

Rural Power Company Limited  
House # 19, Road # 1/B  
Sector # 09, Uttara, Dhaka-1230  
Office of the Executive Director  
(Engg.)  
www.rpcl.gov.bd

"শেখ হাসিনার উদ্যোগ  
ঘরে ঘরে বিদ্যুৎ"

Record Number  
27.26.0000.003.06.125.19.137

Date 24/10/2019

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Subject:

**Minutes of Pre-Tender Meeting & Clarifications of queries  
against Tender inquiry No: PUR-004(FG/GPP-  
RPP/OTM)/2019-20, dated: 23/09/2019.**

In response to the queries received from the prospective Tenderers and discussion of pre-tender meeting held on 07/10/2019, the respective clarifications from RPCL end and minutes of pre-tender meeting are attached herewith. These clarifications and minutes of pre-tender meeting shall be treated as an integral part of the Tender Document.



24-10-2019

Md. Salim Bhuiyan  
Executive Director  
(Engineering)  
Phone: 02-48961201  
Email: edengg@rpcl.gov.bd

CC:

- 1) Managing Director, RPCL, Dhaka.
- 2) Executive Director (F/A), RPCL, Dhaka.
- 3) Manager (ICT), RPCL, Dhaka [With a request to publish the Minutes in RPCL's Website].
- 4) Office copy.
- 5) Distribution to: a).....

**Minutes of Pre-Tender Meeting and Clarifications of Queries against Tender Ref: PUR-004(FG/GPP-RPP/OTM)/2019-20, dated: 23/09/2019.**

Bidder's Name	Queries SI/No.	Lot No. and Name of Lot	Clause/ Section	As published in Tender Notice/Document	Bidder's Queries	Response of RPCL/ Amendment of Tender Document
A	1	Lot-1, 2	TDS-ITT 13.1	The maximum three (3) number of arbitration awards against the Tenderer over a period of the last five (5) years.	Request to clarify the nature of contracts. We understand that it should be for Supply of RTUs, FOTE and OPGW and NLDC works.	Total number of arbitration is three (3) in the last five (5) years.
	2		TDS-ITT 14.1(a)	The Tenderer shall have a minimum of five (5) years of overall experience for supply of goods and related services.	Request to clarify the nature of contracts. We understand that it should be for Supply of RTUs, FOTE and OPGW works.	Nature of contract is supply of goods and related services.
	3	Lot-2	TDS-ITT 14.1(b)	The satisfactory completion of *similar project of minimum USD 2,60,355.00 / EUR 2,35,083.00 / BDT 2,20,00,000.00 or equivalent currency under at least 2 (Two) Contracts in the last 5 (Five) of years. i.e. years counting backward from the date of publication of IFT in the newspaper. * Design, Supply, Erection, Testing, Commissioning and Integration of Voice Communication and SCADA system in the power plant will be treated as similar projects. [The Tenderer must submit evidence in the form of contract completion certificate issued by the end users.]	This Job being including work for S/s and more at Network level as well as NLDC end also. Request to look accordingly for the experience to understand the work outside the substation. Relevant exoerinece and certification and support from respective OEM should be desired in view of hasslefree execution.	The satisfactory completion of supply, installation, testing and commissioning of SCADA and Voice Communication System of a power plant of minimum BDT 1,00,00,000.00 or equivalent currency under a single Contract in the last 5 (Five) of years. i.e. years counting backward from the date of publication of IFT in the newspaper. [The Tenderer must submit evidence in the form of contract completion certificate issued by the end users.]
	4	Lot-1, 2	TDS-ITT 23.3	Tenders are being invited for 2 (Two) lots on Lot by Lot basis.	We understand that Lot-1 is Gazipur Kadda PS and Lot-2 is Raozan 25 MW PS. Please cofirm.	Lot-1 for Gazipur 52MW Power plant and Lot-2 for Raozan 25MW Power Plant.

*(Mo. Saifur Rahman, FEng)*  
*Executive Director (Engg.)*  
*Rural Power Company Limited*

Minutes of Pre-Tender Meeting and Clarifications of Queries against Tender Ref: PUR-004(FG/GPP-RPP/OTM)/2019-20, dated: 23/09/2019.

A	5	Lot-1, 2	GCC 26.2 of PCC	<p>Responsibility of the Supplier: (a) The supplier shall pay the cost of the insurance, all import duties and all the charges including clearing and forwarding charges for the goods and all sorts of charges to be liable by the port as well as other Govt. agencies inside Bangladesh for the goods to be imported in accordance with the specification and local cost for delivery upto Raozan 25MW Power Plant.</p> <p>(b) To do everything for successful commissioning of the SCADA system.</p>	<p>Taxation being the most crucial part ,We request RPCL to declare CD and VAT percentage at this moment or in RPCL scope. CD and VAT are changing frequently and will be hitting any bidder in financial terms. Or We propose it to be extra at actual to be paid by RPCL directly. Any wrong CD ,VAT calculation also jeopardise execution so putting bidder in serious risk leading to default the whole execution.</p>	<p>As per Incoterm 2010: CPT upto Hazrat Shahjalal International Airport.</p>
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 (Mr. Saifur Rahman, FENG)  
 Executive Director (Engg.)  
 Rural Power Company Limited

**Minutes of Pre-Tender Meeting and Clarifications of Queries against Tender Ref: PUR-004(FG/GPP-RPP/OTM)/2019-20, dated: 23/09/2019.**

A	6	Lot-1, 2	GCC 27.1 of PCC	<p>Payment of Foreign Currency: Payment of foreign currency portion shall be made thorough irrevocable Letter of Credit (LC) in the following manner: (a) On Shipment: Fifty (50) percent of the foreign currency payment of the contract shall be paid through irrevocable letter of credit opened in favor of the Supplier in a bank in its country, upon shipment of goods from abroad and submission of documents specified in GCC Clause 23.2. (b) On Completion of the works: Fifty (50) percent of the foreign currency payment of the contract shall be paid through irrevocable letter of credit upon submission of claim supported by satisfactory Material receiving report (MRR), quality certificate and Completion Certificate issued by the Project Manager after commissioning. (c) If integration is delayed due to PGCB's reason, the payment for this portion will be withheld. Project Manager will issue partial completion certificate and payment will be made accordingly.</p>	<p>As foreign will be maximum material supply so we request RPCL to clear complete supply payment after MRR. Any reason pertaining to PGCB side should also be supported by RPCL to solve the problem being both govt. entity to collaborate.</p>	<p><b>Payment for Supply portion:</b> a) Eighty (80) percent of the foreign currency payment of the supply portion shall be paid through irrevocable letter of credit opened in favor of the Supplier in a bank in its country, upon submission of claim supported by satisfactory Material receiving report (MRR) &amp; Quality certificate issued by RPCL. (b) Twenty (20) percent of the foreign currency payment of the contract shall be paid through irrevocable letter of credit upon submission of claim supported by Completion Certificate issued by the Project Manager after commissioning of SCADA and Voice Communication System.</p>
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**(Md. Salim Bhuiyan, P.Eng.)**  
 Executive Director (Engg.)  
 Rural Power Company Limited

**Minutes of Pre-Tender Meeting and Clarifications of Queries against Tender Ref: PUR-004(FG/GPP-RPP-OTM)/2019-20, dated: 23/09/2019.**

A	7	Lot-1, 2	GCC 27.1 of PCC	<p>Payment of Local Currency: Payment of local currency portion shall be made through Account Payee Cheque in the following manner: (a) On Completion of the works: Hundred (100) percent of the Local currency payment of the contract shall be paid through Account Payee Cheque upon submission of claim supported by satisfactory Material receiving report (MRR), quality certificate and Completion Certificate issued by the Project Manager after commissioning.</p> <p>(b) If integration is delayed due to PGCB's reason, the payment for this portion will be withheld. Project Manager will issue partial completion certificate and payment will be made accordingly.</p>	<p>Any reason pertaining to PGCB side should also be supported by RPCL, to solve the problem being both govt. entity to collaborate.</p>	<p><b>Payment for Service Portion:</b> Hundred (100) percent of the Local currency payment of the service portion shall be paid through Account Payee Cheque upon submission of claim supported by Completion Certificate issued by the Project Manager after commissioning of SCADA and Voice Communication System.</p>
	8		GCC 33.3 of PCC	<p>Warranty: a) The period of validity of warranty is Twelve (12) month from date of issuance of Acceptance Certificate by Project Manager.</p>	<p>Request to consider from date of dispatch 12 /18 months as to limit the warranty period.</p>	<p>Warranty period will be 12 months counting from the date of satisfactory commissioning of the equipment.</p>

*(M/s. Salim Brothers, Perini)*  
 Executive Director (Engg.)  
 Rural Power Commission, India.

Minutes of Pre-Tender Meeting and Clarifications of Queries against Tender Ref: PUR-004(FG/GPP-RPP/OTM)/2019-20, dated: 23/09/2019.

A	9	Lot-1, 2	Price Schedule for Goods (Form PG4-3B)	<p>SDH Equipment and PDH Equipped with common cards &amp; traffic cards as per PGCB standard. All Telecom equipment should be made by GE/ABB/HUAWEI.</p>	<p>We would like to put in the consideration that Official Network is made in PGCB is delivered by GE with Three elements ( GE MSE Series SDH and DXC Series PDH with Teleprotection DIP5000 and running successfully till date). ABB is also running a parallel network but less of any redundancy on SDH and PDH level.Huawei is not having any network. So we Request to amend the same and put only GE/ABB name under these sections to avoid any future incompatibility and network conflicts w.r.t. existing equipments and NMS at control centres.MAF can be asked with Technical compatibility certification from respective OEMs for SDH and PDH.</p>	<p>Tender Provision will prevail.</p>
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**Md. Salim Bhuiyan, PEng**  
 Executive Director (Engg.)  
 Power Company Limited

Minutes of Pre-Tender Meeting and Clarifications of Queries against Tender Ref: PUR-004(FG/GPP-RPP/OTM)/2019-20, dated: 23/09/2019.

A	10	Lot-2	Price Schedule for Goods (Form PG4-3B)	<p>Remote Terminal Unit (RTU) along with accessories- at Raozan 25 MW PP, Noapara, Raozan and PGCB grid substation, Madunaghat, Chattogram as per SLD provided All RTU should be made by GE/ABB/Schneider.</p>	<p>At PGCB Grid Substation ,existing is GE C264 RTU only and augmentation of Raozan bays will be must in this RTU to complete the Network and configuration at NLDC.At Power plant End RTU/SAS of any make is OK but not at PGCB End.Request to consider and modify accordingly. &amp; Any unauthorised and technical misinterpreted solution to configure GE C264 will be leading to risking the complete RTU and existing AMC which is under GE.</p>	Tender Provision will prevail.
	11	Lot-1, 2	Price Schedule for Goods (Form PG4-3B)	<p>© Interfacing cards, extension cards, transducers, inverter, converter, relays etc as required for the system</p>	<p>Cards for RTU and FOTE Augmentation at PGCB end in GE FOTE and GE RTU has to be appropriately chosen and considered from GE only to avoid any technical incompatibility and conflicts during execution.GE may be unable to help if technical and OEM OEM compliance /incompatibility is arising due to the same.</p>	Tender Provision will prevail.

  
 Md. Saifur Rahman, PCCO  
 Executive Director (Engg.)  
 Rural Power Company Limited

**Minutes of Pre-Tender Meeting and Clarifications of Queries against Tender Ref: PUR-004(FG/GPP-RPP/OTM)/2019-20, dated: 23/09/2019.**

Bidder's Name	Queries SI/No.	Lot No. and Name of Lot	Clause/ Section	As published in Tender Notice/Document	Bidder's Queries	Response of RPCL/ Amendment of Tender Document
B	1	Lot-1	TDS-ITT 14.1(b)	<p>The satisfactory completion of *similar project of minimum USD 2,36,686.00 / EUR 3,13,712.00 / BDT 2,00,00,000.00 or equivalent currency under at least 2 (Two) Contracts in the last 5 (Five) of years. i.e. years counting backward from the date of publication of IFT in the newspaper.</p> <p>* Design, Supply, Erection, Testing, Commissioning and Integration of Voice Communication and SCADA system in the power plant will be treated as similar projects. [The Tenderer must submit evidence in the form of contract completion certificate issued by the end users.]</p>	<p>The satisfactory successful completion of supply, erection, testing commissioning of any electrical goods of minimum BDT 2,00,00,000.00 or equivalent currency under at least 2 (Two) Contracts in the last 5 (Five) of years. i.e. years counting backward from the date of publication of IFT in the newspaper.</p>	<p>The satisfactory completion of supply, installation, testing and commissioning of SCADA and Voice Communication System of a power plant of minimum BDT 90,00,000.00 or equivalent currency under a single Contract in the last 5 (Five) of years. i.e. years counting backward from the date of publication of IFT in the newspaper.</p> <p>[The Tenderer must submit evidence in the form of contract completion certificate issued by the end users.]</p>
	2	Lot-2		<p>The satisfactory completion of *similar project of minimum USD 2,60,355.00 / EUR 2,35,083.00 / BDT 2,20,00,000.00 or equivalent currency under at least 2 (Two) Contracts in the last 5 (Five) of years. i.e. years counting backward from the date of publication of IFT in the newspaper.</p> <p>* Design, Supply, Erection, Testing, Commissioning and Integration of Voice Communication and SCADA system in the power plant will be treated as similar projects. [The Tenderer must submit evidence in the form of contract completion certificate issued by the end users.]</p>	<p>The satisfactory successful completion of supply, erection, testing commissioning of any electrical goods of minimum BDT 2,20,00,000.00 or equivalent currency under at least 3 (Three) Contracts in the last 5 (Five) of years. i.e. years counting backward from the date of publication of IFT in the newspaper.</p>	<p>The satisfactory completion of supply, installation, testing and commissioning of SCADA and Voice Communication System of a power plant of minimum BDT 1,00,00,000.00 or equivalent currency under a single Contract in the last 5 (Five) of years. i.e. years counting backward from the date of publication of IFT in the newspaper.</p> <p>[The Tenderer must submit evidence in the form of contract completion certificate issued by the end users.]</p>

*(Md. Saleh Bhuiyan, P.Eng)*  
 Executive Director (Engrg.)  
 Rural Power Company Limited



**Minutes of Pre-Tender Meeting and Clarifications of Queries against Tender Ref: PUR-004(FG/GPP-RPP/OTM)/2019-20, dated: 23/09/2019.**

Bidder's Name	Queries Sl/No.	Lot No. and Name of Lot	Clause/ Section	As published in Tender Notice/Document	Bidder's Queries	Response of RPCL/ Amendment of Tender Document
C	1	Lot-1, 2	ITT 14.1(a)	The Tenderer shall have a minimum of five (5) years of overall experience for supply of goods and related services.	Bidder requested to reduce the overall experience to 2-3 yrs instead of existing.	The Tenderer shall have a minimum of two (2) years of overall experience for supply of goods and related services.
	2	Lot-1	ITT 14.1(b)	The satisfactory completion of *similar project of minimum USD 2,36,686.00 / EUR 3,13,712.00 / BDT 2,00,00,000.00 or equivalent currency under at least 2 (Two) Contracts in the last 5 (Five) of years. i.e. years counting backward from the date of publication of IFT in the newspaper. * Design, Supply, Erection, Testing, Commissioning and Integration of Voice Communication and SCADA system in the power plant will be treated as similar projects. [The Tenderer must submit evidence in the form of contract completion certificate issued by the end users.]	Bidder requested to reduce value of the specific experience to BDT 1,00,00,000.00 or equ. currency under at least 1 (one) contract instead of existing.	The satisfactory completion of supply, installation, testing and commissioning of SCADA and Voice Communication System of a power plant of minimum BDT 90,00,000.00 or equivalent currency under a single Contract in the last 5 (Five) of years. i.e. years counting backward from the date of publication of IFT in the newspaper. [The Tenderer must submit evidence in the form of contract completion certificate issued by the end users.]
	3	Lot-2	ITT 14.1 (b)	The satisfactory completion of *similar project of minimum USD 2,60,355.00 / EUR 2,35,083.00 / BDT 2,20,00,000.00 or equivalent currency under at least 2 (Two) Contracts in the last 5 (Five) of years. i.e. years counting backward from the date of publication of IFT in the newspaper. * Design, Supply, Erection, Testing, Commissioning and Integration of Voice Communication and SCADA system in the power plant will be treated as similar projects. [The Tenderer must submit evidence in the form of contract completion certificate issued by the end users.]	Bidder requested to reduce value of the specific experience to BDT 1,15,00,000.00 or equ. currency under at least 1 (one) contract instead of existing.	The satisfactory completion of supply, installation, testing and commissioning of SCADA and Voice Communication System of a power plant of minimum BDT 1,00,00,000.00 or equivalent currency under a single Contract in the last 5 (Five) of years. i.e. years counting backward from the date of publication of IFT in the newspaper. [The Tenderer must submit evidence in the form of contract completion certificate issued by the end users.]

  
 (Md. Salim Bhuiyan, PEng)  
 Executive Director (Engg.)  
 Rural Power Company Limited.

**Minutes of Pre-Tender Meeting and Clarifications of Queries against Tender Ref: PUR-004(FG/GPP-RPP/OTM)/2019-20, dated: 23/09/2019.**

Bidder's Name	Queries Sl/No.	Lot No. and Name of Lot	Clause/Section	As published in Tender Notice/Document	Bidder's Queries	Response of RPCL/ Amendment of Tender Document
D	1	Lot-1	Section 7: Clause #1	SDH Equipment and PDH Equipped with common cards & traffic cards as per PGCB standard. All Telecom equipment should be made by GE/ABB/HUAWEI.	Quantity of common cards are not mentioned for SDH Equipment and PDH Equipped with common cards & traffic cards. We request to provide number of quantity of each equipment or we are allowed to choose the minimum quantity.	Number of cards has to be decided based on the signals and data to be communicated as per attached lists.
	2				Each company has lots of models of SDH and PDH equipment. Details of product such as number of ports along with capacity of SDH and PDH Equipment is not given. We request to provide model with number of different types of ports or detail specification of SDH Equipment and PDH Equipped with common cards & traffic cards or we are allowed to choose the minimum quantity.	SDH and PDH model, capacity, ports etc. should be compatible with existing PGCB equipment and capable of functioning with signal, data and voice communications as per attached lists with future expansion facility.
	3				Information about the route from RPCL Raozan and Kodda to nearest reporting station is not mentioned. Is there any optical fiber link between power plant to nearest grid/reporting substation. We request you to inform name of node of existing PGCB to be connected with and means of connectivity. Link cost should we include in the offer.	Optical communication schemes for Gazipur 52 MW and Raozan 25MW Power Plant are attached.
	4				Please let us know the availability of the ports of existing PGCB telecom equipment at the nearest grid substation. If ports for data and voice are not available then the bidder will be allowed to split up the existing ports or not?	Contractor/Supplier is allowed to supply/split up existing port as per satisfaction of PGCB engineer.

*Md. Saifur Rahman, PEGP  
Executive Director (Engg)  
Gazipur Power Company Limited*

**Minutes of Pre-Tender Meeting and Clarifications of Queries against Tender Ref: PUR-004(FG/GPP-RPP/OTM)/2019-20, dated: 23/09/2019.**

D	5	Lot-I	Remote Terminal Unit (RTU) along with accessories- at Gazipur 52MW PP and PGCB substation, Kodda, Gazipur as per SLD provided. All RTU should be made by GE/ABB/Schneider.	No of analog and digital input/output not given to determine the size of RTU requested to provide those.	Input and output have to be decided by tenderer. For more clarification, tenderer is requested to contact with PGCB.	
	6				Each company has number of models of RTU equipment.	As per requirement of Tender. For more clarification, tenderer is requested to contact with PGCB.
	7				Please confirm availability of required license to connect additional RTU with existing core server software.	
	8				Master station work for SCADA and telecom is within bidder scope or not?	Tenderer's scope.
	9				Any hardware for master station or license is not within the bidder's scope. Our understanding is correct or not?	Tenderer's scope.
	10				Fiber Optic Cable FOAC (24 cores single mode armoured/ G Optical cable)	Cable length of Fiber Optic Cable is not mentioned. Without this information, quotation is not possible. We request to provide cable length of Fiber Optic Cable with existing network.

  
 Md. Salim Bhuiyan (Engg.)  
 Executive Director (Engg.)  
 Tural Power Company Limited

**Minutes of Pre-Tender Meeting and Clarifications of Queries against Tender Ref: PUR-004(FG/GPP-RPP/OTM)/2019-20, dated: 23/09/2019.**

D	11		<p>a) Accessories like - ODF, FODP, Joint Box, termination kits etc. as required for the system.</p> <p>b) Power cables earthing cables, control cables, signaling /telephone cables with other accessories like-tape, binder, clip, washer, nut, bolts, washer, conduits, sealing materials, ACDB/DCDB etc. and others e as required to execute the works.</p> <p>c) Interfacing cards, extension cards, transducers, inverter, converter, relays etc. as required for the system</p>	<p>Quantity is not mentioned for any of accessories. We request to provide of quantity each equipment.</p>	<p>As per requirement of Tender. For more clarification, tenderer is requested to contact with PGCB.</p>
	12	Lot-1		<p>We request you to provide capacity and details specification of each equipment as well.</p>	
	13		<p>Section 7: Clause #4(a), (b), ©</p>	<p>Quantity is not mentioned for VoIP Phone (Cisco make). We request to provide quantity of VoIP phone required.</p>	<p>As per Amended Price Schedule for Goods (Form PG4-3B)</p>
	14		<p>Section 7: Clause #6</p>	<p>We request you to provide required model or details specification of the equipment.</p>	<p>Model 89XX.</p>
	15		<p>Section 7: Clause #7</p>	<p>Quantity is not mentioned for Analog Telephone Set Beete// Equivalent. We request to provide number of quantity required.</p>	<p>As per Amended Price Schedule for Goods (Form PG4-3B)</p>
	16			<p>We request you to provide model or details specification of the equipment.</p>	<p>High Quality with caller ID.</p>

*Md. Salim Bhuiyan (Engg.)  
Executive Director (Engg.)  
Rural Power Company Limited*

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Bidder's Name	Queries SI/No.	Lot No. and Name of Lot	Clause/Section	As published in Tender Notice/Document	Bidder's Queries	Response of RPCL/ Amendment of Tender Document
-	-	Lot-1	Price Schedule for Goods (Form PG4-3B) (item#2)	Remote Terminal Unit (RTU) along with accessories- at Gazipur 52MW PP and PGCB substation, Kadda , Gazipur as per SLD provided. All RTU should be made by GE/ABB/Schneider. Qty: 02 Lot.	-	As per Amended Price Schedule for Goods (Form PG4-3B)
-	-	Lot-2	Price Schedule for Goods (Form PG4-3B) (item#2)	Remote Terminal Unit (RTU) along with accessories- at Raozan 25 MW PP, Noapara, Raozan and PGCB grid substation, Madunaghat , Chattogram as per SLD provided All RTU should be made by GE/ABB/Schneider. Qty: 02 Lot.	-	As per Amended Price Schedule for Goods (Form PG4-3B)
-	-	-	Name of Tender Package	Design, Supply, Erection, Testing, Commissioning and Integration of Voice Communication and SCADA system for Power Stations of RPCL on Turn-key Basis.	-	Procurement of SCADA and Voice Communication equipment & related services for Gazipur 52 MW and Raozan 25MW Power plants of RPCL.

  
**Md. Salim Bhuiyan, PEGG**  
 Executive Director (Energy)  
 Rural Power Company Limited

Minutes of Pre-Tender Meeting and Clarifications of Queries against Tender Ref: PUR-004(FG/GPP-RPP/OTM)/2019-20, dated: 23/09/2019.

-	-	Lot-1	Name of Tender Lot	Design, Supply, Erection, Testing, Commissioning and Integration of Voice Communication and SCADA system for RPCL Gazipur 52 MW Power Plant on Turn-key Basis.	-	Procurement of SCADA and Voice Communication equipment & related services for Gazipur 52 MW Power plant.
-	-	Lot-2	Name of Tender Lot	Design, Supply, Erection, Testing, Commissioning and Integration of Voice Communication and SCADA system for RPCL Raozan 25 MW Power Plant on Turn-key Basis.	-	Procurement of SCADA and Voice Communication equipment & related services for Raozan 25MW Power plant.
-	-	Both Lot	Regarding Supply of Goods	The supplier will provide list of items, quantity, detail technical specifications, brochure, necessary drawing etc. to RPCL before shipment of the goods. RPCL will take concurrence from PGCB regarding suitability of the goods and after getting the same, RPCL will give shipment clearance to the supplier.		
-	-	Lot-2	Additional information	Length of Line 33kv : 6.6 Km (approx), No. of SPC (RCC) Pole = 61, No. of Steel Tower (Small) = 58 , No. of Steel Tower (Big) = 02, No. of H- Pole = 04, Modhunaghat (Halda) River Crossing Tower Span = 435 Meter.		

  
 Md. Saifur Rahman, PEng  
 Executive Director (Engg.)  
 Rural Power Company Limited

**Amended Price Schedule for Goods (Form PG4-3B)**  
**[Group B Tenders: Goods Manufactured outside Bangladesh, to be imported]**

<b>Invitation for Tender No:</b>	PUR-004(FG/GPP-RPP/OTM)/2019-20	<b>Date:</b>	23/09/2019
<b>Tender Package No:</b>	01	<b>Package Description:</b>	Procurement of SCADA and Voice Communication equipment & related services for Gazipur 52 MW and Raozan 25MW Power plants of RPCL.
<b>Tender Lot No:</b>	01	<b>Lot Description:</b>	Procurement of SCADA and Voice Communication equipment & related services for Gazipur 52 MW Power plant.

1	2	3	4	5	6	7
Line Item No.	Description of Item	Country of Origin	Unit of Measurement	Quantity	Unit price CPT up to Hazrat Shahjalal International Airport of Bangladesh [USD/Euro]	Total CPT Price per line item [USD/Euro] (Col. 5*Col. 6)
1.	SDH Equipment and PDH Equipped with common cards & traffic cards as per PGCB standard. All Telecom equipment should be made by GE/ABB/HUAWEI.		Lot	1		
2.	Remote Terminal Unit (RTU) along with accessories (Complete set) - at Gazipur 52MW PP and PGCB substation, Kadda , Gazipur as per SLD provided. All RTU should be made by GE/ABB/Schneider.		Lot	1		
3.	Fiber Optic Cable FOAC (24 cores single mode armoured/G Optical cable)		Lot	1		
4.	(a) Accessories like- ODF, FODP, Joint Box, termination kits etc. as required for the system. (b) Power cables earthing cables, control cables, signaling /telephone cables with other accessories like-tape, binder, clip, washer, nut, bolts, washer, conduits, sealing materials, ACDB/DCDB etc. and others e as required to execute the works © Interfacing cards, extension cards, transducers, inverter, converter, relays etc. as required for the system		Lot	1		
5.	Heavy duty industrial grade DC-DC converter (110VDC/48VDC, 20A) with necessary accessories.		Set	2		

M/S. Shaheen (Engg)  
 Executive Director (Engg)  
 Rural Power Company Limited

6.	VoIP Phone (Cisco make) incl. License & Integration with NLDC Operational Telephony Network with necessary accessories.	Set	1	
7.	Analog Telephone Set Beete/ Equivalent) with necessary accessories.	Set	2	

**Note : Price offered in USD/Euro**

**Point of Delivery as per Schedule of Requirement:**

<b>Name:</b>	[insert full name of signatory]	<b>Signature with Date and Seal</b>
<b>In the capacity of:</b>	[insert designation of signatory]	[ Sign]
Duly authorized to sign the Tender for and on behalf of the Tenderer		

  
(Mr. Saifur Rahman, Engg)  
Executive Director (Engg.)  
Rajal Power Company Limited



## Amended Price and Completion Schedule - Related Services (Form PG4-3D)

<b>Invitation for Tender No:</b>	PUR- 004(FG/GPP- RPP/OTM)/2019-20	<b>Date:</b>	23/09/2019					
<b>Tender Package No:</b>	01	<b>Package Description:</b>	Procurement of SCADA and Voice Communication equipment & related services for Gazipur 52 MW and Raozan 25MW Power plants of RPCL.					
<b>Tender Lot No:</b>	01	<b>Lot Description:</b>	Procurement of SCADA and Voice Communication equipment & related services for Gazipur 52 MW Power plant.					
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
Service No.	Description of Services (excludes inland transportation and other services required in Bangladesh to convey the goods to their final destination)	Country of Origin	Unit of Measurement	Quantity	Unit price of service [Taka]	Price per line item of service (Col. 5 X Col. 6) [Taka]	VAT Payable on account of Supplier if the Contract is awarded [Taka]	Total Price per line item of service (Col. 7) Taka
1.	Design, drawing, installation, testing, commissioning of SCADA Voice Communication system as per satisfaction of RPCL and PGCB.		Lot	1				
2.	<p><b>Integration:</b></p> <ul style="list-style-type: none"> <li>➤ Integration with NLDC Telecom Network/ NMS (GE System) of Gazipur 52MW PP, Kodda, Gazipur and PGCB grid substation at kodda.</li> <li>➤ SCADA and EMS Database creation of new RTU data of Gazipur 52MW PP, Kodda, Gazipur at NLDC Rampura &amp; Backup NLDC Bidyut Bhaban.</li> <li>➤ EMS Tuning at NLDC end with complete data base of new RTU data of Gazipur 52MW PP, Kodda, Gazipur at NLDC Rampura &amp; Backup NLDC Bidyut Bhaban.</li> <li>➤ Configuration &amp; Integration with NLDC Telecom Network/ NMS (GE System) of existing SDH/PDH (GE Make ).</li> <li>➤ Other activities as required for the successful operation of the system in addition to Appendix-A.</li> </ul>		Lot	1				
<b>Note Price offered in Bangladesh Taka</b>								
<b>Point of Delivery as per Schedule of Requirement:</b>								<b>Total Price for Lot</b>

<b>Name:</b>	[insert full name of signatory]	<b>Signature with Date and Seal</b>
<b>In the capacity of:</b>	[insert designation of signatory]	[ Sign]
Duly authorized to sign the Tender for and on behalf of the Tenderer		


(M. SAHIL RAHMAN, Beng)   
 Executive Director (Engg)   
 National Power Company Limited

## Amended Price Schedule for Goods (Form PG4-3B)

**[Group B Tenders: Goods Manufactured outside Bangladesh, to be imported]**

<b>Invitation for Tender No:</b>	PUR- 004(FG/GPP-RPP/OTM)/2019-20	<b>Date:</b>	23/09/2019
<b>Tender Package No:</b>	01	<b>Package Description:</b>	Procurement of SCADA and Voice Communication equipment & related services for Gazipur 52 MW and Raozan 25MW Power plants of RPCL.
<b>Tender Lot No:</b>	02	<b>Lot Description:</b>	Procurement of SCADA and Voice Communication equipment & related services for Raozan 25MW Power plant.

Line Item No.	Description of Item	Country of Origin	Unit of Measurement	Quantity	Unit price CPT up to Hazrat Shahjalal International Airport of Bangladesh [USD/ Euro]	Total CPT Price per line item [USD/Euro] (Col. 5*Col. 6)
1.	SDH Equipment and PDH Equipped with common cards & traffic cards as per PGCB standard. All Telecom equipment should be made by GE/ABB/HUAWEI.		Lot	1		
2.	Remote Terminal Unit (RTU) along with accessories (Complete set)- at Raozan 25 MW PP, Noapara, Raozan and PGCB grid substation, Madunaghat , Chattogram as per SLD provided All RTU should be made by GE/ABB/Schneider.		Lot	1		
3.	Fiber Optic Cable (24 cores single mode OPGW)		Lot	1		
4.	(a)Accessories like- ODF, FODP, Joint Box, termination kits etc as required for the system. (b) Power cables earthing cables, control cables, signaling /telephone cables with other accessories like-tape, binder, clip, washer, nut, bolts, washer, conduits, sealing materials , ACDB/DCDB etc and others e as required to execute the works © Interfacing cards, extension cards, transducers, inverter, converter, relays etc as required for the system		Lot	1		

  
 Md. Saifur Rahman (Engg.)  
 Executive Director (Engg.)  
 Power Company Limited

5.	Heavy duty industrial grade DC-DC converter (110VDC/48VDC, 20A) with necessary accessories.	Set	2	
6.	VoiP Phone (Cisco make) incl. License & Integration with NLDC Operational Telephony Network with necessary accessories.	Set	1	
7.	Analog Telephone Set Beutel/ Equivalent) with necessary accessories.	Set	2	

**Note : Price offered in USD/Euro**

**Point of Delivery as per Schedule of Requirement:**

<b>Name:</b>	[insert full name of signatory]	<b>Signature with Date and Seal</b>
<b>In the capacity of:</b>	[insert designation of signatory]	[ Sign]
Duly authorized to sign the Tender for and on behalf of the Tenderer		

  
 (Md. Salim Bhuiyan, Peng)  
 Executive Director (Engrg.)  
 Rural Power Company Limited.

## Amended Price and Completion Schedule - Related Services (Form PG4-3D)

<b>Invitation for Tender No:</b>	PUR- 004(FG/GPP- RPP/OTM)/2019-20	<b>Date:</b>	23/09/2019					
<b>Tender Package No:</b>	01	<b>Package Description:</b>	Procurement of SCADA and Voice Communication equipment & related services for Gazipur 52 MW and Raozan 25MW Power plants of RPCL.					
<b>Tender Lot No:</b>	02	<b>Lot Description:</b>	Procurement of SCADA and Voice Communication equipment & related services for Raozan 25MW Power plant.					
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
<b>Service No.</b>	<b>Description of Services (excludes inland transportation and other services required in Bangladesh to convey the goods to their final destination)</b>	<b>Country of Origin</b>	<b>Unit of Measurement</b>	<b>Quantity</b>	<b>Unit price of service [Taka]</b>	<b>Price per line item of service (Col. 5 X Col. 6) [Taka]</b>	<b>VAT Payable on account of Supplier if the Contract is awarded [Taka]</b>	<b>Total Price per line item of service (Col. 7) Taka</b>
1.	Design, drawing, installation, testing, commissioning of SCADA Voice Communication system as per satisfaction of RPCL and PGCB.		Lot	1				
2.	<p><b>Integration:</b></p> <ul style="list-style-type: none"> <li>➤ Integration with NLDC Telecom Network/ NMS (GE System) of Raozan 25 MW PP, Noapara, Raozan and PGCB grid substation at Madunaghat, chottogram.</li> <li>➤ SCADA and EMS Database creation of new RTU data of Raozan 25 MW PP, Noapara, Raozan at NLDC Rampura &amp; Backup NLDC Bidyut Bhaban.</li> <li>➤ EMS Tuning at NLDC end with complete data base of new RTU data Raozan 25 MW PP, Noapara, Raozan, Chattogram at NLDC Rampura &amp; Backup NLDC Bidyut Bhaban.</li> <li>➤ Configuration &amp; Integration with NLDC Telecom Network/ NMS (GE System) of existing SDH/PDH (GE Make).</li> <li>➤ Other activities as required for the successful operation of the system in addition to Appendix-A.</li> </ul>		Lot	1				
<b>Note Price offered in Bangladesh Taka</b>								<b>Total Price for Lot</b>
<b>Point of Delivery as per Schedule of Requirement:</b>			<b>Period of Delivery as per Schedule of Requirement:</b>					

<b>Name:</b>	[insert full name of signatory]	<b>Signature with Date and Seal</b>
<b>In the capacity of:</b>	[insert designation of signatory]	[ Sign]
Duly authorized to sign the Tender for and on behalf of the Tenderer		

  
 Md. Saifur Rahman (Engg.)  
 Executive Director (Engg.)  
 Power Company Limited

## Signal list with IEC address for Gazipur RPCL 52MW Power Plant

Bay description	Device	Signal	Signal type	IEC address
33 kV Bus	Bus	Voltage	Analog	35840
		Frequency		35841
		Busbar protection	Digital(Single bit)	512
		Voltage status		513
33kV side of 11/33kV Transformer	Trafo feeder	Voltage	Analog	35842
		Active Power		35843
		Reactive Power		35844
		Ampere		35845
		Bay fault	Digital(Single bit)	514
		Protection class 1		515
		Protection class 2		516
		Transformer trip		517
		Transformer fault		518
	Circuit Breaker (CB)	Breaker fault	Digital(Single bit)	519
			Status(Open/Close)	Digital(Double bit)
	Line Isolator	Status(Open/Close)	Digital(Double bit)	30721
	Bus Isolator	Status(Open/Close)	Digital(Double bit)	30722
	33kV outgoing feeder 1	Feeder	Voltage	Analog
Active Power			35847	
Reactive Power			35848	
Ampere			35849	
Bay fault			Digital(Single bit)	520
Protection class 1				521
Protection class 2				522
Auto reclose				523
Breaker fault		524		
Circuit Breaker (CB)		Status(Open/Close)	Digital(Double bit)	30723
Line Isolator		Status(Open/Close)	Digital(Double bit)	30724
Bus Isolator		Status(Open/Close)	Digital(Double bit)	30725
Earth isolator		Status(Open/Close)	Digital(Double bit)	30726
33kV outgoing feeder 2	Feeder	Voltage	Analog	35850
		Active Power		35851
		Reactive Power		35852
		Ampere		35853
		Bay fault	Digital(Single bit)	525
		Protection class 1		526
		Protection class 2		527
		Auto reclose		528

## Signal list with IEC address for Gazipur RPCL 52MW Power Plant

Bay description	Device	Signal	Signal type	IEC address
33kV outgoing feeder 2	Circuit Breaker (CB)	Breaker fault	Digital(Single bit)	529
		Status(Open/Close)	Digital(Double bit)	30727
	Line Isolator	Status(Open/Close)	Digital(Double bit)	30728
	Bus Isolator	Status(Open/Close)	Digital(Double bit)	30729
	Earth isolator	Status(Open/Close)	Digital(Double bit)	30730
11kV side of 11/33kV transformer	Generator	Voltage	Analog	35854
		Active Power		35855
		Reactive Power		35856
		Ampere		35857
	Transformer	Transformer alarm	Digital(Single bit)	530
		Transformer trip		531
	Circuit Breaker (CB)	Breaker fault		532
		Status(Open/Close)	Digital(Double bit)	30731
Gateway	Station	AC fail	Digital(Single bit)	533
		DC fail		534

Note:

1. Bay Fault-VT fail, DC abnormal in Relay or control panel
2. Breaker fault- Spring discharge or Hydrolic pressure low, SF6 gas pressure low
3. Protection class 1- Distance/ Differential protection
4. Protection class 2- Overcurrent/Earth Fault
5. Busbar protection alarm - Bus differential
6. Transformer Alarm- buchholz alarm,oil level low for main tank
7. Transformer Trip- Buchholz or PRD trip

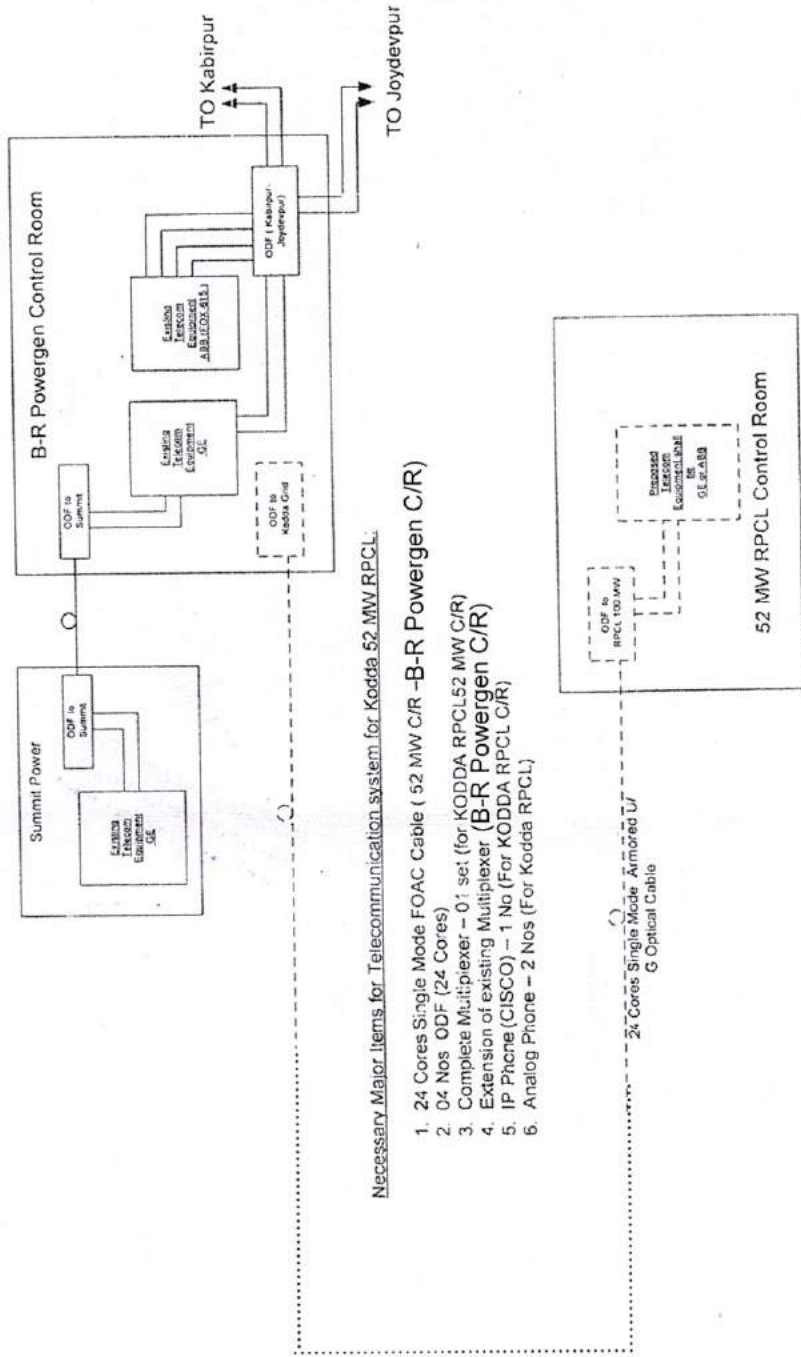
  
 (Mr. Salim Ghuyyan, P(Eng))  
 Executive Director (Engg.)  
 Rural Power Company Limited

## IP configuration Parameter for Gazipur RPCL 52 MW PS Gateway

1. Station ID- 203
2. Vlan ID- 724
3. For Link 1 ,NLDC Master station server1 IP Address - 172.31.72.3
4. For Link 1 , NLDC Master station server2 IP Address - 172.31.72.4
5. For Link 1 , Gateway IP address - 172.31.72.1
6. For Link 2 , Backup station server address- 192.168.98.65
7. For Link 2 , Gateway IP address - 172.31.72.5
8. For Link 2 , Default gateway - 172.31.72.2

  
Md. Salim Bhuiyan, P(Eng)  
Executive Director (Engg.)  
M.P. Power Company Limited

Optical Communication Scheme for Kodda RPCL 52 MW Power Plant



Necessary Major Items for Telecommunication system for Kodda 52 MW RPCL:

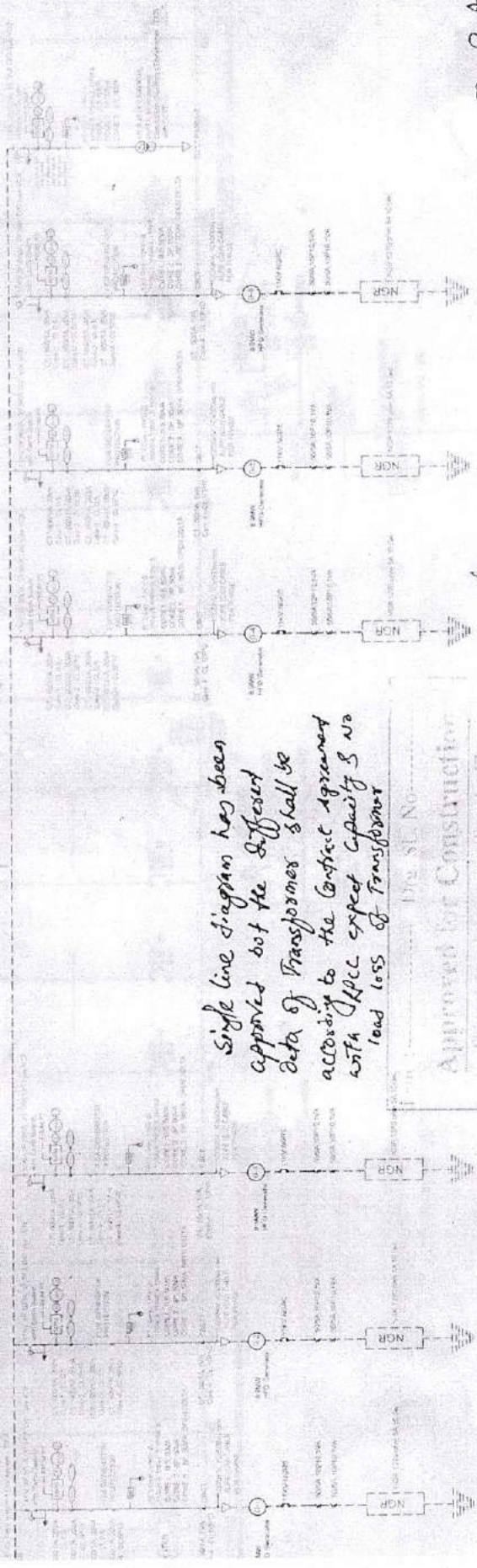
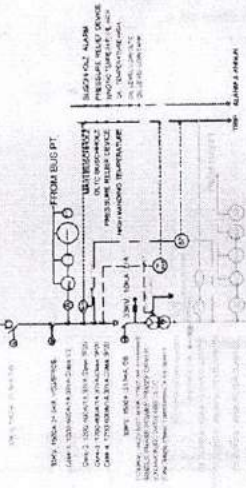
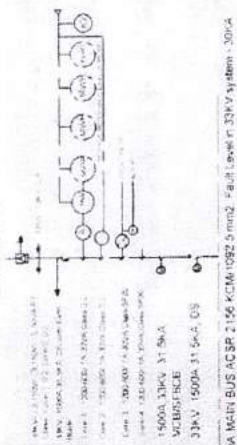
1. 24 Cores Single Mode FOAC Cable ( 52 MW C/R -B-R Powergen C/R)
2. 04 Nos. ODF (24 Cores)
3. Complete Multiplexer - 01 set (for KODDA RPCL 52 MW C/R)
4. Extension of existing Multiplexer (B-R Powergen C/R)
5. IP Phone (CISCO) - 1 No (For KODDA RPCL C/R)
6. Analog Phone - 2 Nos (For Kodda RPCL)

24 Cores Single Mode Armored U/G Optical Cable

*(Signature)*  
 (Mr. Salim Bhuyan, P-Engg)  
 Executive Director (Engg.)  
 Rural Power Company Limited



NO	CODE	DESCRIPTION	UNIT	QTY
1	1000	1000	1000	1000
2	2000	2000	2000	2000
3	3000	3000	3000	3000
4	4000	4000	4000	4000
5	5000	5000	5000	5000
6	6000	6000	6000	6000
7	7000	7000	7000	7000
8	8000	8000	8000	8000
9	9000	9000	9000	9000
10	10000	10000	10000	10000



single line diagram has been approved but the different data of Transformers shall be according to the Contract agreement with HCL expect capacity & no load loss of transformer

Approved for Constructor  
This approval does not relieve the EPC Contractor from any contractual obligations with the RPCL

FOR APPROVAL

RECEIVED  
09.02.2011  
RPCL-REGIONAL PROJECT OFFICE

(M. Salim Bhuiyan, P.Eng.)  
Executive Director (Engg.)  
Rural Power Company Limited

## Signal list with IEC address for Raozan RPCL 25MW Power Plant

Bay description	Device	Signal	Signal type	IEC address
33 kV Bus	Bus	Voltage	Analog	35840
		Frequency		35841
		Busbar protection	Digital(Single bit)	512
		Voltage status		513
33kV side of 11/33kV Transformer	Trafo feeder	Voltage	Analog	35842
		Active Power		35843
		Reactive Power		35844
		Ampere		35845
		Bay fault	Digital(Single bit)	514
		Protection class 1		515
		Protection class 2		516
		Transformer trip		517
		Transformer fault		518
	Circuit Breaker (CB)	Breaker fault	Digital(Single bit)	519
		Status(Open/Close)	Digital(Double bit)	30720
	Line Isolator	Status(Open/Close)	Digital(Double bit)	30721
	Bus Isolator	Status(Open/Close)	Digital(Double bit)	30722
	33kV outgoing feeder 1 (AEB 901)	Feeder	Voltage	Analog
Active Power			35847	
Reactive Power			35848	
Ampere			35849	
Bay fault			Digital(Single bit)	520
Protection class 1				521
Protection class 2				522
Auto reclose				523
Breaker fault		524		
Circuit Breaker (CB)		Status(Open/Close)	Digital(Double bit)	30723
Line Isolator		Status(Open/Close)	Digital(Double bit)	30724
Bus Isolator		Status(Open/Close)	Digital(Double bit)	30725
Earth isolator		Status(Open/Close)	Digital(Double bit)	30726
33kV outgoing feeder 2 (AEB 902)	Feeder	Voltage	Analog	35850
		Active Power		35851
		Reactive Power		35852
		Ampere		35853
		Bay fault	Digital(Single bit)	525
		Protection class 1		526
		Protection class 2		527
		Auto reclose		528

  
 (Md. Salim Bhuiyan, PEng)  
 Executive Director (Engg.)  
 Rural Power Company Limited

## Signal list with IEC address for Raozan RPCL 25MW Power Plant

Bay description	Device	Signal	Signal type	IEC address
33kV outgoing feeder 2 (AEB 902)	Circuit Breaker (CB)	Breaker fault	Digital(Single bit)	529
		Status(Open/Close)	Digital(Double bit)	30727
	Line Isolator	Status(Open/Close)	Digital(Double bit)	30728
	Bus Isolator	Status(Open/Close)	Digital(Double bit)	30729
	Earth isolator	Status(Open/Close)	Digital(Double bit)	30730
11kV side of 11/33kV transformer	Generator	Voltage	Analog	35854
		Active Power		35855
		Reactive Power		35856
		Ampere		35857
	Transformer	Transformer alarm	Digital(Single bit)	530
		Transformer trip		531
	Circuit Breaker (CB)	Breaker fault	Digital(Double bit)	532
Status(Open/Close)		30731		
Gateway	Station	AC fail	Digital(Single bit)	533
		DC fail		534

**Note:**

1. Bay Fault-VT fail, DC abnormal in Relay or control panel
2. Breaker fault- Spring discharge or Hydrolic pressure low, SF6 gas pressure low
3. Protection class 1- Distance/ Differential protection
4. Protection class 2- Overcurrent/Earth Fault
5. Busbar protection alarm - Bus differential
6. Transformer Alarm- buchholz alarm,oil level low for main tank
7. Transformer Trip- Buchholz or PRD trip

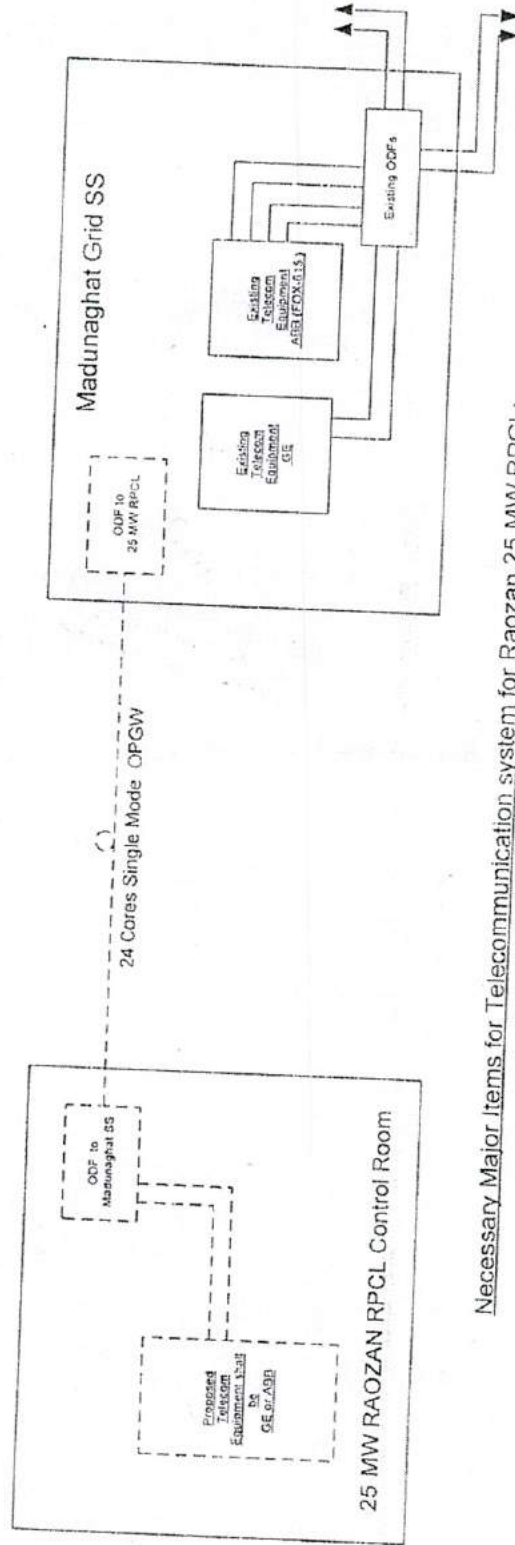
  
**Md. Salim Bhuiyan, PEng**  
 Director (Engg.)  
 UMS 314 / 17/2024

## IP configuration Parameter for Raozan RPCL 25 MW PS Gateway

1. Station ID- 347
2. Vlan ID- 723
3. For Link 1 ,NLDC Master station server1 IP Address - 172.31.71.195
4. For Link 1 , NLDC Master station server2 IP Address - 172.31.71.196
5. For Link 1 , Gateway IP address - 172.31.71.193
6. For Link 2 , Backup station server address- 192.168.98.65
7. For Link 2 , Gateway IP address - 172.31.71.197
8. For Link 2 , Default gateway - 172.31.71.194

  
(Md. Salim Bhuiyan, PEng)  
Executive Director (Engg.)  
Rural Power Company Limited

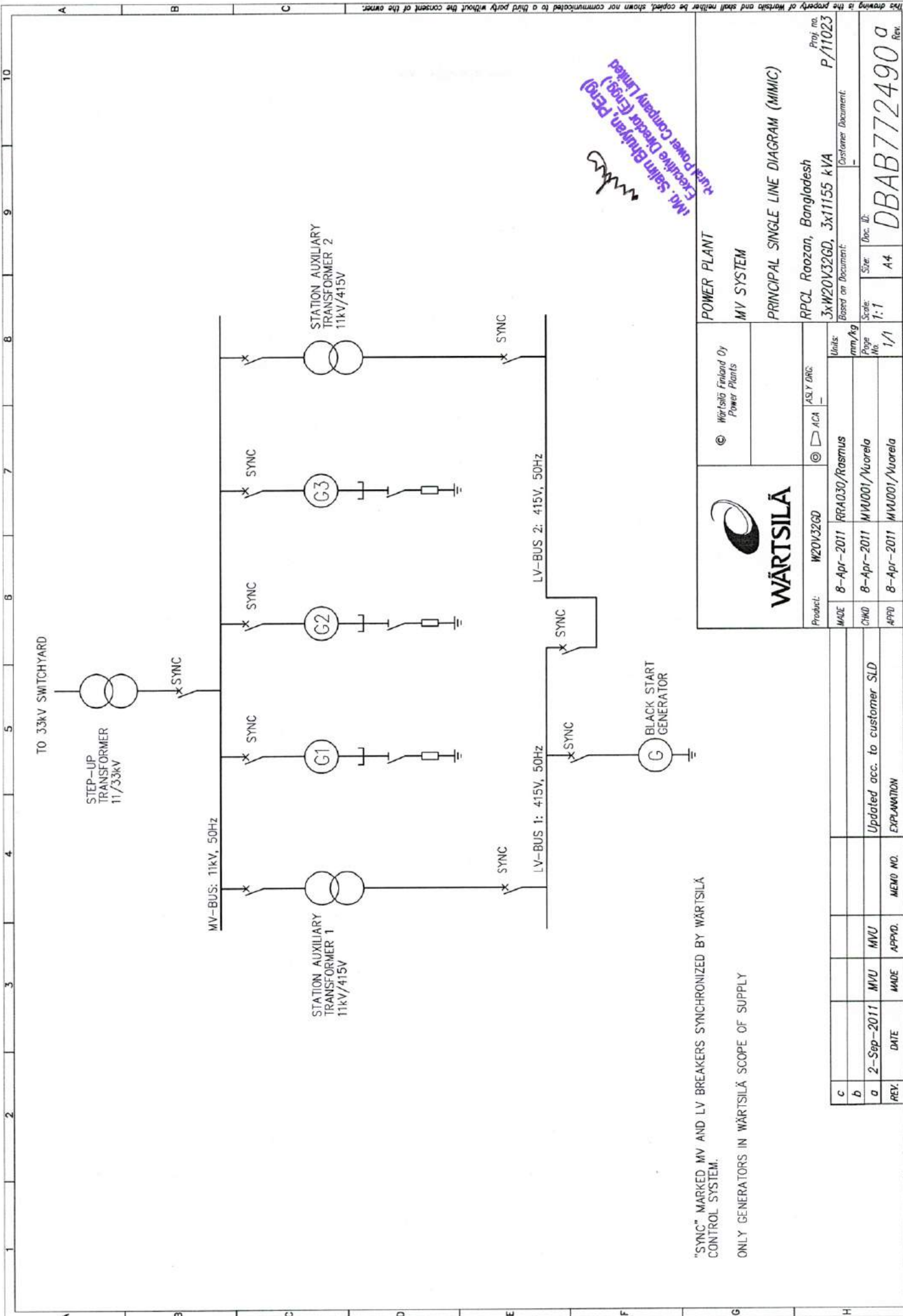
Optical Communication Scheme for RAOZAN RPCL 25 MW Power Plant



Necessary Major Items for Telecommunication system for Raozan 25 MW RPCL:

1. 24 Cores Single Mode OPGW ( 25 MW RPCL – Madunaghat Grid SS)
2. ODF (24 Cores) – 2 Nos
3. Complete Multiplexer – 01 set (for 25 MW Raozan RPCL C/R)
4. Extension of existing Multiplexer (For Madunaghat Grid SS)
5. IP Phone (CISCO) – 01 No (For Raozan RPCL)
6. Analog Phone- 2 Nos (For Raozan RPCL)

*(Signature)*  
 (Mr. Sajjan Bhatnagar, JCEP) (Sd/-)  
 Executive Director (Energy)  
 Central Power Corporation Limited

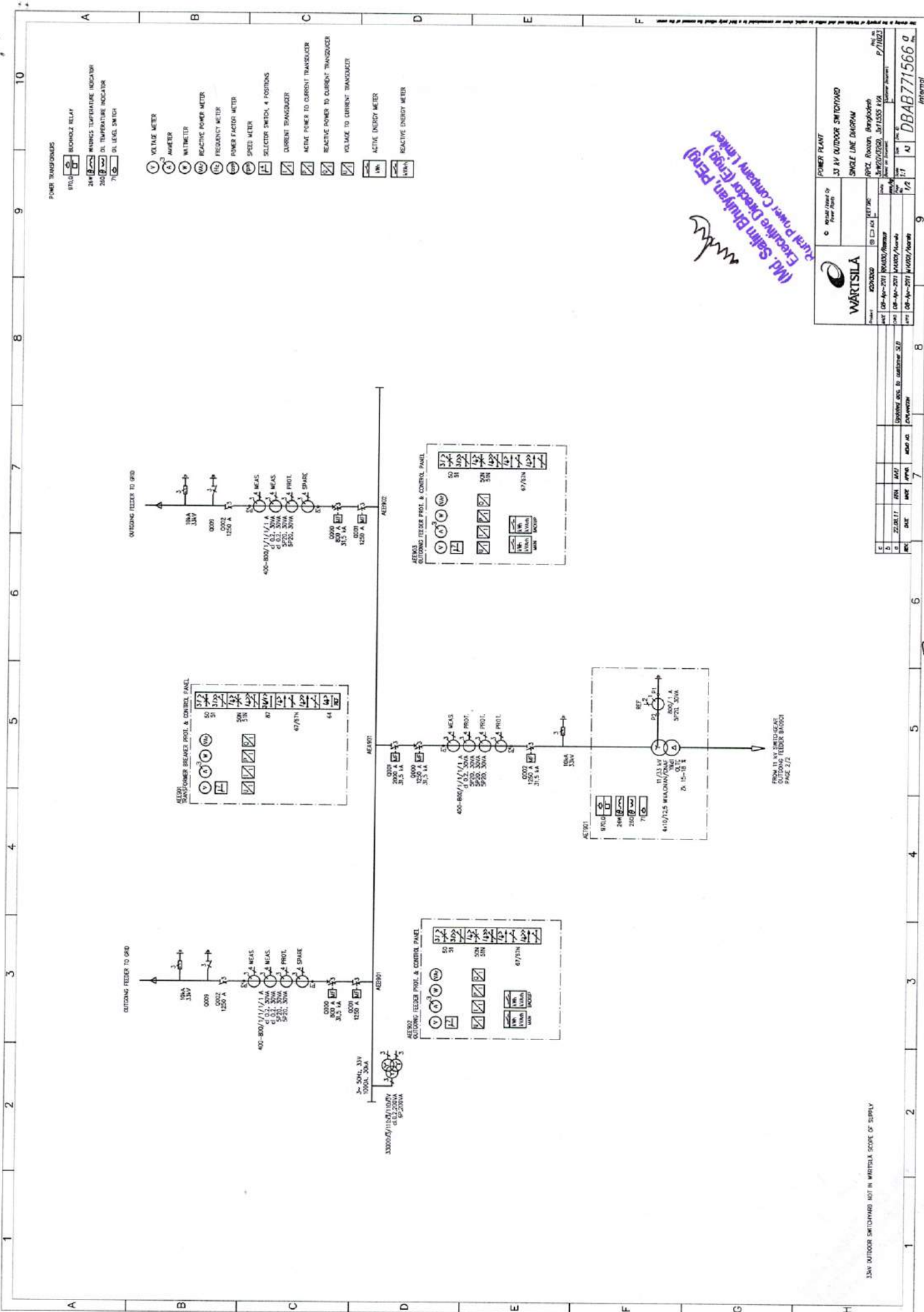


*M. M. M.*  
 Md. Saifur Bhuiyan (Peri)  
 Executive Director (Engg.)  
 Rural Power Company Limited

"SYNC" MARKED MV AND LV BREAKERS SYNCHRONIZED BY WÄRTSILÄ CONTROL SYSTEM.  
 ONLY GENERATORS IN WÄRTSILÄ SCOPE OF SUPPLY

		© Wärtsilä Finland Oy Power Plants	
Product: W20V32GD	ASLY DRG:	POWER PLANT MV SYSTEM PRINCIPAL SINGLE LINE DIAGRAM (MIMIC)	
MADE: 8-Apr-2011	RRA030/Rasmus	RPCL Raazan, Bangladesh 3xW20V32GD, 3x11155 kVA	
CHND: 8-Apr-2011	MWU001/Nuorela	Based on Document:	
APPD: 8-Apr-2011	MWU001/Nuorela	Customer Document:	
Units: mm/Ag	Page No. 1/1	Scale: 1:1	Size: A4
Doc. ID: DBAB772490	Rev. a	Proj. no. P/11023	Internal

REV.	DATE	MADE	APPD.	MEMO NO.	EXPLANATION
a	2-Sep-2011	MVU	MVU		Updated acc. to customer SLD



- POWER TRANSFORMERS
- 8710 BUCHHOLZ RELAY
  - 24M WINDING TEMPERATURE INDICATOR
  - 250 OIL TEMPERATURE INDICATOR
  - 71 OIL LEVEL SWITCH

- 1 VOLTAGE METER
- 2 AMPERE
- 3 WATTMETER
- 4 REACTIVE POWER METER
- 5 FREQUENCY METER
- 6 POWER FACTOR METER
- 7 SPEED METER
- 8 SELECTOR SWITCH, 4 POSITIONS
- 9 CURRENT TRANSDUCER
- 10 ACTIVE POWER TO CURRENT TRANSDUCER
- 11 REACTIVE POWER TO CURRENT TRANSDUCER
- 12 VOLTAGE TO CURRENT TRANSDUCER
- 13 ACTIVE ENERGY METER
- 14 REACTIVE ENERGY METER

*M. S. S. S.*  
 (M/s. Saimin Bhatnagar, Pritol)  
 Executive Director (Engg.)  
 Rural Power Company Limited

POWER PLANT		33 KV OUTDOOR SWITCHYARD		SINGLE LINE DIAGRAM		Rev. No. P/11023	
WARTSILA		RPTL, Raipur, Bhopal		30/05/2020, 30/11/2020		Project Name	
Project	4000000	Rev. No.	01	Rev. No.	01	Rev. No.	01
Rev. No.	01	Rev. No.	01	Rev. No.	01	Rev. No.	01
Rev. No.	01	Rev. No.	01	Rev. No.	01	Rev. No.	01

NO.	DATE	BY	CHKD BY	REVISION
1	22.08.17	ASH	ASH	ISSUED FOR ESTIMATION
2				
3				
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FIGURE NO. 11.01  
 33KV OUTDOOR SWITCHYARD  
 OUTGOING FEEDER DIAGRAM  
 PAGE 2/2





## Appendix-A

### Additional Information for Integration Activities

Integrating RTU/gateway with NLDC, Bangladesh following work shall be done at master Station ( Rampura NLDC, Bangladesh) and Backup station at Biddut Bhaban Bangladesh

1. Prepare sub- station topology ( SUBTop) according to Provided signal list with proper interlock .
2. Prepare communication topology( Com top) according to provided IP address.
3. Prepare RTU top according to supplied Gateway mapping address and station address.
4. Prepare of RTU database If required
5. Prepare network. topology with actual Circuit Breaker, Transmission Line and
5. Prepare generation. topology 6. Verify SCADA ,Network, Generation, DTS and Modify if necessary
7. Prepare System Calculation Database and Verify.
8. Make a error free Database for ALARM, SCADAMOM, HYMOM, NETMOM, GENMOM, DTSMOM
9. On lining Error free Database ( Update ALARM ,SCADA MOM HYMOM,NETMOM, GENMOM, DTS MOM)
  
- 10 Create VLAN at Polling Servers both master and redundant and Switches master and redundant according to supplied Vlan ID and IP address.
11. Tuning of Energy Management System( EMS)

  
(Md. Salim Bhuiyan, PEng)  
Executive Director (Engg.)  
Rural Power Company Limited