	Tender Questions and Answers	Document Identifier 240-7124948	Rev 1
		Effective Date 01 April 2023	
		Review Date April 2026	

To whom it may concern	Date	Thursday, 25 April 2024
	Enquiries	Sheilah Brown
	E-mail address	TenderClarifications TenderClarifications@eskom.co.za

Dear Sir/Madam

Request for Enquiry Number	WCKBG2516SB
Description / Project Title	THE SUPPLY AND REPLACEMENT OF THE INVERTERS AND AUXILIARY SYSTEM AT KOEBERG OPERATING UNIT (KOU)
NEW Tender Questions Closing Date	16 May 2024

No.	Document	Section	Page	Requirement	Questions	Answers
03 April 2024 (Clarity published date) – Rev 1.1_Tender Questions and Answers_Clarifications_2024.03.26						
1.	TRS 09082A rev 1	1.3 and 4.2.5	10 and 14	Problems with Design	What are the current problems with the distribution boards associated with LNE, LZC, SSC and SSD, i.e. what items necessitate the replacement of these distribution boards, e.g. circuit breakers, earth fault relays, displays, etc.?	Replace existing distribution boards in accordance with TRS.
2.	TRS 09082A rev 1	1.3 and 4.2.5	10 and 14	Problems with Design	Just to be 100% sure – the requirement is to completely replace the distribution boards for those boards that have distribution boards?	Correct.

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Document Identifier	240-7124948	Rev	1
Effective Date	01 April 2023		
Review Date	April 2026		

No.	Document	Section	Page	Requirement	Questions	Answers
3.	TRS 09082A rev 1	2.2	11	Scope	As safety vetting is required to view and work with the documentation, for 6 SSC / 6 SSD / 6 SSE / 6 SSG / 6 SSA / 6 SSB can the Employer please provide sufficient information at the tender stage to allow tenderers the opportunity to accurately cost for the works?	Vetting is required before any security information is provided.
4.	TRS 09082A rev 1	2.2	11	Scope	Do the documents and drawings for 6 SSC / 6 SSD / 6 SSE / 6 SSG / 6 SSA / 6 SSB reflect the as-built plant status, or must the Contractor allow for the effort to confirm the as-built status of these systems as part of the offer?	It is of the employees understanding that the documents and drawings reflects as built plant status. However, it is recommended that the contractor makes effort to confirm the as-built status.
5.	TRS 09082A rev 1	2.2	11	Scope	According to the feeder lists the 1/2 LNE and 9 LNF/G/H inverter boards house 30 V dc and/or 48 V dc rectifiers for the supply of power to various systems. Can the Employer please supply the specifications of these rectifiers, assuming that the new panels will have to replicate this functionality?	LNE – 48 V 500W LNF – 48 V 500W - 30 V 1000W LNG – 48 V 500W LNH – 48 V 500 W The above must be verified and upgraded if required during the design phase.
6.	TRS 09082A rev 1	2.2	11	Scope	The increase in capacity for the non-1E qualified LNE, LNF, LNG, LNH and LZC could require new power supply feeders (and cables) for the DC and AC supplies. Does the Employer have spare feeders that could be free issued, given that there is a high likelihood that the feeders are obsolete? Perhaps the obsolescence studies for SALTO have the answer?	The new uprated inverters will be limited to the existing inverter rating, therefore there would be no need for the upgrade of cables and feeders.

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No.	Document	Section	Page	Requirement	Questions	Answers
7.	TRS 09082A rev 1	2.2	11	Scope	<p>The increase in capacity of the various inverters could be a challenge, but as this is part of the TRS, it is assumed that the Employer has considered the impact and does not have solutions that are not expressed in the TRS. Is this assumption correct?</p> <p>Note that alternative solutions could have a substantial impact on the timelines needed for the Contractor to put together the tender in the very limited tender period (and might require further clarification – with its own impact on the timelines).</p>	Refer to 6.
8.	TRS 09082A rev 1	4.3	14	Inverter Requirements	<p>The TRS calls for the inverter systems to be replaced with a type already installed and proven in the nuclear power generating industry <u>and</u> other industrial applications.</p> <p>a. Does the “inverter systems” imply the inverters <u>and</u> distribution boards?</p> <p>b. Is it a definitive requirement that the inverters <u>and</u> their distribution boards offered be installed and proven in nuclear power plants, i.e. it would not be acceptable to offer inverters <u>and</u> distribution boards that are only used in industrial applications?</p>	<p>a. Yes.</p> <p>b. Yes.</p>
9.	TRS 09082A rev 1	4.3.1.8	15	Monitoring	<p>What is meant by “All switches shall be monitored and flagged”, i.e. where must it be monitored and flagged, e.g. in the control room (by means of indication, or in KIT, or both)?</p>	<p>All switches should also include an auxiliary contact to indicate its position (on/off) and should be used for alarming and control.</p>

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Document Identifier	240-7124948	Rev	1
Effective Date	01 April 2023		
Review Date	April 2026		

No.	Document	Section	Page	Requirement	Questions	Answers
10.	TRS 09082A rev 1	4.3.1.12	15	Interchangeability	In order to have interchangeable equipment and spares, all the applicable equipment installed in the NSF inverters and distribution boards will have to be qualified as 1E (paperwork included). This could have a substantial impact on cost.	This does not refer to the complete inverter system. Specific critical identified interchangeable components should carry the highest qualification. This could be achieved during the manufacturing (batch) process of said components.
11.	TRS 09082A rev 1	4.3.1.17.4 and 4.3.1.17.13	17	Rating Requirements	To allow for the correct sizing of busbars (and the costing for the replacement) can the Employer please indicate typically what size (maximum) of spare breakers they envisage for the various boards?	These are to be used for busbar calculation purposes. LNA/B/C/D – x4 at 5A = 20A each inverter LNE – x15 at 5A = 75A LNF – x5 at 5A = 25A LNG – x10 at 5A = 50A LNH – x5 at 5A = 25A Further clarification to be obtained during design phase.
12.	TRS 09082A rev 1	5.2.3	26	Dimensions	With the requirement to increase sizing and provide the new upgrades, like bypass stabilizers, specified in section 2.2 of the TRS, it will most likely not be possible to maintain similar dimensions for the new equipment. Can the Employer agree (such as not to have this as a deviation in our offers)?	Except for LNE and SSC/D, the bypass stabilizers are already part of the current design. With more modern technology, compared to when the existing inverters were manufactured, it could be possible to use the existing footprint for the new inverters, with their upgrades.
13.	TRS 09082A rev 1	5.2.5	26	Fire Detection	For the JDT interface: a. Which of the inverters or inverter switchboards are fitted with Fire Detection, i.e. is it only LNA/B/C/D? b. What type of fire detection is fitted – detectors or SDA?	a. LNA/B/C/D and LNE b. Aspirating smoke detectors – VESDA units c. Same as existing design

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Document Identifier	240-7124948	Rev	1
Effective Date	01 April 2023		
Review Date	April 2026		

No.	Document	Section	Page	Requirement	Questions	Answers
					c. What are the requirements for interfacing with JDT in terms of design and installation?	
14.	TRS 09082A rev 1	6	27	Quality	Must the Contractor make provision for audits (with the Employer and NNR) of the inverter supplier at his overseas premises?	Yes - as discussed in the clarification meeting. The tenderer must make provision for audits by Eskom and the NNR during execution of the project.
15.	TRS 09082A rev 1	7.4	31	Safety Vetting	What are the requirements for safety vetting of personnel (to what level) and measures for safeguarding sensitive information (and what is meant by "sensitive information" in the context of design for SSC and SSD)?	<p>Sensitive information is information exempted from disclosure, which can be classified as confidential, Secret and Top-Secret. In terms of SSC and SSD the classification of the feeder diagrams is Confidential. If this is what is currently required, at this stage of the project, a DECLARATION OF SECRECY must be completed and submitted to the employer before confidential information is provided. If higher classified information is required, then the individual must be vetted accordingly.</p> <p>Security Vetting – Individuals requiring access to sensitive information higher than confidential must be vetted for that level of the classified information being requested.</p> <p>Once a contract is in place, then necessary arrangements will be made with Eskom IT to provide excess to a folder, to cleared individuals, to access and perform design work on sensitive information/equipment.</p>

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Document Identifier	240-7124948	Rev	1
Effective Date	01 April 2023		
Review Date	April 2026		

No.	Document	Section	Page	Requirement	Questions	Answers
08 April 2024 (Clarity published date) - Rev 2_Tender Questions and Answers_Clarifications_2024.04.08						
16.					For Item 42,2 Defects date, it states One full life cycle after each sectional completion date. The tenderer would like to know How Long is One Full Life Cycle?	One fuel cycle is approximately 18 months.
17.	TRS 09082A rev 1	4.1	14	Generation Requirements	Can the Employer please provide references 4.1.19 and 4.1.20 and confirm that they are applicable to Koeberg?	These references are currently unavailable on the documentation platform. Eskom to revert ASAP. Ignore these references.
18.	TRS 09082A rev 1	-	-	LZC Detail	Can the Employer please supply details of the 0 LZC inverter and its distribution board (make, model numbers, feeder types, tripping curves), as this information does not seem to be readily available, or alternatively please supply references to where the information can be obtained for the 0 LZC inverter and its switchboard?	Details attached. Rev 3_Q18_Item 2_OLZC - info
19.	TRS 09082A rev 1	4.3.1.17.4	17	Spare Feeders and Sizing	To ensure that the upgrade makes provision for the correct spares to allow for 1) the correct sizing of switchboards, 2) the correct sizing of the busbars, and to 3) determine the impact on the inverter loads, it is imperative that the Employer provides an idea of what sizes the spares must be that the Contractor needs to make provision for, e.g.: <ul style="list-style-type: none"> • 1/2 LNE - 15 extra feeders each - 3 x 6A, 3 x 10A, 3 x 16A, 3 x 20A, 2 x 25A, 1 x 32A (a total of 238 A) • 9 LNF - 10 extra feeders - 3 x 6A, 3 x 10A, 3 x 16A, 1 x 25A (a total of 121 A) • 9 LNG/H - 5 extra feeders each - 2 x 6A, 2 x 16A, 1 x 20A (a total of 64 A) • 0 LZC - 5 extra feeders - 2 x 6A, 2 x 16A, 1 x 20A 	See 11. Main busbars should be sized to the size of the inverter/UPS

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Document Identifier	240-7124948	Rev	1
Effective Date	01 April 2023		
Review Date	April 2026		

No.	Document	Section	Page	Requirement	Questions	Answers
					(a total of 121 A) <ul style="list-style-type: none"> 6 SSC/D - 5 extra feeders each - 2 x 6A, 2 x 16A, 1 x 20A (a total of 121 A) 	
20.	TRS 09082A rev 1	-	-	SSC and SSD Detail	Can the Employer please supply details of the 6 SSC and 6 SSD inverters and their distribution boards (type of inverters, type of distribution boards and feeder types and sizes) to allow the Contractor the opportunity to find suitable replacements?	See 15. Eskom to provide NDA and SOD to individuals requesting confidential information.
21.	TRS 09082A rev 1	4.6.2	24	FMEA	Can the Employer please confirm that an FMEA is required for the inverters and distribution boards (as this is seldom done at this level), and for which of the systems is this required?	An FMEA is required for the 1E type systems.
22.	ITT	-	-	Closing date	Given the lack of information for 0 LZC, 6 SSC and 6 SSD, and the need to have this information to quote on for the project, an extension for the closing date of 30 April will be needed. The extension period will depend on how quickly the Employer can provide the responses to the clarification questions. The Contractor will need at least 3 weeks to process the information, to send the information to the Suppliers, to receive the feedback and to build a proper technical and commercial offer. Can the Employer please consider an extension, based on when a response can be provided?	Extension to tender closing has been granted until 30 April 2024. This has been published on the tender bulletins, refer attached as reference.
23.	ITT			Quality Requirements	If a supplier is currently not approved for Q1/L1 scope of work, can the supplier still tender for the WCKBG2516SB scope of work?	It should be noted that the current approval is based on the last audit and does not prohibit a supplier to submit a tender if the Quality Management System has been improved/re-evaluated since the last audit. Please see Page 10

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Tender Questions and Answers

Document Identifier	240-7124948	Rev	1
Effective Date	01 April 2023		
Review Date	April 2026		

No.	Document	Section	Page	Requirement	Questions	Answers
						of the Invitation To Tender for the following: Supplier Qualification Process - Suppliers who meet the functionality threshold but are not on the Koeberg Operating Unit (KOU) approved supplier listing (ASL) for the scope of work detailed in the draft NEC3 (ECC) for WCKBG2516SB will be further subjected to a supplier qualification process, which will form part of the functional stage of the evaluation
08 April 2024 (Clarity published date) - Rev 3_Tender Questions and Answers_Clarifications_2024.04.08						
24.					<p>Can the Employer please provide NDA and SOD for the tenderer to fill out to receive a response for the following:</p> <p><i>What are the requirements for safety vetting of personnel (to what level) and measures for safeguarding sensitive information (and what is meant by "sensitive information" in the context of design for SSC and SSD)?</i></p> <p>AND</p> <p><i>Can the Employer please supply details of the 6 SSC and 6 SSD inverters and their distribution boards (type of inverters, type of distribution boards and feeder types and sizes) to allow the Contractor the opportunity to find suitable replacements?</i></p>	<p>The potential tenderer to complete and sign the below mentioned documents in order for Eskom to give access to the documents that are classed as secret:</p> <ul style="list-style-type: none"> ✚ Rev 3_Q15_Item 1_Declaration of secrecy_WCKBG2516SB ✚ NDA – refer 09_Attachment 8_Non-Disclosure Agreement (NDA) Vendors

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Document Identifier	240-7124948	Rev	1
Effective Date	01 April 2023		
Review Date	April 2026		

No.	Document	Section	Page	Requirement	Questions	Answers
25.					<p>Can the Employer please provide LZC Details requested in the previous clarification questions, as they were not previously attached as stated in the response:</p> <p><i>Can the Employer please supply details of the 0 LZC inverter and its distribution board (make, model numbers, feeder types, tripping curves), as this information does not seem to be readily available, or alternatively please supply references to where the information can be obtained for the 0 LZC inverter and its switchboard?</i></p>	Rev 3_Q18_Item 2_OLZC – info
11 April 2024 (Clarity published date) - Rev 4_Tender Questions and Answers_Clarifications_2024.04.11						
26.					<p>Related to NSF distribution switchboards, could you provide the following information?</p> <ul style="list-style-type: none"> - Equipment Specification for NSF distribution switchboards. - The type and form of NSF distribution switchboards. - One line diagram of the separate distribution switchboards associated to these inverters: LNE 001/2/3, 9LNF/G/H, 0LZC 00, 6SSC/D, MTR. 	<ul style="list-style-type: none"> • See Attached KBA1215G10001 & KBA1217LOO052 • Single line diagram attached. • The MTR is a new scope, and the applicable spec should be used. • As per the TRS, 7.8.1.2, the tenderer must develop accepted procurement specs to the subcontractor for the various system types as previously done on previous mods. • Please note that document can be located at Koeberg's documentation centre. All

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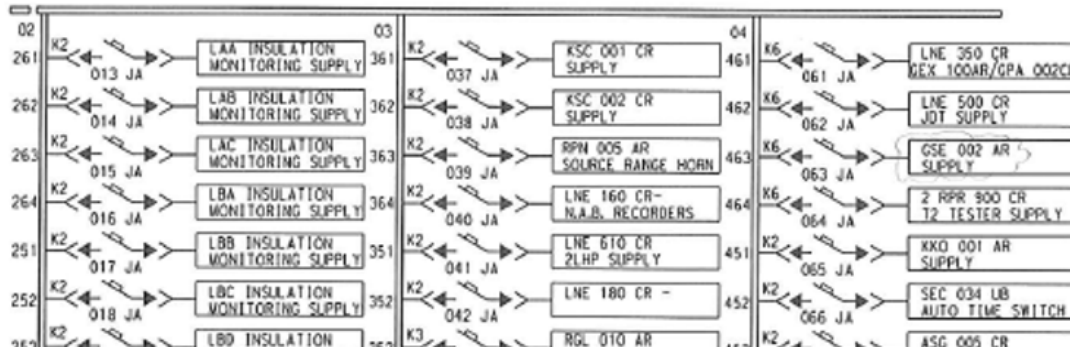
Document Identifier	240-7124948	Rev	1
Effective Date	01 April 2023		
Review Date	April 2026		

No.	Document	Section	Page	Requirement	Questions	Answers
						<p>documents provided during clarification must be verified by the tenderer.</p> <p>Confidential documents can be collected at Koeberg after the DOS and NDA are signed.</p>
27.					<p>Related to Class 1E distribution switchboards, could you provide the following information?</p> <ul style="list-style-type: none"> - Equipment Specification, LNI System, Vital Source 220 V AC Production and Distribution boards (KBA 1217 LNI 800). - One line diagram of switchboard associated to LNA/B/C/D inverters. 	<ul style="list-style-type: none"> • See attached KBA1217 LNI 800 • Attached single line diagram. See 26
17 April 2024 (Clarity published date) - Rev 5_Tender Questions and Answers_Clarifications_2024/04/17						
28.					<p>Regarding the switchboards:</p> <ul style="list-style-type: none"> • Can you confirm the type and form of electrical panel according to IEC 61439-2, referenced in the TRS? 	Confirmed
29.					<p>In the document provided by Eskom, Rev4_Q27_Item 7_Single Line Diagram, there is the single line drawing but the breakers capacity is not referenced, see below. Can you specify the output breakers capacities?</p>	<p>Breaker capacities are K1, K2.. ect.</p> <p>See KBA1217LOO052 (PDF page 49) supplied previously also found attached "Rev 5_Q29_Item 1_Feeders – info"</p>
30.					<p>We do not find, in the attached documents, the single line diagrams of 0LZC 001 and 6SSC/D, could you please send them?</p>	<p>0LZC single line diagram can be found on page 64 of "Rev 3_Q18_Item 2_OLZC - info.pdf" breaker size for 0LZC can be determined from the text of the same document.</p>

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No.	Document	Section	Page	Requirement	Questions	Answers
						6SSC/D docs can be collected from Koeberg. See 26
31.					Cable entry for each switchboard is also necessary: LNE 001/2/3, 9LNF/G/H, 0LZC 001, 6SSC/D	See TRS table 4



32.					<p>Given the lack of information for 0 LZC, 6 SSC and 6 SSD, and the need to have this information to quote on for the project, a three-week extension of up to the 17th May 2024 is requested.</p> <p>The extension period will depend on how quickly the Employer can provide the responses to the clarification questions.</p> <p>The Contractor will need at least 3 weeks to process the information, to send the information to the</p>	<p>Permission has been granted to extend the tender closing until 16 May 2024.</p> <p>No tender box closing takes place on a Friday, only Tuesdays and Thursdays.</p> <p>For 0LZC see 30.</p>
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Effective Date	01 April 2023		
Review Date	April 2026		

No.	Document	Section	Page	Requirement	Questions	Answers
					Suppliers, to receive the feedback and to build a proper technical and commercial offer. Can the Employer please consider an extension, based on when a response can be provided?	For 6SSC and 6SSD see 26
33.					Can the Employer provide the details of the OEMs for the distribution boards for the various systems, especially those for 0 LZC and 6 SSC/D?	Follow standardization stated in 34
34.					The inverters for all of the systems associated with this project are all similar, i.e. Merlin Gerin MG 30 inverters. The distribution boards on the other hand are Normabloc 486 units for the unit 1,2 and 9 boards, but the distribution boards for units 0 and 6 are different. Is it correct to state that the intent of this requirement is to: a) standardise on all of the inverters (all must be same type) and b) standardise on all of the distribution boards (for the purpose of spares, maintenance, training)?	Correct
35.					Can the Contractor accept that the boards can be isolated completely in a window of time allocated by the Employer that will allow for the upgrades to be done by the Contractor, or must the Contractor provide temporary power to back up those loads that are deemed essential by the Employer during the upgrade windows? If it is the latter, can the Employer please make available the details of what loads must be backed up, such that the Contractor can make adequate provision for this as part of the bid proposal and costing?	Temporary's will be need. Recently 6SSC and 6SSD was fed from 6SSA. A temporary TB will only be required (maybe one of the new SSC/D TB) <u>Suggestion</u>

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Tender Questions and Answers

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Effective Date	01 April 2023		
Review Date	April 2026		

No.	Document	Section	Page	Requirement	Questions	Answers
					NOTE that this is especially true for LNE and SSC/D	<p>The MTR can be developed such that it could be used as a temporary supply with TB.</p> <p>OR</p> <p>Off-line inverters and TB used as temporary supplies for on-line inverters, vice versa.</p> <p>AND</p> <p>Plant LTP supplies can be used to temporarily supply loads.</p> <p>The Loads cannot be immediately provided. This will be determined during design phase for specific outages.</p>
24 April 2024 (Clarity published date) - Rev 6_Tender Questions and Answers_Clarifications_2024/04/19)						
36.					Regarding inverter 0LZC, Section 4.3.3.3.2 of TRS 09082A, states that the switchboard shall be separate from the inverter unit. However, in the table included in Section 4.3.1.20.16, it is indicated that for the inverter 0LZC the switchboard has to be integrated with the inverter. Which one is correct?	Consider the table to be correct. 0LZC DL currently has an integrated TB, but separated by a panel, next to it.
37.					Regarding LNE protection device, TRS section 4.3.1.13.6 states " <i>If the OEM 1E protection devices are obsolete, then the contractor shall source equivalent devices or qualify a new device (including its associated components) for this application.</i> ". Please confirm if the 1E protections devices on LLE and LLI	Please note this is referring to the upgrade scope of including a bypass supply for LNE. The new bypass supply shall be taken from LLI and LLE, therefore new 1E breakers are required for this new

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Effective Date	01 April 2023		
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No.	Document	Section	Page	Requirement	Questions	Answers
					shall be replaced, as according to previous Eskom answer to question number 6 , regarding LNE, there is no need to upgrade cables and feeders. In case this upgrade is necessary, please provide detailed information of such 1E protection devices.	scope. All new cables and breakers for the new scope shall be appropriately sized and installed.
38.					Regarding answer 28 , the standard IEC 61439-2 part 2 consider various type of form low-voltage switchgear depending on internals separations. Please confirm if these forms are applicable and which are and if this case confirm the number form? <ul style="list-style-type: none"> For LNE,9LNF,9LNG,9LNH can we consider 3a/3b form according IEC61439? For LNE,9LNF,9LNG,9LNH can we consider 2b form according IEC61439? 	As a minimum the existing TB design shall be met in the new design. Original TB specification included - "Rev6_Q38_Item 1_TB specification". The contractor will be responsible for the compilation of the TB specification to the TB manufacture. The specification is developed in conjunction with the employer. The appropriate "Form, 2,3 or 4" will then be determined. It is likely that "Form 3b" maybe used.
39.					Could the Employer confirm that the design of the interfacing between the replacement Inverter System and the Ovation plant computer (KIT) as well as the associated KIT HMI, is not included in the scope of work?. This scope was requested in previous tendering process under specification TRS-09082B "Inverter System Interface to Plant Computer (KIT)".	The scope of Interface design is not included. However, each inverter must be configured for Modbus communication and a Modbus list of registers, with addressing, for the various variables for each inverter must be provided as part of this scope.
40.					Could the Employer provide a list of all the current alarm signals going to KSA?	Please note these might not be ALL AAs and ECs. 1/2LNA LNA 501 AA INSULATION FAULT LNA 502 AA INVERTER OR MAINS SUPPLY FAULT LNA 503 AA MIN OR MAX VOLTAGE FAULT

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Review Date	April 2026		

No.	Document	Section	Page	Requirement	Questions	Answers
						LNA 504 AA FEEDER TRIP LNA 501EC– LNA BOARD – FAULT 1/2LNB LNB 501 AA INSULATION FAULT LNB 502 AA INVERTER OR MAINS SUPPLY FAULT LNB 503 AA MIN OR MAX VOLTAGE FAULT LNB 504 AA FEEDER TRIP LNB 501EC– LNB BOARD – FAULT 1/2LNC LNC 501 AA INSULATION FAULT LNC 502 AA INVERTER OR MAINS SUPPLY FAULT LNC 503 AA MIN OR MAX VOLTAGE FAULT LNC 504 AA FEEDER TRIP LNC 501EC– LNC BOARD – FAULT 1/2LND LND 501 AA INSULATION FAULT LND 502 AA INVERTER OR MAINS SUPPLY FAULT LND 503 AA MIN OR MAX VOLTAGE FAULT LND 504 AA FEEDER TRIP LND 501EC– LND BOARD – FAULT 1/2LNE

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No.	Document	Section	Page	Requirement	Questions	Answers
						<p>LNE 001 AA 001DL INVERTER FAN FAULT LNE 002 AA 002DL INVERTER FAN FAULT LNE 003 AA 003DL INVERTER FAN FAULT LNE 004 AA FEEDER OR INVERTER OR BOARD FAULT LNE 002EC– INVERTER 001DL – FAULT LNE 003EC– INVERTER 001DL FAN – FAULT LNE 004EC– INVERTER 002DL – FAULT LNE 005EC– INVERTER 002DL FAN – FAULT LNE 006EC– INVERTER 003DL – FAULT LNE 007EC– INVERTER 003DL FAN – FAULT LNE 008EC – OUTGOING FEEDER – TRIPPED LNE 009EC – UNDER OR OVER VOLTAGE – ABNORMAL LNE 010EC – LNE BOARD INSULATION FAULT</p> <p>LNF 9 LNF 001 AA INVERTER OR BOARD FAULT</p> <p>LNG 9 LNG 001 AA INVERTER OR BOARD FAULT</p> <p>LNH 9 LNH 001 AA INVERTER OR BOARD FAULT</p>
41.					Could the Employer provide the general arrangement drawings with the location of every inverter and switchboard?	<ul style="list-style-type: none"> 0LZC, LNi and LNE provided in “Rev6_Q41_Item 1_GA” Not provided LNF is in N247 on the 0.0m level – “Rev6_Q41_Item 2_GA”.

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Tender Questions and Answers

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No.	Document	Section	Page	Requirement	Questions	Answers
						<ul style="list-style-type: none"> LNG is in the Demin Plant electrical room. LNH is in the CTE plant. 6SSC/D is in the CAS.
42.					Will the contractor be responsible for the removal of the inverters from Eskom site or will they be stored on-site and only moved by contractor?	The contractor will be responsible for the removal from the unit to a storage location onsite (within the outer boundaries (R27)).
25 April 2024 (Clarity published date) - Rev 7_Tender Questions and Answers_Clarifications_2024/04/24)						
43.					<p>Could the Employer provide the following documents?</p> <ul style="list-style-type: none"> DSG-318-033 "Specification for Seismic Qualification of Electrical and Mechanical Equipment" DSG-311-088 "Technical Specification For Low Voltage Power Distribution Boards" 36-965 "Acceptance and Commissioning of DC supply equipment in Generation" 240-49230046 "Failure Mode and Effects Analysis (FMEA) Guideline" 	<p>Rev7_Q43_Item 1_SSQ.pdf</p> <p>Rev7_Q43_Item 2_TSTB.pdf</p> <p>36-965 currently not available.</p> <p>Rev7_Q43_Item 3_FMEA.pdf</p>
44.					<p>Could the Employer provide the one line diagrams where identify the income power sources (busbars, external batteries, etc) of inverters to be supplied?</p> <p>Regarding to the chapter 5.3.2:</p> <p>5.3.2. The addition of a new configuration watchdog grouped alarm to KSA (white alarm) and KIT EC (hardwired to KIT I/O) to inform the operators that a parameter change (intentional or unintentional) has occurred in the inverter parameter settings, or the communication link is faulted. This alarm is required for cyber security reasons and must be separate from the KIT interface link.</p>	<p>See Rev7_Q44_Item 1_Single_LIne.pdf</p> <p>See 26</p> <p>The inverter unit should be configured such that any configuration change, in terms of its programming/configuration after commissioning, must activate a new white grouped common alarm in the control room. See 39.</p>

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	Tender Questions and Answers	Document Identifier 240-7124948	Rev 1
		Effective Date 01 April 2023	
		Review Date April 2026	

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					<ul style="list-style-type: none"> • Could the employer provide additional information about the functionality of the new alarm? • Are there enough spare channels/inputs in KSA system to wire the above alarms, one per UPS? • Are there enough spare channels/inputs in KIT system to wire the above alarms, one per UPS? 	<p>See above.</p> <p>A common grouped alarm for inverters selected.</p> <p>Yes- individual ECs to KIT for each inverter.</p>

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