TENDER DOCUMENTS FOR

WAILOA MID-LIFE REFURBISHMENT GENERATOR ELECTRICAL REHABILITATION

TENDER NO. MR17/2021

PREPARED FOR ENERGY FIJI LIMITED

January 2021

Energy Fiji Limited

Wailoa Mid-Life Refurbishment

Generator Electrical Rehabilitation Specification

CONTENTS

1. Project Background

Wailoa Power Station is four unit station capable of generating 78.3MW, while the individual units operating on their own could originally produce up to 21.3MW at rated flow and maximum reservoir level. The station was finally commissioned in 1983.

Since the station was first commissioned, the conveyance system headloss has increased and the present peak output has reduced to 74MW. The machines are typically operated at around 15MW per unit, occasionally a little higher. Wailoa is operated as a baseload facility and the aim of the rehabilitation is:

- To extend the operational life of the existing plant by 30-40 years.
- To improve the reliability of the plant.
- To improve plant availability.
- To bring the plant control, protection and monitoring in line with modern practices

According to EFL personnel the stator wedges were all replaced with ripple spring type a few years after commissioning. Around 1989 Unit 3 suffered a stator fault and a new coil was installed.

Problems have also been experienced with the field conductors shorting between the slip-rings and shaft. This is difficult to repair as the PMG/Exciter assembly must be removed to access the fault location.

Partial discharge measurements were made on all four units in 2007 and some evidence of corona was found at the same time during inspection. We understand that the machines were cleaned and semi-conductor paint applied to the area where the winding leaves the slot. No further corona has been observed. Wedge surveys are carried out every four years & a few loose wedges were identified on each machine during the previous survey.

PI measurements are also taken every four years and typically readings in excess of 3.3 are obtained.

The works associated with Unit 1 have been completed and this contract is for the three remaining units, 2 through 4.

The total scope of the project is covered by the work to be carried out under two contracts. The Generator Rehabilitation Project described in these Contract Documents covers both the Onshore and Offshore Contracts.

The General Conditions of Contract pursuant to which the Contractor will provide the Works under the Onshore and Offshore Contracts, are based on FIDIC Conditions of Contract for Plant and Design Build for Electrical and Mechanical Plant and for Building and Engineering Works Designed by the Contractor, First Edition, 1999.

Other contracts associated with the turbine generators will be proceeding in conjunction with this Contract. The Contractor is required to cooperate with the Employer and other contractors to help facilitate the smooth execution of the work.

The other contracts include:-

- Generator Mechanical refurbishment;
- Replacement of the 11kV circuit breakers;
- Refurbishment of the four existing turbines and governors.
- Refurbishment of the turbine inlet valves.
- Replacement of the tail race coolers and upgrade of the cooling water system
- Replacement of the individual Unit control panels;
- Provision of individual Unit PLCs to interface with all unit plant and provision of a station PLC to control all station related services and interface with the station, generator and transformer protection;
- Provision of new control systems and communications to the intake and surge chamber
- Provision of new excitation systems;
- Provision of penstock flow monitoring systems
- Numerous small works on the station

A number of other refurbishment projects have already been undertaken at the station including:-

- Replacement of the main 11/132kV step up transformers (completed 2013).
- Replacement of the electronic governors (completed 2012).
- Provision of a single new turbine inlet valve and provision of new hydraulic system to enable refurbishment of the existing valves (completed 2018);
- Refurbishment of turbine and generator Unit 1 (completed 2019)

2. Conditions of Tendering

2.1 Scope of Tender

Energy Fiji Limited (EFL) invites Tenders for the electrical testing and refurbishment of four 24.5MVA hydro electric generators located at their Wailoa power station in Fiji.

The General Conditions of Contract pursuant to which the Contractor will provide the Works are based on FIDIC Conditions of Contract for Plant and Design Build for Electrical and Mechanical Plant and for Building and Engineering Works Designed by the Contractor, First Edition, 1999.

These Instructions comprise these instructions to tenderers together with all documents issued to tenderers in respect of the Works.

These Instructions do not constitute an offer but are merely an invitation to the tenderer to submit a Tender.

All documents supplied by EFL remain the property of EFL. EFL reserves the right to request the immediate return of all documents supplied and any copies made of them at any time.

2.2 Delivery of Tenders

Tenders shall be submitted to the **TENDER LINK** Electronic Tender Box https://www.tenderlink.com/EFL no later than **4:00pm, on 3 February 2021.**

In addition hard copies of the tender, one original and one copy, must be deposited in the tender box located at the EFL Head Office, 2 Marlow Street, Suva, Fiji no later than 4:00pm, on Wednesday, 3rd February, 2021. Addressed as":

Tender – MR 17/2021 – Wailoa Mid-Life Refurbishment Generator Electrical Rehabilitation

The Secretary Tender Committee

Energy Fiji Limited

Head Office

Suva

Fiji

Evidence must be included demonstrating that the hard copy was dispatched from the Tenderers premises prior to the tenderlink closing date and time.

For further information contact JReddy@efl.com.fj

Tender Validity

All Tenders shall remain open and valid for acceptance for a period of 60 days after the Tender Closing Time.

A Tender, once submitted, may only be varied by the tenderer with the prior written consent of EFL.

2.3 Identification of Tenders

Tender documents are to be delivered packaged and clearly identified.

2.4 Form of Letter of Tender

The form of Letter of Tender shall be as set out in Schedule 1, Tender Form 1.

2.5 Tender Documents

The tender documents comprise the following:

a) Section 1 – Background to the Contract
b) Section 2 – Tender Conditions
c) Section 3 - General Conditions of Contract
d) Section 4 - Particular Conditions of Contract
e) Sections 5, 6, 7, 8 – Specification
f) Tender Schedules

2.6 Information Required with Tender

Tenders shall include the name of the tenderer and a complete postal address for service of notices. Tenders shall include the following minimum information for evaluation:

- Fixed, lump sum tender price. All prices must be quoted in a single currency, nominated by the contractor plus Fijian dollars if required. The prices should exclude Fiji VAT but it shall include the Withholding Tax and shall also be deemed to include all direct, indirect and ancillary charges and costs for the Works;
- Statement of compliance with all Tender and Contract requirements.
- Completed tender forms;
- Confirmation of the full details of the refurbishment work proposed;
- Proposed programme for design, fabrication and on site works;
- Proposed key personnel;
- Any supplementary information required by the documents issued to the tenderers;
- Any interpretation or other statements by the tenderer affecting the Tender;
- The Tender shall be signed by or on behalf of the tenderer by a person with the delegated authority to do so. Written proof of the delegated authority to sign the tender offer may be requested.

2.7 Site Visit

A site visit will not be possible given the present travel restrictions to Fiji. Tenderers may request additional site information by email to Tuvitu Delairewa, TDelairewa@efl.com.fj

2.8 Evaluation of Tenders

Tenders received will be evaluated on the basis of such matters as EFL in its sole discretion determines are relevant, which may include the following:

- Quality of the solutions and plant offered and completeness of the offer.
- Tender sum and quoted rates and on-costs for possible approved variations.
- Proposed programme for the implementation and completion of the Works.
- Tenderer's experience, capability and commitment to achieving the project objectives.
- Tenderer's health and safety performance record and commitment.
- Compliance with the Contract conditions and specifications.

EFL may apply whatever weighting it considers in its sole discretion to be appropriate and the order set out above is not and shall not be taken to be the order of priority of the factors being considered by EFL.

2.9 Acceptance of Tender

EFL may, in its absolute discretion:

- Decline to consider any Tender;
- Reject all Tenders;
- Accept any Tender, notwithstanding that any other tender may propose a lower cost method of achieving EFL's objectives;
- Accept any Tender, even though it may not be in accordance with these Instructions.

EFL reserves the right to enter into negotiations with any unsuccessful tenderer or other party after the Tender Closing Time to complete the Contract.

2.10 Advice on Tender Outcome

All tenderers who submit a complying Tender will be notified of the outcome of the Tender. The advice will be limited to the name of the successful tenderer only if a Tender is accepted.

The successful tenderer will be invited by EFL to execute the Contract Agreement.

The original copies of all Tenders delivered to EFL will be the property of EFL and will not be returned to tenderers (unless EFL determines otherwise, in its absolute discretion).

2.11 Tender Enquiries

All enquiries relating to these Instructions shall be addressed to:

Jitendra Reddy

Energy Fiji Limited

Phone: +679 999 2436

Email: JReddy@efl.com.fj

Any additional information, modifications or clarifications arising from enquiries from any tenderer will be confirmed in writing to all tenderers unless non-disclosure is necessary to protect tenderer confidentiality.

2.12 Communication

All communications regarding these Instructions may only be made to Jitendra Reddy. EFL will not be bound by any statement, written or verbal made by any person other than Jitendra Reddy, who is the only person authorised to make representations or explanations regarding these Instructions.

EFL may issue clarifications or changes to these Instructions by way of written Notice to Tenderers ("NTT") at any time prior to the Tender Closing Date. A copy of each NTT will be mailed or delivered to those who have received a copy of these Instructions. All NTTs issued will become part of this tender.

Where the Instructions are ambiguous or unclear to a tenderer, the tenderer may request the issue of an NTT for clarification. All such requests should be made in writing to Jitendra Reddy. A copy of each NTT issued will be mailed or delivered to those who have received a copy of these Instructions. All NTTs issued will become part of these Instructions.

In the absence of an NTT, Tenders may be submitted subject to any reasonable interpretation of any ambiguity or uncertainty in these Instructions, which shall be endorsed on the Tender.

2.13 Submission of Tenders

It is EFL's preference to contract on the basis set out in these Instructions. However, EFL may consider alternative Tenders. Any alternative Tender should clearly identify the commercial advantage and 'value added' offered.

By submitting a Tender, the tenderer confirms that EFL is authorised to:

- Verify with any third party any information included in the Tender or disclosed to EFL in connection with the tender;
- Discuss any matter relating to the tenderer or the tenderer's performance with any referee or other third party;
- Carry out a credit check on the tenderer and any proposed guarantor or other security provider.

The cost of preparing and submitting a Tender shall be borne by the tenderer

2.14 Tender Conditions

EFL reserves the right to:

- Suspend or cancel (in whole or in part) this tender process and/or overall process without assigning a reason;
- Terminate or exclude at any time participation by any tenderer in the tender process without assigning a reason;
- Call and/or re-advertise for tenders or revisit any tender process;
- Waive any irregularities or informalities in this tender process;
- Run the tender process as it sees fit, including by varying the process without assigning reason;
- Select suppliers based on their tender responses and/or invite them to participate in a further closed or open tender process;
- Issue Instructions with modified descriptions of goods/services requirements, including innovations identified and/or proposed EFL through this tender process;
- Enter into discussions and/or negotiations with one or more tenderers relating to matters dealt with in these Instructions;
- Deal separately with any of the divisible elements of any tender response, unless the relevant tender response specifically states that those elements must be taken collectively;
- Limit or extend the list of potential tenderers beyond those who respond to these Instructions;
- Seek clarification of any aspect or information provided in any tender response, and seek further information from any party;
- Consider, accept or reject any further Tenders (including any alternative or non-conforming Tenders) it may receive from any tenderer or other correspondent;
- Change any time, date or timeframe in, or any other aspect of, this tender process (including extending the closing date for the receipt of tender responses) by notice in writing to each tenderer;
- Liaise or treat with any prospective or actual tenderer at any time without necessarily liaising or treating with any other prospective or actual tenderer;
- Delete or change its requirements for any goods/services covered by this tender process;
- Conduct a financial check on any tenderer submitting a tender response; and
- Obtain similar goods/services from any third party and not deal exclusively with any tenderer under this tender process.

EFL will not be bound to give any reasons for decisions made as a result of the tender process or as an outcome of the Tender evaluations. Nothing contained or implied in these Instructions shall oblige EFL to discuss, justify or give reasons for any of its decisions or actions relating to these Instructions or any response.

Whilst EFL seeks to ensure that the supporting information contained in these Instructions and otherwise provided by or on behalf of EFL to the tenderer is accurate:

- EFL makes no representation or warranty, whether express or implied, as to the completeness, correctness or accuracy of such information; and
- Any drawings, reports or other material provided by or on behalf of EFL are provided for information purposes only and may not be relied upon as constituting accurate information.
- The tenderer is to make its own enquiries as it considers necessary before relying on any information provided by EFL and before submitting its Tender. EFL shall have no liability for any inaccuracies, errors, omissions or mistakes in such documentation.

Those submitting tender responses will be deemed to have:

- Examined these Instructions and all documents referenced (if any);
- Considered all the risks, contingencies and other circumstances that may have an effect on their tender responses;
- The Tenderer will be deemed to have visited the site and satisfied themselves that the offer is complete. On site conditions will not be accepted as a reason for variation at a later date.
- Taken into account all restrictions, procedures, costs, timings and potential difficulties which may affect the performance of the Works; and
- Satisfied themselves as to the correctness and sufficiency of their tender responses, including the pricing structure offered.

All tenderers submitting a Tender agree that:

- A contract is only formed between EFL and the successful tenderer when EFL executes the Contract Agreement, setting out in full the terms upon which EFL has engaged that tenderer to carry out the Works;
- These Instructions, and any provision contained herein, do not give rise to a separate contract between EFL and the tenderer; and
- Nothing in these Instructions, or in the relationship of EFL and the tenderer, imposes any duty of care on EFL, and any such duty of care is expressly excluded.
- All costs incurred by the tenderer in connection with its Tender, these Instructions or any related matters are the sole responsibility of the tenderer.

2.15 Tender Responses

Each tenderer must include the information as required by EFL in these Instructions. Information not specifically required by these Instructions but believed by the tenderer to be of value in evaluating the responses, should be included as an addendum. Where there is reference to published manuals, only the relevant extracts should be placed in the addendum.

All tenderers warrant that:

- All information provided in their response is complete and accurate in all material respects;
- Provision of information to EFL, and the use of it by its employees, agents or contractors for the evaluation of responses and the possible subsequent negotiation and implementation of a contract, will not breach any third party's intellectual property rights; and
- EFL is under no obligation to check any tender response for errors. Acceptance of a tender response that contains errors will not invalidate any contract that may be negotiated on the basis of that tender response.

- Tenderers must not, without EFL's prior written consent, consult, communicate or agree with any other tenderer in connection with any Tender, and shall not make any attempt to influence any other tenderer to submit or not submit a Tender or to alter the proposed content of that tenderer's Tender.

2.16 Confidentiality

These Instructions, all information supplied by EFL (either itself or through its consultants or advisors) in connection with these Instructions and all discussions relating to these Instructions, are confidential. Tenderers must not release or disclose any of the information or discussions to any other person (other than the tenderer's employees or advisors on a need to know basis) without the prior written consent of EFL.

All drawings and documents of the existing works included in these tender documents are provided for the sole purpose of enabling Tenders to submit to the Employer proposals to rehabilitate the works. Unsuccessful Tenderers shall destroy all such drawings and documents following notification of award to another party. Any use of the drawings and documents by a Tenderer, other than for the purposes of assisting the Employer in rehabilitating the works, may breach the original manufacturer's copyright and the Tenderers shall indemnify the Employer and Engineer against the costs of any claim or defending any such claims that may arise from such breach of copyright by the Tenderer.

2.17 Preferred Tenderer

Should a tenderer be informed that they are a preferred tenderer, such advice does not:

- Constitute an acceptance by EFL nor create a contract;
- Constitute an award of the contract; nor
- Imply or create an obligation on EFL to enter into negotiations with or award the contract to the tenderer.

EFL reserves the right to discontinue negotiations at any time.

2.18 Acknowledgement by Tenderer

Each tenderer acknowledges that EFL has reserved to itself certain rights and discretions in these Instructions and agrees that it assumes, at its sole cost, the risk that EFL may at any time exercise any of these rights and discretions. Each tenderer agrees that it shall not have any rights, and further waives any rights it may have, against EFL or any other person arising from the exercise by EFL of its rights and discretions, and agrees not to make any claim, bring any action or otherwise seek to recover from EFL any costs incurred by that tenderer in respect of its Tender or any lost expectation of profits or other benefits which that tenderer may expect to accrue to it from acceptance of its Tender.

2.19 Governing Law

These Instructions shall be construed according to and governed by Republic of the Fiji Islands Law and the tenderers agree to submit to the non-exclusive jurisdiction of the Fijian Courts in any dispute or difference of any kind which may arise concerning the same.

3. General Conditions of Contract

3.1 Appendix to Tender

The Works shall be carried out under two separate contracts covering the offshore and onshore aspects of the Works.

The General Conditions of Contract pursuant to which the Contractor shall provide the Works under both the Onshore and Offshore Contracts will be the "FIDIC - Conditions of Contract for Plant and Design-Build for Electrical and Mechanical Plant, and for Building and Engineering Works, Designed by the Contractor", First Edition, 1999.

All capitalised terms in this section of the documents are as defined in The General Conditions of Contract unless the context requires otherwise or unless amended by the Particular Conditions of Contract.

References to Sub Clauses in this section are references to Sub Clauses in the General Conditions of Contract. Where the Appendix to Tender or Particular Conditions differ for the Offshore and Onshore Contracts, the differences are noted in the Section that follows. If no difference is noted, the same conditions apply to both Contracts.

The Employer: Sub Clause 1.1.2.2

The Employer is: Energy Fiji Limited
Private Mail Bag
2 Marlow St
Suva
FIJI ISLANDS

The Employer's Representative is: Eparama Tawake
General Manager - Generation

The Contractor: Sub Clause 1.1.2.3

The Contractor is: xxxx

Telephone: xxxx
Facsimile: xxxx
Email: xxxx

The Engineer: Sub Clause 1.1.2.4

The Engineer is: Robin Spittle
Stantec New Zealand
PO Box 13052
Christchurch 8141
265 Princes St
Dunedin
NEW ZEALAND

Telephone:	+64 021 649402
Facsimile:	+64 4 477 0616
Email:	robin.spittle@stantec.com

The Engineer's Representative: Sub Clause 3.2

The Engineer's Representative is: Tim Lusk

Stantec New Zealand

PO Box 13052

Christchurch 8141

265 Princes St

Dunedin

NEW ZEALAND

Telephone:	+64 027 4550139
Facsimile:	+64 4 477 0616
Email:	timothy.lusk@stantec.com

Time for Completion: Sub Clause 1.1.3.3

Section 1: 217 days from the Commencement Date

Section 2: 301 days from the Commencement Date

Section 3: 496 days from the Commencement Date

Defects Notification Period: Sub Clause 1.1.3.7

365 Days for each Section of the Contract.

Contract Sections: Sub Clause 1.1.5.6

Offshore Contract

There are three separate Sections

Section 1: Design, manufacture, supply, transport to Fiji, of Unit 2 generator refurbishment materials.

Section 2: Design, manufacture, supply, transport to Fiji, of Unit 3 generator refurbishment materials.

Section 3: Design, manufacture, supply, transport to Fiji, of Unit 4 generator refurbishment materials.

Onshore Contract

There are three separate Sections

Section 1: Port clearance, transport to site, site installation and testing of Unit 2 generator and all associated auxiliaries.

Section 2: Port clearance, transport to site, site installation and testing of Unit 3 generator and all associated auxiliaries.

Section 3: Port clearance, transport to site, site installation and testing of Unit 4 generator and all associated auxiliaries.

Each Separate Section shall be a standalone Section of the contract with its own Taking Over, Certificate of Acceptance, Defects Liability Period and Performance Certificate.

The following applies

- The Employer reserves the right to change the order in which each Unit is refurbished.

- Only one Unit can be out of service at any time.

Electronic Transmissions: Sub Clause 1.3

Electronic transmissions shall be by email. Drawings shall be transmitted as AutoCAD drawing files and PDF files. Spreadsheets shall be transmitted as Microsoft Excel files or PDF files. Typed documents shall be transmitted as Microsoft Word files or PDF files. The PDF files shall be created using Adobe software.

Governing Law: Sub Clause 1.4

The Contract shall be governed and take effect in accordance with the laws of the Republic of Fiji and any arbitration shall be governed by such laws. The parties hereto submit to the non-exclusive jurisdiction of the Fiji Courts.

Ruling Language: Sub Clause 1.4

English

Language for Communications: Sub Clause 1.4

The language for all communications is English.

Time for Access to the Site: Sub Clause 2.1

The Employer shall give the Contractor right of access to, and non-exclusive possession of, each part of the Site on or before the possession dates shown in the latest approved programme. Refer to clause 3.3 of Preliminary and General Section of this Contract for the preliminary programme.

Engineer's Duties and Authority Sub Clause 3.1

The Engineer must obtain approval from the Employer for any Variation that increases the Contract Price.

Performance Security Sub Clause 4.2

Offshore Contract

10% of the Accepted Contract Amount (the sum of the value of the Onshore and Offshore Contracts) for all Sections of the Contract up to Taking Over of the final refurbished Generator covered under the contract. This shall reduce by 1.67% as each Section of the Contract achieves Taking Over with the final 5% released at the end of the Defects Notification Period for the final Section of the Contract.

Onshore Contract

No Performance Security is required.

Electricity, Water and Gas: Sub Clause 4.19

The Contractor shall be entitled to use for the performance of any Works and the remedying of any defects therein the power house crane, electricity and water free of charge.

Employer's Equipment: Sub Clause 4.20

Powerhouse crane and any special tools available for the maintenance of the existing generators and their auxiliaries, for which the Contractor shall be entitled to use free of charge for installation and remedying of defects.

Free-issue materials will be provided as detailed in the Specification.

Contractor's Operations on Site: Sub Clause 4.23

The Contractor shall be entitled to use for the performance of any Works and the remedying of any defects therein any additional areas within the site as working areas. The Contractor shall place any dismantled parts no longer required at a location specified on site by the Employer. The Employer shall clear away, dispose of and remove from the Site any wreckage, rubbish and parts, which are no longer required. Upon the issue of the Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all Contractor's Equipment.

Period for Notifying Unforeseeable Errors, Faults and Defects in the Specification: Sub Clause 5.1

14 days after Commencement Date.

Working Hours Sub Clause 6.5

Working hours shall be between 7am and 10pm unless otherwise approved by the Employer.

Commencement of Work Sub Clause 8.1

The Commencement date shall be the latest of:

- Contract Agreement signed by both parties
- Receipt of Advance Payment Guarantee and Performance Security by the Employer.
- Receipt of Advance Payment by the Contractor

If the Contractor has met the obligation to provide the Advance Payment Guarantee and Performance Security under Sub Clause 4.2 but the Advance Payment has not been received from the Employer, the Commencement Date shall be the date when the Advance Payment is received by the Contractor.

Delay Damages Sub Clause 8.7

Offshore Contract

a) 1.0% of the Value of each Section of the Offshore Contract per week (7 days), up to a maximum of 10% of the Offshore Contract value, plus;
b) If the delay to one Section causes a second Section to be delayed, only the delay damage for a single Section will be applied unless other matters delay the second or subsequent Sections.

Onshore Contract

a) 1.0% of the Value of each Section of the Onshore Contract per week (7 days), up to a maximum of 10% of the Onshore Contract value, plus;
b) If the delay to one Section causes a second Section to be delayed, only the delay damage for a single Section will be applied unless other matters delay the second or subsequent Section.

Adjustments for Changes in Cost Sub Clause 13.8

No adjustments shall be allowed for changes in cost. No cost increase will be allowed for delays in completion of any of the Sections of Work or for the effect of a delay in one Section of the Work on subsequent Sections of Work.

Advance Payment Sub Clause 14.2

Offshore Contract

10% advance payment will be provided for each of Sections 1 to 3. The payment will be due within 42 days of the Date of the Letter of Acceptance provided the Performance Security is provided within the 28 day period required under Sub Clause 4.2.

Onshore Contract

10% advance payment will be provided for each of Sections 1 to 3. The payment will be due within 42 days of the Date of the Letter of Acceptance provided the Performance Security is provided within the 28 day period required under Sub Clause 4.2

Percentage of Retentions: Sub Clause 14.3

The Percentage of Retentions shall be 0%.

Schedule of Payments: Sub Clause 14.4

Interim payments for both the Onshore and Offshore Contracts shall be made on completion of specific milestones. The Milestones and the payment amount are set out on the Schedule of Payments set out in Section 5.2 of the Specification.

Delayed Payment: Sub Clause 14.8

The interest rate for delayed payment shall be at the Westpac Banking Corporation of Fiji base commercial overdraft rate applicable at the time of the delayed payment plus 1.8% per annum.

Currencies of Payment: Sub Clause 14.15

All payments under the Onshore and Offshore Contracts shall be claimed and paid in xxxx dollars, in accordance with the Contract price.

Period for Submission of Insurance: Sub Clause 18.1

Offshore Contract

Insurance: (a) evidence of insurance: 28 days before the relevant start of risk (e.g. commencement of transports or arrival of first shipment at site or start of first activities on site).

(b) relevant certificates: 28 days before the relevant start of risk (e.g. commencement of transports or arrival of first shipment at site or start of first activities on site)

Onshore Contract

Insurance: (a) 28 days before the relevant start of risk

(b) 28 days before the relevant start of risk

Sub Clause 18.2

The Employer shall take out and maintain Construction/Erection All Risk insurance.

Maximum Amount of Deductibles For Insurance of Employer's Risks: Sub Clause 18.2(d)

NZ$50,000 for both the offshore and onshore Contracts.

Minimum Amount of Public Liability Insurance: Sub Clause 18.3

NZ$10,000,000 for both the offshore and onshore Contracts.

Minimum Amount of Professional Indemnity Insurance: Sub Clause 18.5

Combined Value of the Onshore and Offshore Contracts plus 20%

Motor Vehicle Third Party Insurance: Sub Clause 18.6

NZ$1,000,000 for both the offshore and onshore Contracts.

The DAB shall be: Sub Clauses 20.2

There is no DAB. Refer to the Particular Conditions Clauses 20.2 to 20.4, including the Particular Conditions of Contract for the dispute resolution procedures

4. Particular Conditions of Contract

The following Particular Conditions of Contract amend or modify or are in addition to the General Conditions of Contract.

4.1 Definitions

References to Sub Clauses in this section are references to Sub Clauses in the General Conditions of Contract.

1.1.1.1	*delete and substitute:* "Contract" means the Umbrella Agreement, Offshore Contract and the Onshore Contract for the Generator Rehabilitation Project.
1.1.1.5	*delete and substitute:* "Employer's Requirements" means the purpose, scope, design requirements and technical data contained in the Specification.
1.1.2.2	*delete and substitute: "Employer" means Energy Fiji Limited, its assignees and any legal successors in title to Energy Fiji Limited.*
1.1.2.4	*delete and substitute: "Engineer" means Stantec New Zealand, its assignees and any legal successors in title to Stantec New Zealand.*
Add new Sub Clause 1.1.2.11	"Offshore Contract" means the Offshore Contract Agreement, the Letter of Acceptance, the Letter of Tender, these Conditions, the Specification, the Schedules, the Contractors Proposal, and the further documents (if any) which are listed in the Offshore Contract Agreement or in the Letter of Acceptance.
Add new Sub Clause 1.1.2.12	"Onshore Contract" means the Onshore Contract Agreement, the Letter of Acceptance, the Letter of Tender, these Conditions, the Specification, the Schedules, the Contractors Proposal, and the further documents (if any) which are listed in the Onshore Contract Agreement or in the Letter of Acceptance.
Add new Sub Clause 1.1.2.13	"EFL" means Energy Fiji Limited
1.1.3.3	*delete. There is no Dispute Adjudication Board*
Add new Sub Clause:	
1.1.3.10	"Acceptance Certificate" means the certificate to be issued by the Engineer to the Contractor pursuant to clause 12.5."
Add new Sub Clauses:	
1.1.6.10	"Specification" means Sections 5, 6, 7, 8, 9 and 10 of the Contract and the Common Requirements Section of the Contract.
Add new Sub Clause 1.1.6.11	"Existing Plant" means the Employer's existing plant including ancillary Units.
Add new Sub Clause 1.1.6.12	"Unit/Units" means the part(s) of the Employer's existing plant such as turbine, generator sets, including accessories"

4.2 Changes and Additions to the General Conditions of Contract

References to Sub Clauses in this section are references to Sub Clauses in the General Conditions of Contract.

1 The Contract

1.5 Priority of Documents

Delete and substitute:

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

(a) Contract Agreement;

(b) Letter of Acceptance;

(c) Appendix to Tender;

(d) Completed Tender Schedules;

(e) Particular Conditions;

(f) General Conditions;

(g) Specification;

(h) Letter of Tender;

(i) Contractor's Proposal.

1.7 Assignment

Delete and substitute:

"The Contractor shall not assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, the Contractor may:

(a) Assign the whole or any part of the Contract with the prior agreement of the Employer, at the sole discretion of the Employer, and

(b) As security in favour of a bank or financial institution, assign its right to any moneys due, or to become due, under the Contract.

The Employer shall be free to assign the whole or any part of the Contract or any benefit or interest in or under the Contract."

1.8 Care and Supply of Documents

First paragraph, replace "six copies" *with* "one electronic copy in pdf and native format".

Second paragraph, replace "Employer's Requirements" *with* "Specification".

1.12 Confidential Details

Add the following:

"The Contractor shall treat the details of the Contract and the Works as private and confidential except to the extent necessary to carry out obligations under the Contract 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 prior agreement of the Employer."

"The Contractor is required to disclose to the Engineer or the Employer confidential information to allow:

(a) The Plant and the Works to be fully integrated with existing systems and operated and maintained in the correct manner; and

(b) The Employer or the Engineer to confirm the full compliance with the Specification.

2.1 Right of Access to the Site

Replace Sub-Clause 2.1 with the following:

"Subject to Sub-Clause 4.15 (Access Route) The Employer will give the Contractor right of access to, and possession of, those parts of the Site required for the Works of each Section at times which coincide with the Employer's planned Unit outages. The times for access stated in the Appendix to Tender shall be used for the purposes of the tendered programme and arriving at the Accepted Contract Amount but shall otherwise be regarded as indicative only.

The actual dates of possession for each Section will be confirmed by the Employer during the course of the Contract. The right and possession may not be exclusive to the Contractor. The Employer may withhold any such right or possession until the Performance Security has been received.

If the Contractor suffers delay and/or incurs additional Cost as a result of delay by the Employer in giving any such right or possession, the Contractor shall give notice to the Engineer and shall be entitled, subject to Sub-Clause 20.1 [Contractor's Claims] to:

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

(b) payment of the sum or sums applicable to such delay at the rate or rates stated in the Contract, which shall be deemed to reimburse the Contractor in full for its Costs plus reasonable profit for such delay, and

(c) payment of Cost plus reasonable profit for the Contractor's abortive costs, if any, if the Employer advises the Contractor of such delay to access to a Section or Sections less than 30 days before such access was scheduled on the accepted programme current at the time such advice was given, less any Costs already covered by the rate or rates referred to in sub-paragraph (b) above.

After receiving this notice, the Engineer 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 delay in providing such right or possession 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."

3 The Engineer

3.1 Engineer's Duties and Authority

Third paragraph, second sentence, delete "Particular Conditions" *and substitute "Appendix to Tender".*

4 The Contractor

4.1 Contractor's General Obligations

In line 4 of the last paragraph delete the words "to the Engineer" *and insert* "and approved by the Engineer. No refusal by the Engineer to such alterations shall give rise to a claim for a Variation, extension of time, cost or profit."

Add the following at the end of the Sub Clause:

The Contractor agrees that if at any time during the performance of the Works the Contractor is of the opinion that a change in the design or execution of the Works:

(a) is necessary to eliminate a potential defect in the Works or a specific hazard to any person in the performance or operation of the Works; or

(b) would otherwise be beneficial to the Employer (whether by maximising the efficiency or cost effectiveness of the construction, operation and maintenance of the Works or otherwise);

then the Contractor shall bring the matter to the attention of the Engineer in writing and the Engineer shall determine whether Clause 13 [Variations and Adjustments] shall be applied and shall notify the Contractor accordingly.

4.2 Performance Security

Delete the first paragraph and substitute:

The Contractor shall provide the Employer with Performance Security in the form of an unconditional on demand bond to secure performance of the Contractor's obligations under the Contract Agreement. The Performance Security shall be for the amount stated in the Appendix to Tender. The Performance Security shall be provided as an irrevocable bond provided by a surety which shall be a registered bank in Fiji, New Zealand or Australia or such other jurisdiction as approved by the Employer.

Add the following to the end of the Sub Clause:

If the Performance Security is not delivered to the Employer within the required time or at any time ceases to be valid and enforceable (except in the circumstances expressly permitted in the contract), or the surety providing the Performance Security becomes, in the reasonable opinion of the Employer, no longer acceptable credit support then the Employer shall be entitled to:

(a) suspend the contract until the Performance Security (or an acceptable replacement, as the case may be) is delivered to the Employer. Such suspension shall not be treated as a Variation and the Contractor shall not be entitled to any extensions of time or any compensation as a result of such suspension, and

(b) withhold any payments due to the Contractor until the Performance Security (or an acceptable replacement, as the case may be) is delivered to the Employer. The

Contractor shall not be entitled to make any claims against the Employer by reason of any such withholding of payments; and

(c) without limiting the foregoing, treat such failure as a default by the Contractor under Sub Clause 15.2.

Further, if in the course of the Contracts the Employer reasonably forms the view at any time concerning the validity or enforceability of the Performance Security the Employer shall be entitled to require the Performance Security to be replaced by another form of security, following consultation with the Contractor, where the Employer gives reasons for its view. The Contractor shall, within 14 days after receipt of the Employer's request for the Performance Security to be replaced, procure the replacement Performance Security and deliver the same to the Employer within the 14 day period. The Employer shall release a replaced Performance Security within 14 days of receiving the replacement Performance Security from the Contractor, provided that should there be any unpaid claims on such replaced Performance Security, the Employer shall not be required to release it until such claims have been paid in full.

4.16 Transport of Goods

Add the following:

"The Contractor is responsible for the transport of goods from the place of manufacture to the site or place of storage in Fiji and subsequent delivery to Site. This includes obtaining clearance and attending to all associated formalities from the Port of Airport in Fiji. The Employer shall be recorded as the importer of the Works in Fiji and shall bear all applicable Fiji import taxes, customs duties and any applicable Fiji VAT.

Any packing used shall prevent mechanical damage to the contents. It shall also prevent the ingress of water. Desiccants shall be included in each waterproof package. Each package shall be clearly labelled with its contents, drawing reference, destination, handling requirements and weight.

Packing of any Plant or Materials shipped from overseas shall comply with The Fiji Islands import regulations. The Contractor shall certify, with the notice provided under (a) above that no prohibited materials have been used for packing. The Contractor shall be responsible for any fumigation costs or other costs resulting from packing that does not comply with The Fiji Islands import regulations.

The Contractor shall not bring any Goods onto the Site unless and until the time they are to be incorporated into the Works.

All Goods when incorporated into the Works shall be free from all charges, encumbrances or liens. The Works shall be delivered to the Wailoa Power Station site or to a storage place nominated by the Employer should the equipment arrive in Fiji too early for incorporation in the Works. The Contractor is responsible for loading and offloading the Goods for incorporation in the Works either from storage or on Site. The risks shall transfer to the Employer on granting of Taking Over.

The risk of accidental loss of any Plant Component to be repaired by the Contractor will pass to the Contractor".

4.18 Protection of the Environment

Delete the second paragraph and substitute:

"The Contractor shall ensure that all activities and operations under the Contract comply with all applicable Laws, and all applicable the environmental requirements for the Works"

Add the following at the end of the Sub Clause:

In carrying out the Works, the Contractor shall not do anything or omit to do anything, or use materials, substances or processes which:

(a) might discharge a contaminant into the environment, cause the emission of noise to exceed such levels, or cause any adverse effect on the environment, which would constitute a breach of the environmental approvals applicable to the Works or the Site;

(b) is a breach of any duty or obligation of the Employer; or

(c) is a breach of any of the environmental approvals applicable to the Works or the Site or causes the Employer to breach any such approvals for Works on the site."

4.22 Security of the Site

Replace Sub-Clause 4.22 with the following:

"Unless otherwise stated in the Particular Conditions:

(a) the Employer shall be responsible for keeping unauthorized persons off the Site,

(b) authorised persons shall be limited to those persons authorised by the Employer or Engineer,

(c) The Contractor shall advise the Employer if the Contractor is aware of unauthorised persons on the Site."

5 Design

5.1 General Design Obligations

Add at the end of the Sub Clause:

Without limiting the foregoing, the Contractor must ensure that the Plant, Materials and the Works are professionally designed to be appropriate and fit for the purposes for which the Works are intended as defined in the Contract and which meet the technical specifications, design life and the performance requirements set out in the Specifications and the Contractor's Tender.

5.9 Additional Design Issues

Add new Sub Clause 5.9:

"The Contractor agrees to accept all responsibility and meet all costs for developing all aspects of the design required by the Specifications and to produce detailed plans and specifications.

The Specifications include preliminary plans and specifications that describe the scope, requirements and expectations of the Employer in respect of the Works and their operation. The Contractor acknowledges in this regard that:

(a) The Specifications are a guide only and do not cover all items of work required to provide the Works; and

(b) The Employer accepts no responsibility for the completeness or accuracy of the design, plans, drawings and specifications described in the Specifications.

The Contractor shall develop the design described in the Specifications into a concept design and a detailed design (which

for the purposes of this Sub Clause 5.9 are the *designs*). The content of the designs shall be as described in the Specifications.

The Contractor shall certify to the Employer that the designs comply with at least the minimum requirements and expectations of the Employer in respect of the undertaking and performance of the Works as described in the Specifications.

The Contractor shall submit the designs to the Engineer for review on the dates specified in the Specifications, and shall undertake any factory or Site testing as required by the Specifications and supply the test results to the Engineer.

Except where the Contract otherwise provides:

(a) The Engineer shall not be required to check the designs for errors, omissions, inconsistencies, ambiguities, discrepancies or compliance with the Contract.

(b) Any acknowledgement, comment, or approval of the designs by the Engineer shall not prejudice or affect the Contractor's obligations to complete the Works in strict compliance with the Contract

(c) If errors, omissions, inconsistencies, inadequacies or other defects are found in the designs, the designs and the Works shall be corrected at the Contractor's cost, notwithstanding any consent or approval given by the Engineer.

5.10 Design Responsibility

Add New Clause 5.10

Except where the Contract otherwise provides:

(a) The Contractor is responsible for the design of all modifications to the existing generator and its auxiliaries and for the refurbishment works provided under this Contract. The Contractor is also responsible reporting to the Engineer any deficiencies in the design of equipment provided by the Employer that is being retained

(b) The Contractor is not responsible for the design of the existing generator that is not being modified under the Contract.

5.11 Technical Standards and Regulations

Add New Clause 5.11

Wherever reference is made in the Contract to specific standards and codes to be met by the Materials, Plant, and other Goods to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be accepted subject to the Engineer's prior review and written approval. Differences between the standards specified and the proposed alternative standards must be fully described in writing by the Contractor and submitted to the Engineer at least 28 days prior to the date when the Contractor desires the Engineer's approval. In the event the Engineer determines that such proposed deviations do not ensure substantially equal performance, the Contractor shall comply with the standards specified in the documents.

Notwithstanding the above, the Fiji Electricity Regulations Cap 180 Regulations 45, 46 and 47 shall apply to all elements the Works.

6 Staff and Labour

Sub-clause 6.1 Engagement of Staff and Labour

Add the following new sentence at the end of Sub-clause 6.1:

The Contractor further shall be responsible for obtaining the necessary work permits from the Local Immigration Department and pay the prescribed fees for such expenses".

6.5 Working Hours

Add the following:

"The normal working hours in respect of those parts of the Site owned by the Employer are restricted (if at all) to the extent specified in the Appendix to Tender. The Contractor acknowledges that where any part of the Works is to be carried out on parts of the Site not owned by the Employer, the Contractor will be required to comply with any restrictions on working hours put in place by the owner of the Site."

Insert the following at the end of the Sub Clause:

"Any works undertaken pursuant to the above shall not entitle the Contractor to additional costs, unless such work is undertaken pursuant to a Variation."

Sub-Clause 6.6

Facilities for Staff and Labour

The second sentence in the first paragraph shall be deleted.

Delete this Sub-Clause and substitute with:

"The Employer shall provide all necessary accommodation and welfare facilities for up to 4 persons of the Contractor's and Subcontractor's staff including weekly cleaning. The existing houses including sanitary facilities shall be cleaned and refurbished. The Employer shall provide a cook and camp assistant."

6.7 Health and Safety

Delete and substitute:

"The Contractor, in its capacity as an employer and a person in control of a place of work, shall ensure that its employees, any other persons in the workplace and people in the vicinity of the workplace, are not harmed by any workplace hazard. The Contractor shall comply with health & safety requirements for Site, the Contractor's health and safety plans and its obligations under the Fiji Health and Safety at Work Act 1996 including subsequent amendments (including all regulations and, where appropriate, Codes of Practice made under the Act), and the Electricity Regulations and any other legal and statutory safety obligations in relation to ensuring the safety of its employees, hazard management, information for employees and training and supervision of employees, and any other statutory safety obligations.

The Contractor, in its capacity as an Employer and a person in control of a place of work, shall ensure that its employees, Subcontractors, and any other persons on the Site and in the vicinity of the Site for whom it is responsible, are informed of existing Site specific hazards, emergency and other requirements and the Employer's expectations and requirements as regards health and safety, all as set out in the Specification or advised from time to time by the Engineer. The Engineer shall notify the Contractor of all of the Employer's key personnel at the workplace and their contact details for accident and other reporting purposes.

The Contractor shall immediately notify the Engineer in writing of any hazard the Contractor identifies on the Site, the date the

hazard was identified, and the steps taken to eliminate, isolate, minimise and monitor the hazard.

The Contractor shall have and comply with its own appropriate Site specific safety and health plan which shall ensure all relevant places of work are safe, that hazards are controlled and that compliance with all health and safety laws is achieved. The Contractor shall submit its project specific safety and health plan to the Engineer at least 14 days prior to commencing any work on the Site. The Contractor shall review the plan regularly and shall ensure that it is maintained so as to be up to date and fully compliant with all Laws.

The Contractor shall comply with any health and safety plans currently implemented on the Site. Failure to comply with existing health and safety plans may result in the Engineer instructing the Contractor to cease or not commence furnishing the Works or part of the Works until the Contractor complies with its health and safety obligations required pursuant to this Contract. Any such instruction shall not constitute a Variation and the Contractor shall not be entitled to any extensions of time or any compensation as a result of such instruction.

The Engineer may audit the Contractor from time to time on any aspect of its activities or procedures as they relate to safety and health. If the Engineer is of the opinion that the Contractor has failed to comply with any part of this Sub Clause the Engineer may advise the Contractor and may instruct the Contractor to cease or not commence furnishing the Works or part of the Works until the Contractor complies with its health and safety obligations required pursuant to this Contract. Any such instruction shall not constitute a Variation and the Contractor shall not be entitled to any extensions of time or any compensation as a result of such instruction.

If any employee of the Contractor or any Subcontractor suffers an injury while furnishing the Works which results in the employee's death or inability to work for any part of the next day or shift scheduled for work, the Contractor shall inform the Engineer forthwith and as soon as practicable shall provide details on the Employer's standard "Event Report" form.

For statistical purposes, the Contractor shall provide in writing, with each monthly progress report, the total hours worked during the previous month on the Site by its staff and its Subcontractors. Staff shall include supervisory and administrative staff. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Engineer may reasonably require.

The Contractor shall also comply with any safety provisions included in the Specification."

6.9 Contractor's Personnel

Add the following:

"The Contractor shall employ the key personnel named in the Tender to fill the positions stated in the Tender, or, where it is unable to do so, shall employ others approved by the Engineer pursuant to this Sub Clause 6.9".

The Contractor shall not without the prior consent of the Engineer replace any of the approved key personnel.

The Engineer shall not be required to approve a proposed replacement key person unless such person's relevant qualifications and experience are at least as good as those of the person who is to be replaced. Otherwise, the Employer's approval

to any proposed replacement key person shall not be unreasonably withheld".

7 Plant, Materials and Workmanship

7.1 Manner of Execution

Add the following Sub-Clauses (d) to (g):

(d) The Contractor shall also provide the raw materials, utilities, lubricants, chemicals, catalysts, Works, services and other matters required for testing and commissioning.

(e) Unless otherwise specified in the Contract, all Materials used other than Temporary Works shall be new.

(f) The Contractor expressly acknowledges that the Employer entered into the Contract in reliance upon the skill and judgement of the Contractor as a designer, manufacturer, fabricator, supplier, installer, erector, constructor, tester and commissioner of facilities of the size, nature and standard of the Works; and:

(g) The ability of the Contractor to design, manufacture, construct, The fabricate, supply, install, erect, test and commission the Works with the highest regard to the environment and to the safety of workers and all other persons at or in the vicinity of the site, the Works and the property of third parties."

7.7 Ownership of Plant and Materials

The Contractor warrants that the Plant and Materials are or will at the point that ownership transfers to the Employer pursuant to this Sub Clause 7.7 and until the date of issue of the Taking-Over Certificate, be free of any lien, pledge, mortgage, charge, or encumbrance whatsoever (save in respect of any rights acquired by the Employer) and in the case of any Security Interest existing over any of the Plant or Materials (or part thereof), the Contractor shall register or procure the registration of a financing change statement wholly releasing each such Security Interest prior to transfer of ownership to the Employer pursuant to this Sub Clause 7.7.

New Sub clause 7.8

(Add new Sub-Clause 7.8 as follows)

Scope of Work

(a) In performing the Work the Contractor shall comply with the regulations, standards and laws valid at the Commencement Date

(b) The Contractor shall co-operate with the Employer and Engineer for co-ordination with other Contractors working on the project. The Contractor shall not be responsible for the co-ordination of third parties other than its Subcontractors.

The Contractor is responsible for the co-ordination of the Onshore and Offshore Contracts.

New Sub clause 7.9

(Add new Sub clause 7.9 as follows)

Exclusions from Scope of Work

(a) The Contractor shall not be responsible for the functionality of the Existing Plant as a whole. The Contractor is responsible for the performance of existing plant if it is adversely affected by the new works provided under the Onshore or Offshore Contracts

(b) Any administrative authorisations and permits necessary for the performance of the Work shall be obtained by the

Employer. Failure by the Employer to obtain any authorizations in due time will result in an extension of the time schedule and compensation of any additional cost incurred.

8 Commencement, Delays and Suspension

First paragraph, second sentence, delete "Particular Conditions" *and substitute:* "Appendix to Tender".

Replace the second paragraph of 8.1 with the following:

8.1 Commencement of Work

"To the fullest extent possible within any limitations of right of access or possession of the Site granted by the Employer for each Section under 2.1 [Right of Access to the Site], 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."

8.3 Programme

Delete the first two sentences of the first paragraph and substitute:

"The Contractor shall prepare a revised programme when required to do so by the Specification, or when instructed to do so by the Engineer. The period within which the Contractor shall submit a revised programme for approval, either having been asked to do so by the Engineer or following disapproval of a previous submission, is 7 days. Each revised programme shall show the effect of Variations, extensions of Time for Completion granted and how any delays are to be dealt with. The form of the programme shall be as set out in the Specification."

Add the following after (d)(ii):

"(e) Any other requirements set out or required by the Specification."

8.8 Suspension of Work

After the second paragraph of 8.8, add the following:

"For the avoidance of doubt, delay by the Employer in giving the Contractor right of access or possession of the Site under 2.1 [Right of Access to the Site] shall not be deemed to be suspension of all or part of the Works, and the provisions of Sub-Clauses 8.8 to 8.12 inclusive shall not apply to such failure."

9 Tests on Completion

9.4 Failure to Pass Tests on Completion

Add to the end of Sub Clause 9.4 (a):

"The Contractor shall at no cost to the Employer rectify, modify or replace the Plant and repeat the Tests as often as may be determined by the Engineer acting reasonably until the said Tests have been passed."

Add the following to Sub-Clause 9.4

If the Contractor does not attend the Tests on Completion, the tests shall be deemed to have been conducted with the consent of the Contractor and the results of the tests shall be accepted as accurate.

9.5 Tests after Completion

Add new sub-clause

Should the Engineer approve Tests on Completion or Functional Guarantee Tests taking place after Taking Over, the requirements of Clause 12 as modified by the Particular Conditions shall apply.

10.1 Taking Over of the Works and Sections

Add a new paragraph to the start of the Clause

The requirements for Taking Over under the Onshore Contract and the Offshore Contract shall both be met before the Contractor can apply for Taking Over under either the Offshore or Onshore Contracts. Taking Over for the Works or any Section of the Works shall be granted for both the Onshore and Offshore Contracts at the same time.

10.3 Interference with Tests On Completion

Add new paragraph to before the final paragraph of this Clause

Nothing in this clause shall prevent the Engineer from instructing that the Tests on Completion be carried out as Tests after Completion

11 Defects Liability

365 Days for each Section of the Contract from the date of Taking Over for each Section.

11.9 Performance Certificate

Delete the second paragraph and substitute:

"The Engineer shall issue the Performance Certificate within 28 days after the latest of the expiry dates of the Defects Notification Periods, or as soon as practicable thereafter, provided that the Contractor has supplied all the Contractor's Documents, completed and tested all the Works, including remedying any defects, and received an Acceptance Certificate pursuant to Sub Clause 12.5. For the avoidance of doubt, the Engineer shall not be obliged to issue the Performance Certificate until all of the above conditions have been satisfied."

Add the following at the end of the Sub Clause:

"The issue of the Performance Certificate shall not relieve the Contractor from any liability in respect of:

(a) fraud or dishonesty relating to the Works or any part thereof or to any matter dealt with in the Performance Certificate;

(b) any incidental or erroneous inclusion or exclusion in the Performance Certificate;

(c) any unresolved issues the subject of a notice of dispute pursuant to Sub Clause 20.2, served before the seventh day after the issue of the Performance Certificate

(d) any other deed or agreement entered into between the Employer and the Contractor (whether or not with any other parties) relating to all or any part of the Works."

Add the following to the end of the Sub Clause:

"The requirements for obtaining the Performance Certificate under the Onshore Contract and the Offshore Contract shall both be met before the Contractor can apply for the Performance Certificate under either the Offshore or Onshore Contracts. Issue of the Performance Certificate for the Works or any Section of the Works shall be granted for both the Onshore and Offshore Contracts at the same time."

11.12 Supplier Warranties

Add a new Sub-Clause 11.12:

"The Contractor shall obtain from any supplier of Plant for the Works warranties for defective product and workmanship ("the Supplier Warranties") on the relevant suppliers' usual commercial terms and for a period agreed upon between the Employer and the Contractor (acting reasonably) which period shall in any event

not be less than, nor expire prior to expiry of, the Defects Notification Period. To the extent permissible the Supplier Warranties shall be assigned by the Contractor to the Employer to the intent that the Employer shall be entitled to the full benefit of such warranty. To the extent that the Supplier Warranties are not assignable, they shall be held on trust by the Contractor for and on behalf of the Employer to the intent that as between the Employer and the Contractor, the Employer shall be entitled to the full benefit of the Supplier Warranties. The Supplier Warranties shall not limit the obligations placed on the Contractor under this Contract. The Contractor shall take all necessary and reasonable steps to assist the Employer in the enforcement of any Supplier Warranties."

12 Tests After Completion

12.1 Procedure for Tests after Completion

Delete the first sentence of Sub Clause 12.1 and replace with the following:

"If Tests after Completion are specified in the Contract, or if the Engineer agrees to Tests on Completion being delayed until after Taking Over in accordance with Clause 9.5 of the Particular Conditions, this Clause shall apply:"

12.5 Acceptance Certificate

Add the following new Sub Clause to Clause 12:

"The Engineer will issue an Acceptance Certificate when the Works have met all requirements for Taking Over, and the Recommissioning Tests detailed in Part **8.6** for each Section have been completed either as part of the Tests on Completion or have been completed after Taking Over as Tests After Completion and fully meet all of the obligations under this Contract. The issue of an Acceptance Certificate does not affect the Defects Notification Period.

The Contractor may apply by notice to the Engineer for an Acceptance Certificate in respect of the Works or, if the Works are divided into Sections, in respect of each Section, at any time after completion of the Tests after Completion.

The Engineer shall, within 28 days after receiving the Contractor's application:

(a) issue the Acceptance Certificate 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/or defects which will not affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and/or 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 Acceptance Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub Clause."

13 Variations and Adjustments

Variation Procedure

New Sub Clause 13..3.1

Unforeseen Work

"(1) Where work not specified in the contractor is identified during the pre-disassembly testing or after disassembly the following procedure shall apply:

(2) The Contractor shall bring the matter to the notice of the Engineer as soon as possible or in the reports prepared at pre dis-assembly and post dis-assembly phase at the latest.

(3) If the Contractor believes any additional work is essential then they should commence preparing a formal price prior to receiving a formal Variation Price Request;

(4) The Engineer will issue a price Variation Request as soon as possible;

(5) The Contractor will be required to attend to these promptly and within 3 days at most to avoid any delay to the project.

(6) The Contractor should assume that a firm price will be required before the Engineer can confirm any item of additional work not set out in the Contract. The Engineer will issue the Variation, if it is accepted, within 2 days.

(7) The failure to provide firm pricing in the required time scale will not provide a reason for a time extension to the Section of Work.

The Employer is most unlikely to allow additional work to proceed without a formal price for the agreed scope."

13.5 Provisional Sums

Delete the second sentence in (b)(ii)

13.8 Adjustments for Changes in Cost

Delete the Sub Clause and insert:

"Onshore and Offshore Contracts

There shall be no adjustment to the contract price owing to changes in costs for any reason The Contract Price may change because of approved Variations.

(Add new paragraph to end of sub-clause)

Where a variation is granted the price shall be valid from the date the Engineer approved the Variation rather than from the Base Date."

14 Contract Price and Payment

14.1 The Contract Price

Delete existing sub-clause 14.1 (b) and replace with the following paragraph (b):

(a) The Employer shall pay for all Fiji customs and import duties including clearing, handling charges, port dues and demurrage
(b) The Contract Price excludes any applicable Value Added Tax (VAT) but shall include Withholding Tax (WHT), which will be assessed or imposed on the onsite Works. It includes all other Fiji taxes including Company tax and Personal tax. The Contract Price also includes all offshore taxes, duties levies and charges.
(c) The Contract Price includes inflation adjustment and exchange rate fluctuation and the Employer shall not be further liable to additional any costs relating to these matters in this paragraph, unless such costs are caused by delay of the Employer.
(d) The Contractor shall be responsible for the payment of any redeemable bond posted by the relevant authorities in the Country in relation to the importation of the Contractor's Equipment."

14.2 Advance Payment

Add the following to the start of Sub Clause to Clause 14.2

The Advance Payment shall be made as detailed in the Appendix to Tender Sub-clause 8.1 *[Commencement of Works]*. The Employer shall make an advance payment when the Contractor submits Performance Security in accordance with this Sub-clause 4.2 *[Performance Security]* of the Particular Conditions and when the conditions included in Specification (5.2 Payments) are fulfilled.

An Advance Payment Guarantee shall be provided by the Contractor as an irrevocable bond provided by a surety which shall be a major Australian or New Zealand bank with a Fitch or Standard & Poor's rating of AA minus or better. The advance Payment Guarantee bond shall have a minimum rating of *Investment Grade Rating as* indicated by Credit Rating Agencies such as Moody's, Standard&Poor's (S&P) and Fitch.

14.5 Plant and Materials Intended for the Works

Delete the Sub Clause and insert:

"Progress payments during manufacture of the Plant and Materials off Site in Fiji will be made subject to:

(a) The Contractor certifying to the Employer the items of Plant covered by the payment are at a location within The Fiji Islands and that the ownership of completed or identified items of Plant and Materials has passed to the Employer.

(b) The Contractor marking the certified Plant and Materials as being the property of the Employer and separately storing such Plant and Materials.

(c) The certified Plant and Materials being made available for inspection by the Engineer or by an inspector appointed by the Engineer.

Progress payments during manufacture of the Plant and Materials off Site outside Fiji will be allowed subject to the Contractor certifying to the Employer that the ownership of completed or identified items of Plant and Materials has passed to the Employer and the Contractor has provided the Employer with an unconditional bank guarantee to the value of the progress payment claimed.

No progress payments for off-Site manufacture of Plant and Materials will be made by the Employer unless all of the above conditions have been met.

14.6 Issue of Interim Payment Certificates

Replace the first paragraph of this Sub Clause with the following;

"No amount will be certified or paid until the Engineer has received and approved the Performance Security. The certificates of insurance required from the Contractor in accordance with Clause 18 [Insurance] must be provided within the requisite time period before the start of exposure to the risk insured against. If these are not received, the Milestone related interim payment will be withheld. Thereafter, the Engineer shall, after receiving a Statement and supporting documents, issue to the Employer an Interim Payment Certificate which shall state the amount which the Engineer fairly determines to be due, with supporting particulars."

14.7 Payment

Add the following Sub Clause

14.7.1 Interim Payment Procedure

As specified in the GCC, when the Contractor considers a progress payment milestone as defined in the Specification, Section 5.2, a claim for an interim progress payment can made.

The procedures and timing for interim progress payments shall be as follows:

(a) Each Statement shall be in writing and comply with the requirements of the Contract.

(b) The Contractor shall submit each Statement to the Engineer by the seventh day of the month following the month in respect of which the Statement is calculated.

(c) Within seven days of receipt of each Statement the Engineer shall issue a Payment Certificate in respect of the Statement and provide a copy to the Contractor.

(d) Each Payment Certificate shall identify the Payment Claim to which it responds, indicate the amount that the Engineer fairly determines to be due and show the manner in which the amount due has been calculated.

(e) If the amount indicated on a Payment Certificate differs from the amount claimed in a Statement, the Payment Certificate will provide reasons for the difference.

(f) The Contractor shall submit a tax invoice to the Employer for the amount to be paid as shown on a Payment Certificate within five days of receipt of the Payment Certificate.

(g) Subject to compliance by the Contractor with the provisions of this Sub Clause, the Employer will pay the invoiced amount within 56 days following receipt of the Contractor's tax invoice.

(h) For the purposes of interpreting the requirements of the Contract, the Employer acknowledges that all Payment Certificates issued by the Engineer shall be regarded as payment schedules and that the Engineer has the full authority and support of the Employer in issuing such payment schedules or certificates in the Employer's name; and

(i) The Contractor acknowledges that the Engineer has the full authority and support of the Employer in issuing the payment schedules or certificates and the Contractor acknowledges that the Employer can only make payment against correct tax invoices prepared by the Contractor for the amount specified in the payment schedules or certificates."

14.8 Delayed Payment

Delete the second paragraph and substitute:

"Financing charges shall be calculated using the annual interest rate as set out in the Appendix to Tender."

14.11 Application for Final Payment certificate

Delete the last sentence and substitute:

"Thereafter, if the dispute is finally resolved under Clause 20, the Contractor shall then prepare and submit to the Employer (with a copy to the Engineer) a Final Statement.

14.13 Issue of Final Payment Certificate

Add at the end of the Sub Clause:

"The Contractor shall submit a tax invoice to the Employer for the amount to be paid as shown on the Final Payment Certificate within five days of receipt of the Payment Certificate.

Subject to compliance by the Contractor with the provisions of this Sub Clause, the Employer will pay the invoiced amount within 56 days following receipt of the Contractor's tax invoice."

14.15 Currencies of Payment

Delete Sub Clause 14.15 and replace with the following:

"The Contract shall be paid in the currencies stated in the Appendix to Tender.

No adjustment of the Contract Price shall be made for any fluctuations in the rate of exchange between the currency of the Contractor's country of origin and any other currency."

14.16 Fiji Islands Taxation

Add new sub-clauses 14.16.1 to Clause 14.16.8

14.16.1 Fiji Value Added Tax, Withholding Tax and Contract Price

The offshore and onshore contract prices shall exclude Fiji Value Added Tax (VAT) and Fiji Withholding Tax.

The Contractor will be able to recover any applicable Fiji Value Added Tax through adjustments to any claims for payment, if required. Refer to Clause 14.16.5.

The Contractor will be able to recover any applicable Fiji Withholding Tax through adjustments to any claims for payment, if required. Refer to Clause 14.16.7.

The Contractor will be instructed how to present invoices which will include instructions concerning the inclusion of Withholding Tax and Value added Tax at the relevant rate at the time.

14.16.2 Offshore Country Withholding Taxes, Goods and Services Taxes, Duties and other Taxes

The offshore and onshore contract prices shall include all offshore country withholding taxes, goods and services taxes, duties and all other taxes, levies or charges.

14.16.3 Contractor to inform itself concerning Fiji tax obligations

The Contractor is required to obtain all necessary advice and to inform themselves independently over all matters concerning tax obligations in Fiji and other countries

14.16.4 Tax Residency in Fiji

(*Add a new sub-clause 14.16.4 stating)*

Where a Contractor is operating in Fiji for more than 6 months in a single tax year, Fiji Revenue and Customs Authority (FRCA) will, for tax purposes, consider the Contractor to be a Permanent Establishment and the Contractor will be subject to Fiji taxation as if the Contractor was operating as a registered identity.

The Commissioner of FRCA in Fiji has advised that a company may apply for an exemption to this rule if they expect to be operating in Fiji for no more than three years.

14.16.5 Value Added tax (VAT)

(Add new Sub-Clause 14.16.5 as follows)

Where any supply occurs under or in connection with the Contract or Works for which VAT is not otherwise provided, the Contractor shall be entitled to increase the amount payable for the supply by the amount of any applicable VAT. The Rate at the Commencement Date is 9%.

The Employer will not be obliged to pay any amount in respect of VAT to the Contractor unless and until a tax invoice that complies with the VAT legislation has been issued in respect of that VAT.

Off - Shore Work

All invoices issued for off-shore work pursuant to this Contract shall be expressed in the foreign currency stated in Appendix to Tender, and will be issued using Contractor's overseas office letterhead. No GST or VAT shall be included in the invoice. Payment of the foreign currency shall be paid at the prevailing exchange rate as at the date of payment.

The Employer shall pay the invoice amount in foreign currency to each overseas bank account nominated by Contractor within 56 days of receipt of the invoice.

On - Shore Work – Fiji Registered Entities

All invoices issued for on-shore work pursuant to this Contract from Fiji registered entities shall state the foreign currency amount and the VAT amount in Fiji dollars. The Value Added Tax due is calculated by converting any foreign currency amounts to Fiji dollars using the corresponding foreign exchange rate prevailing on the date of the invoice. Any Value added Tax (VAT) amount component at the prevailing VAT rate shall be added to indicate the VAT inclusive price (VIP). The invoice shall be issued using Contractor's Fijian registered entity letterhead. The current VAT rate at the Commencement Date is 9%.

The Employer shall pay the amount agreed to be in foreign currency to a Fiji based foreign currency bank account nominated by the Contractor. The Employer shall pay the amount agreed to be in Fiji dollars including the VAT amount to a local bank account nominated by the Contractor.

The Employer shall pay the invoiced amounts within 56 days of receipt of the invoice.

The Contractor shall advise the Employer the details of its Fijian registered entity including the Tax Identification Number given by FRCA as soon as possible after the execution of this Agreement.

The Employer shall not be responsible to pay invoices issued by the Contractor or its Fijian registered entity if such invoices are not in conformance with the above stated requirements.

On - Shore Work –Entities not registered in Fiji

Invoices from entities not registered in Fiji can be expressed in foreign currency. No Value Added Tax is due and no amount is required to be added... Payment procedures shall be agreed with the Employer at the time.

The Employer shall pay the invoiced amounts within 56 days of receipt of the invoice.

14.16.6 Provisional Taxation

(Add new Sub-Clause 14.16.6 as follows)

(Add new paragraph to Particular Conditions clause 14.16 stating):

The Employer will deduct provisional tax at the specified rate of 5% at the Commencement Date of the gross invoiced amount of each invoice submitted by the Contractor for services carried out in Fiji.

Explanatory note:

Provisional Tax is domestic income tax deducted at source at a rate of 5 percent on the VAT exclusive price of services and paid to the FRCA by the Employer. Provisional tax applies to on-shore services provided by the Contractor resident in Fiji for Tax purposes.

This provisional tax is claimable by the Contractor when end-of-year tax returns are submitted to FRCA, provided that the Contractor is registered as a tax payer in Fiji

Provisional Tax is not deducted if Withholding Tax is deducted.

14.16.7 Withholding Tax

(*Add a new sub-clause 14.16.7 stating :)*

The Contract price shall include Fiji Non-Resident Withholding Tax. The Contractor will be able to recover any applicable Fiji Withholding Tax through adjustments to any claims for payment, if required. The Contractor will be instructed how to present invoices which will include instructions concerning the inclusion of Withholding Tax and Value Added Tax at the relevant rate at the time.

Notwithstanding any other provision of this Contract to the contrary, the Contractor shall be required to allow for any Withholding Tax (**"WHT"**) whatsoever. The rate of Withholding Tax at the Commencement Date is 15%.

In general withholding tax will be deducted at the current rate from invoices for onshore work where the Contractor invoice is not in the name of a company registered in Fiji. The withholding tax will not be deducted from invoices from companies that are registered in Fiji.

Withholding tax may be deducted at the applicable rate from invoices for offshore work depending on the type of work and the country of origin.

Note that the invoice from the Contractor shall include the value of any applicable Withholding Tax. The Withholding tax portion of the invoice is paid by the Employer directly to FRCA and the balance is paid to the Contractor.

The Contractor shall obtain clearance from FRCA, that for the purposes of this contract, it fulfils the requirements for a Permanent Establishment for tax purposes in Fiji. If the FRCA confirms that the Contractor, under the Fiji Income Tax Act qualifies as a Permanent Establishment, the Contractor shall register a branch in Fiji , pay the mandatory Fiji provisional tax at the applicable rate and lodge its Company tax return in Fiji. The non-resident withholding tax will not apply.

Should the FRCA agree that this contract does not fulfil the requirements for the Contractor to be Permanently Established in Fiji, then any services component of the Contract, as defined for tax purposes in Fiji, will be subject to the Non Resident Withholding Tax at the applicable rate. In this case, the Contractor will be required to submit a letter from the Tax Authority in the Contractor's home country explaining whether any tax credit against withholding tax is available in the home country. The Non-Resident Withholding Tax will be deducted by the Employer from all of the Contractor's invoices on a net basis for the services component of the Contract, as defined for tax purposes in Fiji.

Explanatory note:

WHT may be applicable on specified payments to non-residents, as defined in Fiji's Income Tax Act (Budget Amendment) Decree 2001 and subsequent amendments or relevant double tax agreements

WHT is usually payable at the applicable rate on onshore work where a Contractor is non-resident in Fiji. WHT can also be

payable at the applicable rate on the services component of offshore portions of contracts.

WHT may be available as a credit against income tax in the home country of the non-resident Contractor.

14.16.8 Contractor Home Country Tax Credits

(Add a new sub-clause 14.16.8 stating)

The Contractor may receive tax benefits in the home country owing to:

- Tax credits received in the home country against non-resident withholding tax payments in Fiji;
- Tax credits received in the Contractor's home country as a result of the operation of a permanent establishment in Fiji.

The Contractor is required to provide a written undertaking as part of this Contract Agreement stating that they will exercise their best endeavour to both maximise any tax credits as a result of working in Fiji in the Contractor's home country and to refund these tax credits in the home country to the Employer.

14.16.9 Company Tax

(*Add a new sub-clause 14.16.9 stating)*

The Contractor is responsible for paying all income tax due on profits earned in Fiji. The Employer will not compensate the Contractor for this taxation.

14.16.10 Personal Tax

(*Add a new sub-clause 14.16.10 stating)*

The staff of the Contractor are responsible for paying all income tax due on income earned in Fiji. Similarly any superannuation related issues such as FNPF liabilities (where applicable) shall be the responsibility of the Contractor and its Fijian registered entity. The Employer will not compensate the Contractor, or its staff, for this taxation, regardless of whether the staff are Fijian nationals or residents of another country.

14.17 Direct Payment

(Add new Sub-Clause 14.17 as follows)

Before issue of the Final Payment Certificate, the Employer may pay unpaid moneys owed by the Contractor to a worker or a subcontractor directly to that worker or subcontractor, where:

a) permitted by law;

b) given a court order in favour of the worker or subcontractor; or

c) Requested in writing by the Contractor.

Such payment made to a worker or subcontractor in compliance with a legislative requirement shall be deemed to be part-satisfaction of the Employer's obligation to pay pursuant to Sub-Clause 14.7 [Payment].

15 Termination by Employer

15.2 Termination by Employer

Add the following at the end of sub-paragraph (a): "and such failure materially and adversely affects the performance of the Works".

Add the following sub-paragraphs (g) to (i):

"(g) commits any other material breach of the Contract which is not remedied within 14 days of receiving notice of the breach from the Employer,"

(h) becomes liable for the maximum amount of Delay Damages as per Sub-Clause 8.7

(i) becomes liable for the maximum liability referred to in Sub-Clause 7.8, 9.4 and 12.4."

Add the following at the end of the last paragraph of Sub Clause 15.2:

"Without limiting the foregoing provisions, upon termination of the Contractor's employment under the Contract, the following shall apply:

(a) the Contractor shall, when and if required by the Employer, assign to the Employer all of its rights under all or any of the subcontracts;

(b) the Contractor shall co-operate with the Engineer in the transfer of information and disposition of work in progress so as to mitigate the cost to the Employer of the termination of the Contractor's employment;

(c) the Contractor shall comply with all other reasonable requests from the Engineer and co-operate with and provide all reasonable assistance to the successor contractor (if any) and/or the Employer following the termination of the Contractor's employment to ensure that there is a smooth and efficient handover of the Works to any successor contractor and/or the Employer as the case may be;

(d) if requested to do so by the Employer, the Contractor shall assign to the Employer any or all of the Contractor's rights under the Contractor's shipping documentation (if any) for items of Plant and/or Materials to be supplied for incorporation into the Works and execute all documentation and do all things reasonably required by the Employer to effect such assignment, within 14 days of being requested to do the same;

(e) the Employer may pay any Subcontractor for any Materials or Goods delivered or works executed for the purpose of the Contract (whether before or after date of termination) insofar as the price thereof has not already been paid by the Contractor. Payments made under this Sub Clause may be deducted from any sums due or to become due to the Contractor. It is a condition of this contract that the Contractor is entitled to be paid any such sum as, in the event of termination and the making of any direct payments pursuant to this Clause 15 [Termination by Employer], may remain after the amount equivalent to such direct payment has, in addition to any other amounts certified by the Engineer under this Sub Clause, been debited against the Contactor;

(f) the Contractor shall provide to the Employer upon request and as a precondition to receiving any payment under this Clause 15 [Termination by Employer], such evidence as the Employer shall reasonably require to satisfy the Employer that property in all Plant and Materials which have been

supplied by the Contractor to the Employer has vested (or will upon such payment vest) in the Employer."

16 Suspension and Termination by Contractor

16.1 Suspension of Work

Add the following after the final paragraph of 16.1:

"For the avoidance of doubt, delay by the Employer in giving the Contractor right of access or possession of the Site under 2.1 [Right of Access to the Site] shall not entitle the Contractor to suspend all or part of the Works under this Sub-Clause 16.1."

16.2 Termination by Contractor

Add the following after the final paragraph of 16.2:

"Delay by the Employer in giving the Contractor right of access or possession of the Site under 2.1 [*Right of Access to the Site*] shall not entitle the Contractor to terminate the Contract for any reason listed in sub-paragraphs (a) to (g) inclusive of this Sub-Clause 16.2 unless such right of access and possession has been delayed by more than 365 days from the date on which it was originally scheduled and after adjustment for any extensions of Time for Completion granted by the Engineer."

17 Risk and Responsibility

17.6 Limitation of Liability

Add the words:

"Sub Clause 8.7 *[Delay Damages], " after the word* "under" *on line 3*.

18 Insurance

The following Insurances described in clauses 18.1 to 18.6 are required under both the Onshore and Offshore Contracts.

18.1 General Requirements for Insurances

Fourth paragraph; replace the first sentence with the following:

"Where the Contract requires insurance to be effected in joint names:

1. The cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured.
2. The policy or policies shall provide for waiver of subrogation with respect to each of the insured."

Fourth paragraph; adjust sub-paragraph (ii) as follows:

"(ii) additional joint insured **shall be entitled** to receive payments directly from the insurer or to have any other direct dealings with the insurer, and…"

Sixth paragraph; replace "the respective periods stated in the Appendix to Tender" *with* "14 days".

18.2 Insurance for Works and Contractor's Equipment

The Employer shall insure the Works, Goods 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. The insurance cover shall apply to the Site at Wailoa Power Station and also any storage area provided by the Employer for storage of Plant and Materials in Fiji before it is sent to Site. The insurance shall be in the joint names of the Employer and all Contractors working on the Wailoa Mid Life Refurbishment Project

Fourth paragraph, sub-paragraph (d), replace

		"the amount stated in the Appendix to Tender" *with* "$AUD50,000.00 or as may otherwise be agreed by the Employer". To be added at the end of Sub-clause 18.2 "The Employer shall coordinate the insurance policy with the Contractor and shall provide a copy of the insurance policy 28 days from the commencement of the risk period." The Employer shall maintain separately a material damage and all risks policy covering the existing Wailoa power station and all of existing buildings and existing plant and equipment. The Contractor is responsible for the insurance of the Plant Materials and Contractor's Equipment in transit from the place of manufacture to the Site at Wailoa Power Station or to a place of storage nominated by the Employer in Fiji, and from the place of storage to the Site, according to Institute Cargo Clause "A". The Contractor's insurance must include the risks of loading and offloading at all locations including on arrival at the Site.
18.3	**Insurance against Injury to Persons and Damage to Property**	*Third paragraph, delete sub-paragraph (d)(i)*
18.5	**Professional Indemnity Insurance**	*Add the following new Sub Clauses to Clause 18:* "The Contractor shall effect and maintain professional indemnity insurance, which shall cover the risk of professional negligence in the design of the Works, for an amount not less than that specified in the Appendix to Tender for any one claim or series of claims arising out of the same occurrence.
18.6	**Motor Vehicle Third Party Liability Insurance**	"The Contractor shall effect and maintain, until expiry of the Defects Notification Period, motor vehicle third party liability insurance for an amount not less than that specified in the Appendix to Tender for any of the Contractor's vehicles used and operated in Fiji."
19	**Force Majeure**	
19.6	**Optional Termination, Payment and Release**	*Add the following after the final paragraph of 19.6:* "Where and to the extent that a Force Majeure event or circumstance occurs at the same time as the Contractor is unable to proceed with the Works because the Employer has not granted right of access or possession of the Site, the option of termination under this Sub-Clause 19.6 shall not apply unless the aggregate period for which such concurrent causes of delay has existed exceeds 730 days."
20	**Claims, Disputes and Arbitration**	
		Delete Sub Clauses 20.2 to 20.8 inclusive and substitute the following Sub Clauses:
20.2	**Disputes**	"If either party is dissatisfied with a decision or instruction of the Engineer, or if no decision is given by the Engineer within a prescribed time frame under this Contract or there is some other dispute between the Contractor and the Employer in relation to this Contract, then the dissatisfied party may refer the matter to mediation or arbitration pursuant to Sub Clauses 20.3 or 20.4 respectively.

Unless the dissatisfied party has notified the other party and the Engineer within 28 days of such decision or instruction of its intention to refer the matter to mediation or arbitration it shall be deemed to have accepted the decision or instruction as final."

20.3 Mediation

"Where a request for mediation is made the parties shall endeavour to agree on a mediator and shall submit the dispute to him/her. The mediator shall discuss the matter with the parties and seek to resolve the dispute by agreement. All discussions in mediation shall be without prejudice and shall not be referred to in any later proceedings. The parties shall bear their own costs in the mediation and shall each pay half the costs of the mediator.

The parties may at any stage agree to invite the mediator to give a decision to determine the matter. The mediator's decision shall in such case be binding on both parties unless within 14 days either party notifies the other in writing that it rejects the mediator's determination.

If:

(a) Mediation has been requested but has not been agreed upon within 14 days of the request, or

(b) Within 14 days of mediation being requested the parties have been unable to agree upon a mediator, or

(c) No agreement has been reached in mediation and no determination has been issued by the mediator within 56 days of the request for mediation, or

(d) either party has, within the prescribed time rejected the mediator's determination,

then the matter may be referred to arbitration."

Sub-Clause 20.5

Amicable Settlement

Change the first sentence of Clause 20.5 to read

"Where notice of dissatisfaction has been given under Sub clause 20.2, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration.

20.6 Arbitration

The first sentence shall be amended as follows: "Unless settled amicably or by mediation, any dispute shall be finally settled by international arbitration."

After sub-paragraph (c), add sub-paragraph (e):

"The arbitral award shall be substantiated in writing and include a decision by the arbitral tribunal on the matter of costs of the arbitration."

Insert at the end of Sub-Clause 20.6:

"With regard to any dispute subject to this section the IBA Rules on the Taking of Evidence in International Commercial Arbitration of June 1, 1999 shall apply. The work product of an (outside or in-house) attorney and communication between an (outside or in-house) attorney and a client shall be subject

to the privilege provided for in Article 9 section 2 of said IBA Rules and shall not be disclosed.

If the value of the total matter in dispute, including the value of any counterclaims, is less than AUD $500,000, the tribunal shall consist of one arbitrator, and if the value of the total matter in dispute is AUD $500,000 or more the tribunal shall consist of three arbitrators. If the parties cannot agree whether or not the value is less than AUD $500,000, the appointing authority shall decide on the number of arbitrators on written request by one of the parties.

If the tribunal consists of one arbitrator, the appointment shall be effected as set forth in Article 8.3 of the ICC Rules of Arbitration. If the tribunal consists of three arbitrators, each party shall nominate one arbitrator for confirmation by the ICC. Both arbitrators shall agree on the third arbitrator within thirty (30) days after their appointment. Each arbitrator nominated by a party shall use reasonable efforts to consult with such party with respect to the third arbitrator before agreeing on his/her nomination. Should the two arbitrators fail to reach an agreement on the third arbitrator within the thirty-day period, the ICC shall select and appoint the third arbitrator. The seat of arbitration shall be Sydney, Australia. The procedural law of such seat of arbitration as applicable to international arbitration proceedings shall apply where the ICC Rules of Arbitration are silent. The language to be used in the ADR and the arbitration proceedings shall be English.

The arbitrator shall have full power to open up, review and revise any decision, opinion, instruction, direction certificate or valuation of the Engineer and to award on all questions referred to him/her. Neither party to the arbitration shall be limited to the evidence or arguments put before the Engineer or put before a mediator.

No decision given by the Engineer in accordance with his/her duties under the Contract shall disentitle him/her from being called as a witness and giving evidence before any hearing on any matter relevant to the dispute.

Where the matter has been referred to mediation the mediator shall not be called by either party as a witness, and no reference shall be made to the determination, if any, issued by the mediator in respect of the matter in dispute."

20.5 Works to Continue

"Performance of the Contract shall continue during mediation or arbitration proceedings unless the Employer shall order suspension. If any such suspension is ordered the documented costs incurred by the Contractor and occasioned thereby shall be added to the Contract Price.

No payments due or payable by the Employer shall be withheld on account of pending reference to mediation or arbitration."

New Sub clause 22

Add the following new clause:

Onshore and Offshore Contracts

"The total scope of the Generator Refurbishment Project is included in the Onshore and Offshore Contracts. All of the Work is deemed to be included in one of the two Contracts. No Variation will be granted for work described in the Contract Document that is claimed by the Contractor to be covered by neither of the two Contracts.

Appendix and Annex

delete

5. Specification – Preliminary and General

5.1 General

5.1.1 Location

The Site of the proposed Works is the Wailoa Power Station on Viti Levu in the Republic of the Fiji Islands. The site is normally accessed by road from the Capital, Suva.

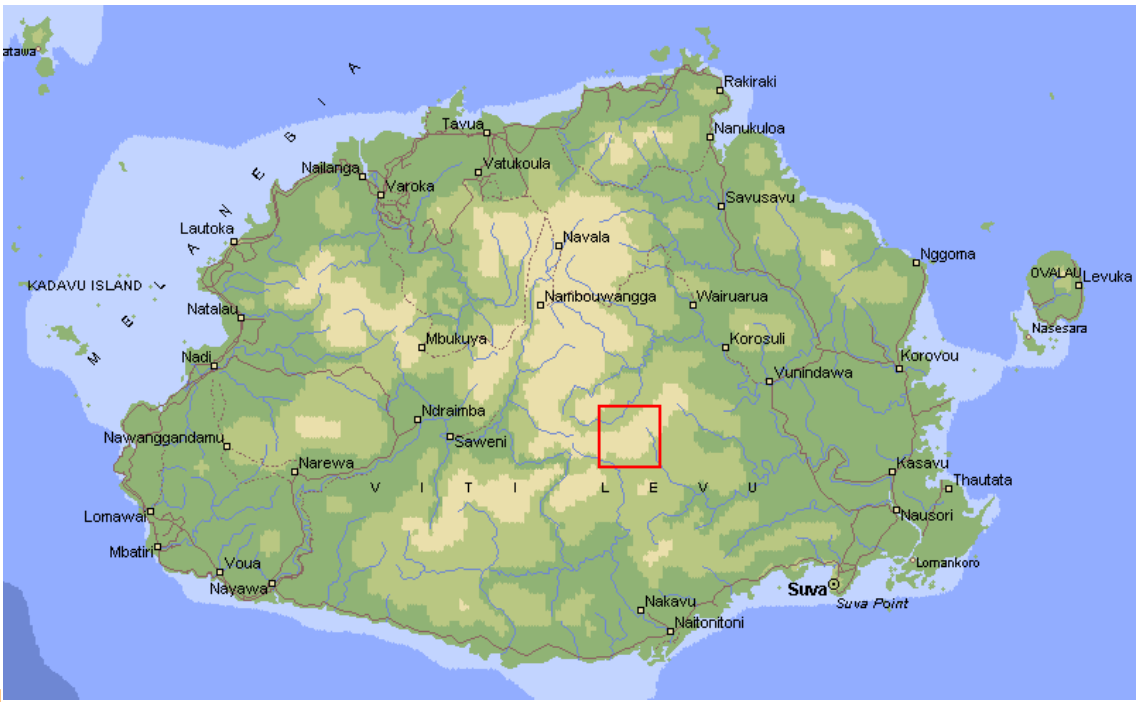

Figure 5-1: Viti Levu Island, Fiji. Approximate site location shown in red box

5.1.2 Access

Only construction vehicles will be allowed in the construction zone. All other vehicles shall be parked in the designated contractor staff car parking areas. Four-wheel drive vehicles are required to access the site.

5.1.3 Site

The Contractor and his/her staff shall comply with the Employer's requirements for external contractors when working on the Site.

5.1.4 Construction Activities to be provided by the Employer

The Employer will provide the following services and construction work as part of this project;

- Provide accommodation, free of charge for the Contractor's team either at Wailoa Camp which is approximately one kilometre from the power station or at Monasavu camp which is approximately

12km from the power station over a 4WD road. The contractor will need to arrange their own food but the Employer can assist in arranging a cook and cleaner to be available;

- The Contractor must provide its own accommodation at other locations in Fiji;
- Crane and operator at site to assist with plant installation;
- The Contractor is required to co-operate with the Employer in all respects in the provision of these services.

5.2 Payments

5.2.1 Offshore Part

Payment will be made on completion of milestones as set out below:-

Milestone	Milestone Payment Basis	Cumulative Payment	Documents to be presented
The following applies to each of Sections 1 to 3			
Advance Payment	10% of the Accepted Contract Amount (Offshore Part)	10% of the Contract Price (Offshore Part)	- Commercial invoice - Advance Payment Guarantee and Performance Security
Design	5% of the Contract Section Price (Offshore Part). Based on submittal of the updated Basic and Detailed design reports, outlining any proposed changes to the design approach from that undertaken on Unit 1.	15% of the Contract Price (Offshore Part)	- Commercial invoice - Updated Basic and Detailed Design information
Manufacture and delivery of parts for shipment to Fiji.	70% of the Contract Section Price (Offshore Part). Based on monthly claims for the percentage of completion of equipment under manufacture at the Contractor's and/or Subcontractor's workshop. Payments for components delivered from suppliers shall be due on delivery to site or the Employers store.- All progress payments for offsite work shall be subject to the claim procedure described in Section 4.2, clause 14.5 for details of the claim procedure.	Total payments for the Section up to 85% of the Contract Section Price (Offshore Part)	- Commercial invoice - Copy of purchase orders. - Packing List - Bill of Lading
Completion of Installation	5% of the Contract Section Price (Offshore Part).	Total payments for the Section up to 90% of the Contract Section Price (Offshore Part)	- Commercial invoice - Acceptance of Test Reports by Engineer

On Taking Over	5% of the Contract Section Price (Offshore Part).	Total payments for the Section up to 95% of the Contract Section Price (Offshore Part)	- Commercial invoice - Taking-Over Certificate or in case of deemed Taking-Over Certificate against Commercial Invoice only - Warranty Guarantee (5% of Section 1)
On granting Acceptance Certificate	5% of the Contract Section Price (Offshore Part).	100% of the Contract Section Price (Offshore Part)	- Commercial invoice - Acceptance Certificate.
Defects Notification Period	Covered by a 5% Performance Bond for each Section – no retentions.		

5.2.2 Onshore Part

Payment will be made on completion of milestones as set out below: -

Milestone	Milestone Payment Basis	Cumulative Payment	Documents to be presented
The following applies to each of Sections 1 to 3			
Advance Payment	10% of the Accepted Contract Amount (Onshore Part).	10% of the Contract Price (Onshore Part)	- Commercial invoice - Advance Payment Guarantee and Performance Security
Completion of Installation and Commissioning	80% of the Contract Section Price (Onshore Part). Based on monthly claims for the percentage of completion of installation on site.	Total payments for the Section up to 90% of the Contract Section Price (Onshore Part)	- Commercial invoice - Acceptance of Commissioning Reports by Engineer
On Taking Over	5% of the Contract Section Price (Onshore Part).	Total payments for the Section up to 95% of the Contract Section Price (Onshore Part)	- Commercial invoice - Taking-Over Certificate or in case of deemed Taking-Over Certificate against Commercial Invoice only - Warranty Guarantee (5% of Section 1)

On granting Acceptance Certificate	5% of the Contract Section Price (Offshore Part).	100% of the Contract Section Price (Onshore Part)	- Commercial invoice - Acceptance Certificate.
Defects Notification Period	Covered by a 5% Performance Bond for each Section – no retentions.		

The Contractor shall submit a schedule of payments for agreement by the Engineer. This schedule is to be used by the Employer for financial planning only and not for payment to the Contractor.

Delivery shall mean delivery to the project site or other store in The Fiji Islands as may be approved by the Engineer. For overseas sourced items manufactured specifically for this contract, payment will be made on presentation of certified shipping documents.

5.3 Programme

The following programme shall apply for the refurbishment of each of Sections 1 to 3 of the Contract. Please note one week equals seven days as defined in the General Conditions of Contract. All durations for each Section are cumulative starting on the Commencement Date of that Section.

Activity	**Section 1 Duration**	**Section 2 Duration**	**Section 3 Duration**
Time allowed for Advance Payment in Schedule	30 days	30 days	30 days
Design Report (Basic and Detailed combined as one) (as already provided for U1 but detailing any changes proposed by the Contractor)	4 weeks		
Approval of Design Report	14 days		
Outage period for rehabilitation excluding wet commissioning	75 days	56 days	59 days
Time after outage commencement for generator stator to be made available to Contractor	14 days	14 days	14 days
Time after outage commencement for generator rotor to be made available to Contractor	16 days	16 days	16 days
Time after outage commencement for generator stator assessment report to be provided by Contractor	21 days	21 days	21 days
Time after outage commencement for generator rotor assessment report to be provided by Contractor	21 days	21 days	21 days

Activity	Section 1 Duration	Section 2 Duration	Section 3 Duration
Time from generator removal to generator stator being ready for the Generator Mechanical contractor to re-install.	28 days	28 days	28 days
Time from generator removal to generator rotor being ready for the Generator Mechanical contractor to re-install.	30 days	30 days	30 days
Commissioning and Tests on Completion	21 days	14 days	14 days
Trial Operation	720 hours *(30 days)*	720 hours *(30 days)*	720 hours *(30 days)*
Taking Over Certificate	0 days	0 days	0 days
Defects Liability Period	12 months	12 months	12 months
Acceptance Certificate	0 days	0 days	0 days
Preliminary Dates			
Contract Award			
Contract Effective Date			
Basic and Detailed Design Report			
Basic and Detailed Design Report Approval			
Generator Base line testing complete			
Outage Commence	23 June 2021	8 September 2021	28 March 2022
Turbine available for generator rotor removal			
Turbine available for generator rotor installation			
Generator rotor reconnected			
Generator Available for Manual Rotation			
Tests on Completion Completed and Unit returned to service			
Trial Operation Complete (Taking Over)			
Tests After Completion Completed (Acceptance)			
Defects Notification Period Ends			
Time For Completion	**217 days**	**301 days**	**496 days**

All installation work shall be completed in accordance with a detailed installation schedule that has been submitted to and meets with the Engineer's approval prior to the start of installation work.

As numerous other upgrade works will be taking place concurrently on the turbine generator unit there will be no opportunity to commission each Section earlier than the scheduled dates. The generator rehabilitation site works for each Section shall commence on the scheduled outage date so as to minimise the risk of time overruns.

A detailed schedule must be provided 4 weeks after the Contract Acceptance date and revised 4 weeks prior to commencing any work on site.

6. Specification - Introduction

6.1 Scope of Supply

The Contractor shall furnish all labour, materials and equipment required to design, manufacture, factory test, deliver to the Site, refurbish, and recommission three (3) existing generators (G2, G3 and G4) at Wailoa power station.

The scope of work on each generator includes: -

- Pre-dismantling tests on the existing generators (G3 and G4 only) to obtain a baseline condition assessment.
- Cleaning the rotor and stator.
- Stator electrical inspection and testing, including Offline PD and EL-CID.
- Clean, inspect, re-varnish, reapply semiconductor coating of the stators.
- Re-wedging of all three stators.
- Clean, inspect, repair, test, and re-varnish the poles.
- Examine and test the rotor field leads (up-shaft leads).
- Replace the up-shaft lead to pole connections.
- Test the stator winding and core RTDs. Replace any faulted RTDs.
- Install and commission new PD couplers and PD analysis system.
- Post commissioning tests on the upgraded generators for comparison with pre-upgrade assessment.

The Contractor shall complete the upgrade of generating units G2, G3 and G4 to a similar specification as the recently upgraded G1. Designs completed for the G1 upgrade and common to all units shall be updated, if necessary. The materials noted in this specification will be provided Free-Issue by the Employer for installation by the Contractor. All additional materials required shall be supplied under this Contract.

The scope of work does not include:-

- Disassembly of the generator.
- Placing the rotor in the powerhouse laydown area.
- Placing the stator in the powerhouse laydown area.
- Reassembly of the generator.

6.2 Other Contracts

Other contracts associated with the turbine generators will be proceeding in conjunction with this Contract. The Contractor is required to cooperate with the Employer and other contractors to help facilitate the smooth execution of the work. The other contracts include: -

- Generator mechanical works including disassembly and reassembly.
- Electrical installation.
- Turbine and governor rehabilitation.
- Replacement excitation system.
- Replacement unit control and protection system.
- Vibration monitoring system.
- Powerhouse building and services upgrade.

6.3 Existing Generator Characteristics

Manufacturer	TIBB, WV200/130/8
In Service Date	1983
Rating	24,500 kVA, 0.85 pf
Voltage	11,000 volts
Phase	3
Speed	750 rpm
Poles	8 pole
Stator Temperature Rise	60°C
Excitation Current	845 A
Excitation Voltage	115 Vdc
Stator Core Outer Dia.	2771mm
Stator Core Inside Dia.	2000mm
Air Gap	19mm
Stator Core Height	1300mm
Stator Slots	108
Insulation type	Micadur
Insulation class	F
Winding type	Double layer coil
Number of turns per coil	6
Number of parallel strands per coil	6
Number of parallel circuits per phase	4
Upper Combined Bearing	
Thrust bearing type	White metal, tilting
Thrust bearing No. pads	8
Guide bearing type	White metal, segmental
Guide bearing No. pads	12
Lower Bearing	
Guide bearing type	White metal, segmental
Guide bearing No. pads	4
Generator Air/Water Coolers	
Number of Coolers	4
Cooler Rating	120kW

Selected drawings and documents for the existing generators are included in Appendix A of this specification

7. Specification - General Requirements

The following sections and paragraphs written in the singular form for one generator shall apply equally to all generators, except where specifically indicated otherwise.

The basic materials and methods shall be in accordance with the Common Requirements Specification.

7.1 Submittals

Submittals shall be provided in accordance with the requirements of Section 1.3 of the Common Requirements Specification.

7.2 Basic Design

The following documents shall be provided with the Contractors bid and shall include the following:

a) Narrative description of the refurbishment methodology proposed.
b) Detailed programme of works
c) A list of standards being used.
d) Catalogue data and brochures indicating the main characteristics of the wedging system proposed.

The Basic Design shall be based on that undertaken for Unit 1, with any proposed change outlined.

7.3 Detailed Design

The following detailed design documents shall be provided:

a) Pre-Dismantling Test procedures.
b) Disassembly plan.
c) Stator NDT test procedures.
d) Stator cleaning methodology.
e) Re-wedging plan, including drawings and materials lists of replacement wedging system.
f) Rotor up-shaft lead and pole NDT test procedures.

The Detailed Design shall be based on that undertaken for Unit 1, with any proposed change outlined.

7.4 Records and Instructions

The following records and instructions shall be provided:

a) Test Reports.
b) As built drawings.

7.5 References, Standards and Codes

The Contractor shall comply with requirements of the Common Requirements Specification and the latest revisions of applicable industry standards.

8. Specification - Description of Works

8.1 General

This Section of the specification details the extent of work to be carried out on each generator. Note that the exact scope of work to be carried out on each individual machine may be adjusted to consider factors determined during the pre-dismantling tests, detailed inspections, test results, or identified on preceding generators.

8.2 Pre-Dismantling Tests.

Prior to the shutdown of the turbine generator, the Contractor shall undertake pre-dismantling tests on generators G3 and G4 (noting that this has already been carried out for G1 and G2). The purpose of these tests is to record baseline condition and performance for comparison with post-upgrade test results.

The Contractor shall: -

1. Test the measurements from the stator, cooler and bearing RTDs to verify that the measurements displayed on the Unit control panel meters are correct.
2. Once verification of the temperature sensors has been completed install a datalogger to log all temperatures associated with each unit, plus ambient temperature, and generator MW output. Sampling rate shall be no less than every five minutes and the measurement period shall be at least 48 hours per machine. Log files in xls or csv format shall be provided to the Engineer.
3. Undertake a thermal imaging inspection of the in-service generator. The inspection shall cover the terminations, stator enclosure (external) and brush gear.
4. Insulation resistance and polarization index tests shall be made on each phase as described in IEEE 43. In all cases, the phases not under test shall be solidly grounded. Tests shall be made at or above 2,500 volts dc.
5. Each individual phase of the winding shall be high potential tested with the phases not being tested solidly connected to ground. The test shall be in accordance with ANSI C50.10 and IEEE 115. The test value shall be 17.25 kV ac rms for a period of one minute.
6. A controlled dc overvoltage test shall also be performed on each phase of the winding to provide baseline data for future maintenance tests. The test shall be the Graded Time Method performed in accordance with IEEE 95. A kV dc voltage vs. microamp plot shall be furnished for each phase
7. Prepare a detailed test report presenting the findings of the tests undertaken. Any items of concern shall be clearly noted in the report, along with the Contractor's recommendations for corrective works.

Should the testing identify additional work that is recommended, the Engineer will issue formal Variation requests to cover the amended scope of the work to be carried out.

8.3 Stator Rehabilitation.

The rotor and stator will be removed to the loading bay floor by the Generator Mechanical contractor, ready for inspection and testing.

The following rehabilitation/testing of the stator shall be conducted (not necessarily in the order presented): -

8.3.1 Electrical Testing, Inspection and Assessment

The Contractor shall undertake off-line partial discharge measurements using the method described in section 10.1 of IEEE 1434.

The stator core condition shall be assessed using the electromagnetic core imperfection detection method "EL-CID".

The Contractor shall carefully inspect the windings for signs of damage or symptoms of insulation deterioration.

Any unusual contamination, cracks, tracking marks, white powder, grease, rust, or foreign particles shall have the location clearly recorded and, if practicable, a sample of the contaminant taken for possible

analysis to determine whether the contaminant is a by-product of partial discharge activity or fretting from rubbing.

Non-destructive examination of the stator frame will be arranged by the Generator Mechanical contractor and is not included in this Contract.

The Contractor shall prepare an assessment report outlining the electrical test results and observations made, the possible explanations for any abnormal results or observations and the Contractors recommendations and expected costs for any additional work. This report shall be presented within two weeks of the stator being removed. If there is evidence of slot discharges then the Contractor shall investigate the injection of a semi-conductor material to restore the stress gradient system. The Contractor shall provide a quotation for this work with their tender as an optional price

A meeting shall be held between the Engineer, Employer and Contractor to discuss the report, and following the meeting the Employer may instruct the Contractor to undertake additional rehabilitation work on the stator.

Following the inspection, the stator bore, and exposed windings shall be cleaned by wiping down with cloths dampened using an approved solvent, such as manufactured by Ecolink. The stator cooling channels shall be carefully inspected for blockages and cleaned as necessary using compressed air.

The end windings shall have any loose ties or blocks corrected. Any cracks in the insulation shall be repaired with compatible materials. The stress grading coating shall be re-applied.

8.3.2 Re-wedging

A new wedging system comprising spring-type filler material; front filler and stator slot wedge shall be installed. The system installed during the G1 upgrade shall be adopted for the remaining units.

The wedge materials for unit G2 only have been manufactured by ABB and supplied to the Employer. These will be provided free-issue for installation under this Contract. Wedging materials for units G3 and G4 shall be manufactured and supplied under this Contract and be consistent with that supplied for G1 and G2.

The Stator slot wedges shall be manufactured from NEMA Standard LI1, Grade GII material. The slot wedge cross sectional shape shall match the wedge groove shape of the stator laminations. Wedge width shall result in a snug, sliding fit when placed in position prior to driving over top fillers.

Top fillers shall be furnished in a variety of thickness to ensure that a proper thickness combination is available to produce a satisfactory radial wedging pressure. The wedging pressure shall be at least 150% of the maximum opposing radial electromotive forces produced on the coil assemblies.

A repeatable method for checking spring-type filler material deflection shall be provided. At a minimum, it shall allow the deflection to be measured at three locations in each slot. The initial deflection shall be recorded and furnished to Employer. The Contractor shall furnish all gauges and other equipment required to determine the total spring deflection and shall furnish instructions for use.

The check wedges shall be located at the quarter points of each slot. End wedges shall be secured in place to prevent axial movement or migration of slot wedges or wedge fillers, but in no case shall epoxy be used to secure the wedges. Wedges shall be furnished with cutbacks at the cooling air passages. These cutbacks shall be designed to enhance the airflow.

Following installation of the new wedging system the tightness of the wedges shall be determined using a wedge tightness detector. The results shall be recorded for future reference and handed to the Employer.

8.3.3 Stator RTD Installation

The Employer will provide free-issue up to twelve spare RTD sensors to replace any faulted sensors identified during the pre-outage testing or post dismantling inspection. The sensors will be flat, laminated type, with 250mm long sensing element, in accordance with ANSI C50.10. Any replacement sensors shall be located between the outermost coil and the wedging system in the same slot as the faulted sensor.

8.3.4 Partial Discharge Analysis System

The components of a Partial Discharge Analysis (PDA) system internal to the generators shall be installed. The system shall include coupling capacitors, leads, and termination cabinet for monitoring the condition of the stator winding without a service outage.

The Employer will provide the coupling capacitors and termination cabinets to the Contractor free-issue for installation on units G2, G3 and G4.

Six coupling capacitors shall be installed in the winding, two in each phase. The system shall be installed and tested by an Iris Power authorised agent.

Leads shall be furnished and installed, to connect the coupling capacitors to the termination cabinet. The leads shall be RG58A/U coaxial cable. Each lead shall be terminated with a BNC connector.

The termination cabinet will accommodate all coaxial cable leads, BNC connectors, terminal boards, and termination and protective devices. Each coaxial cable shall be terminated with a 670 ohm, 1 watt, resistor, and a gas discharge surge arrester at the rear of the BNC.

8.3.5 Reassembly

Once the Contractors works are complete the Contractor shall hand over the stator to the Generator Mechanical contractor for reinstalling into the Unit housing.

8.4 Rotor Rehabilitation.

The rotors shall be closely inspected. In particular, the inter-pole connections, damper connections and fan blades shall be checked for any signs of stress or fatigue damage.

The Employer owns a stand that can be used for holding the rotor upright in the powerhouse loading bay during the refurbishment works.

8.4.1 Inspection of Poles

The poles shall be removed from the rotor by others under the Generator Mechanical Refurbishment contract.

The Contractor shall visually examine the rotor and pole connection area after disassembly. Non-destructive examination will be arranged by the Generator Mechanical contractor, and is not included in this Contract.

The condition of the pole tensioning bolts, and damper windings shall be checked.

Any items of concern shall be advised to the Employer promptly along with the Contractors recommendations for corrective works.

8.4.2 Pole Assessment and Testing

Each pole shall be thoroughly cleaned and given the following tests: -

1. Insulation Resistance using a 1500V DC test set
2. High Voltage AC Withstand (1.5 kV for one minute).
3. Turn-to-Turn Tests to identify short circuits between the turns of the field winding.

The Turn-to-Turn tests shall be performed by subjecting the pole field winding to a short duration impulse voltage and measuring the response using an oscilloscope. The second pole response shall then be checked against the first pole to confirm that the response curve is identical. To check that a fault would be detected, a deliberate short circuit shall be placed between two coils and the waveform compared against the previous 'healthy' measurements. Any poles that have a different response from the other poles shall be further investigated for shorted turns.

Any pole identified as having shorted turns shall be dismantled, inspected and reinsulated using Nomex® or approved equivalent insulating paper. Any cracked joints in the field winding shall be repaired by brazing. The Contractor shall provide a quotation for this work with their tender as an optional price

All poles shall be painted with Glyptal® red alkyd.

8.4.3 Up-Shaft Lead Assessment and Testing

The Contractor shall clean the up-shaft lead terminations and measure the insulation resistance using a 500V DC test set. The terminations shall be carefully inspected for evidence of excessive heating and, if such evidence is found, the Employer and Engineer shall be consulted before proceeding further.

The upper and lower termination studs shall be carefully disassembled and cleaned. Note that the studs are brass and are connected to the steel up-shaft lead by means of a threaded connection. The Contractor shall take care not to use excessive force when disassembling the termination and shall stop disassembly should the threads appear seized and excessive forces be required to loosen.

The Contractor shall replace the insulating sleeves on each stud.

The up-shaft leads shall be removed from within the rotor shaft and the condition of the insulation inspected. Any damaged insulation shall be cut back and repaired.

On reassembly a conductive grease shall be applied on the threaded connection prior to assembly, and the connection shall be torqued to the original design requirements.

Following reassembly of the up-shaft lead and studs into the rotor shaft, repeat insulation measurements shall be taken using a 500V test set.

The Contractor shall also supply one set of brass stud connectors and steel inserts for the upper and lower connections for one (1) up-shaft (4 studs in total). The studs shall be generally as manufactured for Unit 1. Flats shall be machined into the replacement studs to facilitate installation and removal. These stud connectors shall only be utilised if an existing stud connection is damaged during removal, or if the up-shaft lead threaded connections require repair. If these studs are not used on any of the Units then they shall be handed to the Employer as spare parts. The cost of installing one of these studs shall be in accordance with the optional price included within the Tender.

The expectation is that the specified repair work on the up-shaft leads be carried out in Fiji (preferably at site) without needing to send the up-shaft offshore and the Contractor should make the necessary provisions for this.

8.4.4 Assessment Report

The Contractor shall prepare an assessment report outlining the test results and observations made, the possible explanations for any abnormal results or observations and the Contractors recommendations and expected costs for any additional work. This report shall be presented within two weeks of the rotor being removed and disassembled.

A meeting shall be held between the Engineer, Employer and Contractor to discuss the report, and following the meeting the Employer may instruct the Contractor to undertake additional rehabilitation work on the rotor.

8.4.5 Reassembly

The Contractor shall reassemble the rotor in the powerhouse loading bay, and hand over to the Generator Mechanical contractor for fitting the new stub shaft and slip rings and for reinstallation into the Unit. The Generator Mechanical contractor will reinstall the poles to the rotor.

8.5 Reassembly

The stator and rotor shall be reassembled in accordance with these Specifications, TIBB Generator O&M Manual Section 4.5, applicable drawings, written instructions prepared by Contractor, and with applicable codes and standards specified herein. Reassembly of the stator and rotor into the generator housing will be carried out by the Generator Mechanical contractor.

Reassembly procedures may need to be augmented or modified by the Contractor to suit the actual conditions during reassembly. Any modifications to written procedures shall be discussed with and agreed to by the Employer.

The Contractor shall furnish all labour, tools, supplies, bracing, lifting equipment, supports, and all other items or materials necessary to disassemble the equipment in a thorough, neat, and skilful manner. Any special tools that were provided as part of the original generator supply may be used by the Contractor provided that the Contractor signs for all tools utilised on ‘check-out’ and ‘check-in’ from the Employers stores.

The equipment and all of its components shall be placed with great care and accuracy and shall be correctly aligned to provide an installation consistent with the close tolerances used in the manufacture of the equipment. Contractor shall establish and maintain suitable control for the proper elevations and centrelines to which equipment is to be set.

Upon completion of all specified repairs, reassemble the stator and rotor basically in reverse order of the disassembly procedure. Clean all disturbed components and parts prior to reassembly.

In the course of reassembly, repeated careful checks of alignments and levels, fits, clearances, concentricity, and trueness shall be made. Provide illustrated check sheets and record thereon all installation measurements. Such records shall be signed by the Contractor and Engineer, and copies shall be furnished to the Employer.

8.6 Recommissioning

Recommissioning of the turbine and generator will be undertaken primarily by the Employer and Engineer with supervision being provided by the various contractors as applicable to their scope of work.

It is anticipated that the Contractor will have no role in the recommissioning process other than in a supervisory capacity, unless issues are found within the equipment refurbished by the Contractor in which case the Contractor will be required to provide assistance as necessary.

The overall sequence for recommissioning each turbine generator will follow the following general structure. The Contractor will be required to have at least one suitably experienced technician on site during the Generator Excitation, Protection and Synchronising Tests (7.6.2.3), Overspeed test (7.6.2.4), First Synchronisation (7.6.3.1) and Load Rejection (7.6.3.2).

8.6.1 Static Testing

Activity	**Responsible Party**
Inspection for completeness.	Each Contractor for their work area
Inspection of all the hydraulic conduits and removal of any foreign bodies.	Each Contractor for their work area
Point to point wiring tests.	Each Contractor for their work area
All terminations checked for tightness.	Each Contractor for their work area
Insulation resistance checks on all equipment.	Each Contractor for their work area
2 kV rms power frequency withstand test on all control and protection wiring.	Each Contractor for their work area
High current resistance checks across all high voltage joints (Ductor test).	Each Contractor for their work area
Correct settings applied to all protective devices.	Control system Installation Contractor
Plant control system software SAT tests.	Control system Installation Contractor assisted by each Contractor for their work area.
Measurement of bearing and seal clearance.	Each Contractor for their work area
Hydrostatic tests.	Turbine Contractor
Pressure tests in the governing system, check of oil levels and of the conditions of all oil filters and filtering systems	Turbine Contractor
Pressure tests in the cooling water system.	Generator Mechanical Contractor
First fill of all lubricating and hydraulic oil.	Turbine Contractor Generator Mechanical Contractor
First fill of cooling water system.	Generator Mechanical Contractor
Verification of the correct operation of governor HPU.	Turbine Contractor
Verification of correct operation of HP Oil system.	Generator Mechanical Contractor

Verification of correct operation of cooling water system.	Generator Mechanical Contractor
Operational tests of all balance of plant equipment.	Each Contractor for their work area

8.6.2 Pre-Commissioning Tests

The pre-commissioning tests shall include pre-start and closing devices checks:

8.6.2.1 Dry Tests

These tests shall include:

Activity	**Responsible Party**
Adjustment of dry opening and closing times of turbine needles and deflectors to calculated settings.	Turbine Contractor
Adjustment of dry opening and closing times of main inlet valve to calculated settings.	Turbine Contractor
Confirm that the shutdown circuits function correctly by simulating each and every plant protective trip event and verifying correct operation of the turbine shutdown systems, inlet valve closing systems and generator circuit breaker trip (the generator circuit breaker shall be racked out during these tests).	Control System Installation Contractor assisted by each Contractor for their work area.
Unit Control System start up sequences	Control System Installation Contractor assisted by each Contractor for their work area.

8.6.2.2 Wet Tests

These tests shall include:

Activity	**Responsible Party**
Verify that the needle leakage is within acceptable limits.	Turbine Contractor
Check the opening and closing times for the inlet valve and confirm that they are as expected.	Turbine Contractor
First run operation of the turbine generator. During the first run, the turbine generator shall be "bump started" by manually opening the needles to a small opening for a few seconds. The unit shall be permitted to rotate and observed for any unusual readings, measurements, vibrations or noise.	Turbine Contractor Generator Mechanical Contractor
Progressively bring the turbine generator up to rated speed using the governor. The turbine generator shall remain at each speed step until such time as the bearing temperatures have stabilised. If any of the turbine generator instrumentation reaches an alarm or trip condition, or exhibits unusual behaviour. At each speed step it shall be verified that the closing devices are functioning correctly:	Turbine Contractor Generator Mechanical Contractor

• Verify adjustment for operation of governing system timing at rated speed. • Verify adjustment and measuring accuracy of the speed monitoring systems. • Verify adjustment of the overspeed devices.	Turbine Contractor Generator Mechanical Contractor Generator Mechanical Contractor
A bearing heat run at rated speed shall then be conducted. The heat run shall continue for one hour after the bearing temperatures have stabilised. The following parameters shall be recorded during these tests: • Ambient temperature. • Bearing temperatures. • Bearing oil temperatures. • Unit speed	Generator Mechanical Contractor assisted by Control System Installation Contractor
At the end of the test the turbine generator shall be shut down by simulating an overspeed event to demonstrate that the emergency shutdown systems are operating correctly.	Control System Installation Contractor

8.6.2.3 Generator Excitation, Protection and Synchronising Tests

Following the successful completion of the heat run the unit shall be started and the following tests conducted:

Activity	**Responsible Party**
Excite the generator for the first time. Verify that all voltage measurements are being read correctly in the Unit control system and shall undertake excitation system tests as required by the IEC standard and the manufacturer.	Control System Installation Contractor Excitation System Contractor
Test the generator electrical protection as far as possible by reducing settings below the actual measured values and confirming that the protection relays operate correctly.	Control System Installation Contractor
With the generator circuit breaker racked out, test synchronising against a dead bus, and verify phase sequence and phase angle between the generator and bus VTs.	Control System Installation Contractor
With the generator racked in and the main power transformer MV open and other generator circuit breaker open, retest synchronising against a dead bus and verify phase sequence and phase angle between generator and bus VTs.	Control System Installation Contractor

8.6.2.4 Overspeed Test

Activity	**Responsible Party**
Test the overspeed devices by increasing the turbine speed under manual control.	Generator Mechanical Contractor assisted by Turbine Contractor

8.6.3 Commissioning Tests

8.6.3.1 First Synchronisation

The Commissioning tests shall commence with a first synchronisation and loading of the turbine generator.

Activity	Responsible Party
Set the governor load limiter to no more than 10% of rated.	Turbine Contractor
The turbine generator shall initially be started, synchronised and loaded (to the 10% limit) using the Unit Control System automatic start controls in 'step by step' manual override mode.	Control System Installation Contractor Assisted by Turbine Contractor and Generator Contractor

The tests shall then be repeated in fully automatic mode.

8.6.3.2 Load Rejection Tests

The turbine generator shall be started, synchronised and the load shall be increased in steps to the maximum value.

Activity	Responsible Party
At each step, observations and measurements in steady state condition shall be repeated and the operating stability of the turbine shall be verified.	Control System Installation Contractor Assisted by Turbine Contractor and Generator Contractor
The turbine generator shall be subjected to load rejection tests at each of the following load steps: 25%, 50%, 75% and 100% of rated load. The load rejection should operate into the turbine ESD controls and a different initiating event should be used for each test.	Control System Installation Contractor Assisted by Turbine Contractor and Generator Contractor
Record the following parameters during these tests: • Penstock pressure. • Spiral case pressure. • Guide vane position. • Turbine generator speed. • Circuit breaker position. • Inlet valve position.	Control System Installation Contractor

8.6.3.3 Turbine Inlet Valve Tests

The turbine inlet valve shall be demonstrated to be capable of emergency closing against the full turbine flow.

The turbine generator shall be started, synchronised and the load shall be increased in steps to the maximum value.

Activity	Responsible Party
At each step, observations and measurements in steady state condition shall be repeated and the operating stability of the turbine shall be verified.	Control System Installation Contractor Assisted by Turbine Contractor and Generator Contractor
The turbine inlet valve shall be closed against flow at each of the following load steps: 25%, 50%, 75%, 100% of rated load and at overspeed.	Control System Installation Contractor Assisted by Turbine Contractor and Generator Contractor
Record the following parameters during these tests: • Penstock pressure.	Control System Installation Contractor

• Spiral case pressure. • Guide vane position. • Turbine generator speed. • Circuit breaker position. • Inlet valve position	

8.6.3.4 Generator Heat Run

Activity	**Responsible Party**
Undertake a generator heat run at rated output. The heat run shall continue for one hour after the winding, cooling system and bearing temperatures have stabilised.	Control System Installation Contractor Assisted by Turbine Contractor and Generator Contractor
Record the following parameters during these tests: • Ambient temperature. • Stator winding temperatures. • Cooling system temperatures. • Turbine discharge water temperature. • Bearing temperatures. • Bearing oil temperatures. • Generator load.	Control System Installation Contractor

8.6.3.5 Trial Operation

Following successful completion of the Commissioning Tests, a Test Run (Trial Operation) shall be performed as required to assure that the equipment has been installed and adjusted properly and that it will function safely and properly under continuous operation. The test run shall be performed in the automatic control mode, without any adjustments or corrections, under certain loads specified by the Employer. The duration of the Test Run shall be for a continuous period (no interruptions allowed) of 720 hours. If the Test Run is interrupted due to malfunction of equipment, the Test Run shall be performed over again.

8.7 Spare Parts

8.7.1 Specified Spare Parts

The Contractor shall provide the following spare parts:-

- No mandatory spare parts to be supplied

8.7.2 Optional Spare Parts

The Contractor shall furnish a priced list of recommended Optional additional spare parts. This shall include
- One upper up-shaft brass stud, including threaded steel insert and insulating sleeve.
- One lower up-shaft brass stud, including threaded steel insert and insulating sleeve.
- One up-shaft lead assembly, including brass upper and lower studs and all insulating materials, generally in accordance with existing generator drawing UW103722.

Note that these optional spare parts are in addition to the studs specified to be provided as part of the scope of work.

8.8 Generator Data

Provide the following data.

Generator		Purchaser's Requirements	Vendor's Response
Generator replacement wedging system details		Refer Section 8.3.2	

Schedule 1 – Tender Forms

Tender Form 1 – Letter of Tender

Name of Contract: Wailoa Mid Life Refurbishment Project, Generator Electrical Rehabilitation Tender No. MR 17/2021

Tender To: Energy Fiji Limited
2 Marlow St
Private Mail Bag
Suva
Republic of the Fiji Islands

1. This tender is made by _____
[insert full name and registered address of tenderer].
2. Capitalised terms used in this letter have the meaning given to them in the Instructions to tenderers dated [*insert date*] ("**Instructions**") unless otherwise defined.
3. Having examined and understood the Tender Documents relating to the Works (including the Instructions and all documents attached thereto, including but not limited to the Particular Conditions of Contract, the General Conditions of Contract, the Specification and the Employer's Drawings) we, the undersigned, hereby offer to design, execute, complete and remedy defects in the whole of the Works in conformity with the said documents for the sum of:
….
…….., ($……),

Exclusive of VAT, WHT or such other sum as may be ascertained in accordance with the Contract.

4. This offer is made on the terms and conditions set out in this Tender and the Instructions.
5. We attach the following documents which form part of this tender:
   (a) Completed tender forms;
   (b) Technical description of the plant offered;
   (c) Proposed programme;
   (d) Proposed key personnel;
   (e) Any supplementary information;
6. We agree to abide by this Tender for a period of 60 days after the Tender Closing Date and that this Tender it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.
7. We confirm that you may rely upon all statements made by us in response to the Instructions or in subsequent correspondence, discussions or negotiations with you.
8. We certify that:
   (a) The entry into, and performance of the obligations under, the Contract by us will not violate any laws provided that you obtain all consents and authorisations you are required to obtain under the Contract;
   (b) We have corporate power to enter into and perform our obligations under the Contract and we have taken all necessary corporate action to authorise the entry into, and execution of, this offer and (if required) entry into, and execution of, the Contract;
   (c) The rates and prices in our offer have been arrived at independently, without consultation or agreement with any other tenderer; and
   (d) No attempt has been made, nor will be made, by us to influence any other tenderer to submit or not submit a tender or to alter the proposed content of that tenderer's tender.
9. We acknowledge that this tender, and any contract arising upon its acceptance, shall be governed by and construed in accordance with the laws of The Fiji Islands.
10. Unless and until a formal agreement is prepared and executed, this Letter of Tender, together with your written acceptance thereof, shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this _____ day of _____ 2021

Signature _____ in the capacity of _____

duly authorised to sign Tenders for and on behalf of: _____

Witness _____

Address _____

Occupation _____

Tender Form 2 – Tender Price and Price Breakdown

Contract	Offshore	Onshore
Item	**Amount Foreign Currency ( ) (Nominated by Tenderer, excluding VAT and including WHT)**	**Amount Foreign Currency ( ) (Nominated by Tenderer, excluding VAT and including WHT)**
Section 1 Unit 2 Generator		
Provision of updated Design Reports		
Pre-dismantling tests and report	Not required, already done	
Stator inspection and testing (including assessment report)		
Manufacture and delivery of replacement wedging system	Not required, will be free-issued by Employer	
Re-wedge stator		
Partial discharge system coupling capacitor installation		
Rotor up-shaft lead and pole inspection, testing and cleaning (including assessment report)		
Provision of one (1) set of up-shaft lead brass studs, steel inserts and insulating sleeves.		
Reassembly and testing of stator and rotor		
Commissioning and Testing		
Completed Test Reports		
Section 1 Sub-Total		

Contract	Offshore	Onshore
Item	**Amount Foreign Currency ( ) (Nominated by Tenderer, excluding VAT and including WHT)**	**Amount Foreign Currency ( ) (Nominated by Tenderer, excluding VAT and including WHT)**
Section 2 Unit 3 Generator		
Pre-dismantling tests and report		
Stator inspection and testing (including assessment report)		
Manufacture and delivery of replacement wedging system		
Re-wedge stator		

Contract	Offshore	Onshore
Item	**Amount Foreign Currency ( ) (Nominated by Tenderer, excluding VAT and including WHT)**	**Amount Foreign Currency ( ) (Nominated by Tenderer, excluding VAT and including WHT)**
Partial discharge system coupling capacitor installation		
Rotor up-shaft lead and pole inspection, testing and cleaning (including assessment report)		
Reassembly and testing of stator and rotor		
Commissioning and Testing		
Completed Test Reports		
Section 2 Sub-Total		

Contract	Offshore	Onshore
Item	**Amount Foreign Currency ( ) (Nominated by Tenderer, excluding VAT and including WHT)**	**Amount Foreign Currency ( ) (Nominated by Tenderer, excluding VAT and including WHT)**
Section 3 Unit 4 Generator		
Pre-dismantling tests and report		
Stator inspection and testing (including assessment report)		
Manufacture and delivery of replacement wedging system		
Re-wedge stator		
Partial discharge system coupling capacitor installation		
Rotor up-shaft lead and pole inspection, testing and cleaning (including assessment report)		
Reassembly and testing of stator and rotor		
Commissioning and Testing		
Completed Test Reports		
Section 2 Sub-Total		

Tender Price Summary	Offshore Contract	Onshore Contract

	Amount Foreign Currency ( ) (Nominated by Tenderer, excluding VAT and including WHT)	Amount Foreign Currency ( ) (Nominated by Tenderer, excluding VAT and including WHT)
Section 1		
Section 2		
Section 3		
Total Tendered Price		

Optional prices	**Offshore Contract**	**Onshore Contract**
	Amount Foreign Currency ( ) (Nominated by Tenderer, excluding VAT and including WHT)	**Amount Foreign Currency ( ) (Nominated by Tenderer, excluding VAT and including WHT)**
Injection of a semi-conductor material to restore the stator winding stress gradient system (per stator)		
Upper up-shaft brass stud, including threaded steel insert and insulating sleeve (per stud)		
Lower up-shaft brass stud, including threaded steel insert and insulating sleeve (per stud)		
Rotor up-shaft lead stud replacement - excluding stud, insert and insulating sleeve). (per stud).		
Complete up-shaft conductor assembly including upper and lower stud assemblies and all insulation materials.		
Total		

Signature .....

Name .....

Position .....

Company .....

.....

Address .....

.....

Date .....

Tender Form 3 – Proposed Key Personnel

Contract Manager:

.....

Site Works Supervisor:

.....

Signature .....

Name .....

Position .....

Company .....
.....

Address .....
.....

Date .....

Tender Form 4 – Proposed Suppliers and Sub-Contractors

	.....
	.....
	.....
	.....

Signature	.....
Name	.....
Position	.....
Company	.....
	.....
Address	.....
	.....
Date	.....

Tender Form 5 – Schedule of Hourly Rates

Personnel	Basic Hourly Rate On Site (State Currency) ($/h excluding GST and WHT)
Contractor Manager:	.....
Site Works Supervisor:	.....
Mechanical Fitter:	.....
Electrical Fitter:	.....
Labourer:	.....

Basic hourly rates apply for the first ..... hours worked in any one day.

Overtime rates apply thereafter as follows:
Next ..... hours at ..... times basic rates.
Next ..... hours at ..... times basic rates.

Tender shall specify any special factors applicable to adjust the basic hourly rates for work on weekends and public holidays.
Weekend factor .....
Public holiday factor .....

Explanatory Notes
(a) The Tenderer shall complete the Schedule of Hourly Rates tender form to show the basic hourly rates applicable for any authorised extra work on the site.
(b) The Schedule will be used as a basis for evaluating tenders and as a basis for agreeing cost for any extra authorised work.
(c) The basic hourly rate shall include all overheads, profit, hand tools and allowances and shall represent the total cost to the Employer for personnel employed during normal working hours. The rates shall be exclusive of GST.
(d) The scheduled hourly rates shall be applicable throughout the course of the works.
(e) Time sheet records shall be supplied by the Contractor as a basis for agreeing costs for any extra work.

Signature .....
Name .....
Position .....
Company .....
.....
Address .....
.....
Date .....

Tender Form 6 – Percentage On-Costs

Item	Description	Percentage on Cost
1.	Equipment and materials supplied on cost plus basis (including transport).	.....
2.	Sub-contractors employed on cost plus basis.	.....
3.	Equipment hire.	.....
4.	Contractor's profit.	.....

Explanatory Notes

(a) The Tenderer shall complete the Percentage on Costs form to show the percentage on cost applicable for supplying extra equipment and materials, employing extra Sub-contractors on a cost plus basis and for arranging extra equipment hire.
(b) The percentage on costs shall allow for all costs incurred by and profits for the Contractor in arranging for the supply of any extra equipment and materials or hire of any extra equipment.
(c) The percentage on costs shall allow for all costs incurred by and profits for the Contractor in arranging and managing any extra Sub-contractors employed on the job.
(d) Invoices shall be supplied by the Contractor to substantiate any claim for costs associated with work performed on a cost plus basis.
(e) The percentage on costs and invoices will be used as a basis for agreeing costs associated with any variations to the contract.

Signature .....
Name .....
Position .....
Company .....
.....
Address .....
.....
Date .....

Tender Form 7 – Statement of Conformance

We have read and understood the Tender documentation for the generator rehabilitation contract, and confirm that:

Tick 1 Box as Applicable

☐ Our Tender is in full compliance with the requirements and we have no exceptions to note.

☐ Our Tender does not fully comply with the requirements. The following exceptions apply:

.....
.....
.....
.....
.....
.....
.....
.....

Signature .....

Name .....

Position .....

Company .....
.....

Address .....
.....

Date .....

Appendices

Appendix A TIBB Generator Drawings

Appendix B Unit 2 Pre-Outage Testing Report

Dunedin
Level 3 John Wickliffe House, 265 Princes Street
Dunedin 9016
PO Box 13-052, Armagh
Christchurch 8141
Tel +64 3 477 0885
Fax +64 3 477 0616

Please visit **www.stantec.com** to learn more about how Stantec design with community in mind.

Stantec