- 1.1.123 "**Smart Meter**" means any device or devices which the Contractor may utilise or arrange to utilise on behalf of the Employer/s for the implementation and management of the Energy, and in due course the Water and/or ICT Security services, through the Energy, and in due course, Water Vault/s and/or the ICT Systems;
- 1.1.124 "**Special Conditions**" means those conditions or requirements which, from time to time, may be requested by the Employer which are not incorporated in this PPP Agreement and may be added as Addenda;
- 1.1.125 "**Statement**" means a statement submitted by the Contractor as part of an application for payment under Clause 14 [*Contract Price and Payment*];
- 1.1.126 "**Subcontract/s**" means any of those contracts entered into between the Contractor and Subcontractor/s for the provision of any product or service in terms of the Project/s, both prior and post Take Over by the Employer/s, upon the terms and conditions as negotiated between the Contractor and such Subcontractor/s;
- 1.1.127 "**Subcontractor/s**" means any person/s named in the Contract as a Subcontractor/s, or any person/s appointed as a Subcontractor/s, for a part of the Works, and the legal successors in title to each of these person/s;
- 1.1.128 "**Subcontractor/s Costs**" means, if applicable, all losses, damages, liabilities and expenses (including legal costs and expenses) ("Losses") that have been or will be reasonably and properly incurred by the Contractor as a result of the termination of this PPP Agreement but only to the extent that:
- 1.1.128.1 the losses are incurred in connection with the completion of the Works and/or the provision of the Services by the Subcontractor/s, including, without limitation:
- (a) the costs of any materials or goods ordered or Subcontract/s placed that cannot be cancelled without such Losses being incurred;
 - (b) Subcontractor/s' loss of profits for a period not exceeding 3 (Three) months;
 - (c) any expenditure incurred in anticipation of the Completion of the Works or the provision of the Services;

(d) the cost of demobilisation including the cost of relocation of equipment used in connection with the Project/s; and

(e) retrenchment payments; and

1.1.128.2 the Losses have been incurred under arrangements or agreements which are consistent with terms that have been entered into in the ordinary course of business and on reasonable commercial terms; and

1.1.128.3 each of the Parties, including the relevant Subcontractor/s, has used reasonable endeavours to mitigate its losses;

1.1.129 "**Substation**" means a substation operated by Eskom and the Employer/s, where the Energy Vault/s shall be installed by the Contractor;

1.1.130 "**Taking-Over Certificate**" means a certificate issued under Clause 10 [*Employer's Taking Over*];

1.1.131 "**Taxes**" means any and all taxes, charges, fees, levies, duties and/or imposts of any nature whatsoever, and includes all fines, penalties, surcharges or interest imposed, collected, assessed or payable to any public authority located anywhere in the world;

1.1.132 "**Temporary Works**" means all temporary works of every kind (other than Contractor's Equipment) required on Site/s for the execution and completion of the Permanent Works and the remedying of any Defects;

1.1.133 "**Termination Date**" means any date of early termination of this PPP Agreement in accordance with the terms of the Contract;

1.1.134 "**Tests on Completion**" means the tests which are specified in the Employer's Requirements or agreed by both Parties in Addenda or instructed as a Variation, and which are carried out under Clause 9 [*Tests on Completion*] before the Works or a Section (as the case may be) are Taken Over by the Employer;

1.1.135 "**Third Phase**" means the specific arrangements between the Employer/s and the Contractor relating to the financing, construction and management of an Energy Vault and/ in due course a Water Vault/s and/or ICT System, which in the case of the First and Second Parties to this PPP Agreement has been encapsulated in the attached Feasibility Study and Financial Model and in the case of Future Parties as Participating Municipalities shall be completed as part of the process of implementation of the relevant Energy Vault/s, and in due course Water Vault/s and/or ICT Systems, as Project/s;

1.1.136 "**Time for Completion**" means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [*Time for Completion*], as stated in the Particular Conditions and/or set out in the attached Feasibility Study and Financial Model (with any extension under Sub-Clause 8.4 [*Extension of Time for Completion*]), calculated from the Commencement Date;

1.1.137 "**Tri-Annual Budget**" means the Employer/s budget for the previous three Fiscal Years adopted by it / them and approved by National Treasury, duly audited, with regard to the procurement, usage and sale of electricity and/or water and/or ICT Services and all concomitant costs;

1.1.138 "**Treasury**" means the relevant Provincial Treasury Department and/or National Treasury of South Africa;

1.1.139 "**Vault/s or Energy Vault/s**" means the patented and secure grouping of installations and devices of approximately 20 MW/53 MW per unit, or multiples or fractions thereof, on land designated for this purpose by the Employer/s, which serves to effect inter alia, the time related dispatch, storage, shifting, shaving and distribution of power on behalf of the Employer as further detailed in the Employers Requirements and/or attached Feasibility Study and Financial model;

1.1.140 "**Variation**" means any change to the Employer's Requirements or the Works, or the Project/s Deliverables which is/are instructed or approved as a Variation under Clause 13 [*Variations and Adjustments*];

1.1.141 "**VAT**" means any value added tax or any similar tax which is imposed in place of or in addition to such tax;

1.1.142 "**Water Vault/s**" means the arrangements of systems and equipment for the supply, purification and delivery of potable water on behalf of or to the Employer/s which shall be deployed in due course once the Energy Vault/s have been implemented;

1.1.143 "**Works**" means the design, design integration, engineering, construction, installation, completion, testing and commissioning of the complete system comprising the Permanent Works and the Temporary Works (including rectification of Defects), or either of them as appropriate.

1.2 Interpretation

In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders and references to a "person";
- (b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- (c) provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing;
- (d) "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
- (e) reference to any law or legislation shall include such legislation as amended, supplemented, consolidated or re-enacted from time to time in so far as such amendment, re-enactment, consolidation applies or is capable of applying to any transaction entered into under this Agreement;
- (f) reference to "indexed to CPI" in relation to any amount of money shall mean that such amount has been expressed in March 2019 prices and shall be escalated annually as at the Signature Date and each anniversary thereof with reference to the then most recently publication of the CPI subject to any adjustments for rebasing or recalculation thereof;
- (g) references to "Parties" shall include the parties respective successors-in-title and, if permitted in this Agreement, their cessionaries and assignees.

- (h) examples and the use of the words "include", "including" and similar expressions do not limit what else may be listed or otherwise itemised.

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

1.3 **Conditions Precedent**

The provisions of this PPP Agreement and the Contract are subject to the fulfilment of the condition precedent that all such statutory and regulatory approval from Treasury and the DBSA as may be required to give effect to this PPP Agreement, shall be obtained by no later than _____ 2020.

The time period contemplated herein may be extended by agreement in writing between the First and Second Parties provided that any such extensions shall be in writing and signed by both such Parties.

If the condition precedent is not fulfilled on time or extended as provided in this PPP Agreement then:

- (a) This Agreement shall be of no force and effect;
- (b) The Parties shall be entitled to be restored as near as possible to the positions they would have been in had this PPP Agreement not been entered into; and
- (c) No party shall have any claim against any other in terms of this PPP Agreement.

1.4 **Communications**

Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices and requests, these communications shall be:

- (a) in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Particular Conditions; and
- (b) delivered, sent or transmitted to the address for the recipient's communications as stated in the Contract. However:
 - (i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
 - (ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.

Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed.

1.5 **Law and Language**

The Contract shall be governed by the laws of the Republic of South Africa and the ruling language and the language for communications shall be English.

1.6 Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- (a) the conditions of Contract;
- (b) the Particular Conditions (which in turn refer to the Feasibility Study and Financial Model attached);
- (c) the Employer/s Requirements;
- (d) the Contractor's Proposals;
- (e) the Annexures, Schedules and Addendums.

1.7 Effective Date

The Contract shall come into full force and effect on the date of its execution by the First and Second Parties in the first instance, and thereafter by the Future Parties as Participating Municipalities upon such dates as they may execute their similar PPP Agreement/s themselves. All costs or charges (if any) imposed by law in connection with entry into this PPP Agreement shall be borne by the Employer/s.

1.8 Special Conditions Agreement

The Contractor shall be entitled, at its sole discretion, to enter into a Special Conditions Agreement with the Employer/s.

Should the Employer/s wish that the Contractor enter into a Special Conditions Agreement with the Employer/s, it/they shall submit a written request to the General Manager outlining its requirements, and at the sole discretion of the Contractor, the Contractor may agree to meet such requirements and shall furnish the General Manager with the terms and conditions under which it is prepared to fulfil these obligations and record it as an Addendum.

1.9 Assignment

No Party shall assign any interest in or under the Contract without the prior, written agreement of the other Party/ies.

1.10 Care and Supply of Documents

Each of the Contractor's Documents shall be in the custody and care of the Contractor. Unless otherwise stated in the Contract, the Contractor shall supply to the financial institution providing the funding for the Project/s and to the Employer a copy of each of the Contractor's Documents.

The Contractor shall keep, on the Site/s, a copy of the Contract, publications named in the Employer's Requirements, the Contractor's Documents, and Variations and other communications given under the Contract. The financial institution providing the funding for the Project/s and the Employer/s Personnel shall have the right of access to all these documents at all reasonable times.

If a Party becomes aware of an error or defect of a technical nature in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

1.11 Confidentiality

All Parties shall treat the details of and relating to the Contract as private and confidential, except to the extent necessary to carry out obligations under it or to comply with applicable Laws. The Contractor shall not publish, permit to be published, or disclose any particulars of the Works in any trade or technical paper or elsewhere without the previous agreement of the Employer/s.

The provisions of this sub-clause 1.11 survive the expiry or earlier termination of the Contract for whatever reason.

1.12 Project Documents

The Contractor shall comply with the provisions of the Project Documents and, save as otherwise provided herein, may only:

- a. Terminate or make any amendment to (or otherwise agree to do so) any Project/s Document; or
- b. In any respect, depart from its obligations or waive any rights under any Project/s Document

with the prior written agreement of the Employer/s.

The Contractor shall ensure that a Project Document not executed simultaneously with this PPP Agreement is executed in the Agreed Form and is annexed to this PPP Agreement.

Without limiting the generality of the restrictions on amendments to the Project Documents as provided in this clause, the Contractor shall furnish the financial institution providing the funding for the Project/s and the Employer/s with a true and complete copy (including all annexures) of any amendment to any Project/s Document or of any Project Document not executed by the Signature Date, within 14 (Fourteen) Business Days of the date of the Contractors execution of such Project Document/s.

1.13 Employer's Use of Contractor's Documents

As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.

The Contractor shall be deemed (by signing the Contract) to give to the Employer/s a terminable non-transferable non-exclusive royalty-free licence to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This licence shall:

- (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works and the ensuing management period following Take Over by the Employer/s,
- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works; and

- (c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site/s and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.

The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Employer/s for purposes other than those permitted under this Sub-Clause.

1.14 Contractor's Use of Employer's Documents

As between the Parties, the Employer/s shall retain the copyright and other intellectual property rights in the Employer's Requirements, if any, and other documents made by (or on behalf of) the Employer/s. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Employer/s consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

1.15 Confidential Details

The Contractor shall not be required to disclose, to the Employer/s, any information which the Contractor described in the Contractor's Proposals as being confidential. The Contractor shall disclose any other information which the Employer/s may reasonably require in order to verify the Contractor's compliance with the Contract.

1.16 Compliance with Laws and Consents

The Contractor shall, in performing the Contract, comply and ensure the Works comply with applicable Laws and Consents. Unless otherwise stated in the Particular Conditions:

- (a) the Employer shall have obtained (or shall obtain) those planning, zoning or other permission for the Permanent Works, stated as being the Employer/s responsibility in the Employer's Requirements; and the Employer/s shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and
- (b) the Contractor shall give all notices, pay all Taxes and obtain all permits, licences and approvals, as required by the Laws in relation to the design, execution and completion of the Works and the remedying of any Defects; and the Contractor shall indemnify and hold the Employer/s harmless against and from the consequences of any failure to do so.

1.17 Joint and Several Liability

If the Contractor constitutes (under applicable Laws) a joint venture, consortium or other unincorporated grouping of two or more persons:

- (a) these persons shall be deemed to be jointly and severally liable to the Employer/s for the performance of the Contract;
- (b) these persons shall notify the Employer/s of their leader who shall have authority to bind the Contractor and each of these persons; and
- (c) the Contractor shall not alter its composition or legal status without the prior consent of the Employer/s.

1.18 Third Party Rights

No person shall be entitled to enforce the benefit of the Contract.

1.19 Entire Agreement

The Employer/s and the Contractor respectively acknowledge that this Contract forms the entire contract between the Employer/s and the Contractor to the exclusivity of any antecedent statement or representation. The Employer/s and the Contractor further acknowledge that:

- (a) no Party has entered into this Contract in reliance upon any representation, warranty or undertaking of any Party which is not expressly set out or referred to in this Contract;
- (b) no Party shall have any remedy in respect of misrepresentation or untrue statement made by any other Party which is not contained in this Contract nor for breach of warranty which is not contained in this Contract;
- (c) this provision shall not exclude any liability for, or remedy in respect of, fraud or fraudulent misrepresentation.

1.20 Amendment

No amendment or variation of the Contract is valid or binding on a Party unless made in writing and signed by all Parties.

1.21 Severability

If at any time any provision of this Contract is or becomes illegal, invalid or unenforceable in any respect under the law of any jurisdiction, neither the legality, validity or enforceability of the remaining provisions of this Contract nor the legality, validity or enforceability of such provision under the law of any other jurisdiction shall in any way be affected or impaired thereby.

1.22 Indemnities

Each indemnity given under the Contract is a continuing obligation, separate and independent from the other obligations of the Parties and survives the termination or expiration of the Contract. It is not necessary for a Party to incur an expense before enforcing a right of indemnity conferred by the Contract.

1.23 Costs

Each Party shall be responsible for paying its own costs and expenses incurred in connection with negotiating, preparing and entering into the Contract.

1.24 Independent Contractor

The Contractor shall be an independent contractor performing the Contract. The Contract does not create any juristic joint venture or other joint relationship between the Employer/s and the Contractor other than that of a Public Private Partnership in the legal definition thereof.

1.25 **Effect of enquiry or inspection**

The obligations and liabilities of the Contractor under this Contract shall not be released, diminished or in any way affected by:

- (a) any enquiry, inspection, testing, review, consent, notice, permission, payment certificate or other approval which may be made, given or carried out by or on behalf of the Employer/s;
- (b) the appointment by the Employer/s of, or failure by the Employer/s to appoint, any clerk of works to inspect or otherwise report to the Employer/s in respect of the Works; nor
- (c) any act or omission of any clerk of works or other person employed or appointed by the Employer/s whether or not such act or omission might give rise to an independent liability of such person to the Employer/s.

1.26 **Approvals**

Notwithstanding any other provision of this Contract, the term "approval" when used in the context of any approval to be given by the Employer/s or the Employer's Representative shall have the meaning "acceptance of general principles only" and no such approval shall diminish or relieve the Contractor from any of his obligations or responsibilities under this Contract.

1.27 **Survival of Rights**

Termination of this Contract shall not affect any rights of the Parties accrued as at the date of termination and termination of this Contract shall not affect the continuing rights and obligations of the Parties under any clause that is expressed to survive termination or which are required to give effect the such termination or the consequences of such termination.

2. **THE EMPLOYER**

2.1 **Right of Access to the Site/s and Servitude of Usufruct and/or Use**

The Employer/s shall give the Contractor right of access, and exclusive licence, to enter and remain on the parts of the Site/s within the time (or times) stated in the Employer's Requirements, as reflected in the attached Feasibility Study and Financial Model or according to the terms of the industry related Servitude/s of Usufruct and/or Use which the Contractor shall be entitled to register over the applicable and required Site/s for the Works. If, under the Contract, the Employer/s is/are required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Employer/s shall do so in the time and manner stated in the Employer's Requirements and as reflected in the Feasibility Study and Financial Model or any additional Addendum entered into between the Parties for that purpose.

If no such time is stated in the Employer's Requirements, the Employer/s shall give the Contractor right of access to, and possession of, the Site/s with effect from the Signature Date.

If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer/s to give any such right within such time, the Contractor shall give notice to the Employer/s and shall be entitled subject to Sub-Clause 25.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost, which shall be added to the Contract Price.

After receiving this notice, the Employer/s shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

However, if and to the extent that the Employer/s failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.

2.2 Permits, Licences or Approvals

The Employer/s shall (where he/they is/are in a position to do so) provide reasonable assistance to the Contractor at the request of the Contractor:

- (a) by obtaining copies of the Laws / Regulations of South Africa and/or the Municipality in question which are relevant to the Contract but are not readily available, and
- (b) for the Contractor's applications for any permits, licences or approvals required by the Laws of South Africa:
 - (i) which the Contractor is required to obtain under Sub-Clause 1.16 [*Compliance with Laws*],
 - (ii) for the delivery of Goods, including clearance through customs, and
 - (iii) for the export of Contractor's Equipment when it is removed from the Site/s.

2.3 Employer/s Personnel

The Employer/s shall be responsible for ensuring that the Employer/s Personnel and the Employer/s other contractors on the Site/s:

- (a) co-operate with the Contractor's efforts under Sub-Clause 4.6 [*Co-operation*], and
- (b) take actions similar to those which the Contractor is required to take under subparagraphs (a), (b) and (c) of Sub-Clause 4.8 [*Safety Procedures*] and under Sub-Clause 4.17 [*Protection of the Environment*].

2.4 Employer/s Obligations

The Employer/s shall, on or before the Installation Date, complete those Works described in the Employer's Requirements.

The Employer/s may by notice to the Contractor revise the Installation Date/s to a date not earlier than that originally provided. Where an Installation Date is revised for a reason other than the failure of the Contractor to comply with its obligations under this Contract, and the Contractor suffers delay and/or incurs Cost as a result of the revision of that Installation Date, the Contractor shall, subject to Clause 25.1 [*Contractor's Claims*] be entitled to:

- (a) an extension of time in respect of the Time for Completion; and
- (b) the payment of a penalty fee per day which the Parties shall agree to in writing in an Addendum and based on a suitable amount which the financial institution providing the finance for the Project/s shall accept.

3. THE EMPLOYER'S ADMINISTRATION

3.1 The Employer's Representative

The Employer/s shall appoint an Employer's Representative to act on his/their behalf under the Contract. He/they shall give notice to the Contractor of the name, address, duties and authority of the Employer's Representative.

The Employer's Representative shall carry out the duties assigned to him, and shall exercise the authority delegated to him, by the Employer/s. Unless and until the Employer/s notifies the Contractor otherwise, the Employer's Representative shall be deemed to have the full authority of the Employer/s under the Contract, except in respect of Clause 20.2 [*Termination by Employer*].

If the Employer/s wish/es to replace any person appointed as Employer's Representative, the Employer/s shall give the Contractor not less than 14 (Fourteen) days' notice of the replacement's name, address, duties and authority, and of the date of appointment.

3.2 Other Employer's Personnel

The Employer/s or the Employer's Representative may from time to time assign duties and delegate authority to assistants and may also revoke such assignment or delegation. These assistants may include a resident engineer, and/or independent inspectors appointed to inspect and/or test items of Plant/s and/or Materials. The assignment, delegation or revocation shall not take effect until a copy of it has been received by the Contractor.

Assistants shall be suitably qualified persons, who are competent to carry out these duties and exercise this authority, and who are fluent in the language for communications defined in Sub-Clause 1.5 [*Law and Language*]

3.3 Delegated Persons

All these persons, including the Employer's Representative and assistants, to whom duties have been assigned or authority has been delegated, shall only be authorised to issue instructions to the Contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by a delegated person, in accordance with the delegation, shall have the same effect as though the act had been an act of the Employer/s. However:

- (a) unless otherwise stated in the delegated person's communication relating to such act, it shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances;
- (b) any failure to disapprove any work, Plant/s or Materials shall not constitute approval, and shall therefore not prejudice the right of the Employer/s to reject the work, Plant/s or Materials; and
- (c) if the Contractor questions any determination or instruction of a delegated person, the Contractor may refer the matter to the Employer/s, who shall promptly confirm, reverse or vary the determination or instruction.

3.4 Instructions

The Employer/s may issue to the Contractor instructions which may be necessary or, in the Employer's opinion, appropriate for the Contractor to perform his obligations under the

Contract. Each instruction shall be given in writing and shall state the obligations to which it relates and the Sub-Clause (or other term of the Contract) in which the obligations are specified. If any such instruction constitutes a Variation, Clause 13 [*Variations and Adjustments*] shall apply.

The Contractor shall take instructions from the Employer/s, or from the Employer's Representative or an assistant to whom the appropriate authority has been delegated under this Clause and shall forthwith comply with such instructions issued.

3.5 Determinations

Whenever these Conditions provide that the Employer/s shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Employer/s shall consult with the Contractor in an endeavour to reach agreement. If agreement is not achieved, the Employer/s shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

The Employer/s shall give notice to the Contractor of each agreement or determination, with supporting particulars. Each Party shall give effect to each agreement or determination, unless the Contractor gives notice, to the Employer/s, of his dissatisfaction with a determination within 14 (Fourteen) days of receiving it. Either Party may then refer the dispute for resolution in accordance with Sub-Clause 25.3 *Resolution by the Board*] or 25.3 *[Due Legal Process]*.

4. THE CONTRACTOR

4.1 Contractor's General Obligations

The Contractor shall design, execute and complete the Works in accordance with the Contract, and shall remedy any Defects in the Works. Without prejudice to any other obligation of the Contractor, the design, execution and completion of the Works shall be carried out with the reasonable skill and care of a competent contractor experienced in the design, execution and completion of works similar in size, nature, scope and complexity to the Works and in a good workmanlike manner. When completed, the Works shall, in all respects, meet the requirements of the Employer's Requirements and shall be fit for the purposes for which the Works are intended in accordance with the Contract.

The Contractor shall provide the Plant/s and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of Defects.

The Works shall include any work which is necessary to satisfy the Employer's Requirements, or is implied by the Contract, and all works which (although not mentioned in the Contract) are necessary for stability or for the completion, or safe and proper operation, of the Works.

The Contractor shall be responsible for the adequacy, stability and safety of all Site/s operations, of all methods of construction and of all the Works.

The Contractor shall, whenever required by the Employer/s, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works.

4.2 Performance Security

The Contractor shall provide to the financial institution providing the funding for the Project/s and with notice to the Employer/s, Performance Security for proper performance, in the amount and currencies required by the aforementioned.

The Performance Security shall be issued by an entity and from within a country (or other jurisdiction) approved by the financial institution providing the funding for the Project/s.

Where applicable, the Contractor shall ensure that the Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the Performance Security reaches its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 28 (Twenty eight) days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.

The Employer/s shall not make a claim under the Performance Security, except for amounts to which the Employer/s is/are entitled under the Contract in the event of:

- (a) failure by the Contractor to pay the Employer/s an amount due, as either agreed by the Contractor or determined under Clause 25.1 [*Claims, Disputes and Arbitration*], within 30 (Thirty) days after this agreement or determination,
- (b) failure by the Contractor to remedy a default within 30 (Thirty) days after receiving the Employer's notice requiring the default to be remedied, or
- (c) circumstances which entitle the Employer/s to termination under Sub-Clause 20.2 [*Termination by Employer*], irrespective of whether notice of termination has been given.

The Employer/s shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Performance Security to the extent to which the Employer/s was/were not entitled to make the claim.

The Employer/s shall work in conjunction with the financial institution providing the funding for the Project/s to return the Performance Security to the Contractor within 7 (Seven) days after the Contractor has become entitled to receive the Performance Certificate.

4.3 Contractor's Representative

The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the Contract.

Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Employer/s for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked, or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.

The Contractor shall not, without the prior consent of the Employer/s, revoke the appointment of the Contractor's Representative or appoint a replacement.

The Contractor's Representative shall, on behalf of the Contractor, receive instructions under Sub-Clause 3.4 [*Instructions*].

The Contractor's Representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the Employer/s has/have received prior notice signed by the Contractor's Representative, naming the person and specifying the powers, functions and authority being delegated or revoked.

The Contractor's Representative and all these persons shall be fluent in the language for communications defined in Sub-Clause 1.5 [*Law and Language*].

4.4 Subcontractor/s

The Contractor shall not subcontract the whole of the Works.

The Contractor shall be responsible for the acts or defaults of any Subcontractor/s, his agents or employees or consultants, as if they were the acts or defaults of the Contractor. The Contractor shall give the Employer not less than 28 (Twenty eight) days' notice of:

- (a) the intended appointment of the Subcontractor/s;
- (b) the intended commencement of the Subcontractor/s work; and
- (c) the intended commencement of the Subcontractor/s work on the Site/s.

4.5 Nominated Subcontractor/s

In this Sub-Clause, "Nominated Subcontractor/s" means Subcontractor/s whom the Employer, under Clause 13 [*Variations and Adjustments*], may instruct the Contractor to employ as a Subcontractor. The Contractor shall not be under any obligation to employ a Nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Employer as soon as practicable, with supporting particulars.

4.6 Co-operation

The Contractor shall co-operate with and provide reasonable assistance to:

- (a) the Employer/s Personnel,
- (b) any other contractors employed by the Employer/s,
- (c) the personnel of any legally constituted public authorities,
- (d) the O&M Contractor/s and its/their representatives,

to facilitate the fulfilment of their respective obligations in relation to the Works.

4.7 Setting Out

The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contract. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.

4.8 Safety Procedures

The Contractor shall:

- (a) comply with Laws, including all applicable safety regulations,
- (b) take care for the safety of all persons entitled to be on the Site/s,
- (c) use reasonable efforts to keep the Site/s and Works clear of unnecessary obstruction so as to avoid danger to these persons,
- (d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 [*Employer's Taking Over*], and
- (e) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.

4.8 **CDM (Construction Design and Management) Regulations**

The Employer/s appoint/s the Contractor to act as Principal Contractor for the Works.

The Contractor undertakes that, in relation to the Works and the Site/s, he will duly comply with the relevant Construction Design and Management (CDM) Regulations of 2015, or any amendments thereto. In particular, without limitation:

- (a) where the Contractor is and while he remains the Principal Designer, he shall comply with the duties of a Principal Designer and shall without charge prepare and deliver to the Employer/s, the health and safety file;
- (b) the Contractor shall comply with regulations 8 to 10 and 15 of the CDM Regulations and where he is Principal Contractor, with regulations 12 to 14 of the CDM Regulations;
- (c) whether or not the Contractor is Principal Contractor, compliance by the Contractor with his duties under the CDM Regulations, includes such duties as are referred to in regulation 15(3) thereof, shall be at the cost to the Employer/s and shall not entitle the Contractor to an extension of time.

The Contractor warrants that he is competent to fulfil the roles of designer, Principal Contractor and Principal Designer under the CDM Regulations.

4.9 **Quality Assurance**

The Contractor shall institute a suitable quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Employer/s and the financial institution providing the funding for the Project/s shall be entitled to audit any aspect of the system.

Details of all procedures and compliance documents shall be submitted to the Employer/s for information before each design and execution stage is commenced. When any document of a technical nature is issued to the Employer/s, evidence of the prior approval by the Contractor himself shall be apparent on the document itself.

Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.

4.10 **Sufficiency of the Contract Price**

The Contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Contract Price.

Unless otherwise stated in the Contract, the Contract Price covers all the Contractor's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper design, execution and completion of the Works and the remedying of any Defects.

4.11 Unforeseeable Difficulties

Except as otherwise stated in the Contract or in written amendments to this Contract signed by the Parties:

- (a) the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Works;
- (b) by signing the Contract, the Contractor accepts total responsibility for having foreseen all difficulties and costs of successfully completing the Works; and
- (c) the Contract Price may be adjusted to take account of any unforeseen difficulties or costs as agreed to between the Parties and the financial institution providing the funding for the Project/s in Addendum/s to this PPP Agreement.

4.12 Rights of Way, Servitudes and Facilities

The Contractor shall bear all costs and charges for special and/or temporary rights-of-way or Servitude/s which he may require, including those for access to and use of the Site/s. The Contractor shall also obtain, at his risk and cost, any additional facilities outside the Site/s which he may require for the purposes of the Works.

4.13 Avoidance of Interference

The Contractor shall not interfere unnecessarily or improperly with:

- (a) the convenience of the public, or
- (b) the access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Employer/s or of others.

The Contractor shall indemnify and hold the Employer/s harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

4.14 Access Route

The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site/s. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.

Except as otherwise stated in these Conditions:

- (a) the Contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes;
- (b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions;

- (c) the Employer/s shall not be responsible for any claims which may arise from the use or otherwise of any access route,
- (d) the Employer/s do/does not guarantee the suitability or availability of particular access routes, and
- (e) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

4.15 Transport of Goods

Unless otherwise stated in the Employer's Requirements:

- (a) the Contractor shall give the Employer/s not less than 21 (Twenty one) days' notice of the date on which any Plant/s or a major item of other Goods will be delivered to the Site/s;
- (b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and
- (c) the Contractor shall indemnify and hold the Employer/s harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of goods, and shall negotiate and pay all claims arising from their transport.

4.16 Contractor's Equipment

The Contractor shall be responsible for all Contractor's Equipment. When brought on to the Site/s, Contractor's Equipment shall be deemed to be exclusively intended for the execution of the Works.

4.17 Protection of the Environment

The Contractor shall take all reasonable steps to protect the environment (both on and off the Site/s) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.

The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities shall not exceed the values indicated in the Employer's Requirements, and shall not exceed the values prescribed by applicable Laws.

4.18 Electricity, Water and Gas

The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he may require.

The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site/s and of which details and prices are given in the Employer's Requirements. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services and for measuring the quantities consumed.

The quantities consumed and the amounts due (at these prices) for such services shall be agreed or determined in accordance with Sub-Clause 3.5 [*Determinations*]. The Contractor shall pay these amounts to the Employer.

4.19 **Employer's Equipment and Free-Issue Material**

The Employer/s shall make the Employer's Equipment (if any) available for the use of the Contractor in the execution of the Works in accordance with the details, arrangements and prices stated in the Employer's Requirements which are in turn encapsulated in the attached Feasibility Study and Financial Model. Unless otherwise stated in the Employer's Requirements:

- (a) the Employer/s shall be responsible for the Employer's Equipment, except that
- (b) the Contractor shall be responsible for each item of Employer's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it.

The appropriate quantities and the amounts due (at such stated prices) for the use of Employer's Equipment shall be agreed or determined in accordance with Sub-Clause 3.5 [*Determinations*]. The Contractor shall pay these amounts to the Employer/s.

The Employer/s shall supply, free of charge, the "free-issue materials" (if any) in accordance with the details stated in the Employer's Requirements or as agreed to between the Parties in separate Addendums to this PPP Agreement. The Employer/s shall, at his/their risk and cost, provide these materials at the time and place specified in the Contract and/or Addendum. The Contractor shall then visually inspect them and shall promptly give notice to the Employer/s of any shortage, defect or default in these materials. Unless otherwise agreed by both Parties, the Employer/s shall immediately rectify the notified shortage, defect or default.

After this visual inspection, the free-issue materials shall come under the care, custody and control of the Contractor. The Contractor's obligations of inspection, care, custody and control shall not relieve the Employer/s of liability for any shortage, defect or default not apparent from a visual inspection.

4.20 **Progress Reports**

Unless otherwise stated in the Employer's Requirements, monthly progress reports shall be prepared by the Contractor and submitted to the Employer and the financial institution providing the funding for the Project/s (in the format of electronic copies). The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 (Seven) days after the last day of the period to which it relates.

Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate/s for the various Site/s which constitute the Works of the Project/s.

Each report shall include:

- (a) charts and detailed descriptions of progress, including each stage of design, Contractor's Documents, procurement, manufacture, delivery to Site/s, construction, erection, testing, commissioning and trial operation;
- (b) photographs showing the status of installation progress and of progress in general on the Site/s;

- (c) if applicable, for the manufacture of each main item of Plant/s and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:
 - (i) commencement of manufacture
 - (ii) Contractor's inspections
 - (iii) tests, and
 - (iv) shipment and arrival at the Site/s;
- (d) the details described in Sub-Clause 6.10 [*Records of Contractor's Personnel and Equipment*];
- (e) copies of quality assurance documents, test results and certificates of Materials;
- (f) list of Variations and notices given under Sub-Clause 25.1 [*Contractor's Claims*];
- (g) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- (h) comparisons of actual and planned progress, with details of any events or circumstances which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

4.21 **Security of the Site**

Unless otherwise stated in the Employer's Requirements:

- (a) the Contractor shall be responsible for keeping unauthorised persons off the Site/s, and
- (b) authorised persons shall be limited to the Contractor's Personnel and the Employer's Personnel; and to any other personnel notified to the Contractor, by (or on behalf of) the Employer/s, as authorised personnel of the Employer's other contractors on the Site/s.

4.22 **Contractor's Operations on Site/s**

The Contractor shall confine his operations to the Site/s, and to any additional areas which may be obtained by the Contractor and agreed by the Employer/s as working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site/s and these additional areas, and to keep them off adjacent land.

During the execution of the Works, the Contractor shall keep the Site/s free from all unnecessary obstruction and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site/s any wreckage, rubbish and Temporary Works which are no longer required.

Upon the issue of the Taking-Over Certificate/s for the Works at the various Site/s of the Project/s, the Contractor shall clear away and remove all Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works and remediate any damage to the relevant Building/s or other property on the Site/s resulting from the performance of the Works. The Contractor shall leave the Site/s and the Works in a clean and safe condition. However, the Contractor may retain on Site/s, during the Defects Notification Period and

during the ensuing management period, such Goods as are required for the Contractor to fulfil obligations under the Contract.

4.23 **Contractor Warranties**

Without prejudice to any other obligation of the Contractor the Contractor warrants that:

- (a) all Goods supplied to the Employer/s by the Contractor pursuant to or in connection with the Contract will:
 - (i) comply with the applicable Specification and any sample product provided by or on behalf of the Contractor;
 - (ii) be of satisfactory quality and fit for any purpose:
 - (1) held out by the Contractor; or
 - (iii) be free from defects in design, material and workmanship; and
 - (iv) comply with all applicable statutory and regulatory requirements including those relating to the manufacture, labelling, packaging, storage, handling, sale and delivery of the Goods.

5. **DESIGN**

5.1 **General Design Obligations**

- (a) The Contractor shall be deemed to have scrutinised, prior to the Commencement Date, the Employer's Requirements (including design criteria and calculations, if any). The Contractor shall be responsible for the design of the Works and for the accuracy of the Employer's Requirements (including design criteria and calculations whether performed or procured by the Employer/s or others), except as expressly set out in clause 5.1(c) below.
- (b) The Employer shall not be responsible for any error, inaccuracy or omission of any kind in the Employer's Requirements as originally included in the Contract and shall not be deemed to have given any representation of accuracy or completeness of any data or information, except as stated below. Any data or information received by the Contractor, from the Employer/s or otherwise, shall not relieve the Contractor from his responsibility for the design and execution of the Works.
- (c) However, the Employer/s shall be responsible for the correctness of the following portions of the Employer's Requirements:
 - (i) definitions of intended purposes of the Works or any parts thereof,
 - (ii) criteria for the testing and performance of the completed Works.

5.2 **Contractor's Documents**

The Contractor's Documents shall comprise the technical documents specified in the Employer's Requirements, all of the Contractor's Proposal documents required to satisfy all regulatory approvals, and the documents described in Sub-Clause 5.6 [*As-Built Documents*] and Sub-Clause 5.7 [*Operation and Maintenance Manuals*]. Unless otherwise stated in the Employer's Requirements, the Contractor's Documents shall be written in the language for communications defined in Sub-Clause 1.5 [*Law and Language*].

The Contractor shall prepare all Contractor's Documents and shall also prepare any other documents necessary to instruct the Contractor's Personnel.

If the Employer's Requirements describe the Contractor's Documents which are to be submitted to the Employer/s and the financial institution providing the funding for the Project/s for review, they shall be submitted accordingly, together with a notice as described below. In the following provisions of this Sub-Clause, (i) "review period" means the period required by the Employer for review, and (ii) "Contractor's Documents" exclude any documents which are not specified as being required to be submitted for review.

Unless otherwise stated in the Employer's Requirements, each review period shall not exceed 21 (Twenty one) days, calculated from the date on which the Employer/s receive/s a Contractor's Document and the Contractor's notice. This notice shall state that the Contractor's Document is considered ready, both for review in accordance with this Sub-Clause and for use. The notice shall also state that the Contractor's Document complies with the Contract, or the extent to which it does not comply.

The Employer/s may, within the review period, give notice to the Contractor that in its opinion a Contractor's Document fails (to the extent stated) to comply with the Contract. If a Contractor's Document so fails to comply, and is verified by the financial institution providing the funding for the Project/s concurs in writing that it does not comply, it shall be rectified, resubmitted and reviewed in accordance with this Sub-Clause, at the Contractor's cost.

For each part of the Works, and except to the extent that the Parties otherwise agree:

- (a) execution of such part of the Works shall not commence prior to the expiry of the review periods for all the Contractor's Documents which are relevant to its design and execution;
- (b) execution of such part of the Works shall be in accordance with these Contractor's Documents, as submitted for review; and
- (c) if the Contractor wishes to modify any design or document which has previously been submitted for review, the Contractor shall immediately give notice to the Employer/s and the financial institution providing the funding for the Project/s. Thereafter, the Contractor shall submit revised documents to the Employer/s with notice to the financial institution providing the funding for the Project/s in accordance with the above procedure.

Any such agreement (under the preceding paragraph) or any review (under this Sub-Clause or otherwise) shall not relieve the Contractor from any obligation or responsibility.

5.3 Contractor's Undertaking

The Contractor undertakes that the design, the Contractor's Documents, the execution and the completed Works will be in accordance with:

- (a) the Laws of South Africa, and
- (b) the documents forming the Contract, as altered or modified by Variations.

5.4 Technical Standards and Regulations

The design, the Contractor's Documents, the execution and the completed Works shall comply with South Africa's technical standards, building, construction and environmental

Laws, Laws applicable to the product being produced from the Works, and other standards specified in the Employer's Requirements, as reflected in the attached Feasibility Model and Financial Model, applicable to the Works, or defined by the applicable Laws.

All these Laws shall, in respect of the Works and each Section, be those prevailing when the Works or Section are taken over by the Employer under Clause 10 [*Employer's Taking Over*]. References in the Contract to published standards shall be understood to be references to the edition applicable on the Effective Date, unless stated otherwise.

If changed or new applicable standards come into force in the Country after the Effective Date, the Contractor shall give notice to the Employer and (if appropriate) submit proposals for compliance. In the event that:

- (a) the Employer determines that compliance is required, and
- (b) the proposals for compliance constitute a variation,

then the Employer shall initiate a Variation in accordance with Clause 13 [*Variations and Adjustments*].

5.5 Training

The Contractor shall carry out the training of the O&M Contractor (which is understood to include the possibility of the Contractor itself being the O&M Contractor) and the Employer's Personnel in the operation and maintenance of the Works to the extent specified in the Employer's Requirements. If the Contract specifies training which is to be carried out before Taking-Over, the Works shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [*Taking Over of the Works and Sections*] until this training has been completed.

5.6 As-Built Documents

The Contractor shall prepare, and keep up-to-date, a complete set of "as-built" records of the execution of the Works, showing the exact as-built locations, sizes and details of the work as executed. These records shall be kept on the Site/s and shall be used exclusively for the purposes of this Sub-Clause. Two (2) copies shall be supplied to the Employer/s prior to the commencement of the Tests on Completion.

In addition, the Contractor shall supply to the Employer/s as-built drawings of the Works, showing all Works as executed, and submit them to the Employer for review under Sub-Clause 5.2 [*Contractor's Documents*]. The Contractor shall obtain the consent of the Employer as to their size, the referencing system, and other relevant details.

Prior to the issue of any Taking-Over Certificate/s, the Contractor shall supply to the Employer the specified numbers and types of copies of the relevant as-built drawings, in accordance with the Employer's Requirements. The Works shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [*Taking Over of the Works and Sections*] until the Employer/s has/have received these documents.

5.7 Operation and Maintenance Manuals

Prior to commencement of the Tests on Completion, the Contractor shall supply to the Employer/s provisional operation and maintenance manuals in sufficient detail for the Employer/s, assisted by the Contractor, to operate, maintain, dismantle, reassemble, adjust and repair the Plant/s.

The Works shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [*Taking Over of the Works and Sections*] until the Employer/s has/have received final operation and maintenance manuals in such detail, and any other manuals specified in the Employer's Requirements for these purposes.

5.8 Design Error

If errors, omissions, ambiguities, inconsistencies, inadequacies or other Defects are found in the Contractor's Documents, they and the Works shall be corrected at the Contractor's cost, notwithstanding any consent or approval under this Clause.

6. STAFF AND LABOUR

6.1 Engagement of Staff and Labour

Except as otherwise stated in the Employer's Requirements, the Contractor shall make arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, housing, feeding and transport.

6.2 Rates of Wages and Conditions of Labour

The Contractor shall pay rates of wages, and observe conditions of labour, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.

6.3 Persons in the Service of Others

The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Employer's Personnel unless the Employer specifically requests the Contractor to do so.

6.4 Labour Laws

The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.

The Contractor shall require his employees to obey all applicable Laws, including those concerning safety at work.

6.5 Working Hours

No work shall be carried out on the Site/s on locally recognised days of rest, or outside normal working hours, unless:

- (a) otherwise stated in the Contract,
- (b) the Employer/s gives written consent, or
- (c) the work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Employer/s.

6.6 Facilities for Staff and Labour

Except as otherwise stated in the Employer's Requirements, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Employer's Requirements.

The Contractor shall not permit any of the Contractor's Personnel to maintain any permanent living quarters within the structures forming part of the Permanent Works unless they are suitable therefore.

6.7 Health and Safety

The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site/s and at any accommodation for Contractor's and Employer's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

The Contractor shall appoint an accident prevention officer/s at the Site/s, responsible for maintaining safety and protection against accidents. This/these person/s shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this/these person/s to exercise this responsibility and authority.

The Contractor shall send to the Employer/s details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Employer/s may reasonably require.

6.8 Contractor's Superintendence

Throughout the design and execution of the Works, and as long thereafter as is necessary to fulfil the Contractor's obligations, the Contractor shall provide all necessary superintendence to plan, arrange, direct, manage, inspect and test the Works.

Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.5 [*Law and Language*]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

6.9 Contractor's Personnel

The Contractor's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Employer/s may require the Contractor to remove (or cause to be removed) any person employed on the Site/s or Works, including the Contractor's Representative if applicable, who:

- (a) persists in any misconduct or lack of care,
- (b) carries out duties incompetently or negligently,
- (c) fails to conform with any provisions of the Contract, or

- (d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment.

If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

6.10 Records of Contractor's Personnel and Equipment

The Contractor shall submit, to the Employer/s, details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site/s. Details shall be submitted each calendar month, in a form approved by the Employer/s, until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate/s for the various Site/s for the Works.

6.11 Disorderly Conduct

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site/s.

7. PLANT, MATERIALS AND WORKMANSHIP

7.1 Manner of Execution

The Contractor shall carry out the manufacture or assembly of Plant/s, the production and manufacture of Materials, if applicable, and all other execution of the Works at the various relevant Site/s:

- (a) in the manner (if any) specified in the Contract,
- (b) in a proper workmanlike and careful manner, in accordance with recognised good practice and comply with most recent editions of relevant industry standards and codes of practice,
- (c) with properly equipped facilities and non-hazardous Materials; and
- (d) using Plant/s and Materials that are of sound and satisfactory quality.

7.2 Samples

The Contractor shall, if requested in writing, submit samples to the Employer/s, for review in accordance with the procedures for Contractor's Documents described in Sub-Clause 5.2 [*Contractor's Documents*], as specified in the Contract and at the Contractor's cost. Each sample shall be labelled as to origin and intended use in the Works.

7.3 Inspection

The financial institution providing the funding for the Project/s, as well as the Employer's Personnel and any person authorised in writing by the aforementioned and/or the Employer/s shall at all reasonable times:

- (a) have full access to all parts of the Site/s and to all places from which natural Materials are being obtained, and
- (b) during production, manufacture and construction (at the Site/s and, to the extent specified in the Contract, elsewhere), be entitled to examine, inspect, measure and

test the materials and workmanship, and to check the progress of manufacture of Plant/s and production and manufacture and/or assembly of Materials.

The Contractor shall give the financial institution providing the funding for the Project/s and the Employer's Personnel and any person authorised in writing by the aforementioned and/or the Employer/s full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.

In respect of the work which the financial institution providing the funding for the Project/s and/or the Employer's Personnel and any person authorised in writing by the aforementioned and/or the Employer/s are entitled to examine, inspect, measure and/or test, the Contractor shall give notice to the financial institution providing the funding for the Project/s and/or the Employer/s whenever any such work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The financial institution providing the funding for the Project/s and/or the Employer/s shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the financial institution providing the funding for the Project/s and/or the Employer/s do/does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the financial institution providing the funding for the Project/s and/or the Employer/s, uncover the work and thereafter reinstate and make good, all at the Contractor's cost.

7.4 Testing

This Sub-Clause shall apply to all tests specified in the Contract.

The Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall agree, with the Employer/s and the financial institution providing the funding for the Project/s, the time and place for the specified testing of any Plant/s, Materials and other parts of the Works.

The Employer/s may, under Clause 13 [*Variations and Adjustments*], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant/s, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne by the Contractor, notwithstanding other provisions of the Contract.

The Employer/s shall give the Contractor not less than 24 (Twenty four) hours' notice of the Employer's intention to attend the tests. The Employer's Personnel, and any person authorised in writing by the Employer/s shall be entitled to attend the tests (each such party bearing its own costs in relation thereto). If the Employer/s do/does not attend at the time and place agreed, the Contractor may proceed with the tests, unless otherwise instructed by the Employer/s, and the tests shall then be deemed to have been made in the Employer's presence.

If the Contractor suffers delay and/or incurs Cost from complying with these instructions or as a result of a delay for which the Employer/s is/are responsible, the Contractor shall give notice to the Employer/s and the financial institution providing the funding for the Project/s and shall be entitled subject to Sub-Clause 25.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and

- (b) payment of any such Cost-plus reasonable profit, which shall be added to the Contract Price for approval by the financial institution providing the funding for the Project/s.

After receiving this notice, the Employer/s shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

The Contractor shall promptly forward to the Employer/s and the financial institution providing the funding for the Project/s duly certified reports of the tests. When the specified tests have been passed, the Employer/s shall endorse the Contractor's test certificate, or issue a certificate to him, to that effect. If the Employer/s has/have not attended the tests, he shall be deemed to have accepted the readings as accurate.

7.5 Rejection

If, as a result of an examination, inspection, measurement or testing, any Plant/s, Materials, design or workmanship is found to be defective or otherwise not in accordance with the Contract, the Employer/s may reject the Plant/s, Materials, design or workmanship by giving notice to the Contractor and the financial institution providing the funding for the Project/s, with reasons. The Contractor shall then promptly make good the Defect and ensure that the rejected item complies with the Contract.

If the Employer/s require/s this Plant/s, Materials, design or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If the rejection and retesting cause the Employer/s to incur additional costs, the Contractor shall arrange to pay these costs to the Employer/s and/or deduct them from the Contract Price.

7.6 Remedial Work

Notwithstanding any previous test or certification, the Employer/s may instruct the Contractor to:

- (a) remove from the Site/s and replace any Plant/s or Materials which is/are not in accordance with the Contract;
- (b) remove and re-execute any other work which is not in accordance with the Contract; and
- (c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.

If the Contractor fails to comply with any such instruction, which complies with Sub-Clause 3.4 [Instructions], the Employer/s shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall pay to the Employer/s all costs arising from this failure or deduct these costs from the Contract Price.

7.7 Ownership of Plant/s and Materials

Each item of Plant/s and Materials shall, to the extent consistent with the Laws of South Africa, not become the property of the Employer/s unless and until the period of 25 (Twenty Five) years from the date of the Take Over of the Project, fully commissioned, to the Employer/s, under the management of the Contractor, has passed, or until and when the Contractor has received payment of the value of the Plant/s and Materials under Sub-Clause 8.11 [Payment for Plant and Materials in Event of Suspension].

The Contractor indemnifies and holds the Employer/s harmless from and against all claims, losses, expenses, damages, costs and liabilities that the Employer/s may suffer or incur howsoever arising in connection with those items of Plant/s and Materials to which this Sub-Clause 7.7 applies. The Contractor shall ensure that at the time when an item of Plant/s and Material becomes the property of the Employer/s, the relevant item is free from all Liens and shall, upon request of the Employer's Representative, provide documentary evidence that demonstrates that the relevant Plant/s and Materials are free from Liens.

The Contractor shall ensure, by including appropriate provisions in each relevant Sub-contract, contract of sale and/or supply agreement with its suppliers that the property in all Plant/s and Materials ordered in the performance of the Works passes to the Employer at some time in the future under this Contract.

The Contractor shall provide to the Employer/s satisfactory evidence in the form of a vesting certificate (in a form approved in writing by the Employer/s and the financial institution providing the funding for the Project/s) that ownership in such Materials and Goods shall pass to the Employer/s at some time in the future in accordance with this Contract.

7.8 Royalties

Unless otherwise stated in the Employer's Requirements, the Contractor shall pay all required royalties, rents and other payments for:

- (a) natural Materials obtained from outside the Site/s, and
- (b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or man-made), except to the extent that disposal areas within the Site/s are specified in the Contract.

8. COMMENCEMENT, DELAYS AND SUSPENSION

8.1 Commencement of Works

- (a) The Contractor shall commence the design and execution of the Works as soon as is reasonably practicable after the Commencement Date and shall then proceed with the Works with due expedition and without delay.
- (b) The Contractor shall procure delivery to a location/s alternative to the Site/s if it should in its discretion, determine that this action is justified and required in order to competently complete the Works and the Project/s .

8.2 Time/s for Completion

The Contractor shall:

- (a) deliver and unload the Energy Vault/s, and in due course the Water Vault/s and ICT System/s and the Balance of Plant/s to the Site/s or such other location/s agreed to with the Employer/s and the financial institution providing the funding for the Project/s by the date/s for delivery as set out in the program or such other date/s as agreed to with the Employer/s and the financial institution providing the funding for the Project/s in writing;
- (b) complete the whole of the Works, and each Section (if any), within the Time/s for Completion for the Works or Section (as the case may be), including:
 - (i) achieving the passing of the Tests on Completion, and

- (ii) completing all work which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of Taking-over under Sub-Clause 10.1 [*Taking Over of the Works and Sections*].

8.3 Program

The Contractor shall submit a time program to the Employer/s and the financial institution providing the funding for the Project/s within 28 (Twenty eight) days after the Commencement Date. The Contractor shall also submit a revised program whenever the previous program is inconsistent with actual progress or with the Contractor's obligations. Unless otherwise stated in the Contract, each program shall include:

- (a) the order in which the Contractor intends to carry out the Works, including the anticipated timing of each major stage of the Works,
- (b) the periods for reviews under Sub-Clause 5.2 [*Contractor's Documents*],
- (c) the sequence and timing of inspections and tests specified in the Contract, and
- (d) a supporting report which includes:
 - (i) a general description of the methods which the Contractor intends to adopt for the execution of each major stage of the Works, and
 - (ii) the approximate number of each class of Contractor's Personnel and of each type of Contractor's Equipment for each major stage.

Unless the Employer/s, within 21 (Twenty one) days after receiving a program, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the program, subject to his other obligations under the Contract. The Employer's Personnel shall be entitled to rely upon the program when planning their activities.

The Contractor shall promptly give notice to the Employer of specific probable future events or circumstances which may adversely affect or delay the execution of the Works. In this event, or if the Employer/s gives notice to the Contractor that a program fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised program to the Employer and the financial institution providing the funding for the Project/s in accordance with this Sub-Clause.

8.4 Extension of Time for Completion

The Contractor shall be entitled subject to Sub-Clause 25.1 [*Contractor's Claims*] and Sub-Clause 8.5 [*Extension of Time Provisions*] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [*Taking Over of the Works and Sections*] is or will be delayed by any of the following causes:

- (a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.4 [*Variation Procedure*]),
- (b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions, or

- (c) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors on the Site/s.

If the Contractor considers himself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Employer and the financial institution providing the funding for the Project in accordance with Sub-Clause 25.1 [*Contractor's Claims*]. When determining each extension of time under Sub-Clause 25.1, the Employer/s shall review previous determinations and may increase, but shall not decrease, the total extension of time and shall grant extensions to the Time/s for Completion as shall be reasonable in the circumstances.

Without prejudice to this Sub-Clause, the Employer/s shall be entitled, at the Employer's absolute discretion, to grant an extension of time to the Contractor.

8.5 The Contractor will not be entitled to an extension of time in respect of a cause of delay:

- (a) to the extent that a cause of delay is concurrent with another delay for which the Contractor is responsible;
- (b) if the Contractor has not given the notices and claims required by Sub-Clause 25.1 [*Contractor's Claims*], including within the time frames and setting out all the information required by that Sub-Clause;
- (c) to the extent that the delay has been caused or contributed to by an act, omission or default of the Contractor, or any person for whom the Contractor is responsible in accordance with the Contract (including any of the Contractor's Personnel) or breach of this Contract by the Contractor;
- (d) to the extent that the delay could have been reduced if the Contractor had at all times used all reasonable endeavours to prevent, mitigate or minimise the delay,

8.6 **Delays Caused by Authorities**

If the following conditions apply, namely:

- (a) the Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in South Africa;
- (b) authorities delay or disrupt the Contractor's work;
- (c) the delay or disruption was not reasonably foreseeable by an experienced contractor at the date of the Contract,

then this delay or disruption will be considered as a cause of delay under sub-paragraph (b) of Sub-Clause 8.4 [*Extension of Time for Completion*].

8.7 **Rate of Progress**

If, at any time:

- (a) actual progress is too slow to complete within the Time/s for Completion, and/or
- (b) progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 [*Program*],

other than as a result of a cause listed in Sub-Clause 8.4 [*Extension of Time for Completion*], then the Employer/s may instruct the Contractor to submit, under Sub-Clause

8.3 [*Program*], a revised program and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time/s for Completion.

Unless the Employer/s notify/ies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor. If these revised methods cause the Employer/s to incur additional costs, the Contractor shall pay these costs to the Employer/s, in addition to delay damages (if any) under Sub-Clause 8.8 below.

8.8 Delay Damages

If the Contractor fails to comply with Sub-Clause 8.2 [*Time for Completion*], the Contractor shall pay Delay Damages to the Employer/s for this default or deduct the cost of the Delay Damages from the Contract Price. These Delay Damages shall be the sum as agreed to between the Contractor, the Employer/s and the financial institution providing the funding for the Project/s in a separate Addendum to this PPP Agreement, which shall be paid for every day which shall elapse between the relevant Time/s for Completion and the date stated in the Taking-Over Certificate and thus deducted from the Contract Price.

These Delay Damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Sub-Clause 20.2 [*Termination by Employer*] prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.

The Employer/s may inform the financial institution providing the funding for the Project/s that such Delay Damages should be deducted from any sums due or which become due to the Contractor for the Contract Price.

If the Contractor is granted an extension of time under Sub-Clause 8.4 [*Extension of Time for Completion*] after Delay Damages have been paid or deducted under this Sub-Clause, the Employer/s shall request the financial institution providing the funding for the Project/s to pay or repay to the Contractor any amounts paid or deducted for the period up to the Time/s for Completion as extended.

All amounts of such Delay Damages for which the Contractor may become liable are agreed as a genuine pre-estimate of the losses which may be sustained by the Employer/s in the event that the Contractor fails to comply with Sub-Clause 8.2 [*Time for Completion*] and not a penalty provided always that, notwithstanding any other provisions of the Contract, in circumstances where the level of any Delay Damages payable pursuant to this Sub-Clause is successfully challenged (or otherwise deemed unenforceable in any judicial proceedings) as constituting a penalty or otherwise cannot be enforced against the Contractor, the Employer/s shall be entitled to recover all actual damages suffered by the Employer/s as a result of the Contractor's failure.

8.9 Suspension of Work

Subject to good cause along with corroborating proof thereof, the Employer/s may with due and fair written notice, after notice has been provided to the financial institution providing the funding for the Project/s, instruct the Contractor to suspend progress of part or all of the Works. During such suspension, the Contractor shall protect, store and secure such part or the Works against any deterioration, loss or damage.

If and to the extent that the cause of the suspension of work is notified and is the responsibility of the Contractor, the following Sub-Clauses 8.10, 8.11 and 8.12 shall not apply.

8.10 Consequences of Suspension

If the Contractor suffers delay and/or incurs Cost from complying with the Employer's instructions under Sub-Clause 8.9 [*Suspension of Work*] and/or from resuming the work, the Contractor shall give notice to the Employer/s and the financial institution providing the funding for the Project/s and shall be entitled subject to Sub-Clause 25.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost, which shall be added to the Contract Price upon notice to the financial institution providing the funding for the Project/s.

After receiving this notice, the Employer/s shall notify the financial institution providing the funding for the Project/s and proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Contractor's faulty design, workmanship or materials, or of the Contractor's failure to protect, store or secure in accordance with Sub-Clause 8.9 [*Suspension of Work*]

8.11 Payment for Plant/s and Materials in Event of Suspension

The Contractor shall be entitled to payment of the value (as at the date of suspension) by the financial institution providing the funding for the Project/s of Plant/s and/or Materials which have not been delivered to Site/s, if:

- (a) the work on Plant/s or delivery of Plant/s and/or Materials has been suspended for more than 28 (Twenty eight) days, and
- (b) the Contractor has marked the Plant/s and/or Materials as the Employer's property in accordance with the Employer's instructions; and
- (c) the Plant/s and Materials are free from Liens.

8.12 Prolonged Suspension

If the suspension under Sub-Clause 8.9 [*Suspension of Work*] has continued for more than 60 (Sixty) days, the Contractor may request the Employer's and the financial institution providing the funding for the Project/s permission to proceed. If the Employer and the financial institution providing the funding for the Project/s do/does not give permission within 28 (Twenty eight) days after being requested to do so, the Contractor may, by giving notice to the Employer/s and the financial institution providing the funding for the Project/s, treat the suspension as an omission under Clause 13 [*Variations and Adjustments*] of the affected part of the Works. If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 21.2 [*Termination by Contractor*].

8.13 Resumption of Work

After the permission or instruction to proceed is given, the Parties and the financial institution providing the funding for the Project/s shall jointly examine the Works and the Plant/s and Materials affected by the suspension. The Contractor shall make good any deterioration or Defect in or loss of the Works or Plant/s or Materials, which has occurred during the suspension.

9. TESTS ON COMPLETION

9.1 Contractor's Obligations

The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 9, [*Testing*] and all other requirements specified in the Employer's Requirements as amplified in the attached Feasibility Study and Financial Model after providing the documents in accordance with Sub-Clause 5.6 [*As-Built Documents*] and Sub-Clause 5.7 [*Operation and Maintenance Manuals*].

The Contractor shall give to the Employer/s and the financial institution providing the funding for the Project/s, not less than 21 (Twenty one) days' notice of the date after which the Contractor will be ready to carry out each of the Tests on Completion. Unless otherwise agreed, Tests on Completion shall be carried out within 14 (Fourteen) days after this date, on such day or days as the Employer/s shall instruct. The financial institution providing the funding for the Project/s and the Employer, the Employer's Personnel, and any person authorised in writing by the Employer/s or the financial institution providing the funding for the Project/s, are entitled to attend any or all of the Tests on Completion (including any delayed or repeated tests).

Unless otherwise stated in the Employer's Requirements and amplified in the Feasibility Study and Financial Model attached, the Tests on Completion shall be carried out in the following sequence:

- (a) pre-commissioning tests, which shall include the appropriate inspections and functional tests to demonstrate that each item of Plant/s of the Works at the Site/s can safely under-take the next stage;
- (b) commissioning tests, which shall include the specified operational tests to demonstrate that the Works or Section at the Site/s can be operated safely and as specified, under all available operating conditions; and
- (c) trial operation, which shall demonstrate that the Works or Section at the Site/s perform reliably and in accordance with the Contract.

During trial operation, when the Works are operating under stable conditions, the Contractor shall give notice to the Employer/s and the financial institution providing the funding for the Project/s that the Works are ready for any other Tests on Completion, including performance tests to demonstrate whether the Works conform with criteria specified in the Employer's Requirements as amplified by the Feasibility Study and Financial Model and with the Performance Guarantees, if applicable.

Trial operation shall not constitute a Taking-over under Clause 10 [*Employer's Taking Over*]. Unless otherwise stated in the Employer's Requirements, any product produced by the Works during trial operation shall be the property of the Contractor until such time as the Energy management and administration period of 25 (Twenty five) years, operated in accordance with the terms and conditions of the attached Feasibility Study and Financial

Model post Take Over, or any extensions thereof, and in due course Water and ICT management and administration activities, has expired.

In considering the results of the Tests on Completion, appropriate allowances shall be made for the effect of any use of the Works by the Employer/s on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed each of the Tests on Completion described in sub-paragraph (a), (b) or (c), the Contractor shall submit a certified report of the results of these Tests to the Employer/s and the financial institution providing the funding for the Project/s.

9.2 **Delayed Tests**

If the Tests on Completion are being unduly delayed by the Employer/s, Sub-Clause 7.4 [*Testing*] (fifth paragraph) and/or Sub-Clause 10.3 [*Interference with Tests on Completion*] shall be applicable.

If the Tests on Completion are being unduly delayed by the Contractor, the Employer/s, in conjunction with the financial institution providing the funding for the Project/s may by notice require the Contractor to carry out the Tests within 21 (Twenty one) days after receiving the notice. The Contractor shall carry out the Tests on such day or days within that period as the Contractor may fix and of which he shall give notice to the Employer and the financial institution providing the funding for the Project/s.

If the Contractor fails to carry out the Tests on Completion within the period of 21 (Twenty one) days, the Employer's Personnel may proceed with the Tests at the risk and cost of the Contractor. These Tests on Completion shall then be deemed to have been carried out in the presence of the Contractor and the results of the Tests shall be accepted as accurate.

9.3 **Retesting**

If the Works, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.5 [*Rejection*] shall apply, and the Employer/s or the Contractor may require the failed Tests, and Tests on Completion on any related work, to be repeated under the same terms and conditions.

9.4 **Failure to Pass Tests on Completion**

The Works will pass the Tests on Completion where they meet the Performance Guarantees, if applicable, the Minimum Performance Levels and other criteria stated in the Employer's Requirements as amplified in the attached Feasibility Study and Financial Model. If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 [*Retesting*], the Employer/s, in conjunction with the financial institution providing the funding for the Project/s, shall be entitled to:

- (a) order further repetition of Tests on Completion under Sub-Clause 9.3;
- (b) levy Performance Damages in respect of any failure to meet Required Testing Performance, if the failure deprives the Employer/s of substantially the whole benefit of the Works or Section, reject the Works or Section (as the case may be), in which event the Employer/s shall have the same remedies as are provided in sub-paragraph (c) of Sub-Clause 11.4 [*Failure to Remedy Defects*]; or
- (c) issue a Taking-Over Certificate/s.

In the event of sub-paragraph (c), the Contractor shall proceed in accordance with all other obligations under the Contract post Take Over in terms of the Energy management and

administration activities and in due course Water and ICT management and administration activities.

10. EMPLOYER'S "TAKING OVER"

10.1 Taking Over of the Works and Sections

Except as stated in Sub-Clause 9.4 [*Failure to Pass Tests on Completion*], the Works shall be "Taken Over" by the Employer/s when (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 8.2 [*Time for Completion*] and except as allowed in sub-paragraph (a) below, and (ii) Taking-Over Certificate/s for the Works has/have been issued, or is deemed to have been issued in accordance with this Sub-Clause. It is understood between the Parties that "Take Over" is understood to mean that the Employer/s is from date of "Take Over" responsible for the Project/s and Works, but that the Contractor continues to manage the Project/s and Works in all aspects as the O&M contractor or by employing other O&M operator/s in terms of the Energy management and administration activities and in due course Water and ICT management and administration activities as set out in the attached Feasibility Study and Financial Model.

The Contractor may apply by notice to the Employer/s and the financial institution providing the funding for the Project/s for Taking-Over Certificate/s not earlier than 14 (Fourteen) days before the Works will, in the Contractor's opinion, be complete and ready for Taking Over. If the Works are divided into Sections, the Contractor may similarly apply for a Taking-Over Certificate for each Section.

The Employer/s shall, within 28 (Twenty eight) days after receiving the Contractor's application:

- (a) issue the Taking-Over Certificate/s to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and Defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these Defects are remedied); or
- (b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the Taking-Over Certificate/s to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.

If the Employer/s fail/s either to issue the relevant Taking-Over Certificate/s or to reject the Contractor's application within the period of 28 (Twenty eight) days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the relevant Taking-Over Certificate/s shall be deemed to have been issued on the last day of that period.

10.2 Taking Over of Parts of the Works

Parts of the Works (other than Sections) shall not be taken over or used by the Employer/s, except as may be stated in the Contract or as may be agreed by both Parties in writing in any Addendum.

10.3 Interference with Tests on Completion

If the Contractor is prevented, for more than 14 (Fourteen) days, from carrying out the Tests on Completion by a cause for which the Employer/s is/are responsible, the Contractor shall carry out the Tests on Completion as soon as practicable.

If the Contractor suffers delay and/or incurs Cost as a result of this delay in carrying out the Tests on Completion, the Contractor shall give notice to the Employer/s and the financial institution providing the funding for the Project/s and shall be entitled, subject to Sub-Clause 25.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost-plus reasonable profit, which shall be added to the Contract Price, upon notice to the financial institution providing the funding for the Project/s.

After receiving this notice, the Employer/s shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

11. DEFECTS LIABILITY

11.1 Completion of Outstanding Work and Remedying Defects

In order that the Works and Contractor's Documents, and each Section, shall be in the condition required by the Contract (fair wear and tear excepted) by the expiry date of the relevant Defects Notification Period or as soon as practicable thereafter, the Contractor shall:

- (a) complete any work which is outstanding on the date stated in a Taking-Over Certificate/s, within such reasonable time as is instructed by the Employer/s, and
- (b) execute all work required to remedy Defects or damage, as may be notified by the Employer/s on or before the expiry date of the Defects Notification Period for the Works or Section (as the case may be).

If a Defect appears or damage occurs, the Employer/s shall notify the Contractor accordingly as soon as reasonably practicable. The Contractor shall use all reasonable endeavours to rectify all defects and damage immediately after each notification.

11.2 Cost of Remedying Defects

All work referred to in sub-paragraph (b) of Sub-Clause 11.1 [*Completion of Outstanding Work and Remedying Defects*] shall be executed at the risk and cost of the Contractor, if and to the extent that the work is attributable to:

- (a) the design of the Works;
- (b) Plant/s, Materials or workmanship not being in accordance with the Contract;
- (c) improper operation or maintenance which was attributable to matters for which the Contractor is responsible; or
- (d) failure by the Contractor to comply with any other obligation.

If and to the extent that such work is attributable to any other cause, the Employer shall give notice to the Contractor accordingly, and Sub-Clause 13.4 [*Variation Procedure*] shall apply.

11.3 Extension of Defects Notification Period

The Employer/s shall be entitled to an extension of the Defects Notification Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant/s (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a Defect or damage.

11.4 Failure to Remedy Defects

If the Contractor fails to remedy any Defect or damage within a reasonable time, a date may be fixed by (or on behalf of) the Employer/s, with notice to the financial institution providing the funding for the Project/s, on or by which the Defect or damage is to be remedied. The Contractor shall be given reasonable notice of this date.

If the Contractor fails to remedy the Defect or damage by this notified date and this remedial work was to be executed at the cost of the Contractor under Sub-Clause 11.2 [*Cost of Remedying Defects*], the Employer/s may (at his/their option):

- (a) carry out the work himself or by others, in a reasonable manner and at the Contractor's cost, but the Contractor shall have no responsibility for this work; and the Contractor shall pay to the Employer/s the costs reasonably incurred by the Employer/s in remedying the Defect or damage or deduct it from the Contract Price;
- (b) agree or determine a reasonable reduction in the Contract Price in accordance with Sub-Clause 3.5 [*Determinations*]; or
- (c) if the Defect or damage deprives the Employer/s of substantially the whole benefit of the Works or any major part of the Works, after due notice to the financial institution providing the funding for the Project/s, terminate the Contract as a whole, or in respect of such major part which cannot be put to the intended use.

Without prejudice to any other rights, under the Contract or otherwise, the Employer/s shall be entitled to recover all sums paid by the Employer/s for the Works, if any, or for such part (as the case may be), plus financing costs and the cost of dismantling the same, clearing the Site/s and returning Plant/s and Materials to the Contractor.

11.5 Removal of Defective Work

If the Defect or damage cannot be remedied expeditiously on the Site and the financial institution providing the funding for the Project/s and the Employer/s give/s consent, the Contractor may remove from the Site/s for the purposes of repair such items of Plant/s as are subject to the Defect or damaged. This consent may require the Contractor to increase the amount of the Performance Security, if applicable, by the full replacement cost of these items, or to provide other appropriate security.

11.6 Further Tests

If the work of remedying of any Defect or damage may affect the performance of the Works, the Employer/s may require the repetition of any of the tests described in the Contract, including Tests on Completion. The requirement shall be made by notice within 28 (Twenty eight) days after the Defect or damage is remedied.

These tests shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the Party liable, under Sub-Clause 11.2 [*Cost of Remedying Defects*], for the cost of the remedial work.

11.7 Right of Access

Until the Making Good Defects Certificate/s has/have been issued, and thereafter in terms of the O&M activities of the Contractor and/or its Subcontractor/s, the Contractor, in addition to the rights afforded by the Servitude/s applicable, shall have the right of access to all parts of the Works and to records of the operation and performance of the Works, except as may be inconsistent with the Employer's reasonable security restrictions.

11.8 Contractor to Search

The Contractor shall, if required by the Employer and/or the financial institution providing the funding for the Project/s, search for the cause of any Defect, under the direction of the Employer/s, if applicable. Unless the Defect is to be remedied at the cost of the Contractor under Sub-Clause 11.2 [*Cost of Remedying Defects*], the Cost of the search plus reasonable profit shall be agreed or determined in accordance with Sub-Clause 3.5 [*Determinations*] and shall be added to the Contract Price, upon due notice to the financial institution providing the funding for the Project/s.

11.9 Making Good Defects Certificate/s

The Employer/s shall issue the Making Good Defects Certificate/s within 14 (Fourteen) days after the latest of the expiry dates of the Defects Notification Periods, or as soon thereafter as the Contractor has supplied all the Contractor's Documents and completed and tested all the Works, including remedying any Defects. If the Employer/s fail/s to issue the Making Good Defects Certificate/s accordingly:

- (a) the Making Good Defects Certificate shall be deemed to have been issued on the date 14 (Fourteen) days after the date on which it should have been issued, as required by this Sub-Clause, and
- (b) Sub-Clause 11.11 [*Clearance of Site*] and sub-paragraph (a) of Sub-Clause 14.10 [*Cessation of Employer's Liability*] shall be inapplicable.

11.10 Unfulfilled Obligations

After the Making Good Defects Certificate/s and Performance Certificate/s has/have been issued, each Party shall remain liable for the fulfilment of any obligation which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force. Neither the expiry of the Defects Notification Period nor the issue of the Making Good Defects Certificate/s nor the issue of the Performance Certificate/s shall prejudice any liability of the Contractor in respect of any breach of this Contract.

11.11 Clearance of Site

Upon receiving the Making Good Defects Certificate/s, the Contractor shall, at its own discretion and taking into account that it shall continue to manage the Site/s on behalf of the Employer/s in terms of the Energy management and administration activities, and in due course water and ICT management and administration activities, remove any remaining superfluous Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site/s besides those required for the management activities in question.

12. PERFORMANCE

- 12.1 Notwithstanding the issue of the Taking-Over Certificate/s, the Employer/s shall on the expiry of the Defects Notification Period, and in conjunction with the financial institution providing the funding for the Project/s, determine the Average Actual Performance of the Energy Vault/s and in due course the Water Vault/s and/or ICT Systems and the Balance of Plant/s, as set out in the Feasibility Study and Financial Model or in any later Addenda added to this PPP Agreement for such purposes.
- 12.2 Where the Average Actual Performance for the Energy Vault/s and in due course the Water Vault/s and/or ICT Systems and the Balance of Plant/s for all of the Performance Criteria is at or above Required Performance, the Employer shall issue a Performance Certificate/s.
- 12.3 Where the Average Actual Performance for the Energy Vault/s and in due course the Water Vault/s and/or ICT Systems and the Balance of Plant/s for any of the Performance Criterion is below Required Performance, the Employer/s may do any or all of the following:
- (a) allow such additional time to allow further work to be undertaken in relation to the relevant Plant/s and the Balance of Plant/s and set a date for future determination of the Average Actual Performance; and
 - (b) require the Contractor to indemnify the financial institution providing the funding for the Project/s in conjunction with the Employer/s for the Performance Damages in respect of such failure within 14 (Fourteen) days (which the Employer/s may request be taken into account with the financial institution providing the funding for the Project/s as debt due); or
 - (c) treat the failure as a Defect and exercise its rights under clause 11.4.
- 12.4 If the Employer/s, in conjunction with the financial institution providing the funding for the Project/s allows additional time as provided in clause 12.3(a), the procedure in this clause 12 shall be repeated at the end of such period and the actions and remedies in this clause 12 shall be available to the Employer/s at such time.

13. VARIATIONS AND ADJUSTMENTS

13.1 Right to Vary

- 13.2 Variations may be initiated by the Employer/s or the financial institution providing the funding for the Project/s at any time prior to issuing the Taking-Over Certificate/s for the Works, either by an instruction or by a request for the Contractor to submit a proposal. A Variation shall not comprise the omission of any work which is to be carried out by others.

The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Employer/s and the financial institution providing the funding for the Project/s stating (with supporting particulars) that (i) the Contractor cannot readily obtain the Goods required for the Variation, (ii) it will reduce the safety or suitability of the Works, or (iii) it will have an adverse impact on the achievement of the Performance Guarantees, if applicable. Upon receiving this notice, the Employer/s shall cancel, confirm or vary the instruction and inform the financial institution providing the funding for the Project/s thereof.

13.3 Value Engineering

The Contractor may, at any time, submit to the Employer/s and the financial institution providing the funding for the Project/s, a written proposal which (in the Contractor's opinion)

will, if adopted, (i) accelerate completion, (ii) reduce the cost of executing, maintaining or operating the Works, (iii) improve the efficiency or value of the completed Works, or (iv) otherwise be of benefit to the Employer/s.

The proposal shall be prepared at the cost of the Contractor and shall include the items listed in Sub-Clause 13.4 [*Variation Procedure*].

13.4 Variation Procedure

If the Employer/s request/s a proposal, prior to instructing a Variation, the Contractor shall advise the financial institution providing the funding for the Project/s and respond in writing as soon as practicable, either by giving reasons why he cannot comply (if this is the case) or by submitting:

- (a) a description of the proposed design and/or work to be performed and a program for its execution;
- (b) the Contractor's proposal for any necessary modifications to the program according to Sub-Clause 8.3 [*Program*] and to the Installation Dates and the Time/s for Completion; and
- (c) the Contractor's proposal for adjustment to the Contract Price.

The Employer shall, as soon as practicable after receiving such proposal (under Sub-Clause 13.3 [*Value Engineering*] or otherwise), respond with approval, disapproval or comments. The Contractor shall not delay any work whilst awaiting a response.

Each instruction to execute a Variation, with any requirements for the recording of Costs, shall be issued by the Employer/s to the Contractor, who shall acknowledge receipt.

Upon instructing or approving a Variation, the Employer/s shall proceed, upon notice to the financial institution providing the funding for the Project/s, and in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine adjustments to the Contract Price and the Schedule of Payments. These adjustments shall include reasonable profit, and shall take account of the Contractor's submissions under Sub-Clause 13.3 [*Value Engineering*] if applicable

13.5 Payment in Applicable Currencies

If the Contract provides for payment of the Contract Price in more than one currency, then whenever an adjustment is agreed, approved or determined as stated above, the amount payable in each of the applicable currencies shall be specified. For this purpose, reference shall be made to the actual or expected currency proportions of the Cost of the varied work, and to the proportions of various currencies specified for payment of the Contract Price.

13.6 Provisional Sums

Each Provisional Sum shall only be used, in whole or in part, in accordance with the financial institution providing the funding for the Project's instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Employer shall have instructed. For each Provisional Sum, the financial institution providing the funding for the Project may instruct:

- (a) work to be executed (including Plant/s, Materials or services to be supplied) by the Contractor and valued under Sub-Clause 13.4 [*Variation Procedure*]; and/or

(b) Plant/s, Materials or services to be purchased by the Contractor, for which there shall be added to the Contract Price less the original Provisional Sums:

(i) the actual amounts paid (or due to be paid) by the Contractor, and

provided always that the amount payable with respect of the Plant/s, Materials or services shall not exceed the amount stated in the Contract in respect of the relevant Provisional Sum.

The Contractor shall, when required by the Employer/s and/or the financial institution providing the funding for the Project/s, produce quotations, invoices, vouchers and accounts or receipts in substantiation.

13.7 **Daywork**

For work of a minor or incidental nature, the Employer/s, with notice to the financial institution providing the funding for the Project/s, may instruct that a Variation shall be executed on a daywork basis. The work shall then be valued in accordance with the daywork schedule included in the Contract, and the following procedure shall apply. If a daywork schedule is not included in the Contract, this Sub-Clause shall not apply.

Before ordering Goods for the work, the Contractor shall submit binding quotations of its own choosing to the Employer/s and the financial institution providing the funding for the Project. When applying for payment, the Contractor shall submit invoices, vouchers and accounts or receipts for any Goods.

Except for any items for which the daywork schedule specifies that payment is not due, the Contractor shall deliver each day to the Employer/s and the financial institution providing the funding for the Project, accurate statements in duplicate which shall include the following details of the resources used in executing the previous day's work:

- (a) the names, occupations and time of Contractor's Personnel,
- (b) the identification, type and time of Contractor's Equipment and Temporary Works, and
- (c) the quantities and types of Plant/s and Materials used.

One copy of each statement will, if correct, or when agreed, be signed by the Employer/s and returned to the Contractor and the financial institution providing the funding for the Project/s. The Contractor shall then submit priced statements of these resources to the Employer/s and the financial institution providing the funding for the Project, prior to their inclusion in the next Statement under Sub-Clause 14.3 [*Application for Interim Payments*].

13.8 **Adjustments for Changes in Legislation**

The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of South Africa (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Effective Date, which affect the Contractor in the performance of obligations under the Contract.

If the Contractor suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Effective Date, the Contractor shall give notice to the Employer/s and the financial institution

providing the funding for the Project/s and shall be entitled subject to Sub-Clause 25.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion]; and
- (b) payment of any such Cost, which shall be added to the Contract Price.

After receiving this notice, the Employer/s, upon notice to the financial institution providing the funding for the Project/s, shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

13.9 Adjustments for Changes in Costs

If the Contract Price is to be adjusted for rises or falls in the cost of labour, Goods and other inputs to the Works, the adjustments shall be calculated in accordance with the provisions in the Particular Conditions as amplified by the Feasibility Study and Financial Model as attached.

14. CONTRACT PRICE AND PAYMENT

14.1 The Contract Price

Unless otherwise stated in the Particular Conditions as amplified by the Feasibility Study and Financial Model as attached:

- (a) payment for the Works shall be made to the Contractor by the suitable financial institution providing the financing for the Project/s, being the Funder, as facilitated by the Contractor, on the basis of the Contract Price, subject to any adjustments in accordance with the Contract; and
- (b) the Contractor shall pay all Taxes, due howsoever arising in connection with the Works and the Contract Price shall not be adjusted for any of these costs, except as stated in Sub-Clause 13.8 [Adjustments for Changes in Legislation] or as agreed to in writing between the Contractor and the financial institution providing the funding for the Project/s.

14.2 Advance Payment

The Contractor shall be entitled to arrange an advance payment with the relevant financial institution loaning the monies for the Works and the further management thereof by the Contractor, as an amount for mobilisation and design activities. If the Particular Conditions as amplified in the Feasibility Study and Financial Model as attached do not state:

- (a) the amount of the advance payment, then this Sub-Clause shall not apply;
- (b) the number and timing of instalments, then there shall be only one;
- (c) the applicable currencies and proportions, then they shall be those in which the Contract Price is payable; and/or
- (d) the amortisation rate for repayments, then it shall be calculated as agreed to between the Contractor and the financial institution providing the funding for the Project/s as part of the Contract Price.

The Contractor shall be entitled to receive the first instalment upon providing to the Employer/s and the financial institution providing the funding for the Project/s (i) a

Statement (under Sub-Clause 14.3 [*Application for Interim Payments*]), (ii) the Performance Security in accordance with Sub-Clause 4.2 [*Performance Security*], if requested, and (iii) a guarantee in amounts and currencies equal to the advance payment, if requested. This guarantee, if required, shall be issued by an entity and from within a country (or other jurisdiction) approved by the financial institution providing the funding for the Project/s, and shall be in the form annexed to the Particular Conditions or in another form approved by the relevant financial institution providing the funding for the Project/s and included as an Addendum.

The Contractor shall ensure that the guarantee in question, if required by the financial institution providing the funding for the Project/s, is valid and enforceable until the advance payment has been repaid, but its amount may be progressively reduced by the amount repaid by the Contractor. If the terms of the guarantee specify its expiry date, and the advance payment has not been repaid by the date 28 (Twenty eight) days prior to the expiry date, the Contractor shall extend the validity of the guarantee until the advance payment has been repaid.

The advance payment shall be repaid in the manner as the Contractor shall agree to with the financial institution providing the funding for the Project/s.

14.3 **Application for Interim Payments**

In relation to each interim payment, the Contractor shall submit a Statement to the financial institution providing the funding for the Project/s, with a copy thereof to the Employer/s, after the end of the relevant period of payment stated in the Contract (if not stated, after the end of each month), in a form approved by the financial institution providing the funding for the Project, showing in detail the amounts to which the Contractor considers himself to be entitled, together with supporting documents which shall include the relevant report on progress in accordance with Sub-Clause 4.20 [*Progress Reports*].

The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:

- (a) the estimated contract value of the Works executed and the Contractor's Documents produced up to the end of the month (including Variations but excluding items described in sub-paragraphs (b) to (f) below);
- (b) any amounts to be added and deducted for changes in Legislation and changes in cost, in accordance with Sub-Clause 13.8 [*Adjustments for Changes in Legislation*] and Sub-Clause 13.9 [*Adjustments for Changes in Cost*];
- (c) any amount to be deducted for retention, calculated by applying the percentage of retention stated in the Particular Conditions or any other Schedule, Addendum or Annexure to this PPP Agreement, to the total of the above amounts, until the amount so retained by the financial institution providing the funding for the Project/s reaches the limit of Retention Money (if any) stated;
- (d) any amounts to be added and deducted for the advance payment and repayments in accordance with Sub-Clause 14.2 [*Advance Payment*];
- (e) any other additions or deductions which may have become due under the Contract or otherwise, including those under Clause 25 [*Claims, Disputes and Arbitration*]; and
- (f) the deduction of amounts included in previous Statements.

For each interim payment, the due date for payment to the Contractor will be the date of receipt by the financial institution providing the funding for the Project/s of the relevant Statement (the "Due Date") and the final date for payment shall be 14 (Fourteen) days from the Due Date (the "Final Date for Payment").

14.4 Schedule of Payments

If the Contract includes a Schedule of Payments specifying the instalments in which the Contract Price will be paid, then unless otherwise stated in this Schedule, the instalments quoted in the Schedule of Payments shall be the estimated contract values for the purposes of sub-paragraph (a) of Sub-Clause 14.3 [*Application for Interim Payments*]. If the Contract does not include a Schedule of Payments, the Contractor shall submit non-binding estimates of the payments which he expects to become due during each quarterly period. If applicable, the first estimate shall be submitted within 14 (Fourteen) days after the Commencement Date. Revised estimates shall be submitted at quarterly intervals, until the Taking-Over Certificate has been issued for the Works.

14.5 Interim Payments

No amount will be paid until the financial institution providing the funding for the Project/s has/have received and approved the Performance Security by the Contractor, if required. Thereafter, the financial institution providing the funding for the Project/ shall no later than 5 (Five) days after the Due Date issue a payment notice stating the amount that he considers to be due to the Contractor as at the Due Date and the basis on which the amount was calculated.

14.6 Timing of Payments

The financial institution providing the funding for the Project/s shall pay to the Contractor:

- (a) for each interim payment by the Final Date for Payment for that interim payment; and
- (b) the final amount due, within 14 (Fourteen) days after receiving the Final Statement and written discharge in accordance with Sub-Clause 14.9 [*Application for Final Payment*].

Payment of the amount due in each currency shall be made into the bank account, nominated by the Contractor, in the payment country (for this currency) specified in the Contract, without any deductions.

14.7 Final Payment Notice

Not less than 2 (Two) days before the Final Date for Payment of any sum due under this Contract, the financial institution providing the funding for the Project/s may give written notice to the Contractor which shall specify the sum that last mentioned considers to be due to the Contractor on the date of that notice and the basis on which that sum has been calculated.

14.8 Statement at Completion

Within 30 (Thirty) days after receiving the Taking-Over Certificate/s for the Works at the various Site/s on the various Time/s, the Contractor shall submit to the financial institution providing the funding for the Project/s and the Employer, copies of a Statement at completion with supporting documents, in accordance with Sub-Clause 14.3 [*Application for Interim Payments*], showing:

- (c) the value of all work done in accordance with the Contract up to the date stated in the Taking-Over Certificate/s for the Works;
- (d) any further sums which the Contractor considers to be due; and
- (e) an estimate of any other amounts which the Contractor considers will become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.

The financial institution providing the funding for the Project/s shall then give notice to the Contractor and the Employer/s in accordance with Sub-Clause 14.5 [*Interim Payments*] and make payment in accordance with Sub-Clause 14.6 [*Timing of Payments*].

14.9 Application for Final Payment

Within 14 (Fourteen) days after receiving the Making Good Defects Certificate/s, the Contractor shall submit, to the financial institution providing the funding for the Project/s and the Employer/s, copies of a draft final statement with supporting documents showing in detail:

- (a) the value of all work done in accordance with the Contract; and
- (b) any further sums which the Contractor considers to be due to him under the Contract or otherwise.

If the Employer/s and/or the financial institution providing the funding for the Project/s disagree/s with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Employer/s or the financial institution providing the funding for the Project/s may reasonably require and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Employer/s and the financial institution providing the funding for the Project/s the final statement as agreed. This agreed statement is referred to in these Conditions as the "Final Statement".

However if, following discussions between the Parties and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the financial institution providing the funding for the Project shall pay the agreed parts of the draft final statement in accordance with Sub-Clause 14.5 [*Interim Payments*] and Sub-Clause 14.6 [*Timing of Payments*]. Thereafter, if the dispute is finally resolved under Sub-Clause **Error! Reference source not found.** [*Board of Directors*] and Sub-Clause **Error! Reference source not found.** [*Due Legal Process*], the Contractor shall then prepare and submit to the financial institution providing the funding for the Project/s and the Employer/s a Final Statement.

14.10 Cessation of Employer's Liability

The Employer/s shall not be liable to the Contractor for any matter or thing under or in connection with the Contract or execution of the Works, except to the extent that the Contractor shall have included an amount expressly for it for payment by the financial institution providing the funding for the Project/s:

- (a) in the Final Statement and also
- (b) (except for matters or things arising after the issue of the Taking-Over Certificate/s for the Works) in the Statement at completion described in Sub-Clause 14.8 [*Statement at Completion*].

However, this Sub-Clause shall not limit the Employer's liability under his indemnification obligations, or the Employer's liability in any case of fraud, deliberate default or reckless misconduct by the Employer/s.

14.11 Currencies of Payment

The Contract Price shall be paid in a currency agreed to between the Contractor and the financial institution providing the funding for the Project/s. Unless otherwise stated in the Particular Conditions as amplified in the Feasibility Study and Financial Model, if more than one currency is so named, payments shall be made as follows:

- (a) if the Contract Price was expressed in Local Currency only:
 - (i) the proportions or amounts of the Local and Foreign Currencies, and the fixed rates of exchange to be used for calculating the payments, shall be as agreed between the Contractor and the financial institution providing the funding for the Project/s;
 - (ii) payments and deductions under Sub-Clause 13.6 [*Provisional Sums*] and Sub-Clause 13.8 [*Adjustments for Changes in Legislation*] shall be made in the applicable currencies and proportions; and
 - (iii) other payments and deductions under sub-paragraphs (a) to (d) of Sub-Clause 14.3 [*Application for Interim Payments*] shall be made in the currencies and proportions specified in sub-paragraph (a)(i) above;
- (b) payment of the damages specified in the Particular Conditions as amplified in the Feasibility Study and Financial Model or agreed to between the Parties in an Addendum, shall be made in the currencies and proportions specified in the Particular Conditions or Addendum;
- (c) other payments to the Employer by the Contractor shall be made in such currency as may be agreed by the Parties in writing;
- (d) if any amount payable by the Contractor to the Employer/s in a particular currency exceeds the sum payable by the financial institution providing the funding for the Project/s to the Contractor in that currency, the Employer/s may recover the balance of this amount from the sums otherwise payable to the Contractor in other currencies; and
- (e) if no rates of exchange are stated in the Contract, they shall be those prevailing on the Effective Date and determined by the Central Bank of South Africa.

15. ENERGY SECURITY MANAGEMENT AND ADMINISTRATIVE SERVICES

- 15.1 The Employer hereby appoints the Contractor for a term of 25 (Twenty five) years ("the Initial Period") to conduct Energy security management and administrative services with effect from the date on which the construction and commissioning of the Energy Vault/s is complete, being the Take Over date, on the financial terms as indicated in the Feasibility Study and Financial Model (as amended) attached to this PPP Agreement and marked as such, or as agreed to between the Parties in writing as an Addendum.
- 15.2 Provided that this Agreement has not been lawfully cancelled, the Contractor shall be entitled to renew the general terms of this PPP Agreement as they pertain to O&M matters and in terms of the fees for the management and administrative services, for a further period

of 10 (Ten) years by furnishing the Employer/s with written notice of its intention to do so not less than 12 (Twelve) months prior to the expiry of the initial period.

16. ADOPTION AND AMENDMENT OF AN ANNUAL BUDGET

- 16.1 Guided by the Feasibility Study and Financial Model attached to this PPP Agreement, the Contractor shall, annually, on behalf of and in consultation with the Employer/s, adopt an Operational Budget for the Project/s, which shall include, but is not limited to, all costs attributed to Services, for at least the next succeeding Fiscal Year.

17. GENERAL ADMINISTRATION

- 17.1 For matters that relate to general administration of this PPP Agreement or the methodology for adjusting costs associated with the Services and the ensuing management activities of the Contractor after Take Over, as set out in the attached Feasibility Study and Financial Model, the Contractor shall have the right to cast one (1) vote and the Employer one (1) vote. Decisions of the Parties at such meetings shall be effective only upon a majority vote. The Chairman of the meeting shall be chosen by the Contractor and his decision shall hold sway.

18. POWER (ENERGY) MANAGEMENT AND ADMINISTRATIVE SERVICES FEES

- 18.1 Service level Fees associated with power management and administrative services shall be accounted for based on the relevant categories of the services established by the Contractor and the Employer/s post Take Over as set out in the attached Feasibility Study and Financial Model and shall be amplified in due course by agreement between the Parties in an Addendum after the commencement of this PPP agreement and more specifically during the installation period of the Works at the various Site/s for the Project/s.

19. OPERATIONS AND MANAGEMENT AFTER COMPLETION AND "TAKE OVER"

- 19.1 The Contractor shall submit an All Resources Account for payment of Fees on a monthly basis in accordance with methodologies and principles established by the Contractor and the Employer/s from time to time, as set forth in the Addenda and Annexures hereto, which shall be determined in greater detail between the Parties in an Addendum after the commencement of this PPP agreement and more specifically during the installation period of the Works at the various Site/s for the Project/s.
- 19.2 The Employer agrees to and acknowledges its obligation to pay the All Resources Account within 7 (Seven) days of receipt thereof subject to any applicable dispute resolution provisions or procedures.

20. TERMINATION BY EMPLOYER

20.1 Notice to Correct

If the Contractor fails to carry out any obligation under the Contract or its Schedules, Annexures and Addendums, now or in the future, the Employer/s may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.

20.2 Termination by Employer/s

The Employer/s shall be entitled to terminate the Contract if the Contractor:

- (a) fails to comply with Sub-Clause 4.2 [*Performance Security*], if applicable, or with a notice under Sub-Clause 20.1 [*Notice to Correct*];

- (b) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract;
- (c) without reasonable excuse fails to proceed with the Works in accordance with Clause 8 [*Commencement, Delays and Suspension*];
- (d) subcontracts the whole of the Works or assigns the Contract without the required agreement;
- (e) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events;
- (f) is proven in a Court of Law to have given or offer to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an inducement or reward:
 - (i) for doing or forbearing to do any action in relation to the Contract, or
 - (ii) for showing or forbearing to show favour or disfavour to any person in relation to the Contract,or if any of the Contractor's Personnel, agents or Subcontractors is proven in a Court of Law to have given or offered to give (directly or indirectly) to any person any such inducement or reward as is described in this sub-paragraph (f). However, lawful inducements and rewards to Contractor's Personnel shall not entitle termination,
- (g) fails to complete the Works in accordance with the Contract and in accordance with Sub-Clause 8.2 [*Time for Completion*] by the date falling 12 (Twelve) months following the Time/s for Completion, or
- (h) accrues liability exceeding the Contractor's maximum liability under the Contract pursuant to Sub-Clause 22.6 [*Limitation of Liability*],

In any of these events or circumstances, the Employer/s may, upon giving 90 (Ninety) days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site/s.

The Employer's election to terminate the Contract shall not prejudice any other rights of the Employer/s, under the Contract or otherwise.

The Contractor shall then leave the Site/s and deliver any required Goods, all Contractor's Documents, and other design documents made by or for him, to the Employer/s, unless they belong to the Contractor. However, the Contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment of any Subcontract, and (ii) for the protection of life or property or for the safety of the Works.

After termination, the Employer/s may complete the Works and/or arrange for any other entities to do so. The Employer/s and these entities may then use any Goods, Contractor's Documents and other design documents made by or on behalf of the Contractor, except those that are the property of the Contractor or which have not been paid for by the Employer. The Employer/s may choose not to complete the Works and in such circumstances, the Employer/s shall have the same remedies as are provided in sub-paragraph (c) of Sub-Clause 11.4 [*Failure to Remedy Defects*].

The Employer/s shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site/s. The Contractor shall promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Employer/s, these items may be sold by the Employer/s in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.

20.3 Valuation at Date of Termination

As soon as practicable after a notice of termination under Sub-Clause 20.2 [*Termination by Employer*] has taken effect, the Employer/s shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine the value of the Works, Goods and Contractor's Documents, and any other sums due to the Contractor for work executed in accordance with the Contract.

20.4 Payment after Termination

After a notice of termination under Sub-Clause 20.2 [*Termination by Employer*] has taken effect, the Employer/s may:

- (a) withhold further payments to the Contractor until the costs of design, execution, completion and remedying of any Defects, damages for delay in completion (if any), and all other costs incurred by the Employer/s, have been established, and/or
- (b) recover from the Contractor any losses and damages incurred by the Employer/s and any extra costs of completing the Works, after allowing for any sum due to the Contractor under Sub-Clause 20.3 [*Valuation at Date of Termination*]. After recovering any such losses, damages and extra costs, the Employer/s shall pay any balance to the Contractor.

21. SUSPENSION AND TERMINATION BY CONTRACTOR

21.1 Contractor's Entitlement to Suspend Work

If the Employer/s fail/s to work in conjunction with the financial institution providing the funding for the Project/s as envisaged in Sub-Clause 14.6 [*Timing of Payments*], the Contractor may, after giving not less than 21 (Twenty one) days' notice to the Employer/s, suspend work (or reduce the rate of work) unless and until the Contractor has received the co-operation of the Employer/s with regard to the financial institution providing the funding for the Project/s and concomitant payment described in the notice.

The Contractor's action shall not prejudice his entitlements to financing charges and to termination under Sub-Clause 21.2 [*Termination by Contractor*].

If the Contractor subsequently receives such payment from the financial institution providing the funding for the Project/s pursuant to the co-operation of the Employer/s (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable.

If the Contractor suffers delay and/or incurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall give notice to the Employer/s and the financial institution providing the funding for the Project/s and shall be entitled subject to Sub-Clause 25.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and

- (b) payment of any such Cost-plus reasonable profit, which shall be added to the Contract Price and notified to the financial institution providing the funding for the Project/s.

After receiving this notice, the Employer/s shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

21.2 Termination by Contractor

The Contractor shall be entitled to terminate the Contract if:

- (a) the Contractor does not receive the amount due within 15 (Fifteen) days after the expiry of the time stated in Sub-Clause 14.6 [*Timing of Payments*] within which payment is to be made, or
- (b) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.12 [*Prolonged Suspension*],
- (c) the Employer/s become/s bankrupt or insolvent, go/goes into liquidation, has/have a receiving or administration order made against him/them, compounds with his/their creditors, or carries on business under a receiver, trustee or manager for the benefit of his/their creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.

If any of these events or circumstances is not waived or by the Contractor in lieu of the fact that the payment for the Works shall be made by the financial institution providing the funding for the Project/s or alternatively remedied following the Contractor giving 14 (Fourteen) days' notice to the Employer/s requiring the same to be remedied, the Contractor may at his choice terminate the Contract. However, in the case of sub-paragraph c, should the occurrence of the events listed not be waived, the Contractor may at his choice by notice terminate the Contract immediately.

The Contractor's election to terminate the Contract shall not prejudice any other rights of the Contractor, under the Contract or otherwise.

21.3 Cessation of Work and Removal of Contractor's Equipment

After a notice of termination under Sub-Clause 20 [*Employer's Entitlement to Termination*], Sub-Clause 21.2 [*Termination by Contractor*] or Sub-Clause 24.6 [*Optional Termination, Payment and Release*] has taken effect, the Contractor shall promptly:

- (a) cease all further work, except for such work as may have been instructed by the Employer/s for the protection of life or property or for the safety of the Works,
- (b) if applicable, hand over Contractor's Documents, Plant/s, Materials and other work, for which the Contractor has received payment, with due cognisance that the equipment and in question belongs to the Contractor;
- (c) remove all other Goods from the Site/s, except as necessary for safety, and leave the Site/s.

21.4 Payment on Termination

After a notice of termination under Sub-Clause 21.2 [*Termination by Contractor*] has taken effect, the Employer/s shall promptly:

- (a) return the Performance Security to the Contractor, if applicable;
- (b) pay the Contractor in accordance with Sub-Clause 24.6 [*Optional Termination, Payment and Release*], and
- (c) pay to the Contractor the amount of any loss or damage sustained by the Contractor as a result of this termination.

22. RISK AND RESPONSIBILITY

22.1 Indemnities

The Contractor shall indemnify and hold harmless the Employer/s, the Employer's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:

- (a) bodily injury, sickness, disease or death, of any person whatsoever arising out of or in the course of or by reason of the design, execution and completion of the Works and the remedying of any Defects, unless attributable to any negligence, wilful act or breach of the Contract by the Employer/s, the Employer's Personnel, or any of their respective agents, and
- (b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss:
 - (i) arises out of or in the course of or by reason of the design, execution and completion of the Works and the remedying of any Defects, and
 - (ii) is not attributable to any negligence, wilful act or breach of the Contract by the Employer/s, the Employer's Personnel, their respective agents, or anyone directly or indirectly employed by any of them,
- (c) claims of third parties, to the extent not covered by paragraphs (a) and (b) above, to the extent caused by a breach of the Contract by the Contractor or such other act or omission of the Contractor.

The Employer/s shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, wilful act or breach of the Contract by the Employer/s, the Employer's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover, as described in sub-paragraphs (d)(i), (ii) and (iii) of Sub-Clause 23.3 [*Insurance Against Injury to Persons and Damage to Property*].

22.2 Contractor's Care of the Works

The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate/s is/are issued (or is deemed to be issued under Sub-Clause 10.1 [*Taking Over of the Works and Sections*]) for the Works, when responsibility for the care of the Works shall pass to the Employer/s. If a Taking-Over Certificate/s is/are issued (or is so deemed to be issued) for any Section of the Works, responsibility for the care of the Section shall then pass to the Employer/s, despite the fact that the Contractor shall still be managing the Project/s and all the Works at all the Site/s on behalf of the Employer/s and at the terms and conditions and for payments as more fully detailed in Schedules, Annexure/s or Addendum/s to this PPP Agreement, existing or

future, once the Parties have fully determined and/or amended the fair and reasonable post Taking Over management costs during the 25 (Twenty five) year management contract that this PPP Agreement establishes.

After responsibility has/have accordingly passed to the Employer/s, the Contractor shall take responsibility for the care of any work which is outstanding on the date stated in a Taking-Over Certificate/s, until this outstanding work has been completed, following which it shall also be dealt with as described in the paragraph above.

If any loss or damage happens to the Works, Goods or Contractor's Documents during the period when the Contractor is responsible for their care, from any cause not listed in Sub-Clause 22.3 [*Employer's Risks*], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods and Contractor's Documents conform with the Contract.

The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate/s has/have been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate/s has/have been issued and which arose from a previous event for which the Contractor was liable.

22.3 Employer's Risks

The risks referred to in Sub-Clause 22.4 below are:

- (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (b) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war, within the Country,
- (c) riot, commotion or disorder within the Country by persons other than the Contractor's Personnel and other employees of the Contractor and Subcontractors,
- (d) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, within the Country, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
- (e) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds.

22.4 Consequences of Employer's Risks

If and to the extent that any of the risks listed in Sub-Clause 22.3 above results in loss or damage to the Works, Goods or Contractor's Documents, the Contractor shall promptly give notice to the Employer/s and the financial institution providing the funding for the Project/s and shall rectify this loss or damage to the extent required by the Employer/s.

If the Contractor suffers delay and/or incurs Cost from rectifying this loss or damage, the Contractor shall give a further notice to the Employer/s and the financial institution providing the funding for the Project/s and shall be entitled subject to Sub-Clause 25.1 [*Contractor's Claims*] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*], and
- (b) payment of any such Cost, which shall be added to the Contract Price.

After receiving this further notice, the Employer shall proceed in accordance with Sub Clause 3.5 [*Determinations*] to agree or determine these matters.

22.5 Intellectual and Industrial Property Rights

In this Sub-Clause, "infringement" means an infringement (or alleged infringement) of any patent, registered design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works, and "claim" means a claim (or proceedings pursuing a claim) alleging an infringement.

The Employer/s shall indemnify and hold the Contractor harmless against and from any claim alleging an infringement which is or was:

- (a) an unavoidable result of the Contractor's compliance with the Employer's Requirements;
- (b) or a result of any Works being used by the Employer/s:
 - (i) for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or
 - (ii) in conjunction with anything not supplied by the Contractor, unless such use was disclosed to the Contractor prior to the Effective Date or is stated in the Contract.

The Contractor shall indemnify and hold the Employer/s harmless against and from any other claim which arises out of or in relation to (i) the Contractor's design, manufacture, construction or execution of the Works, (ii) the use of Contractor's Equipment, or (iii) the proper use of the Works.

If a Party is entitled to be indemnified under this Sub-Clause, the indemnifying Party may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, litigation or arbitration upon being requested to do so by such other Party.

22.6 Limitation of Liability

Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than under Sub-Clause 8.8 [*Delay Damages*], Sub-Clause 9.4 [*Failure to Pass Tests on Completion*], Sub-Clause 12.3 [*Performance*], Sub-Clause 21.4 [*Payment on Termination*] and Sub-Clause 22.1 [*Indemnities*].

The total liability of the Contractor to the Employer/s, under or in connection with the Contract other than under Sub-Clause 4.18 [*Electricity, Water and Gas*], Sub-Clause 8.8 [*Delay Damages*], 9.4 and 12 [*Performance Damages and rejection*], 11.2 [*Defects*], 21.4 [*Payment on Termination*], 22.1 [*Indemnities*] and Sub-Clause 22.5 [*Intellectual and Industrial Property Rights*], shall not exceed the combined total of the Contract Price hereunder (including any increase the Contract Price by way of variation or otherwise).

This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

23. INSURANCE

23.1 General Requirements for Insurances

In this Clause, "insuring Party" means, for each type of insurance, the Party responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause as set out in Schedule 4.

Wherever the Contractor is the insuring Party, each insurance shall be effected with insurers and in terms chosen by the Contractor and approved by the financial institution providing the funding for the Project/s. These terms shall be consistent with any terms agreed by both Parties before they signed the PPP Agreement, if any. This agreement of terms shall take precedence over the provisions of this Clause.

Wherever the Employer/s is/are the insuring Party, each insurance shall be effected with insurers and in terms consistent with the details as set out in Schedule 4 and the Employer/s will be deemed to have satisfied its obligations in respect of such insurance if the insurance is provided by reputable insurers, but only to the extent such insurances otherwise comply with the requirements of this Contract.

If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured and no act or omission on the part of one insured will prejudice the other insureds right to claim under such policy. If a policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause, (i) the Contractor shall act under the policy on behalf of these additional joint insured except that the Employer/s shall act for Employer's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy.

Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.

The relevant insuring Party shall, on request of the other Party from time to time, submit to the other Party:

- (a) evidence that the insurances described in this Clause have been effected, and
- (b) copies of the policies for the insurances described in Sub-Clause 23.2 [*Insurance of Works and Contractor's Equipment*] and Sub-Clause 23.3 [*Insurance against Injury to Persons and Damage to Property*] and Sub-Clause 23.5 [*Professional Indemnity Insurance*].

When each premium is paid, the insuring Party shall submit evidence of payment to the other Party. Where the Employer/s is/are the insuring Party/ies, the Contractor shall be liable for and the Employer/s shall be entitled to recover any increase in the Employer's premiums that result from the Contractor's claims record or are otherwise attributable to the Contractor.

Each Party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.

Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or attempts to make) any alteration, the Party first notified by the insurer shall promptly give notice to the other Party.

If the insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contract, or fails to provide satisfactory evidence and copies of policies in accordance with this Sub-Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The insuring Party shall pay the amount of these premiums to the other Party, and the Contract Price shall be adjusted accordingly and the financial institution providing the finance for the Project/s informed.

Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor or the Employer/s, under the other terms of the Contract or otherwise. Any amounts not insured or not recovered from the insurers shall be borne by the Contractor and/or the Employer/s in accordance with these obligations, liabilities or responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party.

23.2 Insurance for Works and Contractor's Equipment

The Contractor shall insure the Works, Plant/s, Materials and Contractor's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit. This insurance shall be effective from the date by which the evidence is to be submitted under sub-paragraph (a) of Sub-Clause 23.1 [*General Requirements for Insurances*], until the date of issue of the Taking-Over Certificate/s for the Works, after which date and under the management activities of the Contractor, the Project and the Works at all its Site/s, shall receive the proper and suitable insurance for all aspects of the operation of the Energy Vault and in due course the Water Vault/s, as well as the ICT Systems, and all concomitant systems and components and operations, and the Contractor shall continue with the premiums included in the calculation of the management costs as set out in the Feasibility Study and Financial Model attached to this PPP Agreement.

The insuring Party shall maintain this insurance to provide cover until the date of issue of the Making Good Defects Certificate/s, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate/s, and for loss or damage caused by the Contractor or Subcontractors in the course of any other operations (including those under Clause 11 [*Defects Liability*] and Clause 12 [*Performance*]).

The insuring Party shall insure the Contractor's Equipment for not less than the full replacement value, including delivery to Site/s. For each item of Contractor's Equipment, the insurance shall be effective while it is being transported to the Site/s and until it is no longer required as Contractor's Equipment.

Unless otherwise stated in the Particular Conditions as amplified in the attached Feasibility Study and Financial Model or Schedule 4, insurances under this Sub-Clause:

- (a) shall be effected and maintained by the Contractor as insuring Party;

- (b) shall be in the name of the Contractor, who shall be entitled to receive payments from the insurers, payments being held for the sole purpose of rectifying the loss or damage;
- (c) shall cover all loss and damage from any cause not listed in Sub-Clause 22.3 [*Employer's Risks*],
- (d) shall also cover loss or damage from the risks listed in Sub-Clause 22.3 [*Employer's Risks*], with deductibles per occurrence of not more than the amount stated in the Particular Conditions as amplified in the Feasibility Study and Financial Model (if an amount is not so stated, this sub-paragraph shall not apply), and
- (e) may however exclude loss of, damage to, and reinstatement of:
 - (i) a part of the Works which is in a defective condition due to a Defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (ii) below),
 - (ii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a Defect in its design, materials or workmanship,
 - (iii) a part of the Works which has been Taken Over by the Employer/s, except to the extent that the Contractor is liable for the loss or damage, and
 - (iv) Goods while they are not in the Country.

If, more than one year after the Effective Date, the cover described in sub-paragraph (d) above ceases to be available at commercially reasonable terms, the Contractor shall (as insuring Party) give notice to the Employer/s, with supporting particulars. The Employer/s shall then (i) be entitled subject to payment of an amount equivalent to such commercially reasonable terms as the Contractor should have expected to have paid for such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under Sub-Clause 23.1 [*General Requirements for Insurances*].

23.3 Insurance against Injury to Persons and Damage to Property

The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 23.2 [*Insurance for Works and Contractor's Equipment*]) or to any person (except persons insured under Sub-Clause 23.4 [*Insurance for Contractor's Personnel*]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Making Good Defects Certificate/s.

This insurance shall be for a limit per occurrence of not less than the amount stated in the Particular Conditions as amplified in the Feasibility Study and Financial Model, with no limit on the number of occurrences. If an amount is not stated in the Contract, this Sub-Clause shall not apply.

Unless otherwise stated in the Particular Conditions or Schedule 4 as amplified in the Feasibility Study and Financial Model, the insurances specified in this Sub-Clause:

- (a) shall be effected and maintained by the Contractor as insuring Party;
- (b) shall be in name of the Contractor,;

- (c) shall be extended to cover liability for all loss and damage to the Employer's property (except things insured under Sub-Clause 23.2) arising out of the Contractor's performance of the Contract, and
- (d) may however exclude liability to the extent that it arises from:
 - (i) the Employer's right to have the Permanent Works executed on, over, under, in or through any land or building, and to occupy this land for the Permanent Works,
 - (ii) damage which is an unavoidable result of the Contractor's obligations to execute the Works and remedy any Defects, and
 - (iii) a cause listed in Sub-Clause 22.3 [*Employer's Risks*], except to the extent that cover is available at commercially reasonable terms.

23.4 Insurance for Contractor's Personnel

The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel.

The Employer shall also be indemnified under the policy of insurance, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Employer/s or of the Employer's Personnel.

The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a Subcontractor's employees, the insurance may be effected by the Subcontractor/s, but the Contractor shall be responsible for compliance with this Clause.

23.5 Product Liability Insurance

The Contractor shall effect and maintain product liability insurance with a limit of indemnity and on reasonable terms determined and agreed to between the Parties in respect of each and every claim to cover any claims made against the Contractor in relation to his obligations relating to the design of the Works, provided that such insurance is available in the market. The insurance will be maintained for the period commencing on the Commencement Date and ending 15 (Fifteen) years following the date of the Taking Over Certificate/s for the Works.

24. FORCE MAJEURE

24.1 Definition of Force Majeure

In this **Clause**, "Force Majeure" **means** an exceptional event or circumstance:

- (a) which is beyond a Party's control;
- (b) which such Party could not reasonably have provided against before entering into the Contract;
- (c) which, having arisen, such Party could not reasonably have avoided or overcome; and
- (d) which is not substantially attributable to the other Party.

Force Majeure is limited to, the exceptional events or circumstances listed below, to the extent conditions (a) to (d) above are satisfied:

- (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies;
- (ii) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war;
- (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel and other employees of the Contractor and Subcontractors;
- (iv) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity; and
- (v) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity, if applicable.

24.2 Notice of Force Majeure

If a Party is or will be prevented from performing any of its obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 (Fourteen) days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure.

The Party shall, having given notice, be excused performance of such obligations for so long as such Force Majeure prevents it from performing them.

Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract.

24.3 Duty to Minimise Delay

Each Party shall at all times use all reasonable endeavours to minimise any delay in the performance of the Contract as a result of Force Majeure.

A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

24.4 Consequences of Force Majeure

If the Contractor is prevented from performing any of his obligations under the Contract by Force Majeure of which notice has been given under Sub-Clause 24.2 [*Notice of Force Majeure*], and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to Sub-Clause 25.1 [*Contractor's Claims*] to an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [*Extension of Time for Completion*].

After receiving this notice, the Employer shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine these matters.

24.5 Force Majeure Affecting Subcontractor/s

If any Subcontractor/s is/are entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's non-performance or entitle him to relief under this Clause.

24.6 Optional Termination, Payment and Release

If the execution of substantially all the Works in progress is prevented for a continuous period of 90 (Ninety) days by reason of Force Majeure of which notice has been given under Sub-Clause 24.2 [*Notice of Force Majeure*], or for multiple periods which total more than 120 (One hundred and twenty) days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 (Seven) days after the notice is given, and the Contractor shall proceed in accordance with Sub-Clause 21.3 [*Cessation of Work and Removal of Contractor's Equipment*].

Upon such termination, the Employer/s shall notify the financial institution providing the funding for the Project/s to that it may pay to the Contractor:

- (a) the amounts payable for any work carried out pursuant to this Contract for which a price is stated in the Contract;
- (b) the Cost of Plant/s and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this/these Plant/s and Materials shall remain the property of (and be at the risk of) the Contractor;
- (c) any other Cost or liability which in the circumstances was reasonably incurred by the Contractor in the expectation of completing the Works; and
- (d) if applicable, the Cost of removal of Temporary Works and Contractor's Equipment from the Site/s and the return of these items to the Contractor's works in his country or Head Office (or to any other destination at no greater cost).

25. CLAIMS, DISPUTES AND ARBITRATION

25.1 Contractor's Claims

If the Contractor considers himself to be entitled to any extension of the Time/s for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Employer/s and the financial institution providing the funding for the Project/s, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 (Twenty eight) days after the Contractor became aware, or should have become aware, of the event or circumstance.

If the Contractor fails to give notice of a claim within such period of 28 (Twenty eight) days, the Time/s for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer/s shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.

The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site/s or at another location acceptable to the Employer/s. Without admitting liability, the Employer/s may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Employer/s and the financial institution providing the funding for the Project/s to inspect all these records, and shall (if instructed) submit copies to the Employer/s and/or the financial institution providing the funding for the Project/s.

Within 60 (Sixty) days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Employer/s in conjunction with the financial institution providing the funding for the Project/s, the Contractor shall send to the Employer/s and the financial institution providing the funding for the Project/s, a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

- (a) this fully detailed claim shall be considered as interim;
- (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the financial institution providing the funding for the Project/s in conjunction with the Employer/s may reasonably require; and
- (c) the Contractor shall send a final claim within 28 (Twenty eight) days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the financial institution providing the funding for the Project/s in conjunction with the Employer/s.

Within 60 (Sixty) days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Employer/s and approved by the Contractor, the financial institution providing the funding for the Project/s in conjunction with the Employer/s shall respond with approval, or with disapproval and detailed comments. He/they may also request any necessary further particulars, but shall nevertheless give his /their response on the principles of the claim within such time.

Each interim payment shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.

The financial institution providing the funding for the Project/s in conjunction with the Employer/s shall proceed in accordance with Sub-Clause 3.5 [*Determinations*] to agree or determine (i) the extension (if any) of the Time/s for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [*Extension of Time for Completion*], and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.

The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause.

25.2 Resolution by Contractor Board

All disputes and breached of contract connected with this PPP Agreement shall be submitted to the General Manager of the Contractor and the Commissioner for the Employer for discussion and resolution.

Any disputes that cannot be resolved by the General Manager and the Commissioner shall be submitted to the Board of Directors of the Contractor.

The Contractor's board of directors shall consider the matter at its next regular meeting held not less than thirty (30) Calendar Days after the submission of the matter to it. If the Board of directors of the Contractor cannot resolve a dispute within thirty (30) Calendar Days after said meeting, any Party to the dispute may commence with legal action after providing the relevant Party/ies with 14 (Fourteen) days written notice of the intention to do so and describing the breach of contract.

The Parties shall make their best efforts to resolve all disputes submitted to them through discussion and negotiations.

25.3. Due Legal Process

Any dispute, controversy or claim arising out of or relating to this PPP Agreement and the Contract, or the breach thereof, which is not resolved by expedited dispute resolution as provided in clause 25.2 above, shall be settled by means of recourse to the Supreme Court of South Africa as set forth in this clause 25.3. Provided, however, that the provisions of this clause 25.3 may be invoked by a Party only following the exhaustion of the remedies provided in clause 25.2 above, and any dispute, controversies or claims not raised in the manner provided therein are deemed waived.

Unless otherwise agreed, if the disputing Party fails to commence Supreme Court action within ninety (90) Calendar Days after the Contractor's Board of Directors referral process fails, as provided for in clause 25.2 above, the disputing Party shall be deemed to have waived all claims with respect to such dispute.

A Party (the "Initiating Party") may commence Supreme Court action by serving written notice of its intent to commence such upon the other Party/s. The written notice shall express the Initiating Party's intent to institute action under this PPP Agreement or the Contract, and the remedy to be sought by such action.

The litigating Parties may settle the dispute at any time before the conclusion of the Supreme Court action.

IN WITNESS WHEREOF, the Contractor and the Employer as First and Second Parties, and any Participating Municipality as Further Party/ies, have, by the signature of its / their duly authorized representative shown below, executed and delivered a counterpart of this PPP Agreement and its Addenda and Annexures.

First Party:

INOVASURE (PTY) LIMITED

263 Oak Avenue, Randburg, Johannesburg, South Africa

Tel: +27 83 700 5059 Email: max@inovasure.com

Name: SJ de la Rouviere. Designation: Chairman. Date: _____

_____ (Signature)

Second Party:

KANNALAND LOCAL MUNICIPALITY:

Address: _____

Tel: _____ Email: _____

Name: _____ Designation: _____

Date: _____

Further Parties (Participating Municipalities)

To be incorporated into the InovaSure Energy Vault Program by means of concluding similar PPP Agreement/s with the Participating Municipality/ies along with the duly authorised Resolution/s of the relevant Municipal Council/s.

SCHEDULE 1

Particular Conditions

As set out in the attached Feasibility Study and Financial Model (as amended) or amplified by the Parties in separate Addenda

SCHEDULE 2

Schedule of Payments to a bank account/s of the Contractor's choosing, free of exchange or deductions, by the Financial Institution providing the funding for the Project/s

As determined and set out in the final Loan Terms Agreement between the Funding Agency/ies and Contractor.

SCHEDULE 3

Performance Security

An advance payment bond or other similar instrument/s in the format as may be required by the financial institution providing the funding for the Project/s, a copy of which shall be provided to the Employer/s if and when finalised and attached to the relevant PPP Agreement as an Addendum.

SCHEDULE 4

Insurance Requirements

Insurances to be maintained by the Employer

Construction All Risks for the full value of the Works.

Public Liability Insurance up to a minimum limit of R50 million, such insurance to extend to claims resulting from the Works including damage to the land or building/s or arising out of the Works or the performance of this Contract.

Insurances to be maintained by the Contractor

The Contractor will take out all statutory insurances.

The Contractor will take out and maintain product liability insurance in the amount of R1 billion until the expiry of 10 (Ten) years from the date of issue of the Making Good Defects Certificate and material damage insurance in respect of its own temporary buildings, plant and equipment.

The Contractor will take out and maintain suitable operational insurance for the duration of the existence of the PPP Agreement.

Insurances to be maintained by both Parties

Each Party to maintain material damage insurance for its own property.

And any other insurances required under this Contract.

APPENDIX 1

Employers Requirements

See Feasibility Study and Financial Model (as amended) attached hereto on a USB storage device.

APPENDIX 2

See Feasibility Study and Financial Model (as amended) attached hereto on a USB storage device and marked as such

APPENDIX 3

Contractor's Proposals and Financial Model

See Feasibility Study as published: <https://www.kannaland.gov.za/inovasure-energy-project-kannaland-municipality> and/or as attached hereto on a USB storage device

APPENDIX 4

Before and After Comparison of the InovaSure Energy Vault/s with reference to the Kannaland Local Municipality as the Pilot Implementation Project but applicable to any further Participating Municipality

THE INOVASURE ENERGY VAULT IMPLEMENTATION: COMPARISON OF THE STATE OF AFFAIRS PRIOR TO THE IMPLEMENTATION VERSUS THE SITUATION AFTER IMPLEMENTATION		
Before	After	Comments
Power Factor	Power Factor	Power Factor
The current Power Factor (PF) of the Municipalities vary from 0.6 up to 0.82, view have any equipment installed to correct the PF. The nett effect is simple to calculate that the direct distribution loss is equal to $(1 - \text{current PF}) \times \text{Total energy acquired}$.	The proposed Public Private Partnership Agreement between InovaSure and the relevant Local Municipality will set the specific terms out as to how InovaSure will install specialised equipment to correct the PF in real time and guarantee the PF in the specific municipal distribution network at 0.97. The nett effect is simple to calculate that the direct distribution gain is equal to the $(\text{Guaranteed Inovasure PF} - \text{the Current PF}) \times \text{Total energy acquired}$.	Excessively low power factor increases the required rating of electrical equipment relative to the load supported.
Peak Demand Management	Peak Demand Management	Peak Demand Management
The Municipality has to manage and predict accurately the peak demand in terms of the supply agreement with ESKOM. Failure to comply with the projections attracts very harsh penalties in terms of which a single transgression will attract penalties for a 12-month period after the transgression. Most Municipalities are currently paying approximately 30% of total tariff toward penalties. It is important to note that a single transgression will attract twelve months of penalties.	The Public Private Partnership Agreement between InovaSure and the relevant Local Municipality will set the specific terms out as to how InovaSure will install sophisticated equipment to accurately control the injection of energy into the distribution network to ensure balance between the demand and the supply and in addition to accurately control the cost benefit of limiting the acquisition of energy in time to ensure optimal cost of acquisition. This rules-based equipment and software can ensure that the peak demand projections be complied with exactly. This will ensure that transgressions are not possible which is an assurance that penalties will not be paid.	The value of this assurance is approximately $0.3 \times \text{Total energy acquired} \times 12$ as a maximum possible liability for a single transgression. Apart from limiting the exceedance of Nominated Maximum Demand (NMD), this typically happens during Peak Periods, therefore also indirectly supporting the grid during peak periods – so it is a win-win situation for both parties.

Dynamic Tariff Shifting	Dynamic Tariff Shifting	Dynamic Tariff Shifting
<p>Municipalities acquire energy against dynamic tariffs issued by ESKOM. The Tariff structures are complex and time based. The infrastructure of the post and pre-paid meters in this country does not allow the Municipality to pass the dynamic nature of the cost of acquisition on to the consumer.</p>	<p>InovaSure will deal with this issue in four ways. 1) Dynamic Tariff Shifting, 2) Intelligent Distribution Devices, 3) Incidental Savings to ESKOM and 4) Incidental Savings in Distribution Capacity. The first step will be to install equipment to manipulate the demand in many respects. The proposed Public Private Partnership Agreement between the relevant Local Municipality and InovaSure will set out the specific terms of how InovaSure will store energy on behalf of the Municipality during off-peak times and at low tariff from 11pm up to about 5 am and release the power intelligently during on-peak tariff from 6am to 8am into the Distribution Network.</p> <p>This will protect the substation maximum capacity and minimising the cost of acquisition. The same equipment is then used to store energy produced by the Municipality (described in another section of this document) to prepare for the evening peak starting at 6 pm up to 10 pm -ensuring lowest cost of energy acquisition during peak tariff. The nett effect of both cycles is approximately a 40% saving in the cost of the yearly acquisition of energy.</p>	
Tariff Escalations	Tariff Escalations	Tariff Escalations
<p>Currently the ESKOM energy tariffs have escalated by 400% over the past 10 years. It poses significant challenges to any Municipality to deal with passing the cost on to the consumer. The tariff increases are dynamic time-based tariffs and the Municipalities only have a fixed base tariff as an exit.</p>	<p>InovaSure will install equipment to generate energy on behalf of the Municipality of which total production will be stored for the benefit of the supply during the evening peak. This means that the total production of energy by the Municipality is effectively replacing the cost of peak acquisition.</p> <p>This means that the nett present value of the equipment must be calculated against the future acquisition of peak energy. The current escalations in Peak approximate 18.78 % yearly and it is not anticipated that this will follow CPI in any way even by the own submissions of ESKOM. The 9</p>	<p>The terms of this agreement that will be detailed in the proposed Public Private Partnership Agreement between InovaSure and the relevant Local Municipality, is for the generation of 50 MW_p Energy for a period of 50 years. The energy is used to mitigate the risk of the tariff increases and is focussed on the cost of evening peak energy. The NPV discounted at 11% price escalations of CPI surpass the total</p>

	month peak tariff is 2.84 RkWh and for 2 months per year over 3 RkWh.	InovaSure capital cost for the project.
Incidental Savings to ESKOM	Incidental Savings to ESKOM	Incidental Savings to ESKOM
Dynamic Tariffs were introduced by ESKOM to pass the cost of generation on to the end user, at different time of the day as well as to entice the user to buy energy at other times of the day.	InovaSure installs equipment to use these tariffs and manipulate the time of use of energy to ensure that the Municipality benefits from these tariffs. The nett effect is, however, that ESKOM also benefits from this implementation. During the past years, ESKOM implemented a rebate for energy injection at Peak. It was abandoned for many reasons but the invitation to apply jointly for the reinstatement is under discussion between ESKOM and InovaSure under the advice of the Central Energy Fund group of companies.	The value in terms of the historical rebate is R 1.4 RkWh.
Intelligent Distribution Devices	Intelligent Distribution Devices	Intelligent Distribution Devices
The Municipalities are currently selling energy through obsolete devices, which in most instances do not function properly anymore.	InovaSure will install state-of-the-art pre-paid Distribution Devices consisting of an open-source electrical meter, compliant with the standards in South Africa. The device is Internet compliant and has an accessible Operating System. The Device will include a router operating system which can router traffic between the onboard devices ie. WiFi, LTE, Meter, Smart devices. The Device will include several Radios for communication - a 300 MHz backup communication device as well as the 2.4 GHz and 5 GHz radios and a LTE broadband external communication device. The device has the capability to communicate with at least eight electrical switches to do demand management on behalf of the client to limit energy cost due to time of use tariffs.	These devices will allow the Municipality to reconcile (in real-time) the energy being acquired with the energy being sold. There is currently no Municipality in South Africa which can do this and the value is therefore extremely high. The real-time reconciliation is a powerful tool to determine the condition of the distribution network. Any illegal connections will be identified immediately. The ability to manipulate the demand in the selection of eight domains in the house gives the ability to manage cost against time of use tariffs.
Incidental Savings toward investment in Distribution Capacity	Incidental Savings toward investment in Distribution Capacity	Incidental Savings toward investment in Distribution Capacity
Urbanisation did not stop or decrease over the past decade due to the poor performance of the	The InovaSure Energy Vault protects the substation against peak utilisation and will increase the total nett capacity by 30% and ensure	It could easily be argued that the nett effect of this assurance can be valued at 30% of the installed

<p>economy. This resulted in many of the Substations in the various Municipal distribution networks being under-capacity.</p> <p>ESKOM's inability to further invest in the capacity resulted in Municipalities requesting financial aid from National Treasury. We are being informed that that is estimated to be approximately R115 Billion in total.</p>	<p>additional use in off-peak energy distribution and on-peak protection and energy injection.</p>	<p>capacity of each Energy Vault. The peak production is 10MW and the maximum off-peak acquisition is 10MW. If we assume a 50% difference between peak and off-peak, the capacity increase will be 40% on a typical 25MW peak substation.</p>
<p>InovaSure "eThin" Technologies</p>	<p>InovaSure "eThin" Technologies</p>	<p>InovaSure "eThin" Technologies</p>
<p>Some Municipalities have been actively pursuing the installation of a public Wi-Fi system to ensure public access to the Internet.</p>	<p>InovaSure will install broadband connections to each Distribution Device (pre-paid "Smart meter") in each house in each Energy Vault deployment area. This broadband connection will be used to access the server and cloud technologies developed by InovaSure. These technologies include the ability to connect to a cluster of servers from remote devices using a secure Virtual Private Network (VPN) with a high degree of (incretion) encryption and compression. This secure connection will be maintained to uniquely identify the user as well as to ensure privacy of the end user data and to protect the cluster of computers. InovaSure will maintain the integrity of the cluster and will create Geo-Clusters to ensure Redundancy. InovaSure has entered into a Joint Venture with various companies, including Rapid Blue, to obtain unique content inclusive of Movies, Books and Music - inclusive of customised and curated educational content which includes the CAPS curriculum. The InovaSure "eThin" devices will be used to access the content via the distribution devices and the custom devices. The final service is to connect the "eThin" device to a Virtual Computer which is then the Personal Computer of the home owners where the device has been installed and that stays with the dwelling for the extent of the service</p>	<p>InovaSure built this technology base to explore the possibility of curbing illegal connections as well as to counter the animosity towards metered electrical distribution. We have tested the outcome and the results were overwhelmingly positive. Home owners presented with the ability to stream entertainment content through the Distribution devices as well as access the Internet and educational content do not interfere with the operation of the Distribution devices.</p>

	being offered. The operating systems of the Virtual Computer and the software installed on the computer may be pre-selected by the home owner.	
Indigent Electrification, Water and Sanitation	Indigent Electrification, Water and Sanitation	Indigent Electrification, Water and Sanitation
The Municipalities have an obligation to supply services to all the people in the relevant Municipality / Municipal district. There are a lot of indigent informal settlements posing a significant challenge to the Municipality. The cost of reticulation is in most instances prohibitive.	InovaSure and its collaborators have been successful in the design and implementation of a DC electrification and telecommunications process for informal settlements and have deployed thousands of these systems already the so-called "LivPak" system. These systems have recently integrated-with the InovaSure "eThin" technologies and the first LivPak total solutions are being installed in Kannaland, Diepsloot, Mabopane and George.	It is widely accepted that the cost of reticulation to the indigent household is in the order of R38000. This cost is being mitigated in total since InovaSure does the electrification independently which is a relationship between the InovaSure LivPak Co-operative in each community, its collaborators and the Home Owner. The "eThin" technologies are contracted independently and operated within a Co-operative structure.
InovaSure Collection Services	InovaSure Collection Services	InovaSure Collection Services
Municipalities employ a large number of personnel to read the meters, process the data and issue invoices.	Changing the current infrastructure with pre-paid distribution devices as well as sophisticated software, eliminates many inherent risks with the retail of energy and results in a 100% collection rate.	The value is relatively simple in understanding the current debtors book - looking at the age analysis and understanding the post implementation resulting sales since real time reconciliation is possible.
InovaSure Securitisation Services	InovaSure Securitisation Services	InovaSure Securitisation Services
Municipalities purchase energy from ESKOM and in some instances struggle to pay for the energy in time or in part.	InovaSure will replace the infrastructure with Advanced Distribution Devices which will ensure detail control over every aspect of energy distribution. The aspects of the services delivered to the end-user includes energy distribution but has many other very popular aspects to it. The fact that the energy is bought from the supplier but has already been sold, makes for a very secure counter party risk portfolio from ESKOM's perspective.	It is conceivable that with this in hand, InovaSure could ensure the payments toward ESKOM in return for some preferential treatment in tariff. It is suggested by InovaSure that a structured Power Purchase Agreement be negotiated and the payments be assured to

		<p>create value in the balance sheet of ESKOM.</p> <p>This enhancement of the Municipal payment capability will have a profound impact on its liquidity as well as its credit rating.</p>
InovaSure “Ensurance”	InovaSure “Ensurance”	InovaSure “Ensurance”
	<p>InovaSure will “ensure” all the equipment for the period of installation and operation as a form of back-to-back warranty in conjunction with each component supplier that makes up the Energy Vault.</p>	

Annexure H

THE KANNALAND INOVASURE ENERGY VAULT PUBLIC PRIVATE PARTNERSHIP PROJECT MANAGEMENT PLAN



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INTRODUCTION: EXECUTIVE SUMMARY OF THE INOVASURE KANNALAND ENERGY VAULT PROGRAM

Kannaland Local Municipality ("Kannaland"), over a period of many years, has experienced serious challenges with regard to Energy and Water Security, not to mention other challenges related to the economic health of the Municipality. In order to seek solutions to address this, Kannaland started a process in 2012 to source partners from the Private Sector willing to assist with first world technological and funding solutions that would offer feasible implementation models to secure the economic future of Kannaland and in fact the whole District of the Garden Route Municipality.

Kannaland identified a company by the name of InovaSure (Pty) Limited ("InovaSure") as a suitable partner able to provide the solutions mentioned above and between 2012 and to date has interacted with InovaSure in a Public Private Partnership ("PPP") process aimed at securing a suitable model for the implementation of technologies that will help Kannaland, and the Garden Route District, to achieve economic success through the establishment of Energy, Water and Telecommunications Security.

This PPP process has reached its conclusion with a Draft PPP Agreement which has been advertised in June 2020 as an unsolicited bid, and we have also received the approval for the PPP arrangement from National Treasury and the registration thereof, in terms of the MFMA, under registration number M180 on 26 April 2019, as well as the required views and recommendations from Provincial Treasury.

Throughout the referenced PPP process, Kannaland realized that we have to work together in a COMPACT with willing and able Private Company's, institutions, Government organisations and other Municipalities which are prepared to embrace the goals mentioned above.

As part of the PPP process and implementation, Kannaland is aware that besides the relevant procurement procedures prior to implementation, a suitable Management Plan is required for it to be properly implemented and managed with suitable reporting procedures. Through the Munsoft revenue enhancement software platform, which forms part of the InovaSure suite of services, much of the management process will be automatically carried out and reports produced where and how needed, as well as through the InovaSure Virtual Power Station software platform. However, the manner in which this will be dealt with and managed on the part of the Municipality, is included in this Management Plan.



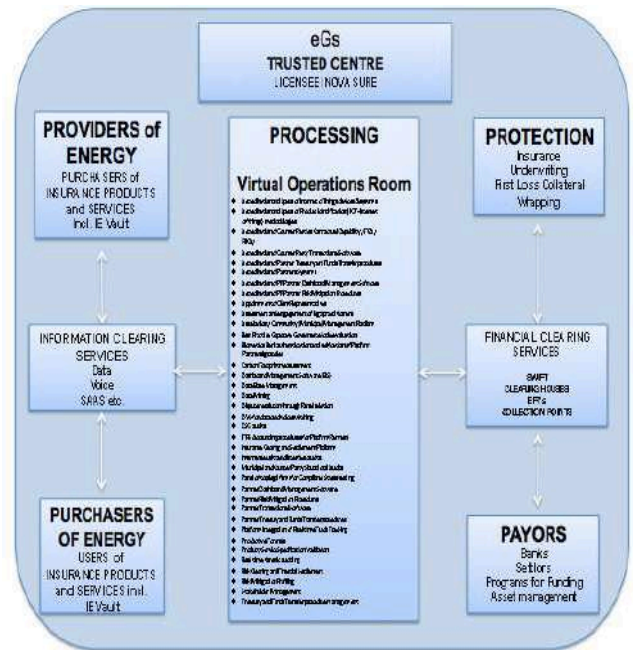
As Kannaland determined through interaction over the years, InovaSure provides “Living Security” solutions in a socially and economically sustainable and environmentally friendly framework, through efficient governance and mainly through collaborative Public Private Partnership (“PPP”) structures.

Kannaland’s goal to achieve economic success can be best implemented in the form of a COMPACT between the PUBLIC element of the PPP partnership with InovaSure, which includes global institutions and funding sources, the organs of state (State Owned Entities [“SOEs”]), Development Finance Institutions (”DFIs”) and other banks, the donor community and SOCIETY at large, as well as PRIVATE SECTOR funding and specialised products and services.

Within the “Living Security” framework, InovaSure focuses on Energy Security and some of its ‘derivative’ applications such as Water Security (capping energy costs) and Telecommunications Security (supplying sustainable telecommunications and ICT).

WHY DID WE CHOOSE INOVASURE AS OUR PARTNER FOR THE PPP?

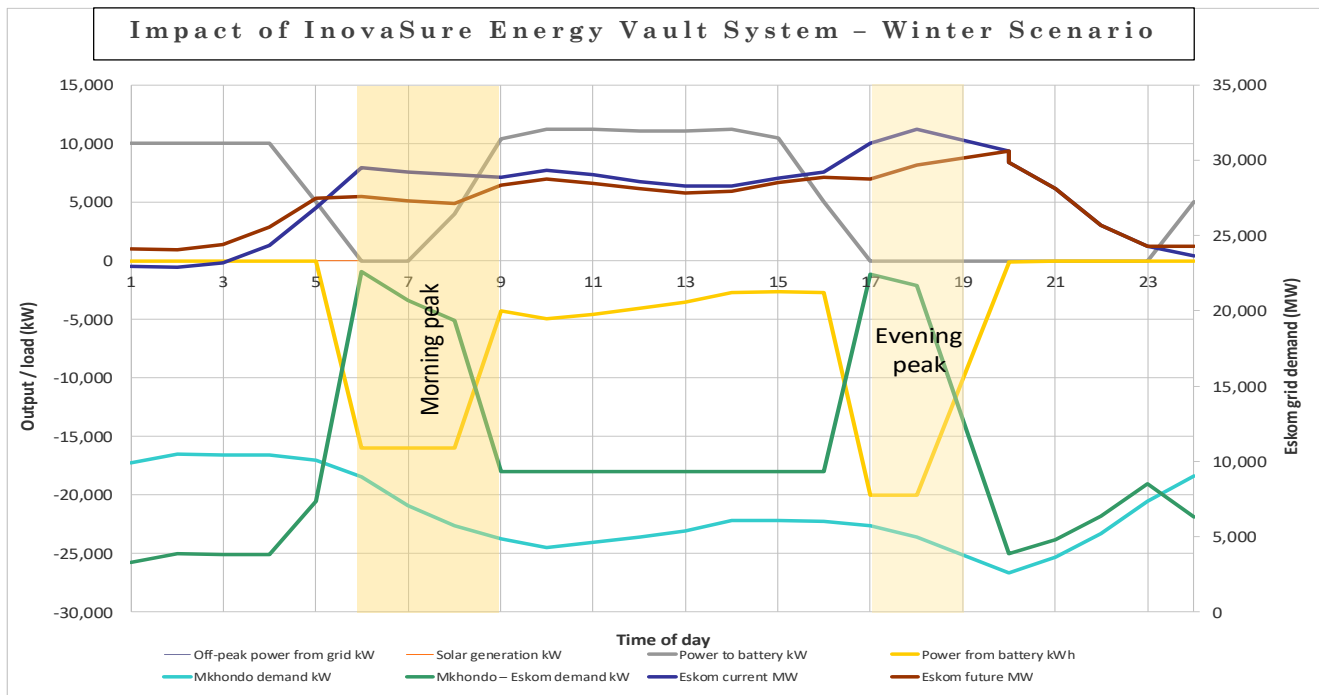
InovaSure designed a very sophisticated proprietary Trusted Centre as a catalyst / enabler / underwriter / control center / energy manager / plug-in platform which is utilised to deliver “Living Security” products and services, presently in short supply in Kannaland, the Garden Route District and South Africa, to Kannaland as a Municipality, being a part of Government. InovaSure, through the PPP arrangement with Kannaland, will implement this plug-in governance model and reporting structure to be ISO compliant, thereafter replicating it in the Garden Route District Municipality and other Municipalities in the Country.



WHAT ARE THE INOVASURE PRODUCTS AND SERVICES PROVIDED TO KANNALAND BY MEANS OF THE PPP ARRANGEMENT?

1) An "ENERGY VAULT" ("IEV") which is an INTEGRATED MANAGEMENT SYSTEM for POWER, using PRE-PAID SMART DISTRIBUTION DEVICES to collect income for power GENERATED and STORED, with embedded, cost efficacious THIN CLIENT TECHNOLOGY providing load management, data connectivity, educational and entertainment content.

The InovaSure Energy Vault is a proprietary system, which has been designed over a long process, to be implemented in a country, such as South Africa, as a platform to stabilise the distribution networks and optimize the power supply services offered by Municipalities. The InovaSure Energy Vault ensures cost effective and in-time delivery of electrical energy to users in a profitable manner. As a result of this, the cost of delivering potable water is concomitantly also reduced.



In order to better understand the impact of morning and evening winter peak power demands in Kannaland (and most other Municipalities in South Africa), InovaSure has provided us with the image above.

What this specific image imparts is fairly simple. If Kannaland (or any other Municipality) is able to store grid energy at very low off-peak rates during the night and discharge during morning peak and then again charge the storage device during the day with an affordable off-peak renewable or other energy source for the evening peak, then we will have a viable Municipal Electricity Department that saves up to 60% of current energy costs.

Storage methods and devices have traditionally been very expensive on a utility scale, but through technology advances made by InovaSure and its collaborators, they have rendered them economically viable.

THE INOVASURE ENERGY VAULT SYSTEM COMPRISES OF VARIOUS COMPONENTS, WHICH IS SIZED IN MULTIPLES OR FRACTIONS AS ACCORDING TO THE SIZE AND NEEDS OF THE MUNICIPALITY IN QUESTION

1. A 20MW/53MWh Battery capable of delivering 2 (two) complete cycles, daily, matching the morning and evening demand shortfalls for a period in excess of 25 (twenty five) years. The batteries/storage devices are manufactured in collaboration with partners under license at suitable locations at affordable costs, inclusive of the chargers and battery management systems and pre-paid "smart" distribution and telecommunications devices, thereby creating much needed job opportunities in South Africa.



2. A Balance of Systems ("BoS") component, inclusive of transformers, inverters, software and switch gear, to invert the DC power, at a peak of 20MWp (megawatt peak), at a distribution voltage of between 11kV and 66kV will allow for:
 - a) intelligent step-up injection;
 - b) power-factor correction and peak-shaving, which in turn provides technology protection and a comprehensive, rule-based remote-control system;
 - c) managing the cumulative behavior of all the InovaSure Energy Vaults implemented in a country simultaneously by means of the InovaSure "Virtual Power Station" software platform.
3. A 25MWp Photo Voltaic Power Plant (and/or other reliable renewable supply source), injecting its full capacity into the Energy Vault for storage and ultimate injection into the evening peak.

4. Approximately 30 000 “smart” network distribution and telecommunications devices, installed in the dwellings, allowing for the detailed delivery of power to the end-user, capable of:

- a) time-of-use tariff;
- b) control systems;
- c) dynamic tariffs;
- d) broad band communication systems;
- e) routers and specialised communication protocols (Wimax). These devices include specialised software to manage, control and measure the energy delivered with the devices, inclusive of the demand management and revenue management (revenue collection and bookkeeping). This is referred to as their “Thin Client” solution which operates through a Virtual Private Network (“VPN”) system and utilizes their unique “eThin” device. InovaMedia is a partner with InovaSure in the rollout of the installation of the InovaSure distribution devices in the dwellings in the Municipalities where the Energy Vaults are installed, as well as the eThin devices. This includes the informal settlements where electrification is also carried out by InovaSure on a DC power basis.

5. Transaction interfaces allow for:

- a) Integration with the financial settlement systems to accept electronic payments and the devices are managed in real-time through reporting systems;
- b) Monitoring and all relevant activities (by means of dashboard activities).

6. In the case of Kannaland, which does not require a full Energy Vault, we will work in conjunction with the Garden Route District Municipality, extending the PPP arrangement so nurtured, and thereby allowing for the Energy and Water Security elements to be transferred into the District as well. Kannaland itself currently uses approximately 6MW of power. The InovaSure Energy Vault implementation will therefore begin in its first phase in Kannaland with a 4MW Solar Photo

Voltaic installation at a suitable site in the district and a 3,5MW/8MWh battery at the substation/s, along with the installation of the smart distribution devices in all the homes, as well as the Wimax telecommunications network to assist to manage the whole process as well as to provide the benefits mentioned above. In Phase 2, the size of the Energy Vault/s will be increased in order to provide the benefits to the whole district with numerous installations.

HIGHLIGHTING THE IMPLEMENTATION PROCESS OF THE INOVASURE ENERGY VAULT PROJECT

- a) The above system comprises a single unit Inovasure Energy Vault ("IEV") which costs approximately \$50 million for all its elements (or fractions or multiples thereof, depending on the needs and size of the Municipality) of which, we are advised, 200 will be installed in South Africa at an estimated US\$9-10 billion, over an estimated period of 3 to 5 years, as a scalable smart grid solution.
- b) The first Pilot Implementation Project of the InovaSure Energy Vault in South Africa, in Phase 1, will be installed in Kannaland and thereafter further installations in the Garden Route District, and thereafter other Municipalities around the country.

HIGHLIGHTING THE BENEFITS OF THE INOVASURE ENERGY VAULT

- c) *Benefit 1* is that Kannaland (and all other Municipalities who participate in the project in the future) will outsource ENERGY SECURITY in exchange for a simplified service fee per time period and become the owner of the assets provided by InovaSure for its 25 year contract. This masterfully engineered program creates the platform to provide the Utility Provider (Eskom) and the various Municipalities in South Africa to receive the value of the InovaSure equipment onto their balance sheet and to have access to the stored capacity and distribution mechanisms needed to prevent load-shedding or even black-outs

without the loss of income to Eskom, the Municipalities or other customers.

- d) *Benefit 2* of this innovative solution is that a constant energy supply for providers of bulk water provides the catalyst for them to be able to provide Water Security, which is an even bigger risk than ENERGY SECURITY. In fact, energy has monetary and human livelihood implications with certain declared minimums, but water is a constitutional right.
- e) *Benefit 3* to all citizens and clients is a 24-hour uninterrupted secured power supply ("UPS") at an escalation of a CPI (Consumer Price Index) instead of the unexpected and unaffordable energy price increases that African countries have been experiencing the past few years.
- f) *Benefit 4* is that households receive ICT SECURITY due to the presence of the unique LiveSure Thin Client Technology and pre-paid "smart" Distribution Devices.
- g) The estimated energy savings for Eskom in South Africa, for instance, we are advised by InovaSure, will be between 5% and 8% when the whole Energy Vault Program has been installed, equating to some R8 billion investment obo Eskom;
- h) The carbon footprint reduction will be enormous but initially difficult to quantify. A best guess for the whole South African operation, according to InovaSure, is a number of 1 130 000 in CERs (Certified Emission Reductions), the type of emissions unit or carbon credits issued by the Clean Development Mechanism (also called CDM) Executive Board for emission reductions achieved by CDM projects and verified by a DOE (Designated Operational Entity) under the rules of the Kyoto Protocol. The Climate change impact measured in terms of reduction of traditional power use will be between 5% and 8% - we are advised;
- i) The estimated jobs created in construction in South Africa will be approximately 20 000 over an initial 5 year period, many of which will be in Kannaland as the first Pilot Implementation Project of the InovaSure Energy Vault;

- j) The estimated number of permanent jobs created will be approximately 10 000 in South Africa;
- k) In the case of the InovaSure Public Private Partnership ("PPP") Energy Management Agreements completed in South Africa, we are advised by InovaSure, the debt considered to be removed from the various Municipalities' balance sheets, as part of the InovaSure Energy Vault Program, will be equal to the current debt - within 3 years;
- l) Essentially InovaSure enters into B.O.O.T. (Build Own Operate Transfer) agreements with the Kannaland and all the other future client Municipalities;
- m) As mentioned above, the approximate cost of each InovaSure Energy Vault (including the Photo Voltaic Power Plant aspects) is approximately \$50 million, we are advised, with a projected Internal Rate of Return, conservatively, over 25 years, in excess of 90% per annum for the PPP. We are advised that the cost of the Energy Vault implementation/s are being reduced significantly by InovaSure periodically by means of the application of advanced technologies;
- n) With PPP approval of InovaSure's Energy Security Agreement with Kannaland (so-called "ESMA" agreements or "Energy Security Management & Administration Agreements") by National Treasury, under the auspices of the Development Bank of Southern Africa ("DBSA") as the Mandated Lead Arranger and co-funder, InovaSure will effectively arrange to fund the project/s.
- o) In each instance of the InovaSure Energy Vault installation at a Municipality, as was the case with Kannaland, Transaction Advisors carry out a Technical, Financial and Legal due diligence process;
- p) Starting with Kannaland, the deployment of 200 Energy Vault systems in South Africa, we are advised by InovaSure, will significantly contribute to the flat-lining of Eskom short supply in peak demand, as well as the reduction of debt by Municipalities to Eskom and Eskom's concomitant debt to National Treasury;
- q) Household, or other users, buy power on a pre-paid basis. In terms of the InovaSure Energy Security PPP arrangement in Kannaland, InovaSure will assist to manage the flow of

- funds on the basis that all operational costs related to the Energy Vault system are a (securitisable) first charge against the income stream, with Eskom being the second;
- r) If an option to renew is not exercised by Kannaland after 25 years for a further 10 years, the InovaSure Energy Security PPP agreement terminates and the assets are transferred to the Municipal balance sheet (if not done so already);
 - s) All relevant risks and warranties are insured and wrapped by InovaSure, re-insurers and underwriters (including the Multilateral Investment Guarantee Agency (MIGA) of the World Bank) on an AA+ rated basis;
 - t) Agreements governing the basis of the InovaSure delivery of the Energy Vault installations have been entered into between InovaSure and various organizations, underpinned by agreements with various companies and countries, *amongst others*, from the Russian Federation and the Peoples Republic of China, both BRICS partners, who have undertaken to underwrite the technological performance of each of the abovementioned parts of the InovaSure Energy Vault, their manufacture, and also to provide the funding, through the technology suppliers;
 - u) InovaSure will provides risk-mitigated credit quality, customer profitability, an efficient but low overhead structure and scalable growth, high revenue per employee, a risk-adjusted net interest margin and proven underlying technology, packaged innovatively;
 - v) The InovaSure team has vast experience as consulting professionals in power generation, transmission and distribution, general management, project management, smart cities, real estate, treasury and international finance, ICT and the media.

**BEFORE AND AFTER COMPARISON OF THE INOVASURE
ENERGY VAULT/S WITH REFERENCE TO THE KANNALAND
LOCAL MUNICIPALITY AS THE PILOT IMPLEMENTATION
PROJECT**

THE INOVASURE ENERGY VAULT IMPLEMENTATION: COMPARISON OF THE STATE OF AFFAIRS PRIOR TO THE IMPLEMENTATION VERSUS THE SITUATION AFTER IMPLEMENTATION IN KANNALAND		
Before	After	Comments
Power Factor	Power Factor	Power Factor
The current Power Factor (PF) of the Municipalities vary from 0.6 up to 0.82, view have any equipment installed to correct the PF. The net effect is simple to calculate that the direct distribution loss is equal to $(1 - \text{current PF}) \times \text{Total energy acquired}$.	The proposed Public Private Partnership Agreement between InovaSure and the relevant Local Municipality will set the specific terms out as to how InovaSure will install specialised equipment to correct the PF in real time and guarantee the PF in the specific municipal distribution network at 0.97. The net effect is simple to calculate that the direct distribution gain is equal to the (Guaranteed Inovasure	Excessively low power factor increases the required rating of electrical equipment relative to the load supported.

	PF – the Current PF) x Total energy acquired.	
Peak Demand Management	Peak Demand Management	Peak Demand Management
The Municipality has to manage and predict accurately the peak demand in terms of the supply agreement with ESKOM. Failure to comply with the projections attracts very harsh penalties in terms of which a single transgression will attract penalties for a 12-month period after the transgression. Most Municipalities are currently paying approximately 30% of total tariff toward penalties. It is important to	The Public Private Partnership Agreement between InovaSure and the relevant Local Municipality will set the specific terms out as to how InovaSure will install sophisticated equipment to accurately control the injection of energy into the distribution network to ensure balance between the demand and the supply and in addition to accurately control the cost benefit of limiting the acquisition of energy in time to ensure optimal cost of acquisition. This rules-based equipment and software can ensure that the peak demand projections be complied with exactly.	The value of this assurance is approximately 0.3 x Total energy acquired x 12 as a maximum possible liability for a single transgression. Apart from limiting the exceedance of Nominated Maximum Demand (NMD), this typically happens during Peak Periods, therefore also indirectly supporting the grid during peak periods – so it is a win-win situation for both parties.

note that a single transgression will attract twelve months of penalties.	This will ensure that transgressions are not possible which is an assurance that penalties will not be paid.	
Dynamic Tariff Shifting	Dynamic Tariff Shifting	Dynamic Tariff Shifting
Municipalities acquire energy against dynamic tariffs issued by ESKOM. The Tariff structures are complex and time based. The infrastructure of the post and pre-paid meters in this country does not allow the Municipality to pass the dynamic nature of the cost of acquisition on to the consumer.	InovaSure will deal with this issue in four ways. 1) Dynamic Tariff Shifting, 2) Intelligent Distribution Devices, 3) Incidental Savings to ESKOM and 4) Incidental Savings in Distribution Capacity. The first step will be to install equipment to manipulate the demand in many respects. The proposed Public Private Partnership Agreement between the relevant Local Municipality and InovaSure will set out the specific terms of how InovaSure will store energy on behalf of the Municipality during off-peak times and at low tariff from 11pm up to about 5 am	

	<p>and release the power intelligently during on-peak tariff from 6am to 8am into the Distribution Network.</p> <p>This will protect the substation maximum capacity and minimising the cost of acquisition. The same equipment is then used to store energy produced by the Municipality (described in another section of this document) to prepare for the evening peak starting at 6 pm up to 10 pm - ensuring lowest cost of energy acquisition during peak tariff. The net effect of both cycles is approximately a 40% saving in the cost of the yearly acquisition of energy.</p>	
Tariff Escalations	Tariff Escalations	Tariff Escalations
Currently the ESKOM energy tariffs have escalated by	InovaSure will install equipment to generate energy on behalf of the Municipality of	The terms of this agreement that will be detailed in the proposed Public Private

<p>400% over the past 10 years. It poses significant challenges to any Municipality to deal with passing the cost on to the consumer. The tariff increases are dynamic time-based tariffs and the Municipalities only have a fixed base tariff as an exit.</p>	<p>which total production will be stored for the benefit of the supply during the evening peak. This means that the total production of energy by the Municipality is effectively replacing the cost of peak acquisition.</p> <p>This means that the net present value of the equipment must be calculated against the future acquisition of peak energy. The current escalations in Peak approximate 18.78 % yearly and it is not anticipated that this will follow CPI in any way even by the own submissions of ESKOM. The 9 month peak tariff is R2.84/kWh and for 2 months per year over R3/kWh.</p>	<p>Partnership Agreement between InovaSure and the relevant Local Municipality, is for the generation of 50 MW_p Energy for a period of 50 years. The energy is used to mitigate the risk of the tariff increases and is focused on the cost of evening peak energy. The NPV discounted at 11% price escalations of CPI surpass the total InovaSure capital cost for the project.</p>
<p>Incidental Savings to ESKOM</p>	<p>Incidental Savings to ESKOM</p>	<p>Incidental Savings to ESKOM</p>

Dynamic Tariffs were introduced by ESKOM to pass the cost of generation on to the end user, at different time of the day as well as to entice the user to buy energy at other times of the day.	InovaSure installs equipment to use these tariffs and manipulate the time of use of energy to ensure that the Municipality benefits from these tariffs. The net effect is, however, that ESKOM also benefits from this implementation. During the past years, ESKOM implemented a rebate for energy injection at Peak. It was abandoned for many reasons but the invitation to apply jointly for the reinstatement is under discussion between ESKOM and InovaSure under the advice of the Central Energy Fund group of companies.	The value in terms of the historical rebate is R1.4/kWh.
Intelligent Distribution Devices	Intelligent Distribution Devices	Intelligent Distribution Devices
The Municipalities are currently selling energy through	InovaSure will install state-of-the-art pre-paid Distribution Devices consisting of an open-source	These devices will allow the Municipality to reconcile (in real-time) the energy being acquired with the

<p>obsolete devices, which in most instances do not function properly anymore.</p>	<p>electrical meter, compliant with the standards in South Africa. The device is Internet compliant and has an accessible Operating System. The Device will include a router operating system which can route traffic between the onboard devices ie. WiFi, WIMAX, Meter, Smart devices. The Device will include several Radios for communication - a 300 MHz backup communication device as well as the 2.4 GHz and 5 GHz radios and a LTE broadband external communication device. The device has the capability to communicate with at least eight electrical switches to do demand management on behalf of the client to limit energy cost due to time of use tariffs.</p>	<p>energy being sold. There is currently no Municipality in South Africa which can do this and the value is therefore extremely high. The real-time reconciliation is a powerful tool to determine the condition of the distribution network. Any illegal connections will be identified immediately.</p> <p>The ability to manipulate the demand in the selection of eight domains in the house gives the ability to manage cost against time of use tariffs.</p>

Incidental Savings toward investment in Distribution Capacity	Incidental Savings toward investment in Distribution Capacity	Incidental Savings toward investment in Distribution Capacity
<p>Urbanisation did not stop or decrease over the past decade due to the poor performance of the economy. This resulted in many of the Substations in the various Municipal distribution networks being under-capacity.</p> <p>ESKOM's inability to further invest in the capacity resulted in Municipalities requesting financial aid from National Treasury. We are being informed that that is estimated to be</p>	<p>The InovaSure Energy Vault protects the substation against peak utilisation and will increase the total net capacity by 30% and ensure additional use in off-peak energy distribution and on-peak protection and energy injection.</p>	<p>It could easily be argued that the net effect of this assurance can be valued at 30% of the installed capacity of each Energy Vault. The peak production is 10MW and the maximum off-peak acquisition is 10MW. If we assume a 50% difference between peak and off-peak, the capacity increase will be 40% on a typical 25MW peak substation.</p>

approximately R115 Billion in total.		
InovaSure "eThin" Technologies	InovaSure "eThin" Technologies	InovaSure "eThin" Technologies
Some Municipalities have been actively pursuing the installation of a public Wi-Fi system to ensure public access to the Internet.	InovaSure will install broadband connections to each Distribution Device (pre-paid "Smart meter") in each house in each Energy Vault deployment area. This broadband connection will be used to access the server and cloud technologies developed by InovaSure. These technologies include the ability to connect to a cluster of servers from remote devices using a secure Virtual Private Network (VPN) with a high degree of (incretion) encryption and compression. This secure connection will be maintained to uniquely identify the user as well as to ensure privacy of the	InovaSure built this technology base to explore the possibility of curbing illegal connections as well as to counter the animosity towards metered electrical distribution. We have tested the outcome and the results were overwhelmingly positive. Home owners presented with the ability to stream entertainment content through the Distribution devices as well as access the Internet and educational content do not interfere with the operation of the Distribution devices.

	<p>end user data and to protect the cluster of computers. InovaSure will maintain the integrity of the cluster and will create Geo-Clusters to ensure Redundancy. InovaSure has entered into a Joint Venture with various companies, including Rapid Blue, to obtain unique content inclusive of Movies, Books and Music - inclusive of customised and curated educational content which includes the CAPS curriculum. The InovaSure "eThin" devices will be used to access the content via the distribution devices and the custom devices. The final service is to connect the "eThin" device to a Virtual Computer which is then the Personal Computer of the home owners where the device has been installed and that stays with the dwelling</p>	
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	for the extent of the service being offered. The operating systems of the Virtual Computer and the software installed on the computer may be pre-selected by the home owner.	
Indigent Electrification, Water and Sanitation	Indigent Electrification, Water and Sanitation	Indigent Electrification, Water and Sanitation
The Municipalities have an obligation to supply services to all the people in the relevant Municipality / Municipal district. There are a lot of indigent informal settlements posing a significant challenge to the Municipality. The cost of reticulation is in	InovaSure and its collaborators have been successful in the design and implementation of a DC electrification and telecommunications process for informal settlements and have deployed thousands of these systems already the so-called "LivPak" system. These systems have recently integrated-with the InovaSure "eThin" technologies and the first LivPak total solutions are being installed in Kannaland,	It is widely accepted that the cost of reticulation to the indigent household is in the order of R38000. This cost is being mitigated in total since InovaSure does the electrification independently which is a relationship between the InovaSure LivPak Co-operative in each community, its collaborators and the Home Owner. The "eThin" technologies are contracted independently and

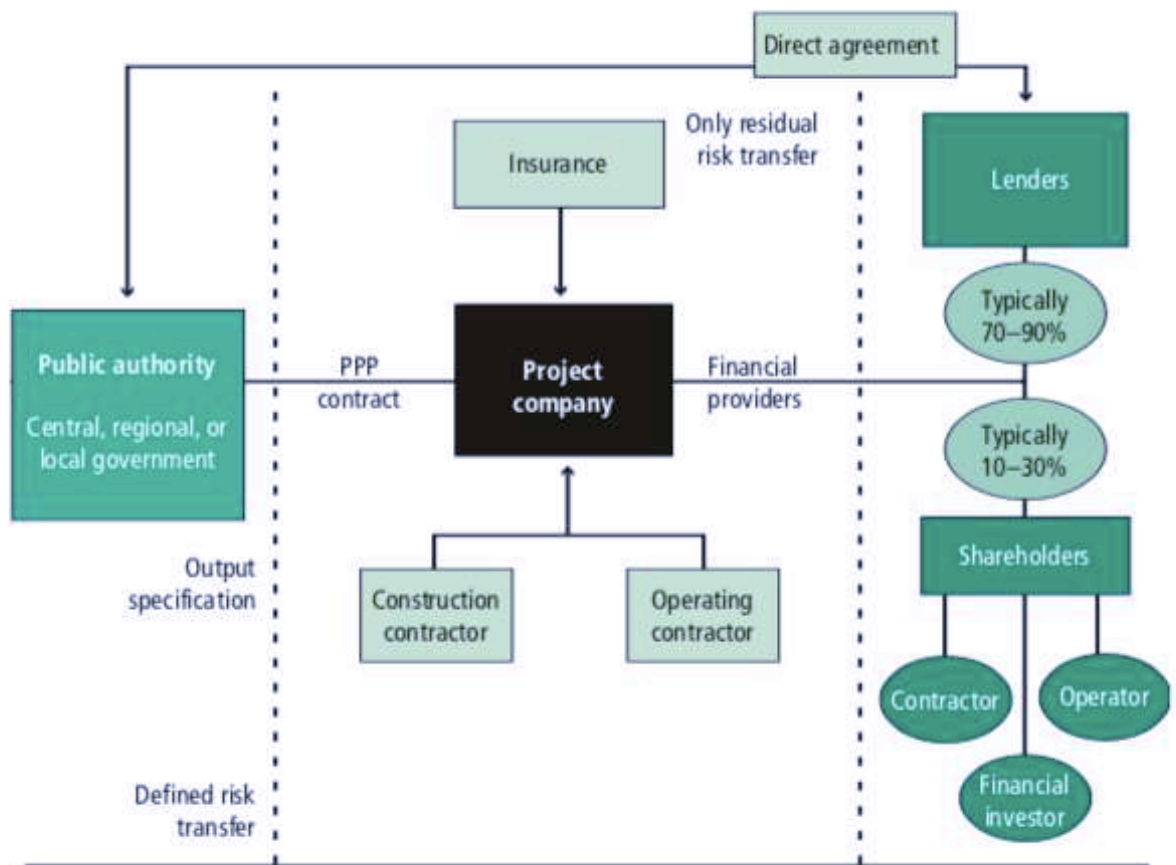
most instances prohibitive.	Diepsloot, Mabopane and George.	operated within a Co-operative structure.
InovaSure Collection Services	InovaSure Collection Services	InovaSure Collection Services
Municipalities employ a large number of personnel to read the meters, process the data and issue invoices.	Changing the current infrastructure with pre-paid distribution devices as well as sophisticated software, eliminates many inherent risks with the retail of energy and results in a 100% collection rate.	The value is relatively simple in understanding the current debtors book - looking at the age analysis and understanding the post implementation resulting sales since real time reconciliation is possible.
InovaSure Securitisation Services	InovaSure Securitisation Services	InovaSure Securitisation Services
Municipalities purchase energy from ESKOM and in some instances struggle to pay for the energy in time or in part.	InovaSure will replace the infrastructure with Advanced Distribution Devices which will ensure detail control over every aspect of energy distribution. The aspects of the services delivered to the end-user includes energy distribution but has many other very popular aspects to it. The fact that the	It is conceivable that with this in hand, InovaSure could ensure the payments toward ESKOM in return for some preferential treatment in tariff. It is suggested by InovaSure that a structured Power Purchase Agreement be negotiated and the payments be assured to

	energy is bought from the supplier but has already been sold, makes for a very secure counter party risk portfolio from ESKOM's perspective.	create value in the balance sheet of ESKOM. This enhancement of the Municipal payment capability will have a profound impact on its liquidity as well as its credit rating.
InovaSure "Ensurance"	InovaSure "Ensurance"	InovaSure "Ensurance"
	InovaSure will "ensure" all the equipment for the period of installation and operation as a form of back-to-back warranty in conjunction with each component supplier that makes up the Energy Vault.	

THE SPECIFIC PUBLIC PRIVATE PARTNERSHIP MANAGEMENT PLAN

1. STRUCTURE

The following is the proposed structure of the Inovasure Kannaland energy vault Public Private Partnership, which will be finalized by Kannaland and InovaSure in conjunction with the Transaction Advisors and the Development Bank of Southern Africa as the Mandated Lead Arranger on behalf of the funders:



2. The Management Plan

The Contract Management Plan (CMP), which will be further elaborated once the project funding has been finalized by the Transaction Advisors and InovaSure, in conjunction with the Development Bank of Southern Africa as the Mandated Lead Arranger, describes:

- The composition and responsibilities of the contract management unit within the Kannaland Municipality;
- Procedures for dealing with contractual events in the various stages of the implementation of the PPP project;
- The performance criteria, monitoring system, and other deliverables/liabilities under the PPP agreement; and
- Procedures for reporting and disclosure of PPP performance to the Kannaland Municipality government and stakeholders.

3. Performance Monitoring

Kannaland's PPP Management Unit (Committee) will carry out Performance Monitoring as its most important monthly task.

The Contract Management Unit will receive and review periodic (monthly or quarterly) performance reports submitted by the InovaSure and the Independent Engineer. In addition, it will conduct scheduled and random inspections to identify performance shortfalls. The Contract Management Unit will also seek feedback from end-users in the Municipality, as a part of its monitoring responsibility.

4. Changes, variations and Amendments

Due to the long duration of the InovaSure Kannaland Energy Vault PPP agreement, changes may be needed to address a change in circumstances, for example, new technologies may emerge that justify changes of service specifications or data on which the project is designed, may prove inaccurate.

These changes may also be needed to address errors in project development, where preparation fell short.

The PPP Agreement provides for mechanisms to address such needed changes, in particular a variations procedure (also known as a change procedure) for minor changes to be made and agreed by Kannaland and InovaSure.

Changes that do not fall within the variations procedure or which require more fundamental changes to the contract which will require renegotiation, also have a special regime specified in the PPP Agreement. The Kannaland PPP Contract Manager (being the Municipal Manager) will assess the variation or renegotiation proposal and undertakes the required steps to obtain approval in terms of either the PPP Agreement or the procedure prescribed by it.

Renegotiations, in particular, will be managed in a strategic and transparent manner to prevent abuses and ensure buy-in from the key stakeholders to the Kannaland InovaSure Energy Vault Project and avoid disputes.

5. Payment Adjustments

The PPP Agreement establishes a regime for availability payment or tariff increases over time, and also provides for some compensation or other remedy where the tariffs are not able to meet expectations. The Contract Manager will secure internal approvals for time-based availability payment or tariff increases and assess requests for adjustments or compensation, if applicable.

6. Compensation and Relief Events

The InovaSure Kannaland Energy Vault PPP agreement provides for a regime to protect the Private Party (InovaSure) from the impact or risks borne by the Municipality, for example, where the Municipality is late in providing assistance, documents or fulfilling other duties. The event, compensation, extension of time and procedure for handling requests are defined in the PPP Agreement. Relief requests by InovaSure will be assessed by the Contract Manager.

7. Refinancing

The debt financing of the InovaSure Kannaland Energy Vault Municipal PPP project is priced against the risk borne by the InovaSure, which includes construction of the various facilities and the mobilization of operations. Once the construction is complete and operations are successfully launched, the project risk will be significantly lower. It is possible that InovaSure may want to refinance the Energy Vault project to take advantage of the lower debt costs, and therefore improve equity return. The Kannaland Municipality will share in the refinancing gain and has therefore provided for a mechanism for this in the PPP Agreement.

Since the project financing as arranged by InovaSure is based on short to medium-term debt, the project may need to go back to the financial markets at the end of the term of the original project debt, to refinance the project debt. InovaSure will take the risk that this refinancing will be costlier or might not be available at all.

8. Expiry of PPP and Handover of Energy Vault Assets (Build Own Operate Transfer or “BOOT” Basis)

The initial PPP contract period with InovaSure is 25 years. Three years before the end date of the PPP agreement, the Contract Management Unit, under the guidance of the Municipal Manager, will start to prepare the handover of the project’s assets from InovaSure to the Municipality. The handover regime is set out in the PPP Agreement. Well before the end date of the PPP Agreement, the Municipality must decide on how the project services will be provided after the termination of the PPP Agreement – assuming that Kannaland does not decide to extend the PPP contract management aspects of the PPP Agreement with another 10 years as provided for. This decision will be taken at least two years before the end date of the PPP Agreement so that there is enough time to train it’s the Municipal staff on the project operations and maintenance.

The PPP Agreement identifies which assets will transfer to the Municipality and when, as well as the conditions those assets must be in at transfer. Kannaland and InovaSure will review together the condition of these assets some two years months before hand-over. Based on this coordinated review, the Parties will effect the transfer process.

9. Conflict Management and Dispute Resolution

Because PPPs are complex, it is natural to expect that at some point during the contract there will be disagreements about performance levels and about payment amounts, payment deductions, or other important issues. As there may be several stakeholders involved in any of these disagreements (investors, banks, Municipal departments, Municipal finance office, etc), all parties to the Kannaland InovaSure Energy Vault PPP need a clear, fair, and cost-effective way of resolving any disagreement so that the project can continue to operate and the partnership continue to benefit all partners and the end-users continue to get uninterrupted services.

The PPP Agreement makes provision for the fact that conflict management and resolution will be implemented as soon as possible after a conflict arises, before it becomes a dispute or impedes the project. Conflict management may involve formal review processes, elevation of issues to different levels of management, and most

importantly— communication. The Contract Manager at Kannaland will play a central role in conflict management and will be responsible for keeping open lines of communication and proactively addressing conflicts where they arise.

If conflict management fails, as according to the PPP Agreement, disputes will be submitted, in the first instance, to internal processes to be resolved, and failing that to mediation and/or expert resolution, to provide additional data to the parties and provide a more structured platform of communication. As a first step, problematic matters will be escalated to a senior executive level, being the Contract Manager at Kannaland (the Municipal Manager) administration and the Managing Director of the Kannaland InovaSure Energy Vault Holdings PPP Special Purpose Vehicle (SPV).

Annexure I1



The InovaSure SGL Power Team - Projects

The team has detailed knowledge of all conventional power generation technologies, from small high-speed to large low-speed dual fuel reciprocating engines, aeroderivative and industrial gas turbines, combined cycle plant as well as large utility-scale coal-fired power generation. Team members have done a number of studies for renewable energy including utility-scale solar, as well as the utilisation of non-conventional energy sources such as waste heat and pyro-metallurgical off-gasses.

We perform studies for technology option analysis, development of design and detailed estimates of plant for bankable feasibility studies, develop enquiry documents (e.g., technical specifications, datasheets, request for proposal, power purchase agreement, gas purchase agreement, etc.) for plant on EPC, EPCM and IPP basis, perform detailed bid evaluations, develop detailed O&M cost estimates and electricity cost analysis, do detail design, provide specialist support for procurement and general engineering support for construction.

A typical project would feature being at least 600km from the nearest infrastructure with extreme ambient conditions, requiring a multi-fuel capability to ensure supply security, with no connection to a grid typically require n+1 redundancy of units. Construction and operational logistics need to be considered with the client typically a consortium of companies with varying levels of interest in different parts of the project.

Our team has a solid understanding of Advanced Analysis, with CFD, FEM, heat balance modelling, hydraulic calculation, pressure vessel and heat exchanger / boiler design as well as specialised high pressure - high temperature piping systems design. This is applied as appropriate in all phases of project development, including the investigation, remediation and optimisation of existing plant.

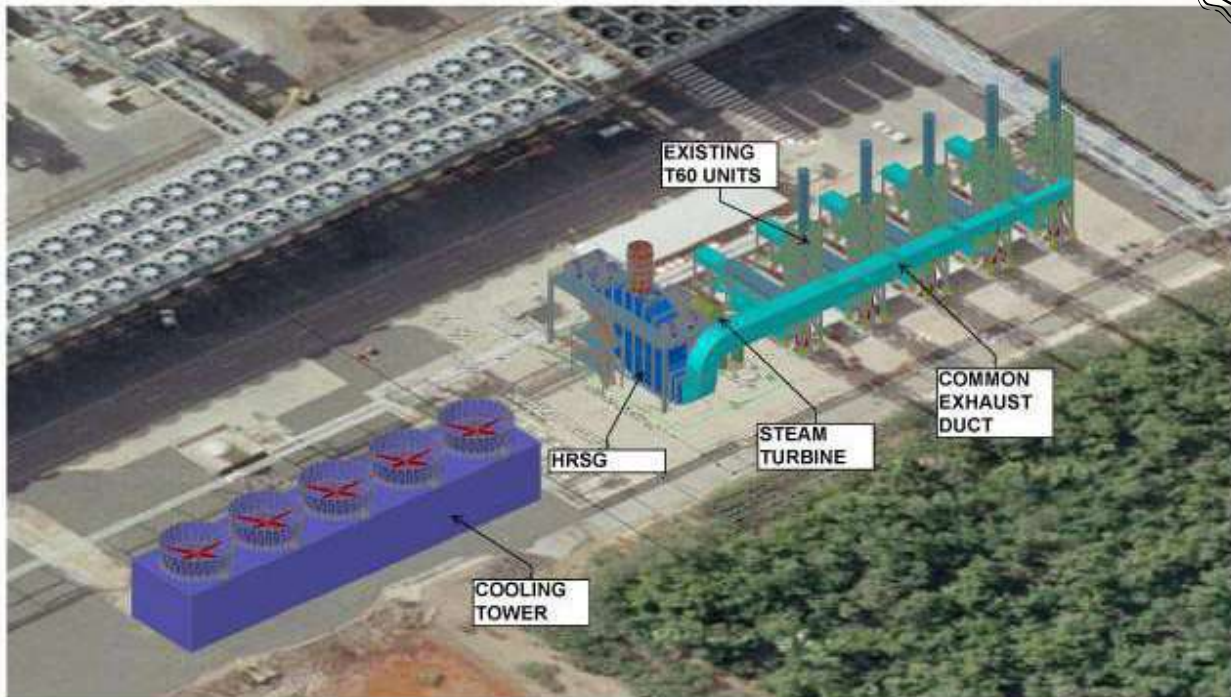
Most team members have site experience, either with construction or with O&M support.

Yarnima Power Station, Australia



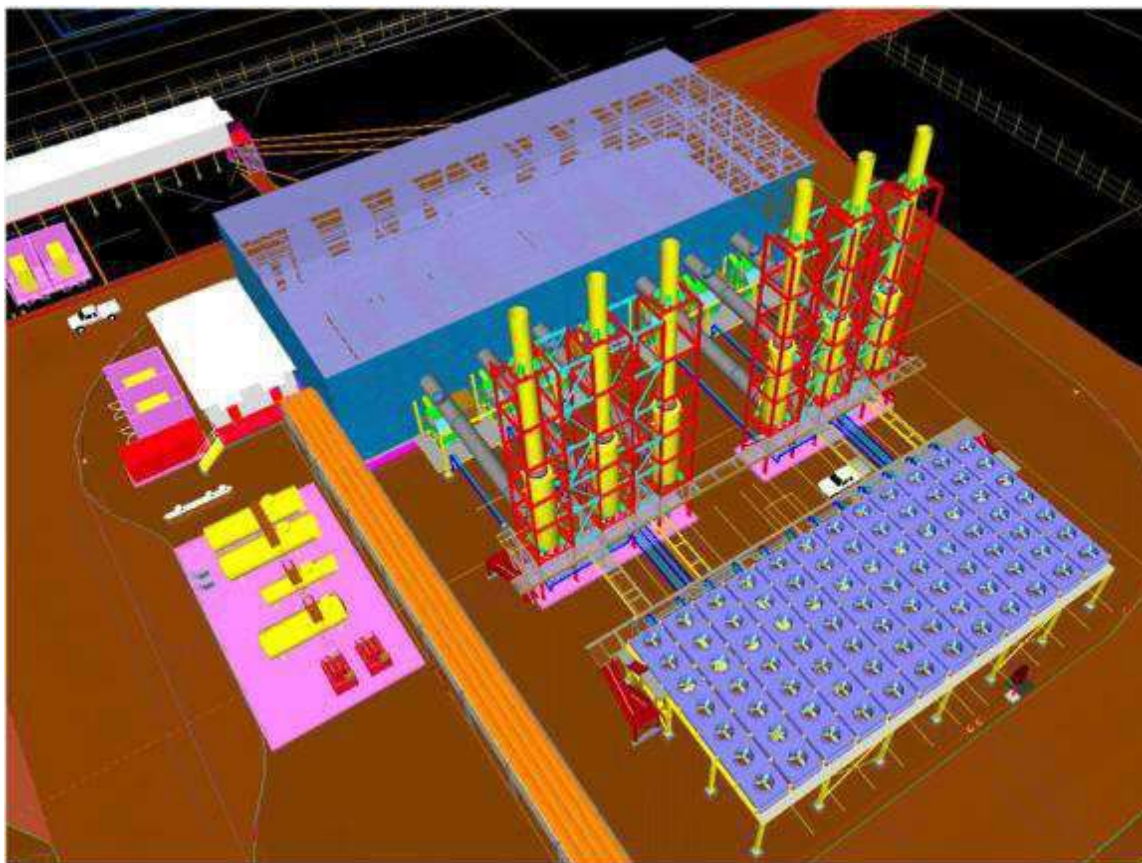
The design utilises 3x Siemens SGT-800 gas turbines connected to 2x Siemens SST- 400 steam turbines with a total system installed capacity of 192MW with an average design load of 140MW. Evaporative inlet coolers as well as substantial supplementary firing of the HRSG units provide cost-effective redundancy while minimising heat rate. The plant is dual-fuel capable, but normally operates on natural gas. The detail design and project delivery was on an EPCM basis.

ConocoPhillips LNG plant waste heat recovery, Australia



This study investigates the feasibility of installing one or more waste heat recover units (WHRUs) into the existing on site power generation (OSPG) facilities for an LNG plant, as well as the potential for obtaining tax credits for related abatement of carbon emissions. Results of the study were to be used by the plant owner to identify concepts, costing and emissions reductions and undertake further evaluation and development. The study outlined that while there were some carbon emissions benefits in installing additional WHRUs into the existing exhaust stacks of the OSPGs, it would not significantly increase power production. Layout constraints required innovative concepts for the HRSG design.

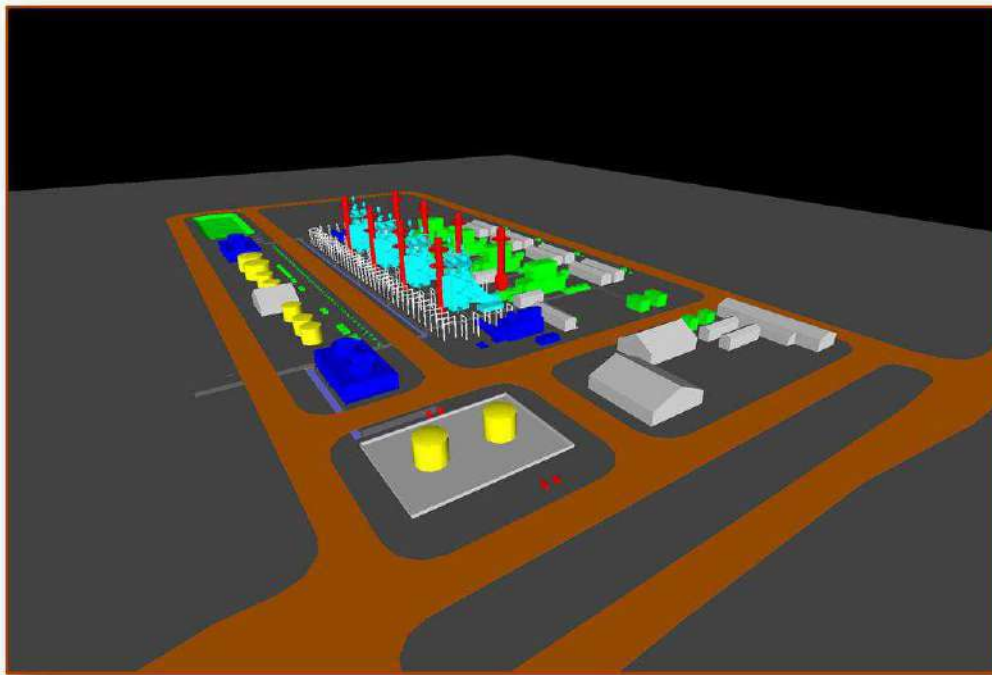
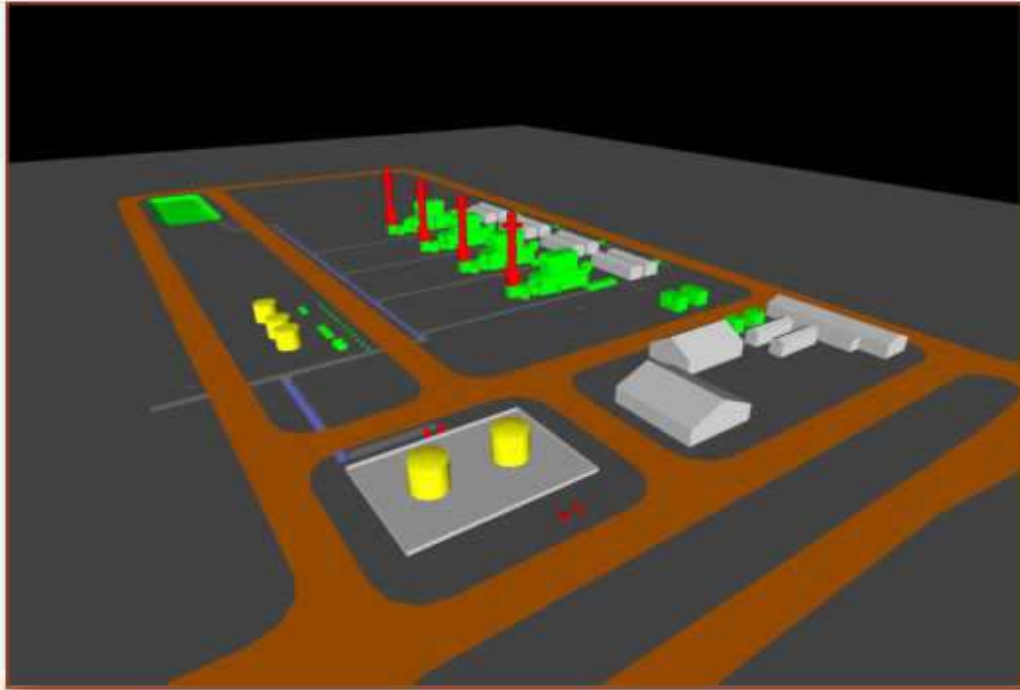
Wadi Sawawin Iron Ore processing plant, Saudi Arabia



The proposed project includes a mine and a port with an iron ore processing facility. A power station forms part of the port operations. It was concluded during the study that a combined cycle solution would represent the most favourable solution for the project considering all the social, commercial and environmental issues associated.

We developed a conceptual design based on GE Frame 6 gas turbines in combined cycle configuration using Heavy Fuel Oil (HFO). The design includes a fuel treatment plant and a seawater-based Flue Gas Desulphurisation (FGD) plant. Other options considered uses Frame 5 turbines in combined cycle, a conventional thermal plant as well as a reciprocating engine plant based on the Wartsila W18V46DF units.

Southwest Creek Power Station, Port Hedland, Australia

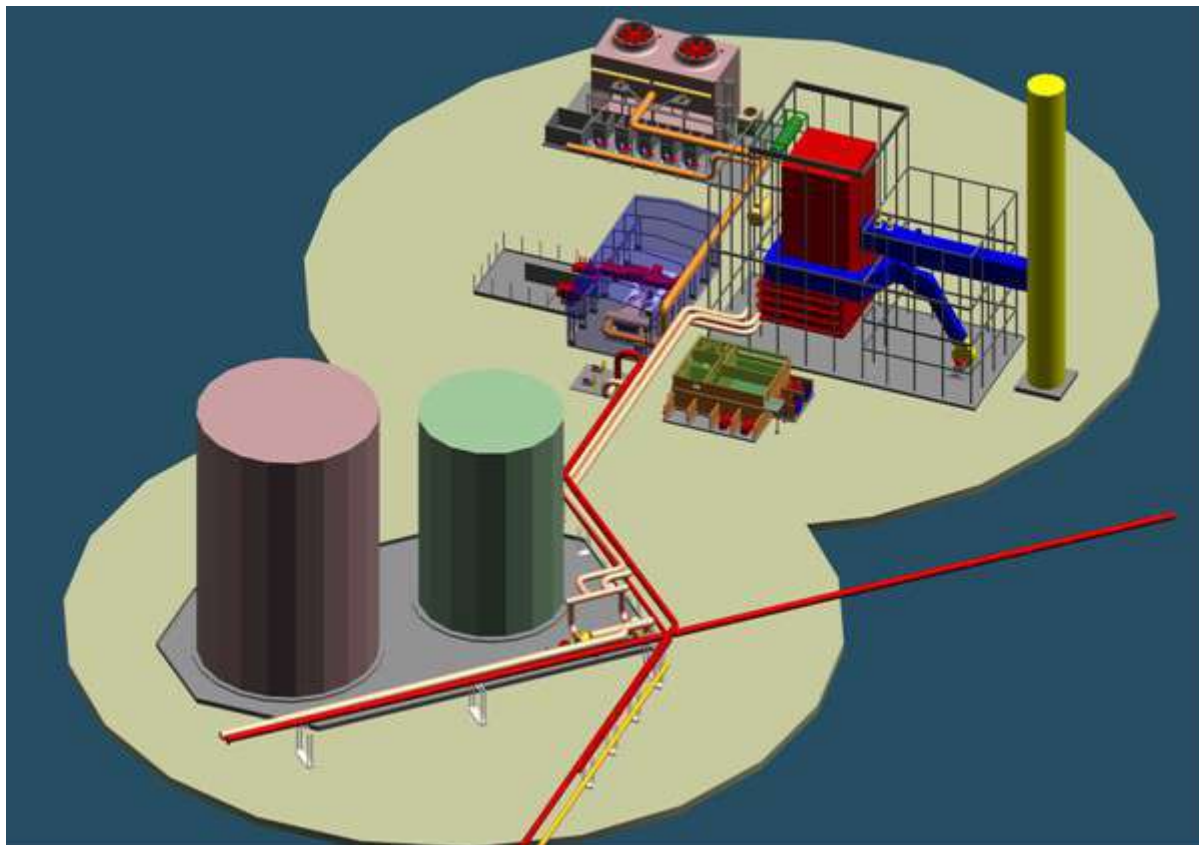


This Definition Phase Study proposes the development of a stand-alone power station using four Open Cycle Gas Turbine Generators (OCGTs) to provide generation capacity for power needs at a port ore processing facility.

Where appropriate, provisions are made for a future 4x4x2 Combined Cycle extension, with services selectively placed below and above ground to allow for the uprating of the power station while it remains operational.

The progressive development of the plant will match the growing power demand while providing an orderly and achievable schedule for the development of the ultimate CCGT station. The plant layout includes provision for future station expansion beyond current configuration being studied, i.e. 6x6x3.

Mittal Steel Power Project, South Africa



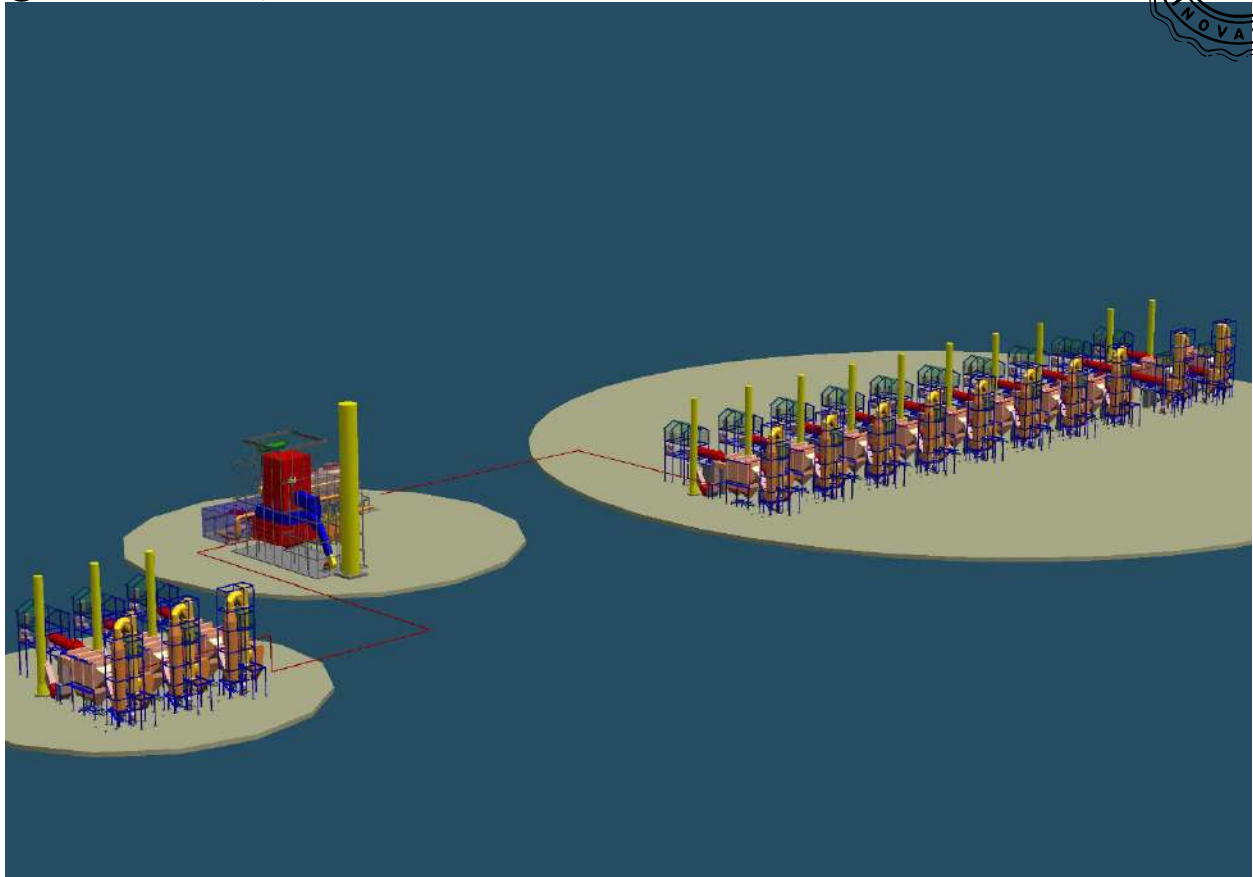
The project is a Brownfield's Power Generation Plant for a steel producer. The project entails converting the current flared furnace off gasses, excess gasses not currently consumed by plant processes and such other gas as the client intends to make available for this project into electrical energy and process steam.

Three streams of off gasses are considered namely Blast Furnace Gas, Coke Oven Gas and Basic Oxygen Furnace Gas. These gasses are created as by-products of the various smelter and oven processes and excess is currently being flared to atmosphere.

This detailed feasibility study phase of the project considered the most viable options for the recovery of these gasses and the conversion of the excess gas into electrical energy. This study includes economical evaluations and any commercial processes that could be to the advantage of this project.

The plant has a generation capacity of 130MW of electrical power based on the gas streams available and technology to be used. The saleable quantity will however be limited to 108MW due to the internal use of electricity for auxiliaries and gas collection plant.

Highveld Steel, South Africa



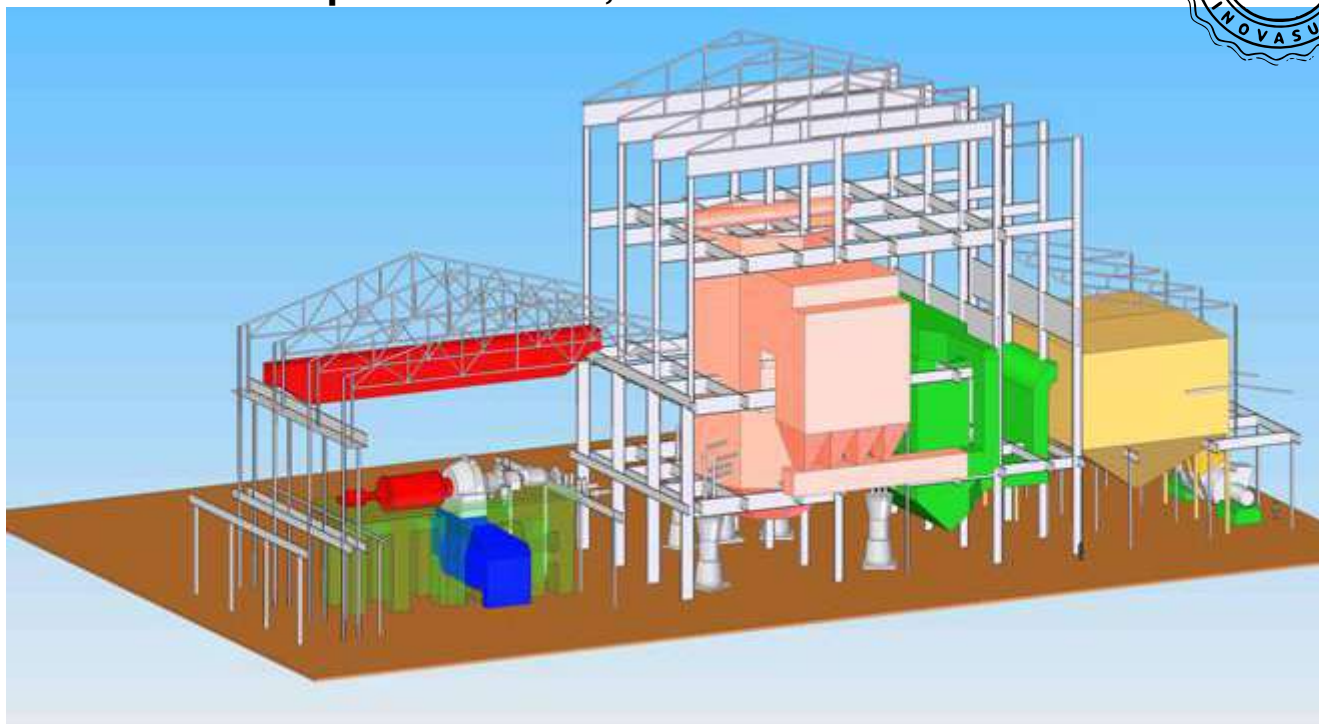
The project is a Brownfield's Power Generation Plant. The project aims to convert the sensible heat in the kiln off gas as well as current flared furnace off gasses into electrical energy.

The kiln off gas originates from 13 kilns split between Iron Plant 1 and 2 (IP1 and IP2) where it is currently quenched to reduce temperature to levels acceptable to for ESP operation. The furnace gas originates from closed submerged arc furnaces, used to for final oxide reduction. The sensible heat in the kilns is currently going unutilised while the furnace gas is partially utilised in the processes employed by the steel production process.

This detailed feasibility study considers the most viable options for the recovery of heat from these gasses and the consequent conversion into electrical energy. The criteria for viability included not only cost but also operational impact on the kilns in that the Power Plant will become an integral part of the plant operation.

The plant has an installed generation capacity of 250MW of electrical power based on the gas streams available and technology to be used. The production at any given point in time will be dependent on the operation of the kilns and the amount of furnace gas available. With the amount of kilns operated it is envisioned that the heat recovered from the plant would be smoothed by the number of heat sources tapped. The maximum electrical output expected from the plant is 220MW when considering the heat sources available.

Retrofit Komati power station, South Africa



It is common practice to "mothball" power stations that are significantly beyond their design life. While the economic case may be ambiguous at the time of such a decision, it becomes even more challenging when considering the challenges of recommissioning such assets. Considering the likelihood of extensive non-compliance with updated standards, finding suitable replacement materials for legacy components and then formulating reliable welding processes to join old to new is par for the course.

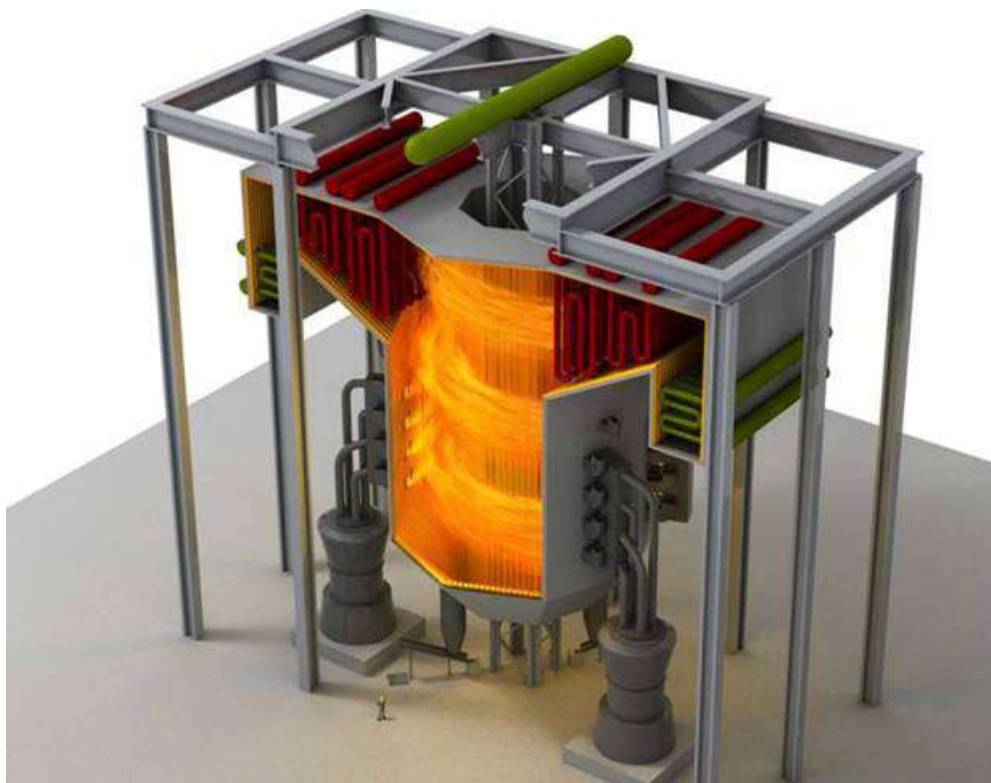
Apart from the technical difficulties, a refurbishment program depends on a systematic approach of: Inspect, Evaluate, Refurbish/Replace. It is therefore only possible to order components after inspection, which constrains schedule and invariably compromises budgets.

Having performed mostly partial replacement of plant components, the resultant plant is reconditioned at best, does not have the expected life of an equivalent new plant, and at best approaches the lower efficiency of a design typically more than 40 years old (in this case, 26%).

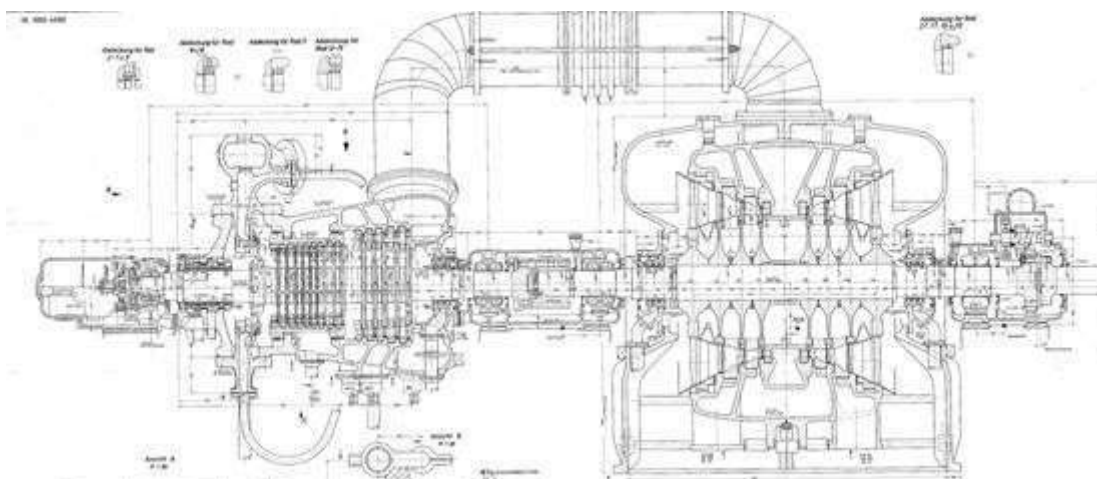
With this study we demonstrated that 2-for-1 main equipment unit replacements could be used to render a solution with significantly increased output with modern cycle efficiency (37%) and at a cost similar or less to that of refurbishment. Such replacement would be quicker than inspect-order-replace, and render a power station with the design life of a new plant.

Option	Cost estimate (mil USD)	Gross output	Net output	Cost USD/kW	Heat rate kJ/kWh	Coal consump tion kg/s
New station 1-7	\$1,575	772	717	\$2,196	10,909	82.1
Replace 1-7	\$1,507	772	717	\$2,101	10,909	82.1
Refurbish 1-7	\$707	641	588	\$1,202	13,846	84.6
Replace 1-7 with 4x180MW	\$720	709	659	\$1,093	9,888	68.5

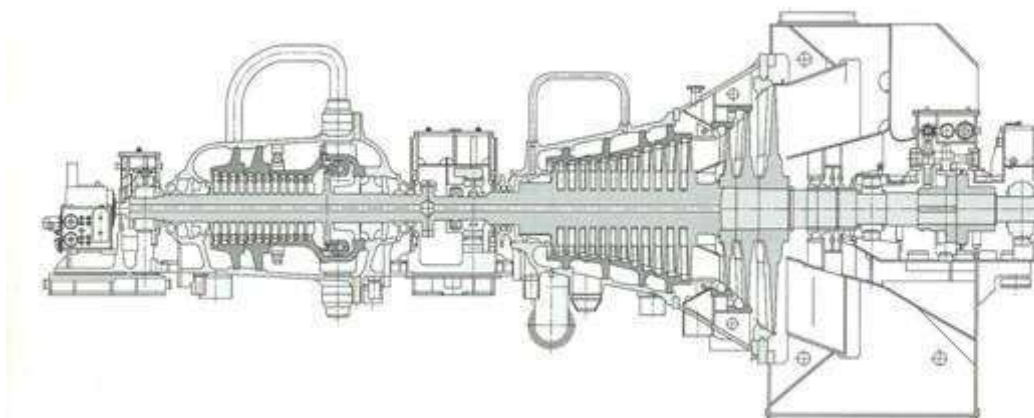
Option	...	CW flow kg/s	Flue gas flow kg/s	Demin makeup kg/s	Cooling tower makeup kg/s	Ash flow kg/s
New station 1-7	...	23,792	1,014	2.26	610	11.1
Replace 1-7	...	23,792	1,014	2.26	610	11.1
Refurbish 1-7	...	23,792	1,041	2.1	681	11.1
Replace 1-7 with 4x180MW	...	18,492	846	1.4	474	9.2



Replacement 180MW boiler



Existing 100MW steam turbine



Replacement 180MW steam turbine (onto existing foundations)

Southern Seawater Desalination Plant, Australia



The first phase Southern Seawater Desalination Plant near Binningup was delivered in 18 months from award of contract by a public-private partnership between Water Corporation and the SSWA Consortium, with the second phase started during completion of the first.

It was constructed in 2 phases of 50 billion/year each at a reported cost of \$995million (AUD).

Environmental management consultancy 360 Environmental was commissioned in July 2007 to conduct flora and fauna investigations at the plant and pipeline locations.

KBR was engaged to undertake an oceanographic survey, preliminary diffuser design, marine hydrodynamic modelling, coastal processes, sediment characterisation, water characteristics, bio-monitoring and benthic habitat studies.



A noise survey was completed by Herring Storer Acoustics. The social impact assessment and sustainability statement were completed by GHD.

Brad Goode and Associates was commissioned in January 2008 to conduct a Site Identification Aboriginal Heritage Survey. WorleyParsons had undertaken comparison of the three shortlisted sites.

The Southern SeaWater Alliance (SSWA) was awarded the design, build and operate (DBO) contract for the desalination plant in late June 2009. The SSWA consortium is headed by two multidiscipline construction companies, Tecnicas Reunidas (38%) and Valoriza Agua (38%). Engineering consultancy firm WorleyParsons (five percent) and construction company AJ Lucas (19%) are the partners.

The DBO contract entitles SSWA to operate the plant for 25 years. Design and installation of seven sectional bolted tanks for the second phase of the project was contracted to pmt Water Engineering.

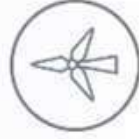
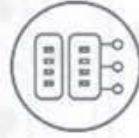
Energy Recovery has been contracted to supply its PX Pressure Exchanger (PXa) devices for the second phase of the project.

Annexure I2



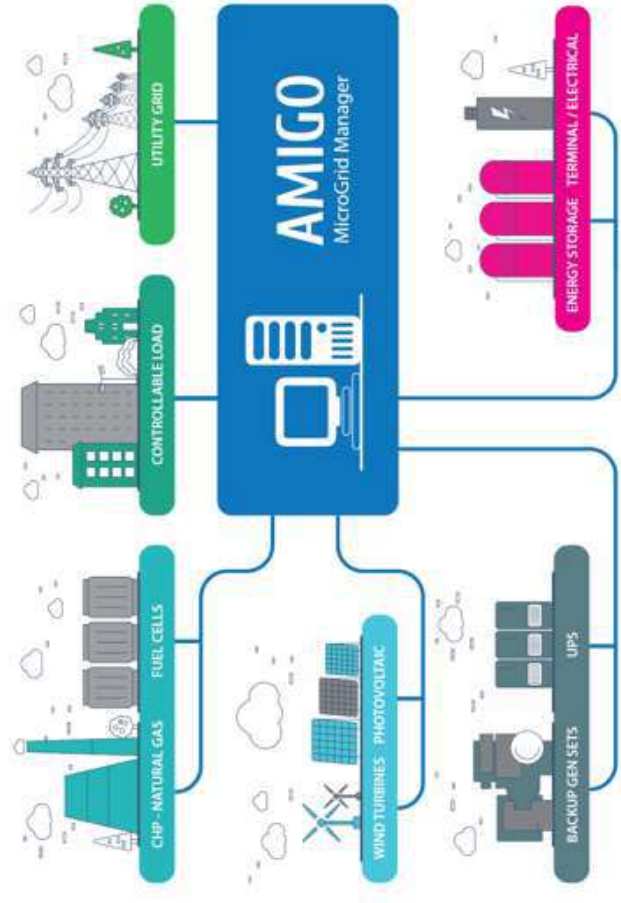
IN COLLABORATION WITH GLOBALLY ACCREDITED COLLABORATORS

THE INOVASURE VIRTUAL POWER STATION & SOLUTIONS FOR SMART GRID



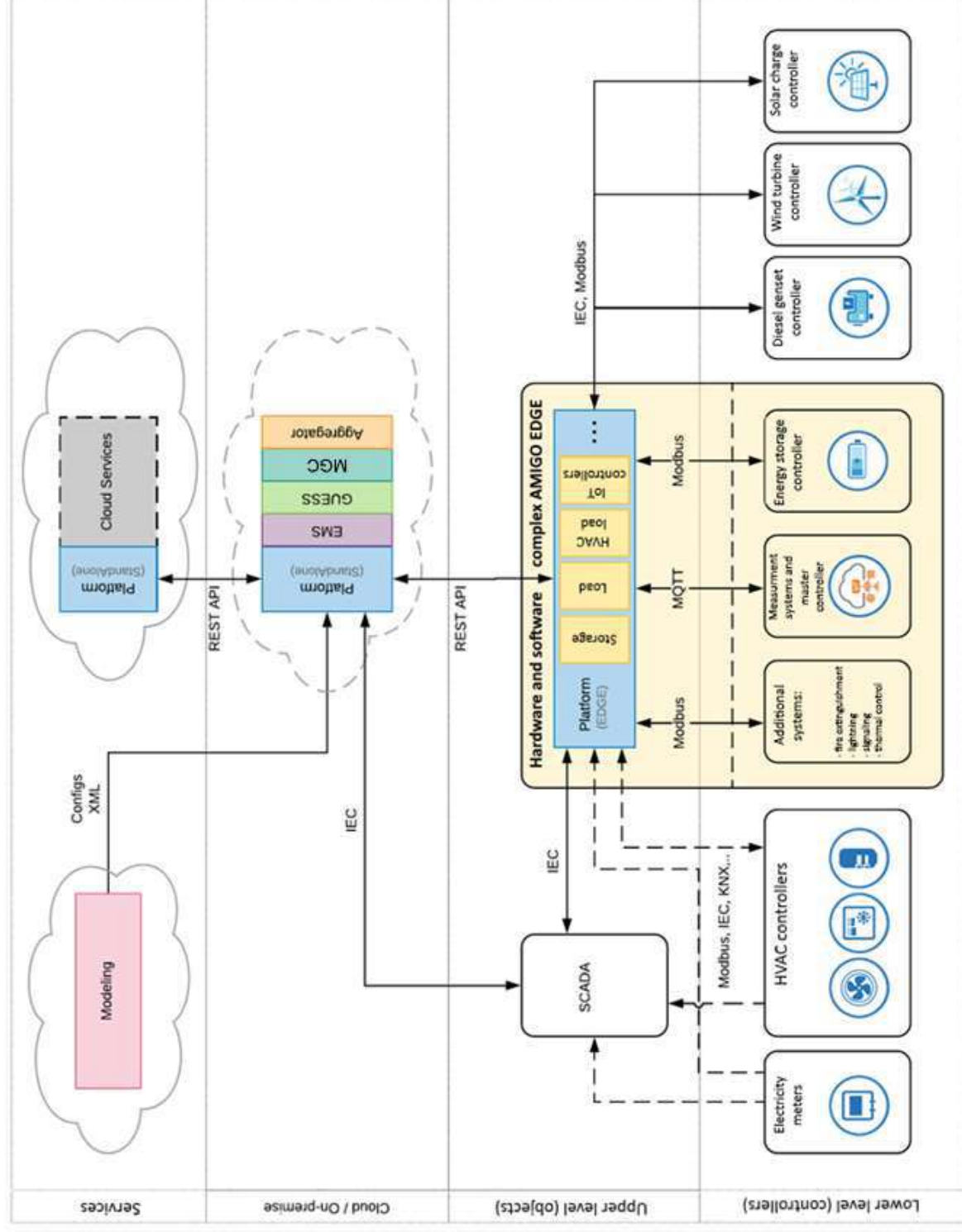
INOVASURE PROVIDES POWER ENERGY INDEPENDENCE: AMIGO – ADVANCED MICROGRID OPTIMIZATION

AMIGO applies coordinated control and energy management functions to Microgrids that incorporate: distributed energy resources, storage systems, local volt/var controls, demand response units.



Advantages:

- // Optimization of energy costs
- // Reduction of operating costs
- // Forecasting
- // Islanding
- // Implementation of VPP algorithms
- // Scalability and interoperability
- // Automatic control
- // Loss reduction and improvement of power quality and reliability indexes



AMIGO ECOSYSTEM

➤ AMIGO EMS

Energy management system

➤ AMIGO GUESS

Grid Utility Energy Storage System

➤ AMIGO MGC

Microgrid Control

➤ AMIGO EDGE

Robust local control system for storages and other DER

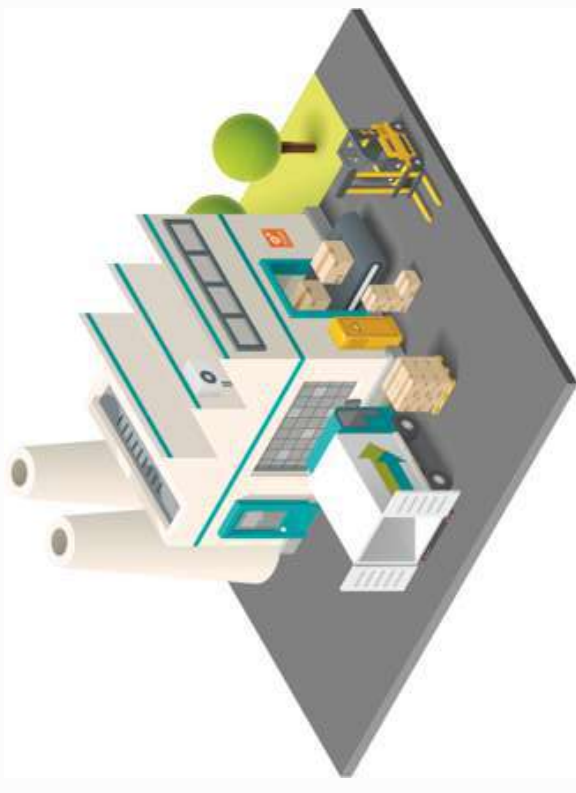
INOVASURE'S AMIGO EMS

ENERGY MANAGEMENT SYSTEM

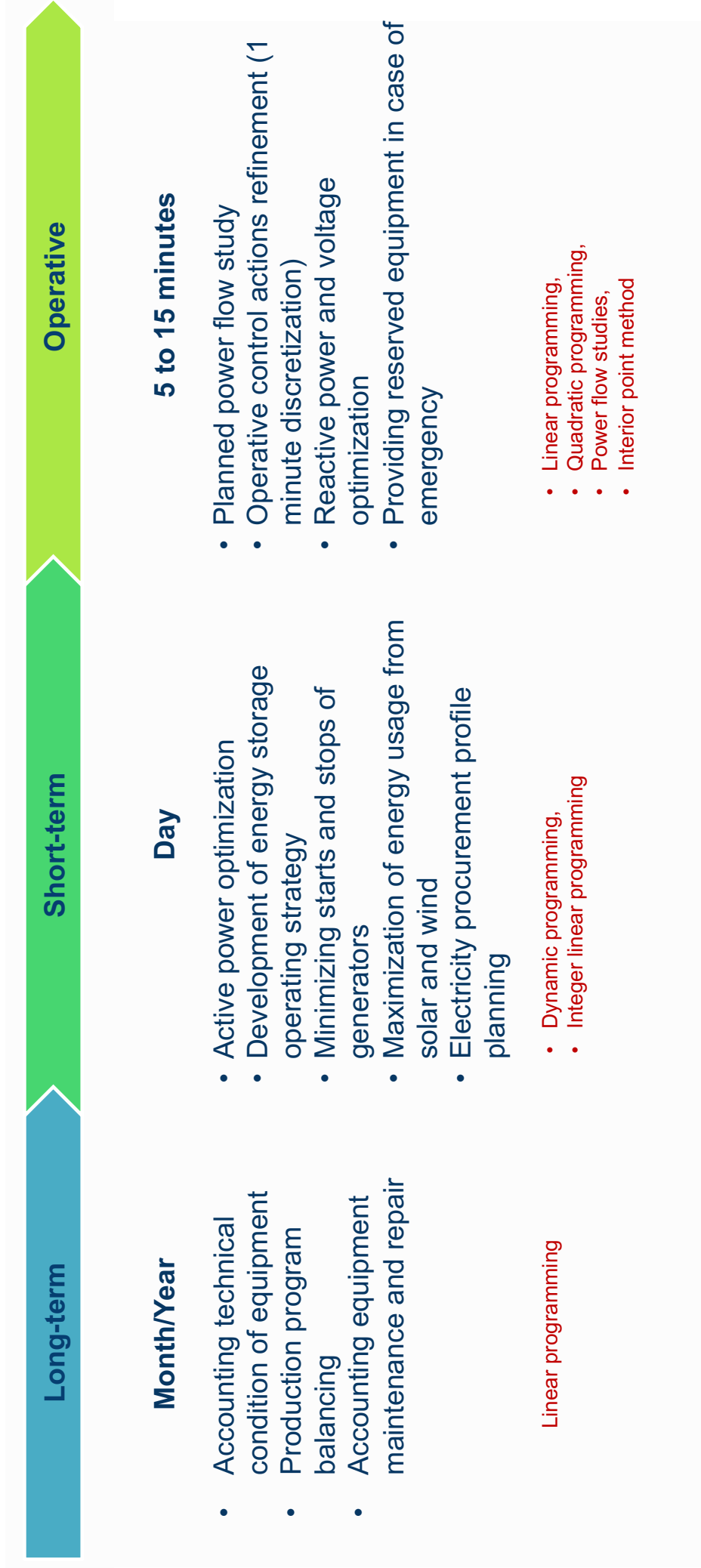
AMIGO EMS

AMIGO EMS is an information and control system, allowing to reduce electricity and power payments for industrial consumers by managing:

- storages and flexible loads
- local generation (gas turbines, solar panels, wind turbines)
- Volt/var control devices (reactive power compensators, transformer's OLTS, energy storage systems)
- electrical network structure

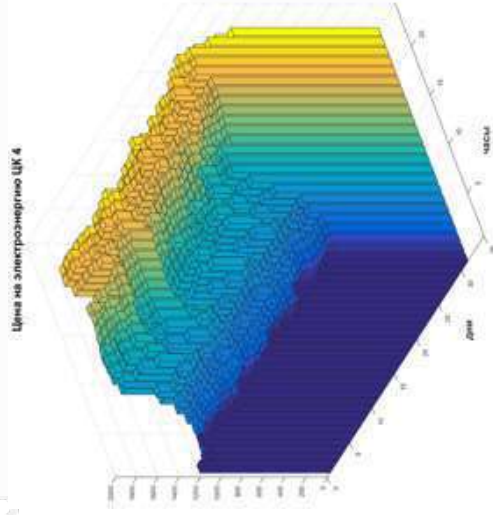


THREE-LEVEL AMIGO OPTIMIZATION

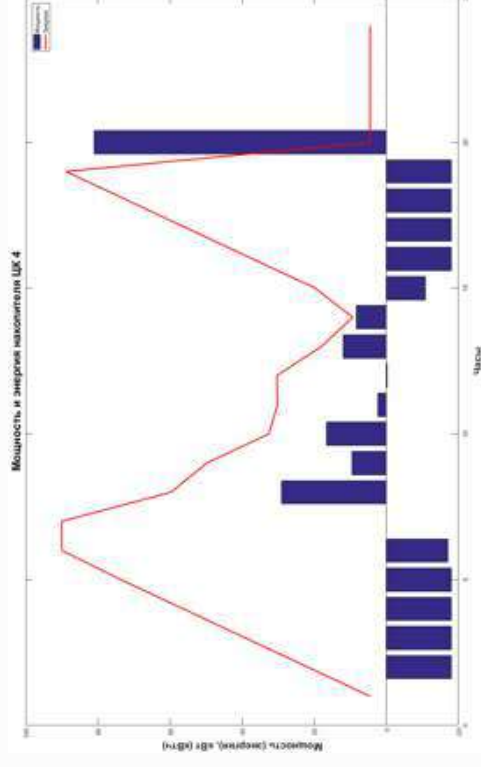


SHORT-TERM AMIGO OPTIMIZATION

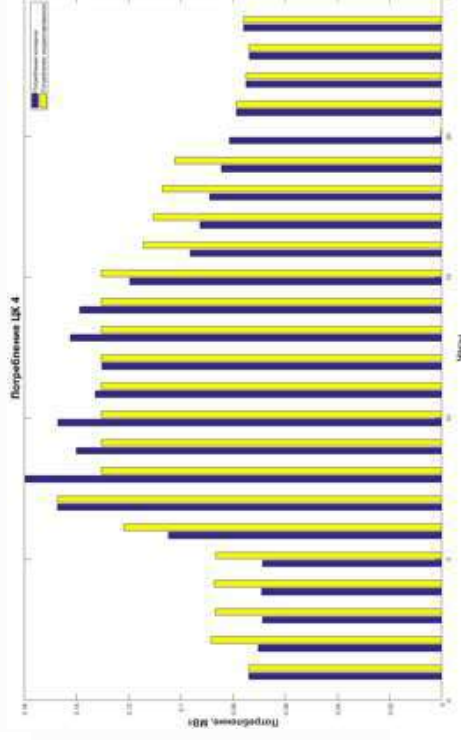
Cost of energy analysis



Energy storage operating strategy



Load profile analysis



Planned peak load hours:

8 9 10 11 12 15 16 17 18 19 20 21

Morning

Evening

AMIGO FORECASTING FEATURES

Consumption, energy and power prices, power market signal

Long-term (1 year)

Short-term (24 hours)

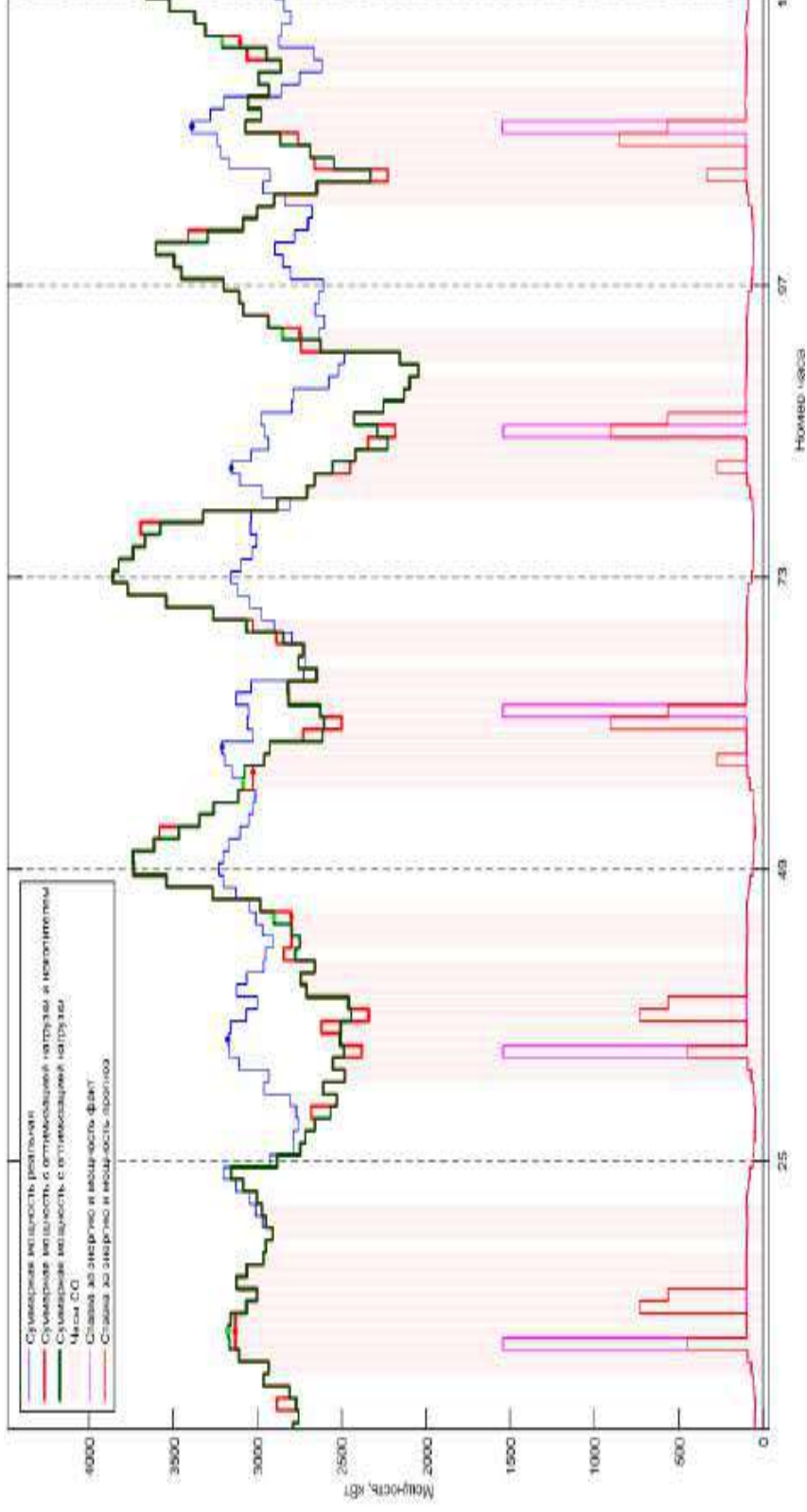
Operative (15 minutes)

- Approximate business process schedule
- Weather forecasts
- Measurements archive for the last 5 years
- Regression model for long-term forecast

- Precise business process schedule
- Weather forecasts
- Measurements archive for the current year
- Regression model for short-term forecast

- Online measurements
- Precise business process schedule
- Data from short-term forecast
- Regression model for operative forecast

COST OF ENERGY AND POWER DYNAMICS DURING THE DAY



The way that cost of electrical energy and power changes during the day depends on **Price Category (PC)** that consumer is using.

For the 1st PC cost of energy is constant, for the 3rd – it changes a bit during the day and has a distinct peak in one exact hour called **Peak Load Hour (PLH)**, for the 4th – it's the same as on the 3rd but in addition cost raises on the intervals called **Planned Peak Load Hours (PPLH)**.

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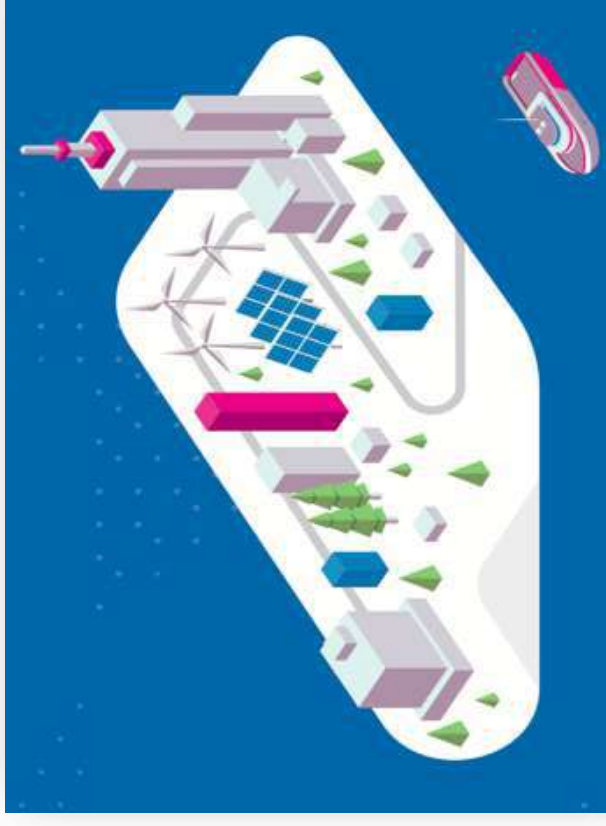
INOVASURE'S AMIGO MGC

MICROGRID CONTROL

AMIGO MGC

AMIGO MGC is an information and control system, allowing to reduce operational expenses and increase reliability for both autonomous and weak-tied to grid consumers such as:

- Residential load in the Municipal areas
- Remote rural areas
- Industrial areas
- Resorts



AMIGO MGC

MAIN FUNCTIONS

Operative and short-term forecasting of renewable energy sources generation

Maximization of renewable energy sources load factor by optimal usage of energy storage systems

Diesel gensets operating schedule optimization

Intelligent energy consumption management

Dynamic selection and maintaining of rotating reserve

Coordinated frequency and reactive power management

Coordinated power flow management in networks with highly complicated grid configuration

Compensation of load oscillation due to energy storage system

Technical condition of equipment and power flow monitoring

Equipment maintenance and repair necessity notifications

BENEFITS

Operational expenses reduction due to automated control of generators and energy storage system

Loss reduction and improving power quality due to coordinated voltage and reactive power control

Generators fuel consumption and wearing optimization due to advanced algorithms of renewable energy sources generation forecasting

Operational expenses reduction due to monitoring of equipment technical condition

AMIGO MGC

Production Cost Optimization

- ✓ **Spinning reserve reduction**
- ✓ **Machine hours optimization**
- ✓ **Start/stop minimization**
- ✓ **DER coordination**
- ✓ **Configurable KPIs**
(financial/technical)
- ✓ **Demand response**

current electricity cost with AMIGO optimization

real-time economy



total economy

AMIGO MGC

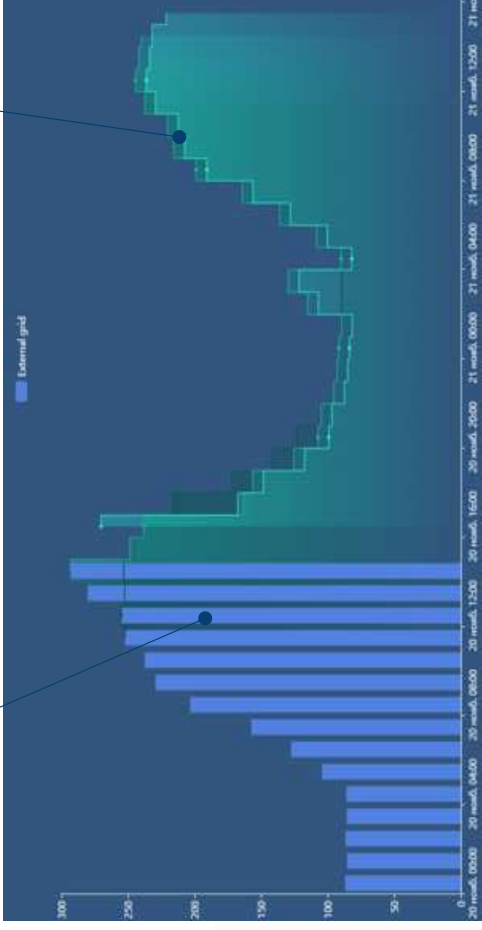
System balance improvement

- ✓ **Unit commitment**
- ✓ **Loads management**
- ✓ **ESS state management**
- ✓ **Automated black start**
- ✓ **Secondary voltage control**
- ✓ **Secondary frequency control**
- ✓ **Controlled islanding**



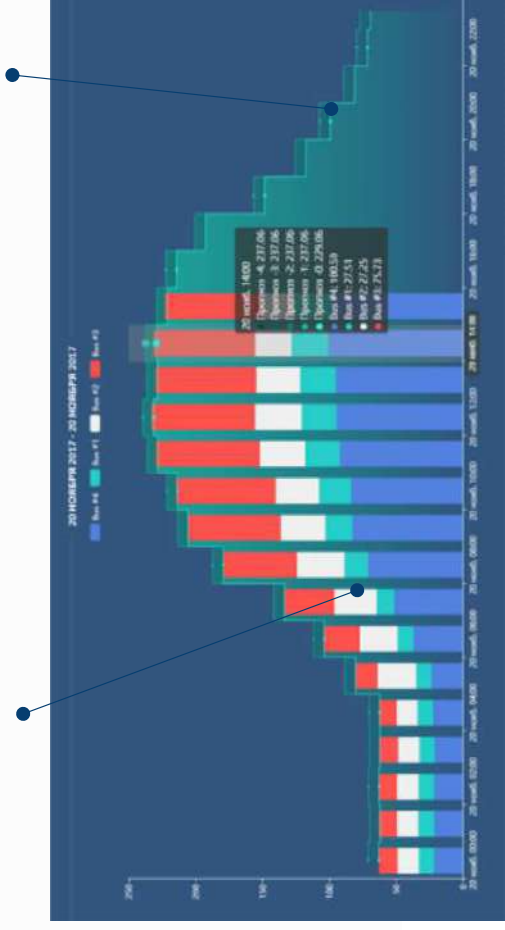
current power generation

day-ahead power generation forecast



current power consumption

day-ahead load forecast



AMIGO MGC

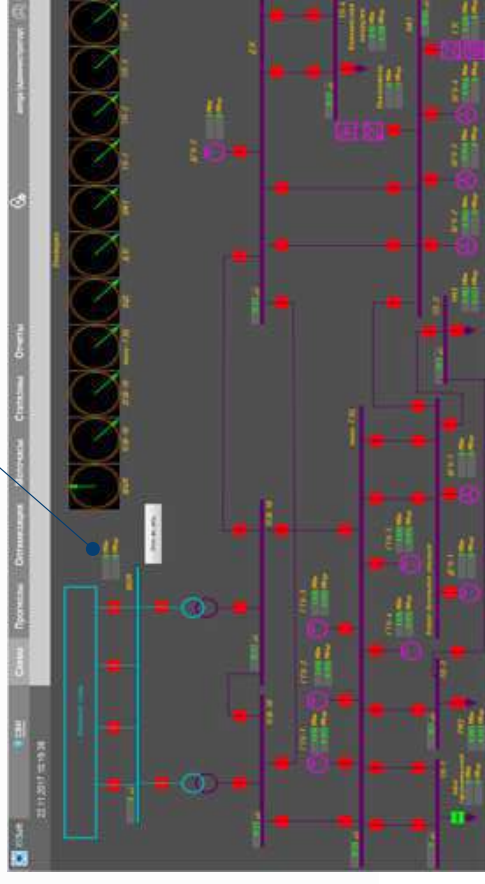
Awareness improvement

- # AMIGO MGC
- ## Awareness improvement
- ✓ **Monitoring & control**
 - ✓ **Genset maintenance scheduling**
 - ✓ **Financial benchmarking**
 - ✓ **Web, App reporting (data logging & export)**
 - ✓ **Alarms handling & processing**
 - ✓ **Utility's systems integration**

	Energy consumed from external grid	Energy produced by renewables
Scenario A	0.78	0.22
Scenario B	0.69	0.31
Scenario C	0.60	0.40
Scenario D	0.51	0.49
Scenario E	0.42	0.58
Scenario F	0.33	0.67
Scenario G	0.24	0.76
Scenario H	0.15	0.85
Scenario I	0.06	0.94
Scenario J	0.00	1.00

[illegible]

Human-machine interface





INOVASURE'S AMIGO GUESS

GRID UTILITY ENERGY STORAGE SYSTEM

AMIGO GUESS

AMIGO GUESS is an information and control system, allowing automated intelligent management of energy storage systems and reactive power sources in real time for:

- improving transmission capacity of power transmission lines
- improving transmission capacity and covering peak loads of highly loaded substations, especially in case of emergency shutdown of one of transformers (n-1 regime)
- maintaining required power quality (voltage and frequency control), reduction of losses
- maintaining required reliability level

INOVASURE'S AMIGO GUESS ENERGY STORAGE SYSTEM MANAGEMENT

SINGLE STORAGE

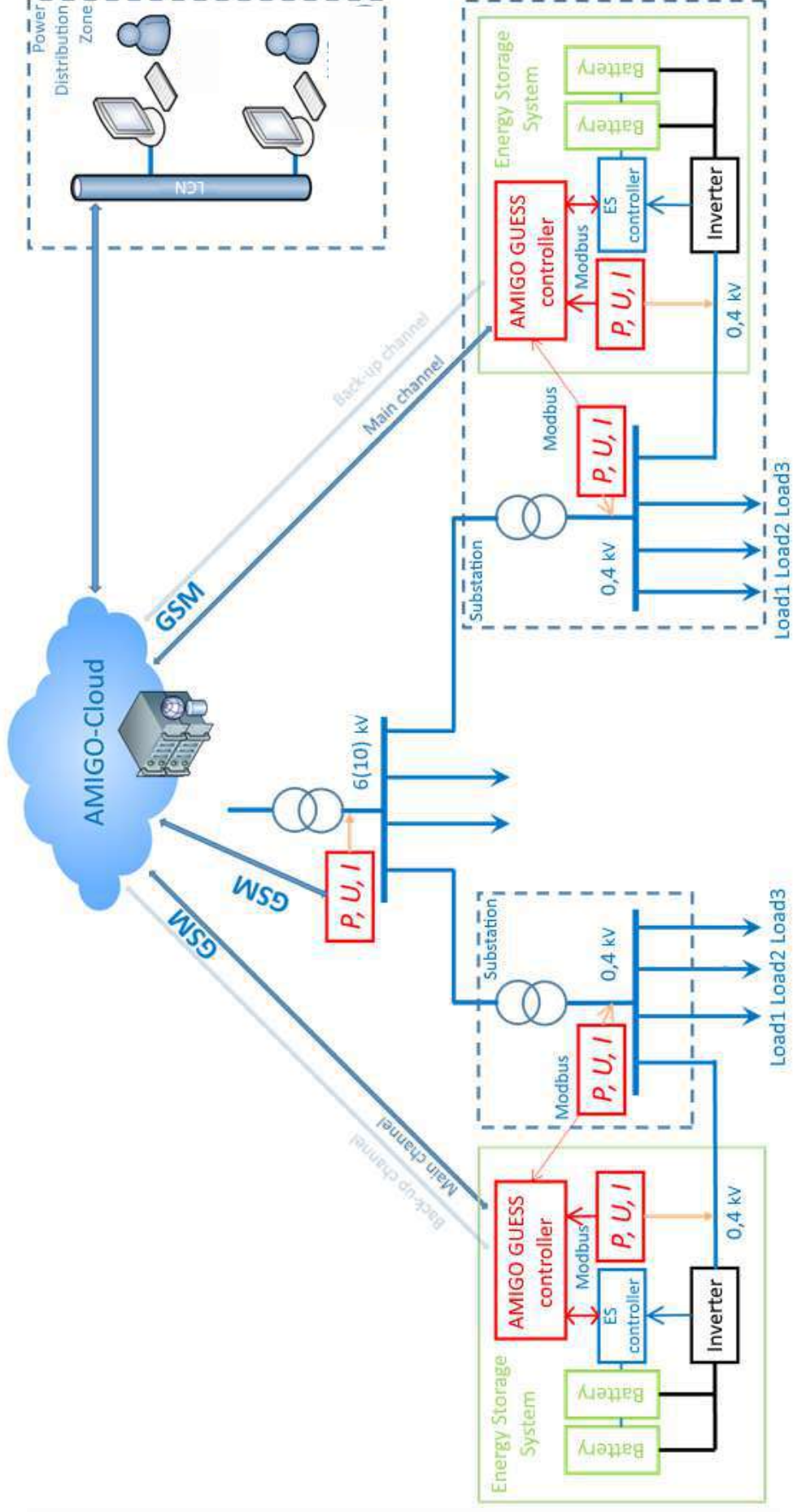
- Daily load forecasts for power transmission lines and substation
- Operative control of energy storage charge/discharge for peak shaving
- Reduction of transformers and transmission lines overload
- Taking part in demand response programs
- Taking part in primary/secondary frequency control in energy system

GROUP OF STORAGES

- Optimal management of charge/discharge of multiple storages
- Optimal reactive power flow and voltage level regulation for loss reduction
- Coordinated overload reduction of transmission lines and transformers
- Conjugation of multiple energy storages into single power and energy market participant
- Coordination of automatic transfer switches operation

- **Constant technical condition monitoring of automated control system equipment**

AMIGO GUESS ARCHITECTURE



The background of the slide features a light gray gradient. Overlaid on this are white, stylized circuit board traces that meander across the lower half of the image. In the center, there are several faint, concentric circles that create a sense of depth and focus towards the central text.

INOVASURE VIRTUAL POWER STATION PROJECT IMPLEMENTATION OVERVIEW

ADVANCED MICROGRID MANAGEMENT: AMIGO EMS

CUSTOMER:

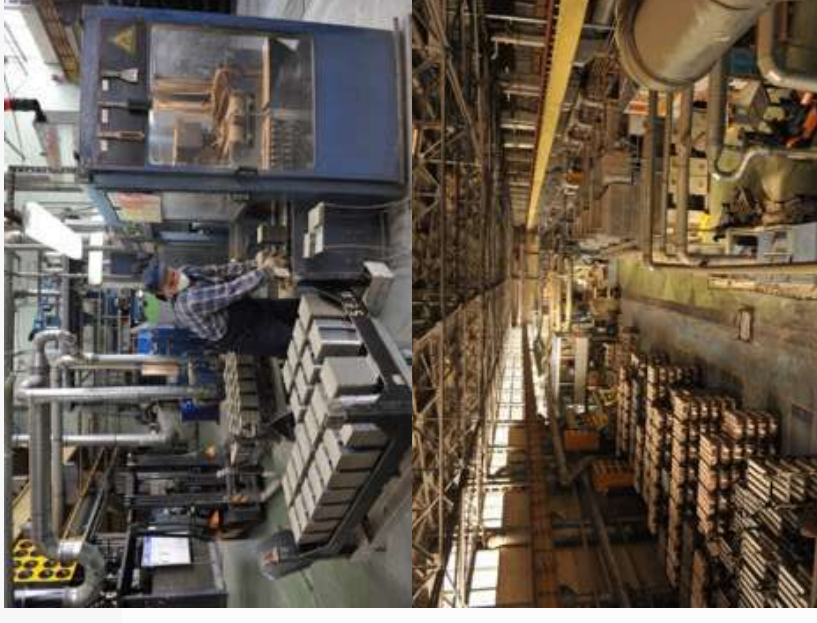
- «ACOM» Group (Car accumulators manufacturing)
-

CHALLENGES:

- High electricity costs
 - Electricity supply system overloads
 - Power Quality (Voltage drops)
-

AMIGO EMS SOLUTION:

- Load and Electricity Prices Forecast
- Optimal control strategy calculation:
 - Load peak “shaving” using electricity storage
 - Load shifting using controllable loads
- Automatic self-diagnostics and performance assessment



ADVANCED MICROGRID MANAGEMENT: AMIGO EMS

CUSTOMER:

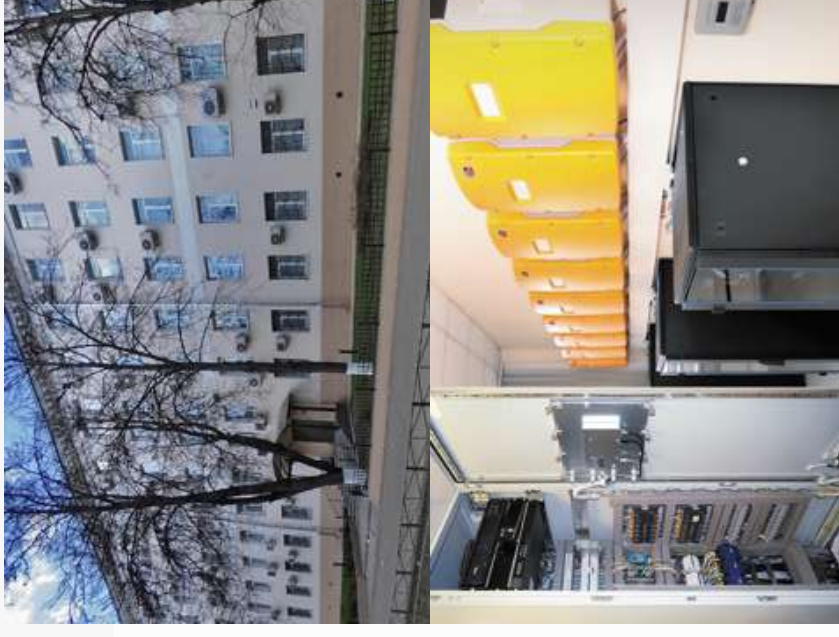
- Commercial estate – office building
-

GOALS:

- AMIGO EMS testing
 - Electricity cost optimization
 - Power quality optimization
-

AMIGO EMS:

- Proactive control based on load forecasting
- Energy and demand cost forecasting
- Li-ion electricity storage control
- Building load control
- Self diagnostics and performance assessment



AMIGO: PROJECTS COMPLETED AND IMPLEMENTATION RESULTS



\$ 11 000 / per month ↓ 17%

«ACOM» Group



\$ 1000 / per month ↓ 12%

RTSoft Engineering House



\$ 1100 / per month ↓ 22%

«Grad Project» Building

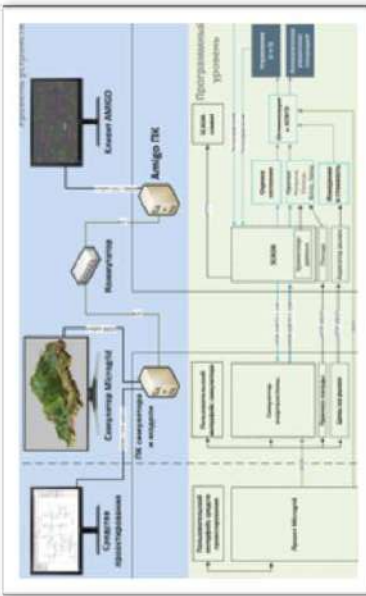
TECHNOLOGICAL TEST SITES



Educational Center
«SIRIUS», Sochi



Microgrid
Laboratory, Skoltech



Testing range in Linz, Austria



Laboratory complex i-Labirint in RTSoft



Chairman:
SJ de la Rouviere
Tel: +27 74 758 7788
Email: jaco@inovasure.com

CEO:
GMR Lourens
Tel: +27 83 700 5059
max@inovasure.com

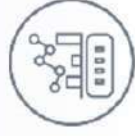
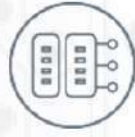
WWW.INOVASURE.COM

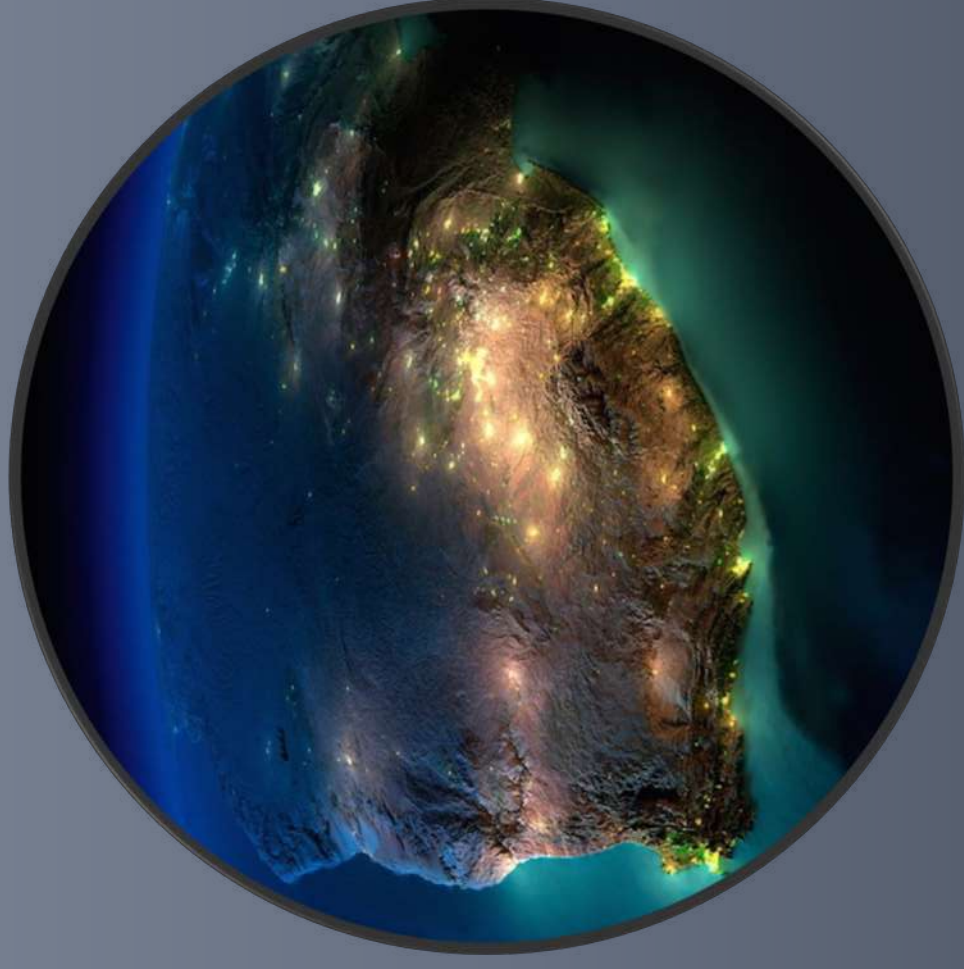
Annexure I3



IN COLLABORATION WITH GLOBALLY ACCREDITED COLLABORATORS

THE INOVASURE ENERGY VAULT BATTERY ENERGY STORAGE SYSTEM (BESS)





Ensuring that the Lights Remain on for Future Generations

IN COLLABORATION WITH:

Narada®
An Expert of Energy Storage Solutions

Cell Technology

1.Lithium Iron Phosphate

Best Lithium Option for BESS;
The safest Lithium technology for BESS

2.Stacking plates

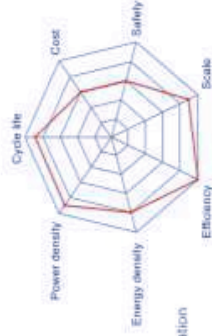
Stacking plates is good for high power operation and thermal dissipation

3.Prismatic Cell

Multi-layered Protection at cell level

4.Aluminum Case

Excellent Thermal Conductivity and Cooling Performance;
Safe and efficient heat release from inside to outside



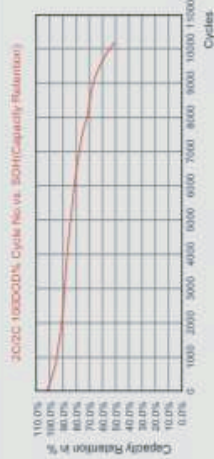
Sustainable Design

Continuously innovating to increase the energy density while maintaining the same form factor and cell dimensions, thus facilitating future upgrades to higher capacity, higher energy density, ESS with no change to pack design.

Cell Model	FE80G	FE105A	FE125A	Unit
Weight	2.20	2.30	2.35	kg
Dimensions	Length	130		mm
	Width	36		mm
	Height	240		mm
Nominal Capacity	86	105	130	Ah
Nominal Voltage		3.2		V
Allowed C-Rate	2	2	1	C
Recommended C-Rate	2	1	0.5	C

Long Life and Wide Application & Experience

Wide application & experience on Telecom, BESS and Automotive, collecting knowhow and innovating superior and adaptive technology.



Long Cycle life

2000 cycles @90%SOH
6000 cycles @80%SOH
8000 cycles @70%SOH

Wide application & experience

Telecom since 2010
BESS since 2011
Automotive since 2012

Module



Rack



Features of Module & Rack Design

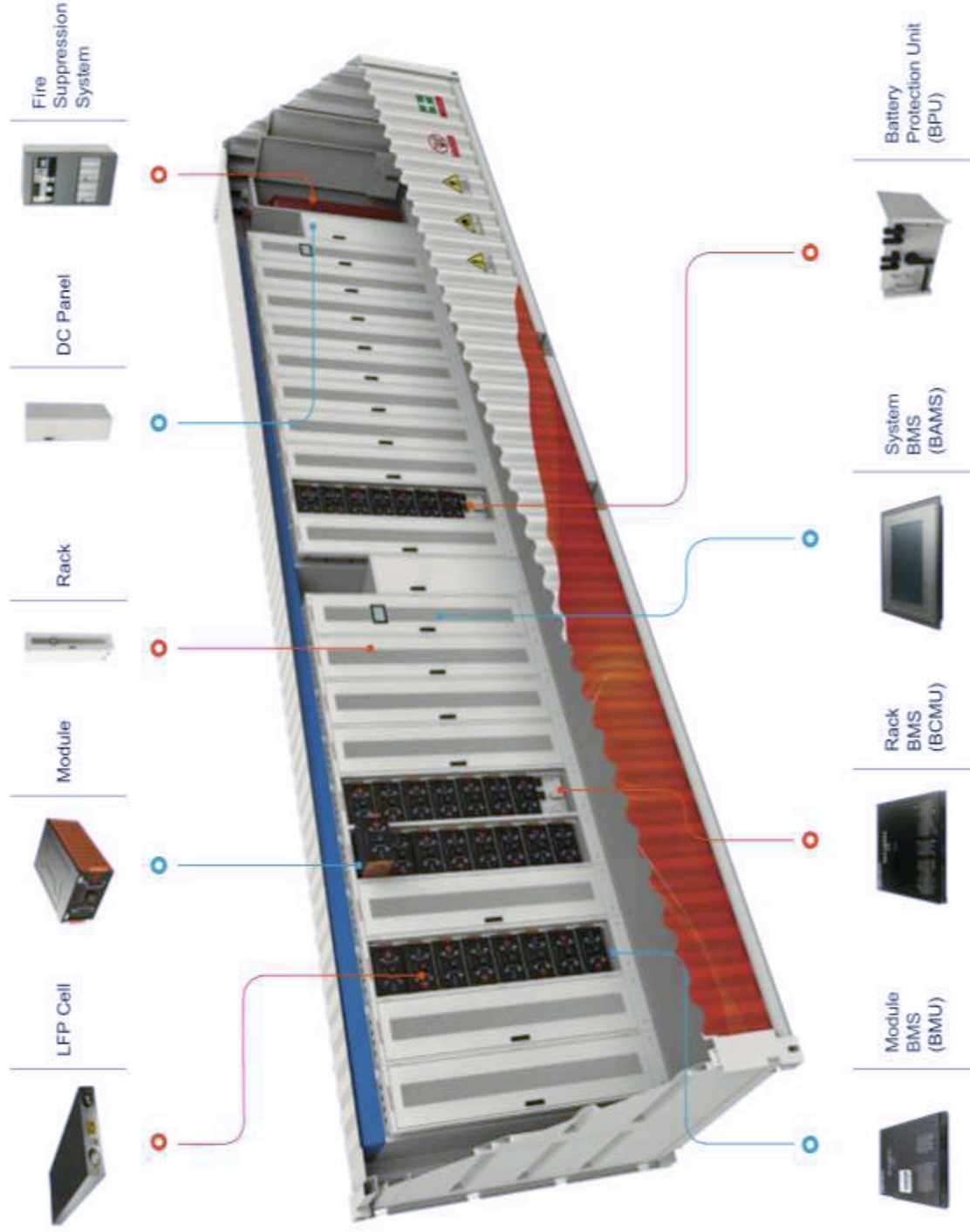
1. Platform Design for Energy, Medium and Power Solutions
2. 0.5C to 2C options available for Frequency regulation, Peak Shaving, Energy Reserve, etc
3. The Highest Energy density for LFP Energy Solution to optimize footprint and BOP cost
4. Passive & Active Thermal Ventilation System, Designed in both Module & Rack
5. Particular Considering for Containerized solution with proper aisle space
6. The Highest Lifetime Performance for Energy Storage System

BMS

BMS Function

1. Battery working condition Monitoring
2. State of Charge (SOC) estimation
3. State of Health (SOH) estimation
4. Discharge Control
5. Thermal Management
6. Fault Diagnosis Alarm
7. Information Monitor
8. Balance
9. Protection





COMPLETED NESP BESS

D.C.System

- Cell
- Module
- Rack
- BMS (Module, Rack, System)
- Battery Protection Unit
- Container
- DC Panel
- HVAC System
- Fire Suppression System

A.C.System



PCS Partner List : Siemens, SMA, Sungrow, etc.
KPI for choosen: Country Certificate, Product Type, System Cost, Client Requirement, etc

■ NESP Module & Rack Specification

Item		Unit	Module	Rack Type 1	Rack Type 2	Rack Type 3
Type No.			51.2NE5P160	512B090	512B0106	512B0123
Capacity		Ah	160	160	160	160
Energy		kWh	8.2	90	106	123
Nominal Volt		V	51.2	563.2	6015.6	768.0
Minimum Volt		V	44.8	492.8	582.4	672.0
Maximum Volt		V	57.6	633.6	748.8	864.0
Dimension (W × D × H)		mm	400*602*265	500*650*1960 (2 pos)	500*650*2130 (2 pos)	500*650*2400 (2 pos)
Weight		kg	73.8	1149.8	1323.4	1495

Item	Unit	Module	Rack Type 1	Rack Type 2	Rack Type 3
Type No.		51.2NESP200	512100113	512100133	512100154
Capacity	Ah	200	200	200	200
Energy	kWh	10.2	113	133	154
Nominal Volt	V	51.2	563.2	665.6	768.0
Minimum Volt	V	44.8	492.8	582.4	672.0
Maximum Volt	V	57.6	633.6	740.8	864.0
Dimension (W x D x H)	mm	400*602*205	500*650*1860 (2 pcs)	500*650*2130 (2 pcs)	500*650*2400 (2 pcs)
Weight	kg	80	317	1521	1723

Item	Unit	Module	Rack Type 1	Rack Type 2	Rack Type 3
Type No		51.2NE5P250	512125141	512125168	512125192
Capacity	Ah	250	250	250	250
Energy	kWh	12.8	141	166	192
Nominal Volt	V	51.2	563.2	595.6	798.0
Minimum Volt	V	44.8	492.8	502.4	672.0
Maximum Volt	V	57.6	633.6	748.8	864.0
Dimension (W x D x H)	mm	400*602*205	500*650*1800 (2 pcs)	500*650*2130 (2 pcs)	500*650*2400 (2 pcs)
Weight	kg	04	372	1586	1786

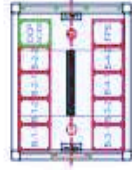
System Specification

System Characteristics												
Battery Type	Lithiation			LFP								
Energy Rating	DC Nominal Energy	MWh	0.58	0.77	1.15	1.92	2.11	3.07	3.46	3.84	Energy @ C/2 state	
	Discharge C-Rate	C	C/2	<2C	C/1	<2C	C/1	C/1	C/4	<2C	Up to 2C	
Power Rating	Rated Power	MW	0.28	-	Y	-	2	2	1	-	1.0 MW	
Battery Voltage	Nominal Voltage	Vdc				768						
	Voltage Range	Vdc				872 – 864						
DOC Range	Recommended Range					85%–85%						
Physical Characteristics												
Container Building	Quantity	pins				1						
	Dimensions	ft		10'	20'	40'						
	Weight	ton	5.8	6.6	7.5	11.1	12.0	15.7	18.4	21.1		
System Performance Characteristics												
Efficiency	A.C. Round Trip Efficiency	%				>85%						
	D.C. Round Trip Efficiency	%				>95%						
Aux Power	Max Aux Power	kW	2.34	5.15	13.18	10.10	24.01	21.26	11.53	20.98	Depends on HVAC	
	Aux Consumption	kWh	13.35	20.60	24.35	40.40	48.01	63.84	80.68	83.60	1 Cycle per day	
Interconnection Parameters												
Port of Interconnect	PCS A.C. Voltage	Vac				Customized						
	DC Voltage	kV				Customized						
	A.C. Frequency	Hz				50/60Hz						
Environmental Characteristics												
Environment conditions	Operating Temperature	°C				-40 °C to 60 °C						
	Storage Temperature	°C				10 °C to 30 °C						
Relative Humidity	Maximum Humidity	%				up to 95%						
Altitude	Above Sea Level	m				2000m / 6000						
Applications												
	Auxiliary Service, Peak shaving, Demanding Response, Ramping Rate Control, Energy Shifting											

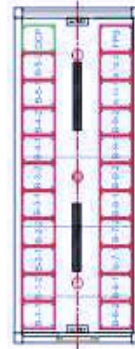
General Layout of Containerized Solution



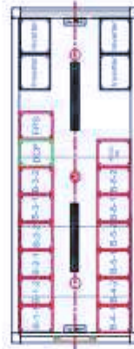
10ft ISO HC Container
External Mounted HVAC
Max Rack Energy 192kWh
Max Container Energy 0.58MWh
Max Container Power 0.25 MW



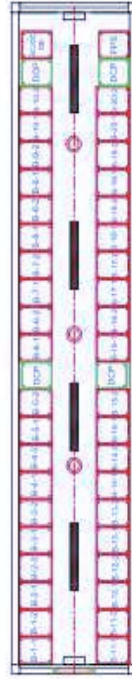
10ft ISO HC Container
External Mounted HVAC
Max Rack Energy 192kWh
Max Container Energy 0.77MWh



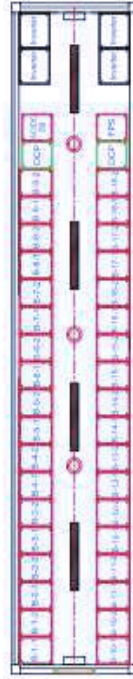
20ft ISO HC Container
External Mounted HVAC
Max Rack Energy 192kWh
Max Container Energy 1.92MWh



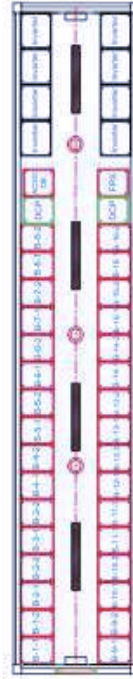
20ft ISO HC Container
External Mounted HVAC
Max Rack Energy 192kWh
Max Container Energy 1.15MWh
Max Container Power 1.0MW



40ft ISO HC Container
External Mounted HVAC
Max Rack Energy 192kWh
Max Container Energy 3.94MWh



40ft ISO HC Container
External Mounted HVAC
Max Rack Energy 192kWh
Max Container Energy 3.45MWh
Max Container Power 1.0MW



40ft ISO HC Container
External Mounted HVAC
Max Rack Energy 192kWh
Max Container Energy 3.07MWh
Max Container Power 2.0 MW



40ft ISO HC Container
External Mounted HVAC
Max Rack Energy 192kWh
Max Container Energy 2.11MWh
Max Container Power 2.0MW
Max 2MVA transformer

Codes & Standards

Safety	
UL 9540	Safety for Energy Storage Systems and Equipment
UL 9540A	Test Methods for Evaluating Thermal Runaway Fire Propagation - BESS
UL 1973	Batteries for Use in Stationary Applications
UL 1542	Standards for Lithium Batteries
IEC 62619	Safety for Secondary Lithium Cells and Batteries
IEC 61508, UL 991, UL 1998, UL60730-1	Functional Safety for Electrical Systems
NFPA 70E	Standard for Electrical Safety in the Workplace
NFPA 70	(NEC) National Electrical Code
ANSI/IEEE C-2	National Electric Safety Code
UL 60850	Electrical Insulation
NFPA 551 / NFPA 550	Fire Detection and Suppression
IEC 60812	Safety Analysis and Control System (FMEA, FTA)
IEC 61025	
MIL-STD-1629A	
UL 1778	UPS for Ancillary
UL 1598	Luminaire
UL8750	Rectifier for D.C. power supply
UL1012	
UL 1995	Air conditioner for cooling
UN 38.3 / IEC-62281	Transportation Safety of Lithium metal and lithium ion batteries
Performance Standards & Grid Interconnect	
IEC1427-2:2015	Secondary cells and batteries for renewable energy storage – General requirements and methods of test – Part 2: On-grid applications
IEC 62520	Secondary Lithium Cells and Batteries for Industrial Application
PNL-22010	Protocol for Measuring Performance of Energy Storage System
UL 1741 (SA)	Standards for Inverters, Converters, Controllers and Interconnection System Equipment
IEEE 1547	Standard for Interconnecting DR WITH EP
ANSI/IEC 60529	Degrees of Protection Provided by Enclosures
NEMA 250	Enclosures for Electrical Equipment
NEMA 250 / UL 50E	Environmental Considerations for Electrical Equipment Enclosures
IEEE 603-2005	Recommended Practice for Seismic Design of Electrical Equipment

Global Track Record

Since 2011, Narada's BESS products have been successfully operating in over 16 countries, ranking Top 2 worldwide in terms of installed capacity according to Bloomberg's statistics in 2017.

SINCE 2011 | TOTAL 290 MW / 1.7 GWh | COUNTRIES 16

Europe



Germany
45 MW / 75 MWh

UK
36 kW / 33 kWh
Spain
0.25 MW / 0.4 MWh

Asia Pacific



India
1.4 MW / 1.4 MWh

Australia
60 kW / 262 kWh
Pakistan
150 kW / 150 kWh
Philippines
200 kW / 200 kWh
Thailand
0.55 MW / 0.62 MWh
Singapore
0.15 MW / 1.250 MWh
Saudi Arabia
9 kW / 21.6 kWh



Nigeria
6 kW / 13 kWh
Saudi Arabia
9 kW / 21.6 kWh
UAE
1 MW / 8.9 MWh (multiple sites)
USA
50 kW / 50 kWh

China



Jiangsu (35 Sites)
104 MW / 812 MWh

Qinghai (3 Sites)
15.5 MW / 122 MWh
Guangdong (7 Sites)
6.2 MW / 26 MWh
Zhejiang
6.3 MW / 25 MWh
Beijing (7 Sites)
1.5 MW / 16.3 MWh
Henan
9.6 MW / 9.6 MWh



Hebei (3 Sites)
2.1 MW / 12.5 MWh
Huber
1.5 MW / 9 MWh
Xinjiang (3 Sites)
2.1 MW / 5 MWh
Inner Mongolia (2 Sites)
1.1 MW / 2.6 MWh
Hunan
24 MW / 48 MWh



INOVASURE'S ENERGY VAULT INVERTER AND BALANCE OF SYSTEMS

IN COLLABORATION WITH:



«Our mission: Staying
at the Frontline of
Energy Integration»



Flexible Operating Model

Production System

- ✓ Supporting Internationalization and smart growth process
- ✓ Controlling the whole value chain
- ✓ Be competitive and quickly adaptable



Flexible Operating Model

Production System

"JUST IN TIME" Production

- ✓ Reliable providers under loyalty arrangement, with other trustworthy alternative suppliers.
- ✓ Buffer stock agreements with suppliers of critical components.
- ✓ Established timelines for the reception of material depending on the difficulty at every phase of the production chain.
- ✓ Accurate adjustment in product's requirements to minimize risks and optimize manufacturing processes.
- ✓ Establishment of a strict supervisory system in all stages for an early detection and correction of any potential "non-conformity"

Flexible Operating Model

Production System

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Suppliers relationships

Global Manufacturing

Closely with Expert Partners

- ✓ Consortium relationship with certified assemblers. This strategy lets GPTech to assure adequate standard quality of products while keeping enough flexibility to adapt product to project requirements.
- ✓ GPTech has built a deep partnership with several manufactures, allowing to go beyond pure outsourcing relationship. GPTech works jointly with those manufacturers to ameliorate the design of products and to optimize supplies.
- ✓ The manufacturers comply with main standards; UL, ISO9001, IEC 61439...

Role of GPTech

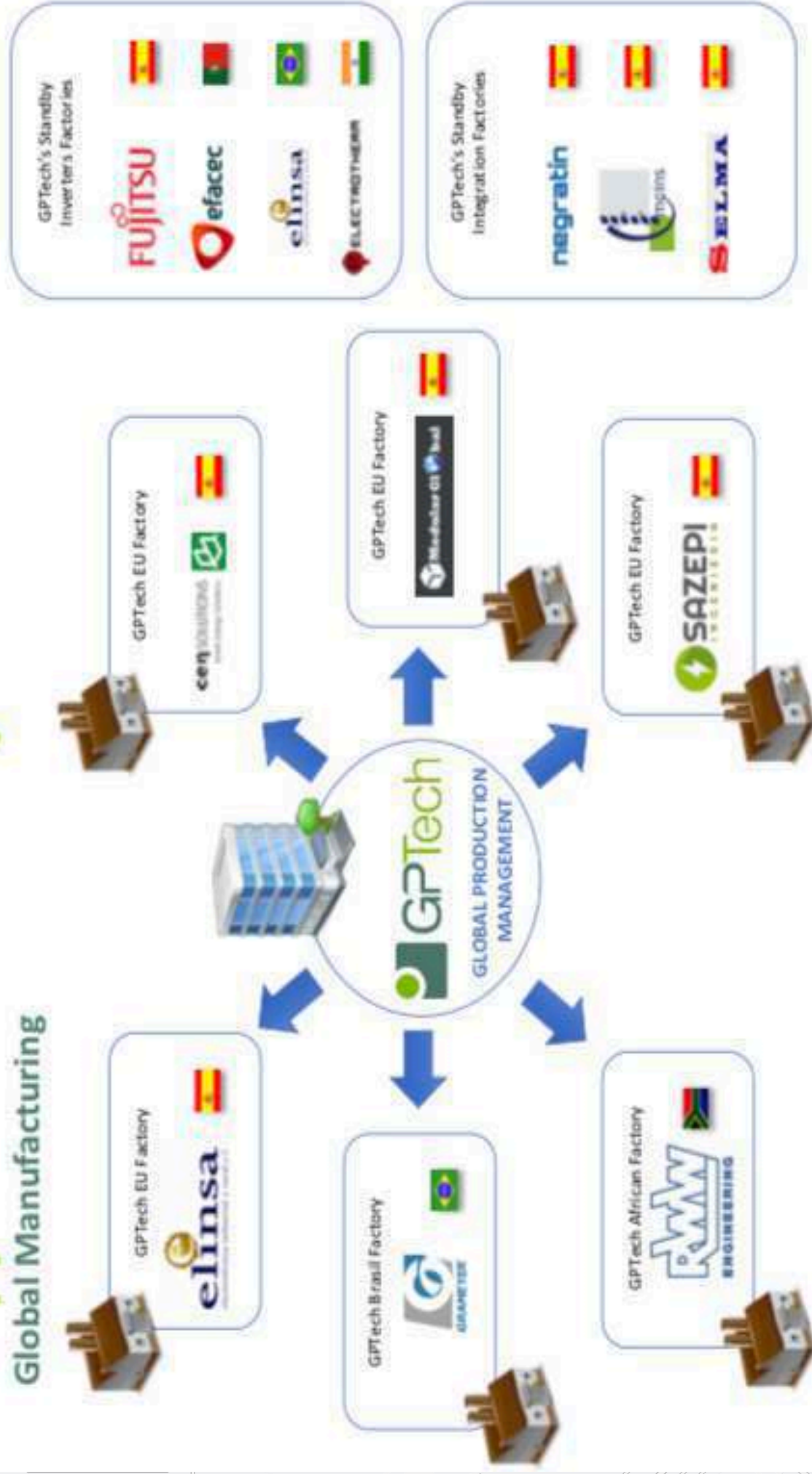
- Production requirements (delivery, qualities..)
- Design documents of products
- For-construction documentation
- Critical components procurement (relationship with components suppliers)
- Quality system
- Shipping

Role of Factories

- Production scheduling
- Minor adaptation of products
- Implementation of procedures
- Quality Control/FAT
- Assembling
- As-Built documentation

Suppliers relationships

Global Manufacturing



Suppliers relationships

Global Manufacturing

Capability

- ✓ Starting from a **nominal capacity larger than 1 GW/year** under normal conditions in only the Spanish factories, our advanced supplier management allows an increase in our production capacity. That enables the development of solutions covering customer demands within the deadlines of the project
- ✓ Real cases: 734 MW WD3 technologies (2018); 1,5GW Wind-Statcom (2009); 300 inverters in Italy PV plants (2010'Q2)....
- ✓ Well-adjusted time and costs for international projects requirements (i.e. local PLA's - Project Labour Agreements)



Manufacturing process

Main indicators

Manufacturing slots - Concept

- ✓ Manuf. Slot = needed time to finish each phase of the production of a reference device

Inverter's manufacturing	Slots per phase
IS3800WD3HVG20 <i>1x control cabinet + 3x power cabinets (3x AC/DC)</i>	<i>3x manufacturing slots per phase</i>
IS5100WD3HVG20 <i>2x control cabinet + 4x power cabinets</i>	<i>4x manufacturing slots per phase</i>
PV900WD2 <i>Compact inverter</i>	<i>1,5x manufacturing slots per phase</i>
AMP S1400 <i>1x control cabinet + 2x power cabinets (1x AC/DC + 1x DC/DC)</i>	<i>2x manufacturing slots per phase</i>
AMP S2800 <i>1x control cabinet + 4x power cabinets (2x AC/DC + 2x DC/DC)</i>	<i>4x manufacturing slots per phase</i>



Manufacturing process

Main indicators

Manufacturing slots – Evolution with WD3 Inverter's family

- ✓ Optimization of the mechanical and electrical designs
- ✓ Improvement of the relation "Output Power" vs. "Required Manufacturing Time"
- ✓ Reduction of \$/W ratio
- ✓ Increment of manufacturing capability
 - ✓ With WD3 production, our capability in lightly forced conditions would reach over 1.5GW/year

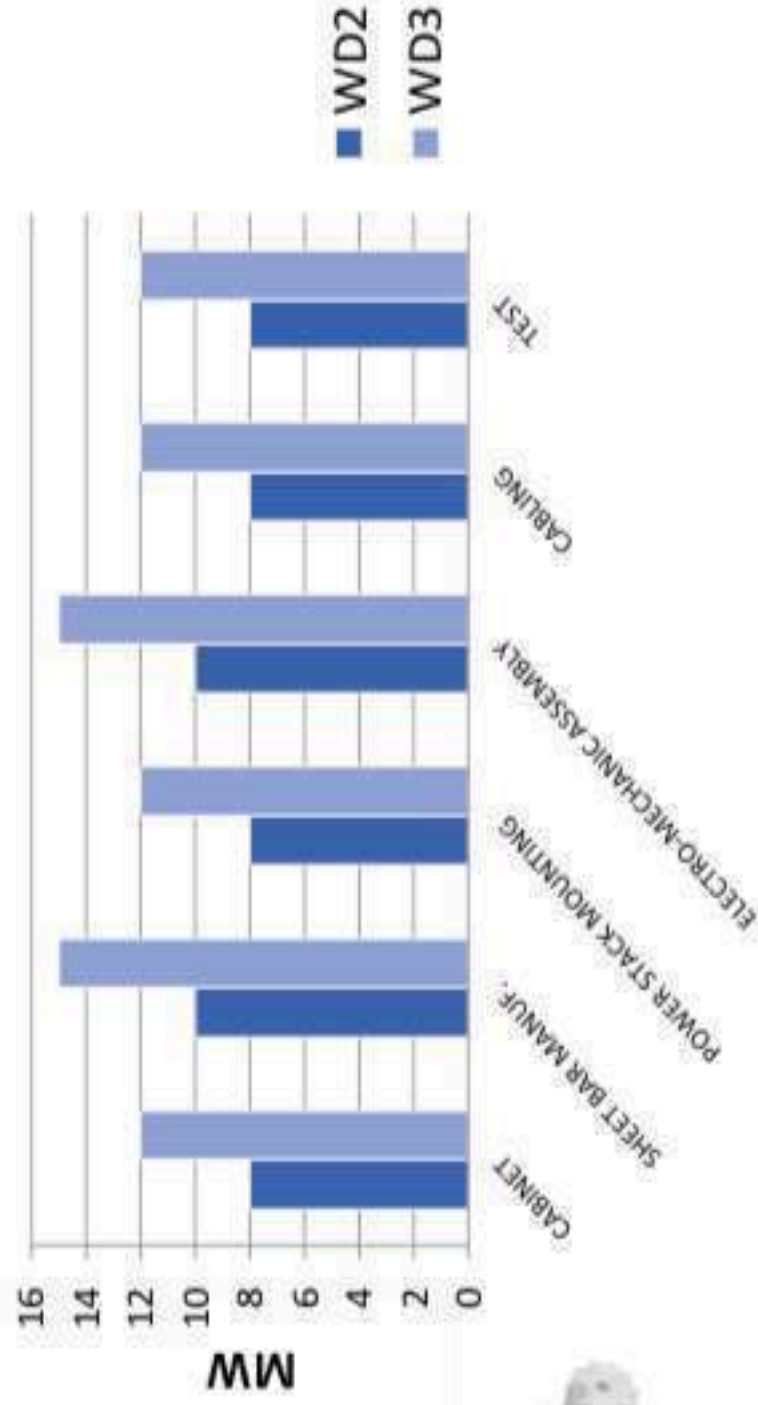


Manufacturing process

Main indicators

Manufacturing slots – Evolution with WD3 Inverter's family

Weekly manufacturing capability



Manufacturing process

Main indicators

Inverters manufacturing – weekly capacity in manufacturing slots



FACTORY 2 (CEN)	STANDARD	LIGHTLY FORCED
CABINET	8	9
SHEET BAR MANUFACTURING/ASSEMBLY	8	9
POWER STACK MOUNTING	12	15
ELECTRO-MECHANIC ASSEMBLY	9	9
CABLING	9	12
TEST	9	12
MV INTEGRATION (WDS Family)	15	24

FACTORY 1 (ELINSA)	STANDARD	LIGHTLY FORCED
CABINET	12	15
SHEET BAR MANUFACTURING/ASSEMBLY	15	18
POWER STACK MOUNTING	12	15
ELECTRO-MECHANIC ASSEMBLY	15	18
CABLING	12	15
TEST	12	15

FACTORY 2 (RWW)	STANDARD	LIGHTLY FORCED
CABINET	12	15
SHEET BAR MANUFACTURING/ASSEMBLY	15	18
POWER STACK MOUNTING	12	15
ELECTRO-MECHANIC ASSEMBLY	8	9
CABLING	8	9
TEST	8	9

Manufacturing process

Main indicators

Manufacturing provisioning timings

INVERTER'S COMPONENT (WD3 Family)	MEAN LEAD TIME (weeks)	PROVIDERS SHORT LIST
Power Stack and IGBTs	20	Semikron, Fuji, Infineon
LC filter	6-8	Electronicon, Eltromil, Tonytrans
EMI filter	10	Schaffner, Premo, TE Connectivity
AC Switch	4	ABB
DC Switch	4	ABB, Eaton
DC Fused protection	3-5	Mersen, Busmann
Coding System	26	EBM Papst, Sanyo Denki
PCBs	4-6	TEF, Digiprocess

INTEGRATION COMPONENT	MEAN LEAD TIME (weeks)	PROVIDERS SHORT LIST
Power Transformer	12-14	Celme, Efacer, ABB
MV Switchgear	8-10	Siemens, Efacer
Auxiliary Transformer	4-5	Tonytrans, HPS, Polyflux
Weather Station	7-8	Monsol, Isotrol, Geinica
Monitoring String Box	8-10	Monsol, Unarte

Manufacturing process

Main indicators

Manufacturing line timings

PRODUCTION PLAN	WEEKS
MEAN ENGINEERING APPROVAL TIME	1-2
MAXIMUM PROVISIONING TIME FOR INVERTER'S COMPONENTS	10-20
MAXIMUM PROVISIONING TIME FOR MV COMPONENTS	12-16
FIRST INVERTER DELIVERY TIME	12 - 20

MANUFACTURERS	MONTHS
NEW PARTNER LAUNCHING	6
NEW PRODUCT LAUNCHING	3
ON STANDBY MANUFACTURER ACTIVATION	2

Manufacturing process

Global production plan

- ✓ Based on Business plan (production strategy)
- ✓ Monthly updated in relation to projects forecast evolution
- ✓ Control of factories capability
- ✓ Production load distribution
- ✓ Partners force sizing
- ✓ Provisioning prediction
- ✓ Production peaks and seasonality analysis

Manufacturing process

Reserve capacity per FACTORY



planning
planning
planning



Manufacturing process

Reserve capacity per FACTORY

planning
planning
planning
planning



cen SOLUTIONS
Smart Energy Solutions

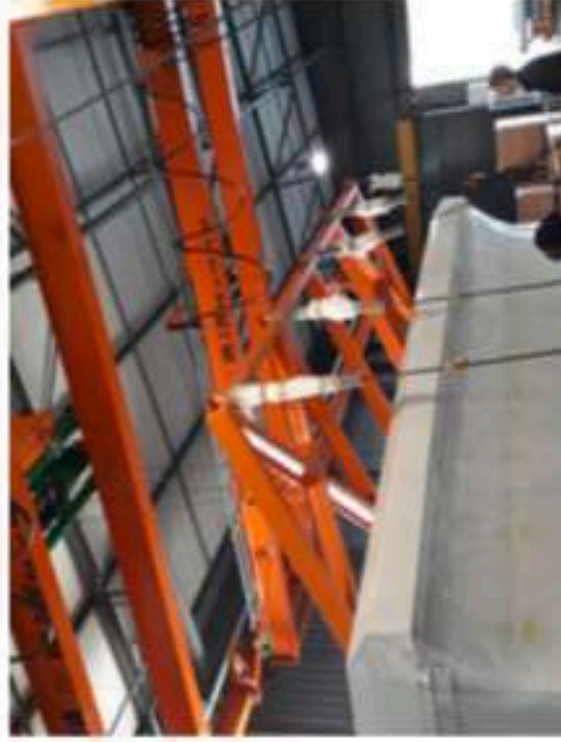


Manufacturing process

Reserve capacity per FACTORY



planning
planning
planning





CEN facilities

BENBAN PV Plant 150
MW, EGYPT
(ACCIONA)

Product assembling phase

A photograph of a male worker in a yellow high-visibility safety vest and blue long-sleeved shirt, working on a large, complex metal structure, likely part of a solar panel manufacturing facility. The worker is positioned in the upper right of the frame, looking down at his work. The background shows industrial shelving and equipment. A large, dark grey triangular graphic overlay covers the bottom left portion of the image, containing white text.

Local Manufacturing in South Africa

- RWW facilities
- SIRIUS/DK1/DK2 PV Plant 225 MW,
RSA (SCATEC)



Transformer Manufacturing & MV Integration in South Africa

RT FACILITIES (SCATEC RSA PROJECTS 225 MW)

BENBAN, 150 MW EGYPT (ACCIONA)





GURUN, JASIN y MERCHANG, |
MALAYSIA 150 MW (SCATEC) |



Tuto, 172 MW Mexico (ACCIONA)

Dymerka, 50 MW UKRANIA (ACCIONA)





MOCUBA, 30MW MOZAMBIQUE (SCATEC)



AURA SOLAR, 25 MW PV + 10 MW BESS MEXICO (GAUSS)



LAWAI, 20 MW PV+BESS HAWAII (AES)



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