GUYANA POWER AND LIGHT INC.

PROVISION OF NETWORK EMERGENCY & MAINTENANCE & CONSTRUCTION SERVICES ON DISTRIBUTION NETWORK

GPL-PD- 015-2022

The Guyana Power & Light Inc. has embarked on a programme of strengthening its image through improvements in customer service. GPL Inc. is seeking suitably qualified and experienced contractors to:

- Respond and correct customers' emergency complaints in the safest, most effective and efficient manner;
- Provide "Emergency Services" as directed by GPL Inc.
- Provide "Maintenance Services" as directed by GPL Inc.
- Provide Network "Construction Services" as directed by GPL Inc.

This Service will be for a specific period and zoned for Georgetown, East Coast, East Bank and West Demerara (West Coast, West Bank & East Bank Essequibo). Successful Contractors providing Emergency Services, will be required to address completely problems associated with network defects, as reported by consumers or identified by GPL Inc. Successful Contractors providing Maintenance Services, will be required to complete maintenance activities on the Distribution Network as identified by GPL Inc.

GPL Inc. invites sealed bids as follows:
Lot 1 - Network Emergency Services
Lot 2 - Network Maintenance Services
Lot 3 – Network Construction Services

Bidders may bid on any or all lots.

Qualifications requirements include:

- Experience on works of a similar nature;
- Skills capacity and skills capacity building of team members;
- The team size

- Having the financial capacity to successfully perform the contract(s).

GPL reserves the right to reject bids if the above details are not stated.

Bids along with valid certificates of compliance from Guyana Revenue Authority (GRA) and National Insurance Scheme (NIS) and VAT registration **MUST ONLY** be submitted electronically to GPL's electronic Tender Box: **gpltenderbox@gplinc.com** on or before **14:00 HRS Thursday, February 24, 2022.**

Evaluation Criteria: Emergency Services

Preliminary Examination Requirements

The bidder's submission shall **not** be evaluated if **ALL** the following are not clearly presented:

- Valid copies of NIS and GRA compliance certificates for proposed contractor and all subcontractors;
- Names of team members inclusive of team leader, along with proof of experience (as pertains to Transmission and Distribution network activities) AND qualification;
- Copies of vehicle registration for all contractor owned or sub-contracted vehicles, along with valid copies of Vehicle license and insurance for ALL vehicles;

Vehicles, tools and equipment (this includes sample PPE) must be available, upon notification, for inspection. Failure to have items available for inspection will lead to automatic disqualification. Vehicles, tools and equipment will be given two chances to pass inspection, within 14 calendar days. If any fails to pass both chances of inspection (if necessary), then they will be assigned the score corresponding to having that item(s) missing.

No clarification will be sought on information not initially provided in submitted tender. Any missing information will be considered as not having met requirements.

Evaluation Criteria

The bidder's shall be evaluated according to the below criteria.

	Criteria	Score Assignment
1	**Cost** **Maximum Score**	Score = $\frac{Lowest\ Unit\ Price}{Bidder\ Unit\ Price} \times 40$ **40**
2	**Experience and Skills of Staff**	
	• Team Leader	
	○ Qualification	
	▪ Senior Network Technician	5
	▪ Network Technician I	2
	▪ Below Network Technician I	0
	○ Experience	
	▪ Over 7 years as a Team Leader	5
	▪ 7-3 years as a Team Leader	4
	▪ Below 3 years as a Team Leader	3
	▪ No experience	1
	• Technician #1	
	○ Qualification	
	▪ Network Technician I	5
	▪ Network Technician II or below	2
	○ Experience	
	▪ Over 7 years	5
	▪ 7-3 years	4
	▪ Below 3 years	3
	▪ No experience	1
	• Technician #2	
	○ Qualification	

	▪ Network Technician I or II ▪ Network Technician III or below ○ Experience ▪ Over 7 years ▪ 7-3 years ▪ Below 3 years ▪ No experience	 5 2 5 4 3 1
	Maximum Score	**30**

	Criteria	Score Assignment
3	**Capacity and Capability**	
	• Team composition	
	○ 3 members per emergency team	5
	○ 2 or less members per emergency team	0
	○ 2 or more additional technicians in the case of a major emergency	4
	○ 1 additional technician in the case of a major emergency	2
	○ 2 or more laborers in the case of a major emergency	4
	○ 1 laborer in the case of a major emergency	2
	○ No additional staff in the case of a major emergency	0
	• Vehicle	
	○ Hi-Ab	
	▪ Owned by Contractor	3
	▪ Sub-contracted	2
	▪ None	0
	○ Bucket Truck	
	▪ Owned by Contractor	3
	▪ Sub-contracted	2
	▪ None	0
	○ Minibus/Utility Van	
	▪ Owned by Contractor	3
	▪ Sub-contracted	2
	▪ None	0
	• Tools and Equipment per Team	
	○ All Tools and Equipment as required per Team	3
	○ Not all tools and equipment as required per Team (statement of purchase for missing tools and equipment presented)	2
	○ Not all tools and equipment as required per Team (no statement of purchase for missing tools)	0
	• Number of Teams	
	○ 1 Team	
	○ 2 Team	2

	○ 3 Teams or more	3 5
	Maximum Score	**30**

Contractors will be classified according to the following score range:

Tier 1	81-100
Tier 2	71-80
Tier 3	60-70
Tier 4	50-59

NOTES ON EVALUATION

(a) The Contract would be awarded to the Bidder whose bid is determined to be substantially technically responsive to the Bid Document and who has offered the lowest evaluated Bid Price

(b) ***A penalty of immediate rejection of a bid or termination of contract will be applied upon discovery of misrepresentation of information.***

Law of Guyana: Procurement Act 2003

Section 39 – Subsection 6 (b)

(c) *The procuring entity may grant a margin of preference not exceeding ten percent to tenders submitted by domestic contractors or for the benefit of tenders for domestically produced goods, provided that such preference is specified in the tender documents. If the lowest evaluated tender was submitted by a foreign tenderer, the evaluating committee will apply the margin of preference to the prices submitted by all foreign tenderers, for evaluation purpose. If, after applying the margin of preference, the lowest evaluated tender was submitted by a domestic tenderer, such tenderer shall be awarded the contract. Otherwise, the foreign tenderer who has submitted the lowest evaluated tender shall be awarded the contract.*

A. INSTRUCTIONS TO BIDDERS

Compliance Certificate:

Valid copies of NIS and GRA compliance Certificates.

Proof of Capacity:

Transportation:

Vehicle registration must be in contractor's name or an agreement of sale suitable vehicle between prospective contractor and registered owner. Vehicle must be available, upon notification for inspection.

Skilled Staff:

Names of team members inclusive of the leader must be provided withs proof of their experience.

Tools & Equipment:

Prospective contractor(s) must provide a list of tools and equipment available per team in quantity and description. Tools and equipment must be made available for inspection upon request.

Experience:

Proof of experience by way of notification of works completed, invoice or completion certificate.

Evaluation Criteria:

Guyana Power and Light Inc has established selection criteria to be used in evaluating responses from bidders on this project. This criterion uses a "weighting system" giving varying importance to these criteria in order to select the "most qualified contractor". The table below outlines the Evaluation criteria elements and their respective weighting (%).

Item	Evaluation Criterion elements	Points	(%)
1	**Cost**		**35**
2	**Experience and Skills of staff**		**25**
3	**Bidder's performance on similar work**		**25**
4	**Capacity and Capability**		**15**

B. RESPONSIBILITIES AND DUTIES OF THE CONTRACTOR

EMERGENCY SERVICES

The responsibilities and duties of the Contractors under this Contract are as stated below:

The Contractor shall:

1. Carry out the Works, as instructed by GPL in the Demerara, Berbice and Essequibo regions. All Works must be executed by the Contractor and where applicable his/her employees, servants and or agents or sub-contractors with strict adherence to all safety rules and procedures in conformity with the Occupational Health and Safety Act of 1997 and GPL's Occupational Safety and Health Handbook along with its other Safety Standards.
2. Ensure that anyone carrying out works under this Contract is at all times properly attired with uniform, where applicable, and appropriate personal protective gear approved by GPL.
3. Be equipped with insulated rubber gloves, pliers, knives, vehicle ladders, drill kit, crimping tool, clamp-on-meter, screw driver set, hacksaw and other necessary tools at his/her own expense as provided for in Appendix VI.
4. In carrying out works under this contract, determine whether said works can be safely completed without any risk to self or others or damage to his/her property or that of a third party and proceed to perform such works only when he/she has presumed it safe to do so. On every occasion an approach must be adopted that would ensure works are completed in the safest manner without compromise and threat to life or limb or damage to property.
5. Establish a twenty (24) hours, seven (7) days a week operating base within one (1) month of signing the contract to manage all jobs (these includes receiving, dispatching and timely reporting) from GPL Call Centre and Control Center. The Operating Base must have at least the following:
    a. Internal radio sets.
    b. Telephone with Telephone Operator.
    c. Technical Records Clerk.
    d. Internet Access
6. As soon as possible, but no later than 08:00 hours for all Works completed by 24:00 hours the previous day and by 12:00 hours for Works completed by 08:00 hours of the current morning, return to GPL all completed Emergency Job Cards with details of all Works completed. A sample Emergency Job Card shall be provided by GPL and the Contractor must accurately reproduce Emergency Job Cards for use by his/her

employees, servants and or agents or sub-contractors. The Contractor must accurately update each form identifying all completed and incomplete Works and give the reasons for the failure to complete the Works.

7. Carry out all Works in accordance with the procedures defined by GPL's Manual on Transmission and Distribution Practices and as described in Appendix IV. If within three (3) months after date of completion of the Works, GPL discovers that the said Works were not done to the specifications or standards of this Contract, or were of a sub-standard quality, then the Contractor shall be liable for the breach in standards and payment of any penalties due per Appendix V Penalties, and, if requested by GPL, shall carry out remedial work at his/her own expense within a time specified by GPL. If the remedial work is executed by GPL, the cost incurred will be transferred to the contractor.
8. Maintain an accurate and comprehensive record of the Works carried out using the forms provided by GPL. This record can be either digital and/or printed.
9. Where the Works required to be performed are as a result of damage caused by a third party and the Contractor is the first responder from GPL on the scene, after completing the emergency works, detail the damage and the cause of such damage, identifying the third party or parties in a report and submit same to GPL within 24 hours. Such report must provide accurate date, time and description of incident and will be used by GPL to determine what action may be taken to recover the cost incurred in remedying the damage.
10. Submit payment invoices together with supporting documentation for certification and payment by GPL. Invoices must be submitted by the Contractor for Works completed in the period 1st to 15th day of the month by the 4th working day after the period and for Works completed in the period 16th to 31st day of the month by the 4th working day of the following month.
11. Ensure that all persons involved in executing the Works at all times wear an identification badge bearing the words "GPL Network Emergency Contractor", the name and photograph of the employee. The badge will initially be provided by GPL and the Contractor will be responsible for the cost of any replacement, recovery of said badge where an employee is no longer in his/her employ, and if necessary, advising the Public that said employee is no longer authorized to conduct business on GPL's behalf.
12. While on duty, Contractor vehicles shall display highly visible and reflective labels〔6"x60") on each side of the vehicle of 'Name of Contractor and GPL Network Emergency Contractor'.
13. While on Duty, each Contractor personnel shall have displayed on their clothing highly visible label of "'GPL Network Emergency Contractor'.
14. Ensure that all of his/her employees, agents and/or servants engaged in Emergency repair and replacement

related activities under this Contract are declared to and approved by GPL before commencing Works in accordance with this Contract.

15. Make good at his/her own expense any defect or damage to third party or GPL's property resulting from faulty workmanship, of which he will be notified within six (6) months after completion of the work. The Contractor will be held accountable and responsible for all of GPL's property entrusted to his/her care, custody and control.
16. When work is conducted for an individual customer, ensure that each Job Card and report is completely updated in the presence of the customer or representative, if available, after the completing emergency repairs and replacements activity.
17. Ensure that "Request for a Temporary Un-Metered Supply" form is signed by the customer and a copy is given to the customer.
18. Ensure that the response time per Emergency Fault should not exceed six (6) hours.
19. Account for all materials or supplies issued by GPL relative to place of usage. The **Contractor** shall not, in any circumstance, store **GPL's** material at any location other than those identified and authorized by GPL for such storage of those materials. The movement of such materials shall be fully documented. The contractor shall submit documentation detailing material usage, along with the invoices for payment.
20. Submit preliminary reports on fire, accidents, etc. within four (4) hours.
21. Submit fortnightly checklist of **all tools and equipment.** Checklist must indicate status of **all tools and equipment; reasons for defects must be provided.**

22. The Contractor shall provide his/her employees, servants and/or agents or sub-contractors, with a smart device capable of receiving mobile internet, when GPL indicates it necessary for operation. This is to facilitate GPL's impending mitigation to digital data collection. The device shall be used to facilitate Emergency Job dispatching, job completion information submission, and Emergency Maintenance activity dispatching and submission of completion information. The Contractor shall provide mobile internet to the device at his/her expense.

23. The Contractor shall ensure that at least one (1) team member is trained to provide First Aid.

24. In the case of a Major Emergency, the contractor shall provide additional man-power to ensure completion within 6 hours.

25. Ensure that the team composition is as outlined in Appendix VII.

INSURANCE REQUIREMENTS

Coverage shall be at a minimum:

1. **Commercial General Liability (CGL):** Insurance Services covering CGL on an "occurrence" basis, including products-completed operations and personal injury, with limits no less than **$2,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability:** if Contractor has no owned automobiles, hired, and non-owned automobiles with limit no less than **$1,000,000** per accident for bodily injury and property damage.
3. **Workers' Compensation:** The Statutory Limits, and Employer's Liability Insurance with limit of no less than **$1,000,000** per accident for bodily injury or disease.
4. If the contractor maintains higher limits than the minimums shown above, then GPL requires and shall be entitled to coverage for the higher limits maintained by the contractor.

SKILL CAPACITY BUILDING REQUIREMENTS

The contractor shall ensure that:

1. All his/her employees, servants and/or agents or sub-contractors, with the exception of the Team Leader, receive at least 10 hours of skills refresher or skill upgrade training per year, from a training provider recognized by GPL or from the GPL Training School.
2. His/her Team Leader receives at least 20 hours of skills refresher or skill upgrade training per year, from a training provider recognized by GPL or from the GPL Training School.
3. Submit annually, proof of skill capacity building sessions, to qualify for contract renewal.
4. Skill Capacity Building exercises are based upon:
    a. Linesman skills
    b. Supervising Linesmen
    c. First-aid
    d. Troubleshooting
    e. Customer Service

LITIGATION

CONTRACTOR shall provide assistance and testify at GPL's request if litigation is brought against GPL in connection with CONTRACTOR'S services under this Contract. Unless the action is brought by CONTRACTOR, or is based upon CONTRACTOR'S wrongdoing, GPL shall compensate CONTRACTOR for preparation for testimony, testimony, and travel at CONTRACTOR'S standard hourly rates at the time of actual testimony.

INDEMNITY

CONTRACTOR agrees to hold harmless and indemnify GPL, its elected and appointed officials, employees, and agents from and against any and all claims, loss, liability, damage, and expense by the Contractor or a third party arising out of CONTRACTOR'S performance of this Contract, except for those claims arising out of GPL's sole negligence or willful misconduct. CONTRACTOR agrees to defend GPL, its elected and appointed officials, employees, and agents against any such claims.

SCOPE OF WORK

The type of Works which the Contractor will be required to execute is shown below

Description of Emergency Activities

Item	Fault Category	Description
1	Faulty Connection	Repair loose electrical connection
2	Secondary Main Fault	Replace and/or remove burst or obstructing service mains
3	Service Line Fault	Replace and/or remove burst or obstructing service mains
4	Structural Defects	Secure broken or leaning poles
5	Encumbrances	Remove vegetation entangling mains, less than two (2) pole spans, where applicable, after seeking and securing the permission of the lawful owner or occupier to remove such vegetation
6	Transient Transformer Faults	Replace transformer fuse(s); jumper(s); bushing(s); connector(s)
7	Fire Calls	Network components or consumer's property on fire
8	Voltage Complaint	High or Low Voltage
9	Meter Defect	Defects associated with meter enclosures, breakers, etc.
10	Attended	All jobs attended to and made safe due to category of defect, e.g. fire call, incorrect data dispatched to crew or follow up action required. The cost associated to this activity is stated in

		Appendix III.

QUALITY & STANDARD OF WORK

General

The Contractor(s) shall:

1. Ensure that he/she complies with the standard procedures. GPL reserves the right to further expand and detail these procedures and to require the Contractor to be available for training in new and safe work methods. Such training will be provided to the Contractor by GPL free of cost.
2. Ensure that an official record is kept of all activities. The Contractor shall complete the forms supplied by GPL and shall submit them to GPL within twenty-four (24) hours. GPL is currently working to reduce the use of paper record keeping and increase digital record keeping. The Contractor is expected to participate in this initiative and submit digital reports of completed jobs. The digital reporting is expected to be implemented by February 2021.
3. Ensure that upon receipt of Emergency Job Card issued by GPL he/she understands the Works or seeks clarification on any aspect of the Works he/she is unclear of.
4. Ensure that he/she has the necessary tools and equipment for the Works at their own cost or expense.
5. On arrival at the Work site, the Contractor shall identify himself/herself, by displaying the identification badge provided by GPL and must at all times be and remain courteous and professional to the customers/occupants. The Contractor must then inform the customer/occupant of the purpose of his/her visit and after receiving consent from the customer/occupant, proceed with the work(s).
6. All the work must be executed with strict adherence to safety rules and procedures. The wearing of all safety gears and inclusive rubber gloves are mandatory when working with or in proximity of live installations and which the Contractor must have at his/her own cost.
7. In the event the Contractor visits a customer's premises where jobs were previously executed or cannot be completed due to safety or other reason, then information on name, address, reference number, nature of the emergency report etc. must be submitted for action by GPL.

Specific: QUALITY / STANDARD OF WORK

The quality and standard of work must conform to the GPL's Manual on Transmission and Distribution Practices, Customer Service Standard and GPL's Occupational Safety and Health Handbook.

PENALTIES

1. **Network component replacement/removal**

For failure to abide with the aforementioned, which results in prolonged disruption to customer(s) to facilitate remedial works, the contractor will be fined twenty thousand dollars ($20,000)-Low Voltage, thirty thousand dollars ($30,000)-Medium Voltage (spurs) and forty thousand dollars ($40,000)-Medium Voltage (backbone)

2. **Replacing, removal of poles dismantling of "H" structures**

For failure to abide with the aforementioned, which results in prolonged disruption to customer(s) to facilitate remedial works, the contractor will be fined fifteen thousand dollars ($15,000)-Dedicated Supply, thirty thousand dollars ($30,000) - Not Dedicated Supply

3. **Primary line hardware transfers**

For failure to abide with the aforementioned, which results in prolonged disruption to customer(s) to facilitate remedial works, the contractor will be fined thirty thousand dollars ($30,000)-Medium Voltage (spurs) and forty thousand dollars ($40,000)-Medium Voltage (backbone)

4. **Secondary line hardware transfers**

For failure to abide with the aforementioned, which results in prolonged disruption to customer(s) to facilitate remedial works, the contractor will be fined twenty thousand dollars ($20,000)

5. **Servicing/crimping of connections**

For failure to abide with the aforementioned, which results in prolonged disruption to customer(s) to facilitate remedial works, the contractor will be fined twenty thousand dollars ($20,000)-Low Voltage, thirty thousand dollars ($30,000)-Medium Voltage (spurs) and forty thousand dollars ($40,000) -Medium Voltage (backbone)

C. RESPONSIBILITIES AND DUTIES OF THE CONTRACTOR

MAINTENANCE SERVICES

The responsibilities and duties of the Contractors under this Contract are as stated below:

The Contractor shall:

1. Carry out the Works, as instructed by GPL in the Demerara, Berbice and Essequibo regions. All Works must be executed by the Contractor and where applicable his/her employees, servants and or agents or sub-contractors with strict adherence to all safety rules and procedures in conformity with the Occupational Health and Safety Act of 1997 and GPL's Occupational Safety and Health Handbook along with its other Safety Standards.
2. Ensure that anyone carrying out works under this Contract is at all times properly attired with uniform, where applicable, and appropriate personal protective gear approved by GPL.
3. Be equipped with insulated rubber gloves, pliers, knives, vehicle ladders, drill kit, crimping tool, clamp-on-meter, screw driver set, hacksaw and other necessary tools at his/her own expense as provided for in Appendix I.
4. In carrying out works under this contract, determine whether said works can be safely completed without any risk to self or others or damage to his/her property or that of a third party and proceed to perform such works only when he/she has presumed it safe to do so. On every occasion an approach must be adopted that would ensure works are completed in the safest manner without compromise and threat to life or limb or damage to property.
5. Establish a twenty (24) hours, seven (7) days a week operating base within one (1) month of signing the contract to manage all jobs (these includes receiving, dispatching and timely reporting) from GPL Call Centre and Control Center. The Operating Base must have at least the following:
    e. Internal radio sets.
    f. Telephone with Telephone Operator.
    g. Technical Records Clerk.
    h. Internet Access
6. As soon as possible, but no later than 08:00 hours for all Works completed by 24:00 hours the previous day, return to GPL all completed Maintenance Job Cards with details of all Works completed. A sample Maintenance Job Card shall be provided by GPL and the Contractor must accurately reproduce Maintenance Job Cards for use by his/her employees, servants and or agents or sub-contractors. The

Contractor must accurately update each form identifying all completed and incomplete Works and give the reasons for the failure to complete the Works.

7. Carry out all Works in accordance with the procedures defined by GPL's Manual on Transmission and Distribution Practices and as described in Appendix IV. If within three (3) months aftsr date of completion of the Works, GPL discovers that the said Works were not done to the specifications or standards of this Contract, or were of a sub-standard quality, then the Contractor shall be liable for the breach in standards and payment of any penalties due per Appendix V Penalties, and, if requested by GPL, shall carry out remedial work at his/her own expense within a time specified by GPL. If the remedial work is executed by GPL, the cost incurred will be transferred to the contractor.
8. Maintain an accurate and comprehensive record of the Works carried out using the forms provided by GPL. This record can be either digital and/or printed.
9. Submit payment invoices together with supporting documentation for certification and payment by GPL. Invoices must be submitted by the Contractor for Works completed in the period 1st to 15th day of the month by the 4th working day after the period and for Works completed in the period 16th to 31st day of the month by the 4th working day of the following month.
10. Ensure that all persons involved in executing the Works at all times wear an identification badge bearing the words "GPL Network Maintenance Contractor", the name and photograph of the employee. The badge will initially be provided by GPL and the Contractor will be responsible for the cost of any replacement, recovery of said badge where an employee is no longer in his/her employ, and if necessary, advising the Public that said employee is no longer authorized to conduct business on GPL's behalf. Where the contractor supplies both Network Emergency and Maintenance Services, then the badge of all persons involved in executing the Works, shall display "GPL Network Emergency & Maintenance Contractor"
11. While on duty, Contractor vehicles shall display highly visible and reflective labels (6"x60") on each side of the vehicle of 'Name of Contractor and GPL Network Maintenance Contractor'.
12. While on Duty, each Contractor personnel shall have displayed on their clothing highly visible label of "'GPL Network Maintenance Contractor'.
13. Ensure that all of his/her employees, agents and/or servants engaged in Maintenance activities under this Contract are declared to and approved by GPL before commencing Works in accordance with this Contract.
14. Make good at his/her own expense any defect or damage to third party or GPL's property resulting from

faulty workmanship, of which he will be notified within six (6) months after completion of the work. The Contractor will be held accountable and responsible for all of GPL's property entrusted to his/her care, custody and control.

15. Account for all materials or supplies issued by GPL relative to place of usage. The **Contractor** shall not, in any circumstance, store **GPL's** material at any location other than those identified and authorized by GPL for such storage of those materials. The movement of such materials shall be fully documented. The contractor shall submit documentation detailing material usage, along with the invoices for payment.
16. Submit fortnightly checklist of **all tools and equipment.** Checklist must indicate status of **all tools and equipment; reasons for defects must be provided.**

17. The Contractor shall provide his/her employees, servants and/or agents or sub-contractors, with a smart device capable of receiving mobile internet, when GPL indicates it necessary for operation. This is to facilitate GPL's impending mitigation to digital data collection. The device shall be used to facilitate Maintenance Job dispatching and job completion information submission. The Contractor shall provide mobile internet to the device at his/her expense.

18. The Contractor shall ensure that at least one (1) team member is trained to provide First Aid.

19. Ensure that the team composition is as outlined in Appendix VII.

INSURANCE REQUIREMENTS

Coverage shall be at a minimum:

1. **Commercial General Liability (CGL):** Insurance Services covering CGL on an "occurrence" basis, including products-completed operations and personal injury, with limits no less than **$2,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability:** if Contractor has no owned automobiles, hired, and non-owned automobiles with limit no less than **$1,000,000** per accident for bodily injury and property damage.
3. **Workers' Compensation:** The Statutory Limits, and Employer's Liability Insurance with limit of no less than **$1,000,000** per accident for bodily injury or disease.
4. If the contractor maintains higher limits than the minimums shown above, then GPL requires and shall be entitled to coverage for the higher limits maintained by the contractor.

SKILL CAPACITY BUILDING REQUIREMENTS

The contractor shall ensure that:

1. All his/her employees, servants and/or agents or sub-contractors, with the exception of the Team Leader, receive at least 10 hours of skills refresher or skill upgrade training per year, from a training provider recognized by GPL or from the GPL Training School.
2. His/her Team Leader receives at least 20 hours of skills refresher or skill upgrade training per year, from a training provider recognized by GPL or from the GPL Training School.
3. Submit annually, proof of skill capacity building sessions, to qualify for contract renewal.
4. Skill Capacity Building exercises are based upon:
    a. Linesman Training
    b. Supervising Linesmen
    c. First-aid
    d. Troubleshooting
    e. Customer Service
    f. Pole top rescue
    g. High structures rescue techniques
    h. Live line pole erection
    i. Pole erection and removal
    j. Transformer– mounting, installation, connections and servicing

LITIGATION

CONTRACTOR shall provide assistance and testify at GPL's request if litigation is brought against GPL in connection with CONTRACTOR'S services under this Contract. Unless the action is brought by CONTRACTOR, or is based upon CONTRACTOR'S wrongdoing, GPL shall compensate CONTRACTOR for preparation for testimony, testimony, and travel at CONTRACTOR'S standard hourly rates at the time of actual testimony.

INDEMNITY

CONTRACTOR agrees to hold harmless and indemnify GPL, its elected and appointed officials, employees, and agents from and against any and all claims, loss, liability, damage, and expense by the Contractor or a third party arising out of CONTRACTOR'S performance of this Contract, except for those claims arising out of GPL's sole negligence or willful misconduct. CONTRACTOR agrees to defend GPL, its elected and appointed officials, employees, and agents against any such claims.

SCOPE OF WORK

The type of Works which the Contractor will be required to execute is shown below

Description of Maintenance Activities

Item No.	Description	Details
TABLE 1: NETWORK ISOLATION		
1	Activation of RCO -	Opening and closing of all RCOS on a a single structure
2	Activation of GAB-	Opening and closing of single GAB
3	Activation of SPD	Opening and closing of set of 3 SPDs
4	Activation Of Temporary Line Earths.	
TABLE 2: NETWORK COMPONENT REPLACEMENT/REMOVAL		
1	Replacing SPD-	Replace existing network component and install new/replacement network component. Connect as required.
2	Replacing RCO	Replace existing network component and install new/replacement network component. Connect as required.
3	Replacing GAB	Replace existing network component and install new/replacement network component. Connect as required.
4	Replacing Insulator & Pin	Replace existing network component and install new/replacement network component. Connect as required.
5	Replacing Suspension Insulator	Replace existing network component and install new/replacement network component. Connect as required.
6	Replacing Cross Arm	Replace existing network component and install new/replacement network component. Connect as required.
7	Replacing Burnt Jumper.	Replace existing network component and install new/replacement network component. Connect as required.
8	Replacing 10 or 15 KVA Transformer	Replace existing network component and install new/replacement network component. Connect as required.

9	Replacing 25 or 50 KVA Transformer	Replace existing network component and install new/replacement network component. Connect as required.
10	Replacing 75 or 100 KVA Transformer	Replace existing network component and install new/replacement network component. Connect as required.
11	Replacing 167 KVA Transformer	Replace existing network component and install new/replacement network component. Connect as required.
12	Replacing Voltage Regulator	Replace existing network component and install new/replacement network component. Connect as required.
13	Replacing Capacitor Bank	Replace existing network component and install new/replacement network component. Connect as required.
14	Replacing Fuse Holder	Replace existing network component and install new/replacement network component. Connect as required.
15	Replacing Fuse Link	Replace existing network component and install new/replacement network component. Connect as required.
16	Replacing Insulator, Spool	Replace existing network component and install new/replacement network component. Connect as required.
17	Replacing Pole Top/Crossarm Pin	Replace existing network component and install new/replacement network component. Connect as required.
18	Replacing Crossarm Brace	Replace existing network component and install new/replacement network component. Connect as required.
19	Replacing Insulator Tie	Replace existing network component and install new/replacement network component. Connect as required.
20	Replacing Single Spool Clevis	Replace existing network component and install new/replacement network component. Connect as required.
21	Replacing Three Spool Rack	Replace existing network component and install new/replacement network component. Connect as required.
22	Replacing Four Spool Rack	Replace existing network component and install new/replacement network component. Connect as required.
23	Replacing Hot Line/Bail Clamps	Replace existing network component and install new/replacement network component. Connect as required.
24	Replacing Preform Wrap	Replace existing network component and install new/replacement network component. Connect as required.
25	Replacing Lightening Arrestor	Replace existing network component and install new/replacement network component. Connect as required.
26	Replacing Down Guy	Replace existing network component and install new/replacement network component. Connect as required.

27	Replacing Fly Guy	Replace existing network component and install new/replacement network component. Connect as required.
28	Replacing Alley Arm Guy	Replace existing network component and install new/replacement network component. Connect as required.
29	Replacing Over Head Guy	Replace existing network component and install new/replacement network component. Connect as required.
30	Transfer of Street Lamp - Rose & Short Bracket	Move from one structure to another (typically from old structure to new structure)
31	Transfer of Street Lamp - Long Bracket	
32	Transfer of PrePaid Meter Box	
33	Preparing Pole (per pole)	Drill holes for pole steps, install pole steps and tar pole
34	Transfer of GTT/Telephone Cable	Disconnect from one structure to another, with correct tension/sag as per pole span and required clearance
35	Install/Remove of Varcorder	Install set of varcorders on network as directed/ remove set of varcorders on network as directed (from a single point/location on network)
36	Install/Remove of Quality Meter	Install/remove quality meter on network as directed (at a single point/location on network)
37	Transferring of PMCO	Transfer PMCO only from one structure to another
38	Retensioning of aluminum conductor - Tulip	Tension existing conductor to the required sag and clearance as dictated by conductor weight and pole span length; splice conductor to maintain tension permanently
39	Retensioning of aluminum conductor - Oxlip	Tension existing conductor to the required sag and clearance as dictated by conductor weight and pole span length; splice conductor to maintain tension permanently
40	Retensioning of aluminum conductor - Poppy	Tension existing conductor to the required sag and clearance as dictated by conductor weight and pole span length; splice conductor to maintain tension permanently
41	Retensioning of conductor - Triplex- Service	Tension existing conductor to the required sag and clearance as dictated by conductor weight and pole span length; splice conductor to maintain tension permanently
42	Retensioning of conductor - Triplex .. Lepas	Tension existing conductor to the required sag and clearance as dictated by conductor weight and pole span length; splice conductor to maintain tension permanently
43	Retensioning of conductor - Duplex Service	Tension existing conductor to the required sag and clearance as dictated by conductor weight and pole span length; splice conductor to maintain tension permanently

44	Retensioning of conductor - Gammarus Service	Tension existing conductor to the required sag and clearance as dictated by conductor weight and pole span length; splice conductor to maintain tension permanently
45	Retensioning of conductor - Quadruplex Service	Tension existing conductor to the required sag and clearance as dictated by conductor weight and pole span length; splice conductor to maintain tension permanently
46	Retensioning of conductor - Lobster Service	Tension existing conductor to the required sag and clearance as dictated by conductor weight and pole span length; splice conductor to maintain tension permanently
47	Retensioning of conductor - Cosmos	Tension existing conductor to the required sag and clearance as dictated by conductor weight and pole span length; splice conductor to maintain tension permanently
TABLE 3: PLANTING & REMOVAL OF POLES, DISMANTLING OF "H" STRUCTURES		
1	Planting of 30' Pole (Including Preparation)	Hole excavation and pole erection
2	Planting of 36' Pole	Hole excavation and pole erection
3	Planting of 40’ Pole	Hole excavation and pole erection
4	Planting of 45’ Pole	Hole excavation and pole erection
5	Planting of 50’ Pole	Hole excavation and pole erection
6	Planting of 55’ Pole	Hole excavation and pole erection
7	Planting of 60' Pole (Including Preparation)	Hole excavation and pole erection
8	Removal 30' Pole	Removal of complete pole
9	Removal 36' Pole	Removal of complete pole
10	Removal 40’ Pole	Removal of complete pole
11	Removal 45’ Pole	Removal of complete pole
12	Removal 50’ Pole	Removal of complete pole
13	Removal 55’ Pole	Removal of complete pole
14	Cutting Poles Above the LV Network	cutting and removal of pole top only
15	Cutting Poles Above the LV Network (up 18" from energised MV Network)	cutting and removal of pole top, to a maximum of 18" from the energised MV Network, only
16	Plumbing (30 & 36)'Pole	Plumb 30 and 36 feet poles
17	Plumbing (40 to 60)'Pole	plumb 40 and 60 feed poles
18	Replacing "H" Structure	Build new "H" Structure and Dismantle old “H” Structure
19	Dismantling Plank ("H" Structure)	Dismantle the plank for a "H" Structure
20	Replacing Plank ("H" Structure)	Replace the existing plank of a "H" structure with a new one
21	Replacing Runner ("H" Structure)	Replace the existing runner of a "H" structure with a new one
TABLE 4: PRIMARY LINE HARDWARE TRANSFERS		

1	Line Hardware Transfer (Cluster Transformer Bank) 10 to 15KVA	Remove conductor and all line hardware in addition to a cluster transformer bank consisting of transformers rated at 10 to 15kVA transformers, from old structure (typically defective) to new structure
2	Line Hardware Transfer (Cluster Transformer Bank) 25 to 50KVA	Remove conductor and all line hardware in addition to a cluster transformer bank consisting of transformers rated at 25 to 50kVA transformers, from old structure (typically defective) to new structure
3	Line Hardware Transfer (Transformer “H” Structure)	Remove conductor and all line hardware on an "H" structure, in addition to all transformers and other equipment, from old structure (typically defective) to new structure. This structure shall not include a Voltage regulator.
4	Line Hardware Transfer (Single Transformer Bank) 10 to 25KVA	Remove conductor and all line hardware in addition to a single transformer rated at 10 to 15kVA transformers, from old structure (typically defective) to new structure
5	Line Hardware Transfer (Single Transformer Bank) 50 to 75KVA	Remove conductor and all line hardware in addition to a single transformer rated at 50 to 75kVA transformers, from old structure (typically defective) to new structure
6	Line Hardware Transfer (Single Transformer Bank) 100 to 167KVA	Remove conductor and all line hardware in addition to a single pole mounted transformer rated at 100 to 167kVA, from old structure (typically defective) to new structure
7	Line Hardware Transfer (Capacitor Bank)	Remove conductor and all line hardware in addition to a capacitor bank, from old structure (typically defective) to new structure
8	Line Hardware Transfer (Voltage Regulator)	Remove conductor and all line hardware in addition to a voltage regulator, from old structure (typically defective) to new structure
9	Line Hardware Transfer (RCO Structure)	Remove conductor and all line hardware in addition to RCOs, from old structure (typically defective) to new structure
10	Line Hardware Transfer (SPD Structure)	Remove conductor and all line hardware in addition to SPDs, from old structure (typically defective) to new structure
11	Line Hardware Transfer (GAB Structure)	Remove conductor and all line hardware in addition to a GAB, from old structure (typically defective) to new structure
TABLE 5: PRIMARY LINE HARDWARE TRANSFERS – Two wire.		
1	Line Hardware Transfer (Intermediate)	Remove conductor and all line hardware from a two wire primary intermediate structure, to a new structure
2	Line Hardware Transfer (Branch Pole)	Remove conductor and all line hardware from a two wire primary branch pole, to a new structure
3	Line Hardware Transfer (Heavy Angle)	Remove conductor and all line hardware from a two wire primary heavy angle structure, to a new structure

4	Line Hardware Transfer (Light Angle)	Remove conductor and all line hardware from a two wire primary light angle structure, to a new structure
5	Line Hardware Transfer (Double Dead End Pole)	Remove conductor and all line hardware from a two wire primary double dead end structure, to a new structure
6	Line Hardware Transfer (Dead End Pole)	Remove conductor and all line hardware from a two wire primary dead end structure, to a new structure
TABLE 6: PRIMARY LINE HARDWARE TRANSFERS – Three wire.		
1	Line Hardware Transfer (Intermediate)	Remove conductor and all line hardware from a three wire primary intermediate structure, to a new structure
2	Line Hardware Transfer (Branch Pole)	Remove conductor and all line hardware from a three wire primary branch pole, to a new structure
3	Line Hardware Transfer (Heavy Angle)	Remove conductor and all line hardware from a three wire primary heavy angle structure, to a new structure
4	Line Hardware Transfer (Light Angle)	Remove conductor and all line hardware from a three wire primary light angle structure, to a new structure
5	Line Hardware Transfer (Double Dead End Pole)	Remove conductor and all line hardware from a three wire primary double dead end structure, to a new structure
6	Line Hardware Transfer (Dead End Pole)	Remove conductor and all line hardware from a three wire primary dead end structure, to a new structure
TABLE 7: SECONDARY LINE HARDWARE TRANSFERS – Two wire.		
1	Line Hardware Transfer (Intermediate)	Remove conductor and all line hardware from a two wire secondary intermediate structure, to a new structure
2	Line Hardware Transfer (Branch Pole)	Remove conductor and all line hardware from a two wire secondary branch pole, to a new structure
3	Line Hardware Transfer (Heavy Angle)	Remove conductor and all line hardware from a two wire secondary heavy angle structure, to a new structure
4	Line Hardware Transfer (Light Angle)	Remove conductor and all line hardware from a two wire secondary light angle structure, to a new structure
5	Line Hardware Transfer (Double Dead End Pole)	Remove conductor and all line hardware from a two wire secondary double dead end structure, to a new structure
6	Line Hardware Transfer (Dead End Pole)	Remove conductor and all line hardware from a two wire secondary dead end structure, to a new structure
TABLE 8: SECONDARY LINE HARDWARE TRANSFERS – Three wire.		
1	Line Hardware Transfer (Intermediate)	Remove conductor and all line hardware from a three wire secondary intermediate structure, to a new structure

2	Line Hardware Transfer (Branch Pole)	Remove conductor and all line hardware from a three wire secondary branch pole, to a new structure
3	Line Hardware Transfer (Heavy Angle)	Remove conductor and all line hardware from a three wire secondary heavy angle structure, to a new structure
4	Line Hardware Transfer (Light Angle)	Remove conductor and all line hardware from a three wire secondary light angle structure, to a new structure
5	Line Hardware Transfer (Double Dead End Pole)	Remove conductor and all line hardware from a three wire secondary double dead end structure, to a new structure
6	Line Hardware Transfer (Dead End Pole)	Remove conductor and all line hardware from a three wire secondary dead end structure, to a new structure
TABLE 9: SECONDARY LINE HARDWARE TRANSFERS – Four wire.		
1	Line Hardware Transfer (Intermediate)	Remove conductor and all line hardware from a four wire secondary intermediate structure, to a new structure
2	Line Hardware Transfer (Branch Pole)	Remove conductor and all line hardware from a four wire secondary branch pole, to a new structure
3	Line Hardware Transfer (Heavy Angle)	Remove conductor and all line hardware from a four wire secondary heavy angle structure, to a new structure
4	Line Hardware Transfer (Light Angle)	Remove conductor and all line hardware from a four wire secondary light angle structure, to a new structure
5	Line Hardware Transfer (Double Dead End Pole)	Remove conductor and all line hardware from a four wire secondary double dead end structure, to a new structure
6	Line Hardware Transfer (Dead End Pole)	Remove conductor and all line hardware from a four wire secondary dead end structure, to a new structure
TABLE 10: SECONDARY LINE HARDWARE TRANSFERS – LEPAS.		
1	Line Hardware Transfer (Intermediate)	Remove conductor and all line hardware from an intermediate structure with Lepas ONLY, to a new structure
2	Line Hardware Transfer (Branch Pole)	Remove conductor and all line hardware from a secondary branch pole with Lepas ONLY, to a new structure
3	Line Hardware Transfer (Heavy Angle)	Remove conductor and all line hardware from a secondary heavy angle structure with Lepas ONLY, to a new structure
4	Line Hardware Transfer (Light Angle)	Remove conductor and all line hardware from a secondary light angle structure with Lepas ONLY, to a new structure
5	Line Hardware Transfer (Double Dead End Pole)	Remove conductor and all line hardware from a secondary double dead end structure with Lepas ONLY, to a new structure
6	Line Hardware Transfer (Dead End Pole)	Remove conductor and all line hardware from a secondary dead end structure with Lepas ONLY, to a new structure

TABLE 11: SECONDARY LINE HARDWARE TRANSFERS – Gammarus/Solaster/Shrimp/Lobster		
1	Line Hardware Transfer (Intermediate)	Remove conductor and all line hardware from secondary structure with Gammarus/Solaster/Shrimp/Lobster as the sole GPL conductor, to a new structure
2	Line Hardware Transfer (Branch Pole)	
3	Line Hardware Transfer (Heavy Angle)	
4	Line Hardware Transfer (Light Angle)	
5	Line Hardware Transfer (Double Dead End Pole)	
6	Line Hardware Transfer (Dead End Pole)	
TABLE 12: SERVICING/CRIMPING OF CONNECTIONS		
1	Servicing GAB	Greasing, crimping connections, replacing damaged parts where possible, removing corrosion and other signs of impuritie
2	Servicing SPD	
3	Servicing RCO	
4	Servicing Jumper on GAB/SPD	
5	Servicing Jumper on RCO	
6	Servicing/Crimping of Regulator Connections	
7	Servicing/Crimping of Transformer HV Connection	
8	Servicing/Crimping of Transformer LV Connection	
9	Servicing/Crimping Mid Span Connection (1/0 to 4/0)	
10	Servicing/Crimping Mid Span Connection (266 to 336.4 MCM)	
11	Servicing/Crimping Service Connections	
12	Servicing/Crimping of Jumper (1/0 to 4/0)	
13	Servicing/Crimping of Jumper (266.8 to 336.4 MCM)	
TABLE 13: TECHNICAL LOSS REDUCTION		
1	Service Line Replacement/Upgrade	Remove existing service line, replace and tension with new or upgraded conductor.
2	Conductor Upgrade: Aphis to Poppy	Remove existing Aphis conductor, replace and tension with Poppy conductor.
3	Conductor Upgrade: Aphis/Poppy to Oxlip	Remove existing Aphis or Poppy conductor, replace and tension with Oxlip conductor.
4	Conductor Upgrade: Oxlip to Tulip	Remove existing Oxlip conductor, replace and tension with Tulip conductor.
5	Conductor Upgrade: Aphis/Poppy to Lepas	Remove existing Aphis/Poppy conductor, replace and tension with Lepas conductor.
6	Conductor Upgrade: Service Wire to Gamerrus	Remove existing service line, replace and tension with Gamerrus conductor.
7	Conductor Upgrade: Service Wire to Lepas	Remove existing service line, replace and tension with Lepas conductor.

8	Jumper Replacement/ Upgrade: 1/0 to 4/0	Remove existing 1/0 jumper, replace with 4/0 jumper.
9	Jumper Replacement/ Upgrade: 266.8 to 477 MCM	Remove existing 266.8 jumper, replace with 477 MCMjumper.
10	Installation of Insulink/Connector on Services	Install (crimp) insuling or other correctly sized or applicable connector on service line, so that the total number of joints along the length of the conductor does not exceed a total of 2
TABLE 14: EARTHING AND GUYING		
1	Installing Earth Set	Install a permanent earth set
2	Installing Guy Set- Down Guy	Install a complete guy set on structure in a down-guy arrangement at best angle to offset tension on structure
3	Installing Fly Guy	Install a complete guy set on structure in a fly-guy arrangements panning between tow structures
4	Installing Over Head Guy Set	Install a complete guy set on structure, inclusive of guy pole at angle to offset tension on structure
5	Installing Strut	Excavate hole, plant strut and secure strut onto structure
6	Installing Anchor – Helical (screw arrangement)	Install helical anchor
7	Installing Anchor – Guy Block (buried arrangement)	Install anchor block
TABLE 15: FIX CHARGES.		
1	Transportation Cost between 2 to 12 miles	Transport materials from uplift point to job site, at the specified distances
2	Transportation Cost between 12 to 32 miles	
3	Transportation Cost between 32 to 52 miles	
4	Transportation Cost over 52 miles	
5	Mobilization (Projects, Emergencies)	1 time cost to mobilise team for projects and emergency call-outs only (once per project or per call-out)

QUALITY & STANDARD OF WORK

General

The Contractor(s) shall:

1. Ensure that he/she complies with the standard procedures. GPL reserves the right to further expand and detail these procedures and to require the Contractor to be available for training in new and safe work methods. Such training will be provided to the Contractor by GPL free of cost.
2. Ensure that an official record is kept of all activities. The Contractor shall complete the forms supplied by GPL and shall submit them to GPL within twenty-four (24) hours. GPL is currently working to reduce the use of paper record keeping and increase digital record keeping. The Contractor is expected to participate in this initiative and submit digital reports of completed jobs.
3. Ensure that upon receipt of Maintenance Job Card issued by GPL he/she understands the Works or seeks clarification on any aspect of the Works he/she is unclear of.
4. Ensure that he/she has the necessary tools and equipment for the Works at their own cost or expense.
5. On arrival at the Work site, the Contractor shall identify himself/herself, by displaying the identification badge provided by GPL and must at all times be and remain courteous and professional to the members of the public.
6. All the work must be executed with strict adherence to safety rules and procedures. The wearing of all safety gears is mandatory at the job site, which the Contractor must have at his/her own cost.

Specific: QUALITY / STANDARD OF WORK

The quality and standard of work must conform to the GPL's Manual on Transmission and Distribution Practices, Customer Service Standard and GPL's Occupational Safety and Health Handbook.

D. RESPONSIBILITIES AND DUTIES OF THE CONTRACTOR

NETWORK CONSTRUCTION SERVICES

The responsibilities and duties of the Contractors under this Contract are as stated below:

The Contractor shall:

1. Carry out the Works, as instructed by GPL in the Demerara, Berbice and Essequibo regions. All Works must be executed by the Contractor and where applicable his/her employees, servants and or agents or

sub-contractors with strict adherence to all safety rules and procedures in conformity with the Occupational Health and Safety Act of 1997 and GPL's Occupational Safety and Health Handbook along with its other Safety Standards.

2. Ensure that anyone carrying out works under this Contract is at all times properly attired with uniform, where applicable, and appropriate personal protective gear approved by GPL.
3. Be equipped with insulated rubber gloves, pliers, knives, vehicle ladders, drill kit, crimping tool, clamp-on-meter, screw driver set, hacksaw and other necessary tools at his/her own expense as provided for in Appendix I.
4. In carrying out works under this contract, determine whether said works can be safely completed without any risk to self or others or damage to his/her property or that of a third party and proceed to perform such works only when he/she has presumed it safe to do so. On every occasion an approach must be adopted that would ensure works are completed in the safest manner without compromise and threat to life or limb or damage to property.
5. As soon as possible, but no later than 08:00 hours for all Works completed by 24:00 hours the previous day, return to GPL all completed Maintenance Job Cards with details of all Works completed. A sample Maintenance Job Card shall be provided by GPL and the Contractor must accurately reproduce Maintenance Job Cards for use by his/her employees, servants and or agents or sub-contractors. The Contractor must accurately update each form identifying all completed and incomplete Works and give the reasons for the failure to complete the Works.
6. As soon as possible, but no later than 08:00 hours for all Capital or System Improvement Works completed by 24:00 hours the previous day, return to GPL all completed Authorization of Works sheets. In the case of any differences between the constructed network and the Authorized design, the Contractor shall present an "as-built" drawing on the back of the Authorization of Works.
7. Ensure that all Capital Works are completed within 18 calendar days of receipt.
8. Carry out all Works in accordance with the procedures defined by GPL's Manual on Transmission and Distribution Practices and as described in Appendix IV. If within three (3) months after date of completion of the Works, GPL discovers that the said Works were not done to the specifications or standards of this Contract, or were of a sub-standard quality, then the Contractor shall be liable for the breach in standards and payment of any penalties due per Appendix V Penalties, and, if requested by GPL, shall carry out remedial work at his/her own expense within a time specified by GPL. If the remedial work is executed by

GPL, the cost incurred will be transferred to the contractor.

9. Maintain an accurate and comprehensive record of the Works carried out using the forms provided by GPL. This record can be either digital and/or printed.
10. Submit payment invoices together with supporting documentation for certification and payment by GPL. Invoices must be submitted by the Contractor for Works completed in the period 1st to 15th day of the month by the 4th working day after the period and for Works completed in the period 16th to 31st day of the month by the 4th working day of the following month.
11. Ensure that all persons involved in executing the Works at all times wear an identification badge bearing the words "GPL Network Construction Contractor", the name and photograph of the employee. The badge will initially be provided by GPL and the Contractor will be responsible for the cost of any replacement, recovery of said badge where an employee is no longer in his/her employ, and if necessary, advising the Public that said employee is no longer authorized to conduct business on GPL's behalf. Where the contractor supplies Network Emergency, Maintenance and Construction Services, then the badge of all persons involved in executing the Works, shall display "GPL Network Emergency, Maintenance & Construction Contractor"
12. While on duty, Contractor vehicles shall display highly visible and reflective labels (6"x60") on each side of the vehicle of 'Name of Contractor and GPL Network Construction Contractor'.
13. While on Duty, each Contractor personnel shall have displayed on their clothing highly visible label of "'GPL Network Construction Contractor'.
14. Ensure that all of his/her employees, agents and/or servants engaged in Network Construction activities under this Contract are declared to and approved by GPL before commencing Works in accordance with this Contract.
15. Make good at his/her own expense any defect or damage to third party or GPL's property resulting from faulty workmanship, of which he will be notified within six (6) months after completion of the work. The Contractor will be held accountable and responsible for all of GPL's property entrusted to his/her care, custody and control.
16. Account for all materials or supplies issued by GPL relative to place of usage. The **Contractor** shall not, in any circumstance, store **GPL's** material at any location other than those identified and authorized by GPL for such storage of those materials. The movement of such materials shall be fully documented. The contractor shall submit documentation detailing material usage, along with the invoices for payment.

17. Submit fortnightly checklist of **all tools and equipment.** Checklist must indicate status of **all tools and equipment; reasons for defects must be provided.**

18. The Contractor shall provide his/her employees, servants and/or agents or sub-contractors, with a smart device capable of receiving mobile internet, when GPL indicates it necessary for operation. This is to facilitate GPL's impending mitigation to digital data collection. The device shall be used to facilitate Maintenance Job dispatching and job completion information submission. The Contractor shall provide mobile internet to the device at his/her expense.

19. The Contractor shall ensure that at least one (1) team member is trained to provide First Aid, in the case of an emergency.

20. Ensure that the team composition is as outlined in Appendix VII.

INSURANCE REQUIREMENTS

Coverage shall be at a minimum:

1. **Commercial General Liability (CGL):** Insurance Services covering CGL on an "occurrence" basis, including products-completed operations and personal injury, with limits no less than **$2,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability:** if Contractor has no owned automobiles, hired, and non-owned automobiles with limit no less than **$1,000,000** per accident for bodily injury and property damage.
3. **Workers' Compensation:** The Statutory Limits, and Employer's Liability Insurance with limit of no less than **$1,000,000** per accident for bodily injury or disease.
4. If the contractor maintains higher limits than the minimums shown above, then GPL requires and shall be entitled to coverage for the higher limits maintained by the contractor.

SKILL CAPACITY BUILDING REQUIREMENTS

The contractor shall ensure that:

1. All his/her employees, servants and/or agents or sub-contractors, with the exception of the Team Leader, receive at least 10 hours of skills refresher or skill upgrade training per year, from a training provider recognized by GPL or from the GPL Training School.

2. His/her Team Leader receives at least 20 hours of skills refresher or skill upgrade training per year, from a training provider recognized by GPL or from the GPL Training School.
3. Submit annually, proof of skill capacity building sessions, to qualify for contract renewal.
4. Skill Capacity Building exercises are based upon:
    a. Linesman Training
    b. Supervising Linesmen
    c. First-aid
    d. Troubleshooting
    e. Customer Service
    f. Pole top rescue
    g. High structures rescue techniques
    h. Live line pole erection
    i. Pole erection and removal
    j. Transformer– mounting, installation, connections and servicing

LITIGATION

CONTRACTOR shall provide assistance and testify at GPL's request if litigation is brought against GPL in connection with CONTRACTOR'S services under this Contract. Unless the action is brought by CONTRACTOR, or is based upon CONTRACTOR'S wrongdoing, GPL shall compensate CONTRACTOR for preparation for testimony, testimony, and travel at CONTRACTOR'S standard hourly rates at the time of actual testimony.

INDEMNITY

CONTRACTOR agrees to hold harmless and indemnify GPL, its elected and appointed officials, employees, and agents from and against any and all claims, loss, liability, damage, and expense by the Contractor or a third party arising out of CONTRACTOR’S performance of this Contract, except for those claims arising out of GPL’s sole negligence or willful misconduct. CONTRACTOR agrees to defend GPL, its elected and appointed officials, employees, and agents against any such claims.

SCOPE OF WORK

The type of Works which the Contractor will be required to execute is shown below

Description of Construction Activities

No	Description	Details
TABLE 1: NETWORK COMPONENT INSTALLATION		
1	Network Component Installation	Install a single Network component on structure/network. This is not to replace an existing network component of the same category, but to introduce a new component onto structure.
TABLE 2: PLANTING OF POLES &"H" STRUCTURES CONSTRUCTION etc		
1	Pole Planting	Excavate hole; pole preparation for planting (inclusive of drilling holes for pole step installation and put tar on pole butt); pole erection
7	Construction of "H" Structure	Excavate poles; prepare poles for planting; put tar of pole; construct and erect frame of "H" Structure
8	Installation of Plank ("H" Structure)	Install Plank on "H" Structure
9	Installation of Runner ("H" Structure)	Install "H" Structure runner
10	Installation of stub complete	
11	Installation of strut complete	
12	Installation of street lamp	
13	Installation of Earth Set	
14	Installation of Temporary Earth Set	
TABLE 3: PRIMARY NETWORK CONSTRUCTION		
1	Construction of single pole mounted Transformer Structure	Pole planting; erection and connection of a single transformer, installation of earths and arrestors, fusing
2	Construction of Cluster bank Transformer Structure	Pole planting; erection and connection of a transformer bank consisting of 3 transformers connected in parallel, delta, open delta or wye configuration, installation of earths and arrestors, fusing
3	Construction of 2 or 3 wire Primary intermediate/end/branch/double end or Tee Pole Structure	Pole planting, installation of crossarms and insulators
TABLE 4: SECONDARY NETWORK CONSTRUCTION		
1	Construction of Secondary Pole Structure	Excavate hole; pole preparation for planting (inclusive of drilling holes for pole step installation and put tar on pole butt); pole erection, install insulators, attach conductor to secondary structures (Lepas, 2/3/4- wire)
TABLE 5: STRINGING AND TENSIONING OF CONDUCTOR		
1	Stringing and tensioning of conductor	String and tension conductors, attach to insulators
TABLE 6: SECONDARY LINE HARDWARE TRANSFERS – Three wire.		
1	Line Hardware Transfer	Transfer conductor and all line hardware on 3 wire secondary structure from one structure to another (typically from old to new structure)
TABLE 7: SECONDARY LINE HARDWARE TRANSFERS – Four wire.		
1	Line Hardware Transfer	Transfer conductor and all line hardware on 4 wire secondary structure from one structure to another (typically from old to new structure)
TABLE 8: FIX CHARGES.		

1	Transportation Cost of materials ***excluding pole***	Total Cost to transport ALL materials, excluding poles, required for Network Construction activities, from point of uplifting to job site
2	Transportation Cost of ***pole***	Total Cost to transport ALL poles required for Network Construction activities, from point of uplifting to job site
3	Mobilization (based on scope and nature of work)	One time cost

QUALITY & STANDARD OF WORK

General

The Contractor(s) shall:

1. Ensure that he/she complies with the standard procedures. GPL reserves the right to further expand and detail these procedures and to require the Contractor to be available for training in new and safe work methods. Such training will be provided to the Contractor by GPL free of cost.
2. Ensure that an official record is kept of all activities. The Contractor shall complete the forms supplied by GPL and shall submit them to GPL within twenty-four (24) hours. GPL is currently working to reduce the use of paper record keeping and increase digital record keeping. The Contractor is expected to participate in this initiative and submit digital reports of completed jobs.
3. Ensure that upon receipt of Maintenance Job Card issued by GPL he/she understands the Works or seeks clarification on any aspect of the Works he/she is unclear of.
4. Ensure that he/she has the necessary tools and equipment for the Works at their own cost or expense.
5. On arrival at the Work site, the Contractor shall identify himself/herself, by displaying the identification badge provided by GPL and must at all times be and remain courteous and professional to the members of the public.
6. All the work must be executed with strict adherence to safety rules and procedures. The wearing of all safety gears is mandatory at the job site, which the Contractor must have at his/her own cost.

Specific: QUALITY / STANDARD OF WORK

The quality and standard of work must conform to the GPL's Manual on Transmission and Distribution Practices, Customer Service Standard and GPL's Occupational Safety and Health Handbook.

E. APPENDICES

APPENDIX 1: TOOLS AND EQUIPMENT REQUIRED PER TEAM

Lot 1: Emergency Contractors

Item	Description	Quantity
1	Earth Sets (complete)	2
2	Stihl Power Saws MS-661C (small)	1
3	Motorized Power Drill	1
4	15Kv Switch Stick	1
5	Hot Line Cutter	1
6	Grip All Sticks	1
7	Fiberglass Ladders -24 ft.	1
8	Step Ladders 7 ft.	1
9	TILT Transformer and Capacitor Tester	1
10	Non-contact Voltage Detector	1
11	2.0 Ton Chain Hoist	1
12	Emergency Lamps	1
13	7/8 Inch Auger	1
14	3/4 Inch Auger	1
15	5/8 Inch Auger	1
16	Lineman Wrench	1
17	Hammer [ball peen]	1
18	Pipe Wrench 12"	1
19	Hot Line Jumper	3
20	Tirfor Jack [2 ton]	1
21	Hacksaw complete with blades	1
22	Pliers	3
23	Lineman Knife	3
24	Block and Tackle	1
25	3/4" Rope Sleeve	1
26	Adjustable Wrench 10" & 8”	3 each
27	Drill Bits 5/8", 3/8” & 5/16	2 each

28	Drill Bits 5/16"	2
29	Drill Bits 7/8"	2
30	5 pound Sledge	1
31	Come Along (Daag), Poppy	2
32	Come Along (Daag), Oxlip	2
33	Come Along (Daag), Tulip	2
34	Come Along (Daag), Guy Wire (5/8)	2
35	Come Along (Daag), Guy Wire (7/8)	2
36	Burndy MD6 Crimping Tool	1
37	Burndy Y35 Crimping Tool	1
38	Burndy OUR 840 Crimping Tool	1
39	VHF Radios (Base Station and Mobile)	1
40	Smart Device	1
41	Ratchet Set	1
42	Wire Cutter Aluminum	1
43	Bolt Cutter	1
44	Hand Drill (battery operated)	1
45	Screw Driver Large- Star & Flat	1 each
46	Multi-tester	1
47	Sling-Canvas- 4’ & 6’	1 each
48	Cutlass-20”	1

Lot 2 and 3: Maintenance and Construction Services

Item	Description	Quantity
1	Earth Sets (complete)	2
2	Stihl Power Saws MS-661C (small)	1
3	Motorized Power Drill	2
4	15Kv Switch Stick	1
5	Hot Line Cutter	1
6	Grip All Sticks	1
7	Fiberglass Ladders -24 ft.	1
8	Step Ladders 7 ft.	1
9	TILT Transformer and Capacitor Tester	1
10	Non-contact Voltage Detector	1
11	2.0 Ton Chain Hoist	1
12	Emergency Lamps	1

13	7/8 Inch Auger	1
14	3/4 Inch Auger	1
15	5/8 Inch Auger	1
16	Lineman Wrench	2
17	Hammer [ball peen]	1
18	Pipe Wrench 12"	1
19	Hot Line Jumper	3
20	Tirfor Jack [2 ton]	1
21	Hacksaw complete with blades	1
22	Pliers	2
23	Lineman Knife	2
24	Block and Tackle	1
25	3/4" Rope Sleeve	1
26	Adjustable Wrench 10"	1
27	Drill Bits 5/8"	2
28	Drill Bits 5/16"	2
29	Drill Bits 7/8"	2
30	5 pound Sledge	1
31	Come Along (Daag), Poppy	2
32	Come Along (Daag), Oxlip	2
33	Come Along (Daag), Tulip	2
34	Come Along (Daag), Guy Wire (5/8)	2
35	Come Along (Daag), Guy Wire (7/8)	2
36	Burndy MD6 Crimping Tool	1
37	Burndy Y35 Crimping Tool	1
38	Burndy OUR 840 Crimping Tool	1
39	VHF Radios (Base Station and Mobile)	1
40	Smart Device	1
41	Ratchet Set	1
42	Wire Cutter Aluminum	1
43	Bolt Cutter	1
44	Hand Drill (battery operated)	1
45	Screw Driver Large- Star	1
46	Screw Driver Large - Flat	2
47	Multi Tester	1 each
48	Sling- Canvas 4’ & 6’	2 each

49	Sling – Wire Rope 4’ & 6’	1 each
50	Cutlass 20”	1

APPENDIX II: VEHICLES & EQUIPMENT REQUIRED

Lot 1: Emergency Contractors

Item	Description	Quantity
1	Hi-Ab Truck	1
2	Bucket Truck	1
3	Minibus/Van (Retrofitted to transport team)	1

Lot 2: Maintenance and Construction Contractors

Item	Description	Quantity
1	Hi-Ab Truck (with over 180 degrees rotation & 45ft to 60ft working radius)	1
2	Bucket Truck	1
3	Truck/Canter (Retrofitted to transport team)	1

APENDIX III: CUSTOMER SERVICE STANDARD – RESPONSE TO REPAIR CALLS

Definition of Standard	Response to repair calls			
	This is the time in days taken for GPL to respond to a repair call, in good faith, to ensure that faults are corrected expeditiously, as the circumstances permit. While a Customer would be able to verify GPL's response to a fault at their home, business, etc., they may not be able to verify GPL's response to one fault affecting several consumers, which in some cases can be remote to the affected area. GPL's records will be used in these cases. The Customer must have filed a report with one of GPL's emergency Call Centers and must have received a reference number. The reference number is a serial number assigned to every call received by each Call Center. The time starts after GPL would have received the call and an adequate and accurate address has been provided.			
		2020	2021	Penalty
	Residential	1 day	1 day	$1,000 per day to maximum of $10,000.
	Commercial	1 day	1 day	$2,000 per day to maximum of $50,000.

APPENDIX IV: CONTRACTOR'S RESPONSES TO REPAIR CALLS – MINOR EMERGENCIES

Customer	Response time	Penalty
Residential	6 hours	$1,000 per day to maximum of $10,000.
Commercial	6 hours	$2,000 per day to maximum of $50,000.

APPENDIX V: PENALTIES

Lot 1: Penalties for Emergency Services

1. **Network component replacement/removal**

For failure to abide with the aforementioned, which results in prolonged disruption to customer(s) to facilitate remedial works, the contractor will be fined twenty thousand dollars ($20,000)-Low Voltage, thirty thousand dollars ($30,000)-Medium Voltage (spurs) and forty thousand dollars ($40,000)-Medium Voltage (backbone)

2. **Replacing, removal of poles dismantling of "H" structures**

For failure to abide with the aforementioned, which results in prolonged disruption to customer(s) to facilitate remedial works, the contractor will be fined fifteen thousand dollars ($15,000)-Dedicated Supply, thirty thousand dollars ($30,000) - Not Dedicated Supply

3. **Primary line hardware transfers**

For failure to abide with the aforementioned, which results in prolonged disruption to customer(s) to facilitate remedial works, the contractor will be fined thirty thousand dollars ($30,000)-Medium Voltage (spurs) and forty thousand dollars ($40,000)-Medium Voltage (backbone)

4. **Secondary line hardware transfers**

For failure to abide with the aforementioned, which results in prolonged disruption to customer(s) to facilitate remedial works, the contractor will be fined twenty thousand dollars ($20,000)

5. **Servicing/crimping of connections**

For failure to abide with the aforementioned, which results in prolonged disruption to customer(s) to facilitate remedial works, the contractor will be fined twenty thousand dollars ($20,000)-Low Voltage, thirty thousand dollars ($30,000)-Medium Voltage (spurs) and forty thousand dollars ($40,000) -Medium Voltage (backbone)

Appendix VI: COSTING SCHEDULE

Lot 1: Network Emergency Services			
Costing Schedule			
Item No.	**Description**	**UOM**	**Cost**
Table 1: Network Isolation			
1	Activation of GAB.	each	
2	Activation of SPD.	set	
3	Activation of RCO.	set	
Sub Total			
Table 2: Vegetation clearing			
Item	**Description**	**Unit**	
1	Clearing and removing heavy vegetation from the primary network	/span	
2	Clearing and removing light vegetation from the primary network	/span	
3	Clearing and removing heavy vegetation from the secondary network	/span	
4	Clearing and removing light vegetation from the secondary network	/span	
5	Clearing and removing tall trees within the primary network	/span	
		each	
6	Clearing and removing branches within the primary network	/span	
		each	
7	Clearing and removing tall trees within the secondary network	/span	
		each	
8	Clearing and removing branches within the secondary network	/span	
		each	
9	Clearing and removing vines from guys	each	
10	Clearing and removing vines from poles	each	
Sub Total			
Table 3: Network component replacement/removal			
Item	**Description**	**Unit**	
1	Replacing SPD	each	
2	Replacing RCO	each	
3	Replacing GAB	each	
4	Replacing Insulator & Pin	each	
5	Replacing Suspension Insulator	each	
6	Replacing Cross Arm	each	
7	Replacing Jumper.	each	
8	Replacing Transformer: 15 & 25 KVA	each	
9	Replacing Transformer: 50 & 75 KVA	each	
10	Replacing Transformer: 100 & 167 KVA	each	
11	Replacing Voltage Regulator	each	

12	Replacing Capacitor Banks	each	
13	Replacing fuse holder	each	
14	Replacing fuse link	each	
15	Replacing insulator, spool	each	
16	Replacing Pole Top/Crossarm Pin	each	
17	Replacing Crossarm Brace	each	
18	Replacing Tye insulator	each	
19	Replacing Single Spool Clevis	each	
20	Replacing Three Spool Clevis	each	
21	Replacing Four Spool Clevis	each	
22	Replacing Hot Line/Bail Clamps	each	
23	Replacing Preform Wrap	each	
24	Replacing Lightening Arrestor	each	
25	Replacing earth conductor (primary)	each	
26	Replacing earth conductor (secondary)	each	
27	Replacing earth electrode	each	
28	Replacing PMCO	each	
29	Installing line spacer	each	
Sub Total			
Table 4: Replacing, removal of poles and dismantling of "H" structures			
Item	**Description**	**Unit**	
1	Replacing 30' Pole	each	
2	Replacing 36' Pole	each	
3	Replacing 40' Pole	each	
4	Replacing 45' Pole	each	
5	Replacing 50' Pole	each	
6	Replacing 55' Pole	each	
7	Removal 30' Pole	each	
8	Removal 36' Pole	each	
9	Removal 40' Pole	each	
10	Removal 45' Pole	each	
11	Removal 50' Pole	each	
12	Removal 55' Pole	each	
13	Dismantling “H” Structure	each	
14	Replacing "H" Structure	each	
15	Replacing Plank ("H" Structure)	each	
16	Replacing Runner ("H" Structure)	each	
17	Plumbing pole	each	
18	Stubbing pole	each	
19	Treating pole	each	
20	Replacing anchor block	each	
21	Replacing Helical anchor	each	
Sub Total			

Table 5: Primary line hardware transfers			
Item	**Description**	**Unit**	
1	Line Hardware Transfer (Cluster Transformer Bank) 10 to 15KVA	each	
2	Line Hardware Transfer (Cluster Transformer Bank) 25 to 75KVA	each	
3	Line Hardware Transfer (Transformer “H” Structure)	each	
4	Line Hardware Transfer (Single Transformer Bank) 10 to 25KVA	each	
5	Line Hardware Transfer (Single Transformer Bank) 50 to 75KVA	each	
6	Line Hardware Transfer (Single Transformer Bank) 100 to 167KVA	each	
7	Line Hardware Transfer (Capacitor Bank)	each	
8	Line Hardware Transfer (Voltage Regulator)	each	
9	Line Hardware Transfer (RCO Structure)	set	
10	Line Hardware Transfer (SPD Structure)	set	
11	Line Hardware Transfer (GAB Structure)	set	
Sub Total			
Table 6: Primary line hardware transfers - two wire			
Item	**Description**	**Unit**	
1	Line Hardware Transfer (Intermediate)	each	
2	Line Hardware Transfer (Branch Pole)	each	
3	Line Hardware Transfer (Heavy Angle)	each	
4	Line Hardware Transfer (Light Angle)	each	
5	Line Hardware Transfer (Double Dead End Pole)	each	
6	Line Hardware Transfer (Dead End Pole)	each	
Sub Total			
Table 7: Primary line hardware transfers - three wire			
Item	**Description**	**Unit**	
1	Line Hardware Transfer (Intermediate)	each	
2	Line Hardware Transfer (Branch Pole)	each	
3	Line Hardware Transfer (Heavy Angle)	each	
4	Line Hardware Transfer (Light Angle)	each	
5	Line Hardware Transfer (Double Dead End Pole)	each	
6	Line Hardware Transfer (Dead End Pole)	each	
Sub Total			
Table 8: Secondary line hardware transfers - two wire			
Item	**Description**	**Unit**	
1	Line Hardware Transfer (Intermediate)	each	
2	Line Hardware Transfer (Branch Pole)	each	
3	Line Hardware Transfer (Heavy Angle)	each	
4	Line Hardware Transfer (Light Angle)	each	
5	Line Hardware Transfer (Double Dead End Pole)	each	
6	Line Hardware Transfer (Dead End Pole)	each	
Sub Total			

Table 9: Secondary line hardware transfers - three wire			
Item	**Description**	**Unit**	
1	Line Hardware Transfer (Intermediate)	each	
2	Line Hardware Transfer (Branch Pole)	each	
3	Line Hardware Transfer (Heavy Angle)	each	
4	Line Hardware Transfer (Light Angle)	each	
5	Line Hardware Transfer (Double Dead End Pole)	each	
6	Line Hardware Transfer (Dead End Pole)	each	
Sub Total			
Table 10: Secondary line hardware transfers - four wire			
Item	**Description**	**Unit**	
1	Line Hardware Transfer (Intermediate)	each	
2	Line Hardware Transfer (Branch Pole)	each	
3	Line Hardware Transfer (Heavy Angle)	each	
4	Line Hardware Transfer (Light Angle)	each	
5	Line Hardware Transfer (Double Dead End Pole)	each	
6	Line Hardware Transfer (Dead End Pole)	each	
Sub Total			
Table 11: Secondary line hardware transfers - lepas			
Item	**Description**	**Unit**	
1	Line Hardware Transfer (Intermediate)	each	
2	Line Hardware Transfer (Branch Pole)	each	
3	Line Hardware Transfer (Heavy Angle)	each	
4	Line Hardware Transfer (Light Angle)	each	
5	Line Hardware Transfer (Double Dead End Pole)	each	
6	Line Hardware Transfer (Dead End Pole)	each	
Sub Total			
Table 12: Secondary line hardware transfers - Gammarus/solaster/shrimp /lobster			
Item	**Description**	**Unit**	
1	Line Hardware Transfer (Intermediate)	each	
2	Line Hardware Transfer (Branch Pole)	each	
3	Line Hardware Transfer (Heavy Angle)	each	
4	Line Hardware Transfer (Light Angle)	each	
5	Line Hardware Transfer (Double Dead End Pole)	each	
6	Line Hardware Transfer (Dead End Pole)	each	
Sub Total			
Table 13: Servicing/crimping of connections			
Item	**Description**	**Unit**	
1	Servicing/Crimping of GAB/SPD	each	
2	Servicing of RCO	each	

3	Servicing of Jumper (primary)	each	
4	Servicing of Jumper (secondary)	each	
5	Servicing/Crimping of Transformers/Regulators Drops & Connections	each	
6	Servicing/Crimping Mid Span Connections	each	
Sub Total			
Table 14: Earthing and guying			
Item	**Description**	**Unit**	
1	Installing Earth Set	each	
2	Installing Down Guy	each	
3	Installing Fly Guy	each	
4	Installing Over Head Guy Set	each	
5	Installing Strut	each	
6	Installing Helical Anchor-Screw Arrangement	each	
7	Installing Anchor Block –Buried Arrangement	each	
Sub Total			
Table 15: Mobilization charges			
Item	**Description**	**Unit**	
1	Mobilization	/job	
Table 16: Minor/Major emergencies-Fix charges			
Item	**Description**		
1	Transportation cost	/hr	
2	Transportation cost	/mile	
3	Labour cost	/hr	
Sub Total			
Note: Team shall comprise of three (3) Technicians			
Table 17: Minor/Major emergencies			
Item	**Fault category**	**Unit**	
1	Faulty connection	each	
2	Secondary mains fault	mts	
3	Service line fault	mts	
4	Structural defects: erecting pole or stub	each	
4a	Structural defects: plumbing pole	each	
5	Encumbrances: utilising standard hand tools	each	
5a	Encumbrances: utilising power tools	each	
5b	Encumbrances: utilising bucket truck	each	
6	Transient transformer fault: installing fuse	each	
6a	Transient transformer fault: replacing jumper	each	
6b	Transient transformer fault: replacing bushing	each	
7	Fire calls: Isolate feeder (GAB)	each	
7a	Fire calls: Isolate feeder/Spur (SPD)	set	

7b	Fire calls: Isolate spur (RCO)	set	
7c	Fire calls: Isolate transformer (RCO)	set	

7d	Fire calls: Isolate service line	each	
8	Voltage complaint	each	
9	Meter defect	each	
10	Attended	each	
Sub Total			
Overall Total			

Lot 2: Network Maintenance Services			
Costing Schedule			
Item No.	**Description**	**UOM**	**Cost**
TABLE 1: NETWORK ISOLATION			
1	Activation of RCO -	Set	
2	Activation of GAB-	Each	
3	Activation of SPD	Set	
Total			
TABLE 2: NETWORK COMPONENT REPLACEMENT/REMOVAL			
1	Replacing SPD-	Each	
2	Replacing RCO	Each	
3	Replacing GAB	Each	
4	Replacing Insulator & Pin	Each	
5	Replacing Suspension Insulator	Each	
6	Replacing Cross Arm	Each	
7	Replacing Burnt Jumper.	Each	
8	Replacing 10 or 15 KVA Transformer	Each	
9	Replacing 25 or 50 KVA Transformer	Each	
10	Replacing 75 or 100 KVA Transformer	Each	
11	Replacing 167 KVA Transformer	Each	
12	Replacing Voltage Regulator	Each	
13	Replacing Capacitor Bank	Each	
14	Replacing Fuse Holder	Each	
15	Replacing Fuse Link	Each	

16	Replacing Insulator, Spool	Each	
17	Replacing Pole Top/Crossarm Pin	Each	
18	Replacing Crossarm Brace	Each	
19	Replacing Insulator Tie	Each	
20	Replacing Single Spool Clevis	Each	
21	Replacing Three Spool Rack	Each	
22	Replacing Four Spool Rack	Each	
23	Replacing Hot Line/Bail Clamps	Each	
24	Replacing Preform Wrap	Each	
25	Replacing Lightening Arrestor	Each	
26	Replacing Down Guy	Each	
27	Replacing Fly Guy	Each	
28	Replacing Alley Arm Guy	Each	
Total			
TABLE 3: PLANTING & REMOVAL OF POLES, DISMANTLING OF "H" STRUCTURES			
1	Planting of 30' Pole	Each	
2	Planting of 36' Pole	Each	
3	Planting of 40' Pole	Each	
4	Planting of 45' Pole	Each	
5	Planting of 50' Pole	Each	
6	Planting of 55' Pole	Each	
7	Removal 30' Pole	Each	
8	Removal 36' Pole	Each	
9	Removal 40' Pole	Each	
10	Removal 45' Pole	Each	
11	Removal 50' Pole	Each	
12	Removal 55' Pole	Each	

13	Replacing "H" Structure	Each	
14	Dismantling Plank ("H" Structure)	Each	
15	Replacing Plank ("H" Structure)	Each	
16	Replacing Runner ("H" Structure)	Each	
Total			
TABLE 4: PRIMARY LINE HARDWARE TRANSFERS			
1	Line Hardware Transfer (Cluster Transformer Bank) 10 to 15 KVA	Each	
2	Line Hardware Transfer (Cluster Transformer Bank) 25 to 50KVA	Each	
3	Line Hardware Transfer (Transformer "H" Structure)	Each	
4	Line Hardware Transfer (Single Transformer Bank) 10 to 25 KVA	Each	
5	Line Hardware Transfer (Single Transformer Bank) 50 to 75 KVA	Each	
6	Line Hardware Transfer (Single Transformer Bank) 100 to 167KVA	Each	
7	Line Hardware Transfer (Capacitor Bank)	Each	
8	Line Hardware Transfer (Voltage Regulator)	Each	
9	Line Hardware Transfer (RCO Structure)	Set	
10	Line Hardware Transfer (SPD Structure)	Set	
11	Line Hardware Transfer (GAB Structure)	Each	
Total			
TABLE 5: PRIMARY LINE HARDWARE TRANSFERS-Two wire.			
1	Line Hardware Transfer (Intermediate)	Each	
2	Line Hardware Transfer (Branch Pole)	Each	
3	Line Hardware Transfer (Heavy Angle)	Each	
4	Line Hardware Transfer (Light Angle)	Each	
5	Line Hardware Transfer (Double Dead End Pole)	Each	
6	Line Hardware Transfer (Dead End Pole)	Each	
Total			

TABLE 6: PRIMARY LINE HARDWARE TRANSFERS-Three wire.			
1	Line Hardware Transfer (Intermediate)	Each	
2	Line Hardware Transfer (Branch Pole)	Each	
3	Line Hardware Transfer (Heavy Angle)	Each	
4	Line Hardware Transfer (Light Angle)	Each	
5	Line Hardware Transfer (Double Dead End Pole)	Each	
6	Line Hardware Transfer (Dead End Pole)	Each	
Total			
TABLE 7: SECONDARY LINE HARDWARE TRANSFERS-Two wire.			
1	Line Hardware Transfer (Intermediate)	Each	
2	Line Hardware Transfer (Branch Pole)	Each	
3	Line Hardware Transfer (Heavy Angle)	Each	
4	Line Hardware Transfer (Light Angle)	Each	
5	Line Hardware Transfer (Double Dead End Pole)	Each	
6	Line Hardware Transfer (Dead End Pole)	Each	
Total			
TABLE 8: SECONDARY LINE HARDWARE TRANSFERS - Three wire.			
1	Line Hardware Transfer (Intermediate)	Each	
2	Line Hardware Transfer (Branch Pole)	Each	
3	Line Hardware Transfer (Heavy Angle)	Each	
4	Line Hardware Transfer (Light Angle)	Each	
5	Line Hardware Transfer (Double Dead End Pole)	Each	
6	Line Hardware Transfer (Dead End Pole)	Each	
Total			
TABLE 9: SECONDARY LINE HARDWARE TRANSFERS - Four wire.			
1	Line Hardware Transfer (Intermediate)	Each	
2	Line Hardware Transfer (Branch Pole)	Each	

3	Line Hardware Transfer (Heavy Angle)	Each	
4	Line Hardware Transfer (Light Angle)	Each	
5	Line Hardware Transfer (Double Dead End Pole)	Each	
6	Line Hardware Transfer (Dead End Pole)	Each	
Total			
TABLE 10: SECONDARY LINE HARDWARE TRANSFERS - LEPAS.			
1	Line Hardware Transfer (Intermediate)	Each	
2	Line Hardware Transfer (Branch Pole)	Each	
3	Line Hardware Transfer (Heavy Angle)	Each	
4	Line Hardware Transfer (Light Angle)	Each	
5	Line Hardware Transfer (Double Dead End Pole)	Each	
6	Line Hardware Transfer (Dead End Pole)	Each	
Total			
TABLE 11: SECONDARY LINE HARDWARE TRANSFERS - Gammarus/Solaster/Shrimp/Lobster			
1	Line Hardware Transfer (Intermediate)	Each	
2	Line Hardware Transfer (Branch Pole)	Each	
3	Line Hardware Transfer (Heavy Angle)	Each	
4	Line Hardware Transfer (Light Angle)	Each	
5	Line Hardware Transfer (Double Dead End Pole)	Each	
6	Line Hardware Transfer (Dead End Pole)	Each	
Total			
TABLE 12: SERVICING/CRIMPING OF CONNECTIONS			
1	Servicing GAB	Each	
2	Servicing SPD	Set	
3	Servicing RCO	Set	
4	Servicing Jumper on GAB/SPD	Each	
5	Servicing Jumper on RCO	Each	

6	Servicing/Crimping of Regulator Connections	Each	
7	Servicing/Crimping of Transformer HV Connection	Each	
8	Servicing/Crimping of Transformer LV Connection	Each	
9	Servicing/Crimping Mid Span Connection (1/0 to 4/0)	Each	
10	Servicing/Crimping Mid Span Connection (266 to 336.4 MCM)	Each	
11	Servicing/Crimping Service Connections	Each	
12	Servicing/Crimping of Jumper (1/0 to 4/0)	Each	
13	Servicing/Crimping of Jumper (266.8 to 336.4 MCM)	Each	
Total			
TABLE 13: TECHNICAL LOSS REDUCTION			
1	Service Line Replacement/Upgrade	meter	
2	Conductor Upgrade: Aphis to Poppy	meter	
3	Conductor Upgrade: Aphis/Poppy to Oxlip	meter	
4	Conductor Upgrade: Oxlip to Tulip	meter	
5	Conductor Upgrade: Aphis/Poppy to Lepas	meter	
6	Conductor Upgrade: Service Wire to Gamerrus	meter	
7	Conductor Upgrade: Service Wire to Lepas	meter	
8	Jumper Replacement/ Upgrade: 1/0 to 4/0	Each	
9	Jumper Replacement/ Upgrade: 266.8 to 477 MCM	Each	
10	Installation of Insulink/Connector on Services	Each	
Total			
TABLE 14: EARTHING AND GUYING			
1	Installing Earth Set	Each	
2	Installing Guy Set	Each	
3	Installing Fly Guy	Each	
4	Installing Strut	Each	
5	Installing Helical Anchor	Each	

Total			
TABLE 15: FIX CHARGES.			
1	Transportation Cost between 2 to 12 miles	Sum	
2	Transportation Cost between 12 to 32 miles	Sum	
3	Transportation Cost between 32 to 52 miles	Sum	
4	Transportation Cost over 52 miles	Sum	
5	Mobilization (Projects, Emergencies)	Sum	
Total			

Lot 3: Network Construction Services			
Costing Schedule			
Item No.	**Description**	**Unit**	**Unit Cost**
TABLE 1: NETWORK COMPONENT INSTALLATION			
1	Installation of SPD - Structure	Each	
2	Installation of RCO - structure	Each	
3	Installation of GAB	Each	
4	Installation of Insulator & Pin	Each	
5	Installation of Suspension Insulator	Each	
6	Installation of Cross Arm	Each	
7	Installation of concrete Cross Arm - concrete pole		
8	Installation of Jumper.	Each	
9	Installation of 10 or 15 KVA Transformer	Each	
10	Installation of 25 or 50 KVA Transformer	Each	
11	Installation of 75 or 100 KVA Transformer	Each	
12	Installation of 167 KVA Transformer	Each	
13	Installation of Voltage Regulator	Each	
14	Installation of Capacitor Bank	Each	
15	Installation of Fuse Holder	Each	
16	Installation of Fuse Link	Each	
17	Installation of Insulator, Spool	Each	
18	Installation of Pole Top/Crossarm Pin	Each	
19	Installation of Crossarm Brace	Each	
20	Installation of Insulator Tie	Each	
21	Installation of Single Spool Clevis	Each	
22	Installation of Three Spool Rack	Each	
23	Installation of Four Spool Rack	Each	
24	Installation of Hot Line/Bail Clamps	Each	
25	Installation of Preform Wrap	Each	
26	Installation of Lightening Arrestor	Each	
27	Installation of Down Guy	Each	
28	Installation of Fly Guy	Each	

29	Installation of Alley Arm Guy Set	Each	
30	Installation of connectors	Each	
31	Installation of Lamp	Each	
32	Installation of Hot Line Clamp	Each	
33	Installation of Concrete Cross Arm	Each	
34	Installation of Meters (should varies according to form number)	Each	
35	Shifting of poles	Each	
36	Installation of complete Earth Set	Each	
Total			
TABLE 2: PLANTING OF POLES &"H" STRUCTURES CONSTRUCTION etc			
1	Planting of 30' Pole	Each	
2	Planting of 36' Pole	Each	
3	Planting of 40’ Pole	Each	
4	Planting of 45’ Pole	Each	
5	Planting of 50’ Pole	Each	
6	Planting of 55’ Pole	Each	
7	Construction of "H" Structure	Each	
8	Installation of Plank ("H" Structure)	Each	
9	Installation of Runner ("H" Structure)	Each	
10	Installation of stub complete	Each	
11	Installation of strut complete	Each	
12	Installation of street lamp	Each	
13	Installation of Earth Set	Each	
14	Installation of Temporary Earth Set	Each	
Total			
TABLE 3: PRIMARY NETWORK CONSTRUCTION			
1	Construction of 10 KVA & 15 KVA Transformer Structure	Each	
2	Construction of 25 KVA & 50 KVA Transformer Structure	Each	
3	Construction of 75 KVA & 100 KVA Transformer Structure	Each	
4	Construction of 167 KVA Transformer Structure	Each	
5	Construction of Cluster bank Transformer Structure - 3x10 kva & 3x15kva	Each	
6	Construction of Cluster bank Transformer Structure - 3x25 kva	Each	
7	Construction of Cluster bank Transformer Structure - 3x50kva	Each	
8	Construction of 3 wire Primary intermediate Pole Structure	Each	
9	Construction of 3 wire Primary end Pole Structure	Each	
10	Construction of 3 wire Primary branch Pole Structure	Each	
11	Construction of 3 wire Primary double end Pole Structure	Each	
12	Construction of 3 wire Primary Tee Pole Structure	Each	
13	Construction of 2 wire Primary intermediate Pole Structure	Each	
14	Construction of 2 wire Primary end Pole Structure	Each	
15	Construction of 2 wire Primary branch Pole Structure	Each	
16	Construction of 2 wire Primary double end Pole Structure	Each	
17	Construction of 2 wire Primary Tee Pole Structure	Each	

Total			
TABLE 4: SECONDARY NETWORK CONSTRUCTION			
1	Construction of Secondary intermediate Pole Structure-Lepas	Each	
2	Construction of Secondary end Pole Structure- Lepas	Each	
3	Construction of Secondary branch Pole Structure- Lepas	Each	
	Construction of Secondary Double Dead End Pole Structure- Lepas	Each	
4	Construction of Secondary intermediate Pole Structure-3 wire	Each	
5	Construction of Secondary Branch Pole Structure- 3 wire	Each	
6	Construction of Secondary Heavy Angle Pole- Structure- 3 wire	Each	
7	Construction of Secondary Light Angle Pole Structure- 3 wire	Each	
8	Construction of Secondary Double Dead End Pole Structure- 3 wire	Each	
9	Construction of Secondary Dead End Pole Structure- 3 wire	Each	
10	Construction of Secondary intermediate Pole Structure-2 wire	Each	
11	Construction of Secondary Branch Pole Structure-2 wire	Each	
12	Construction of Secondary Heavy Angle Pole- Structure-2 wire	Each	
13	Construction of Secondary Light Angle Pole Structure-2 wire	Each	
14	Construction of Secondary Double Dead End Pole Structure-2 wire	Each	
15	Construction of Secondary Dead End Pole Structure-2 wire	Each	
16	Construction of Secondary intermediate Pole Structure-4 wire	Each	
17	Construction of Secondary Branch Pole Structure-4 wire	Each	
18	Construction of Secondary Heavy Angle Pole- Structure-4 wire	Each	
19	Construction of Secondary Light Angle Pole Structure-4 wire	Each	
20	Construction of Secondary Double Dead End Pole Structure-4 wire	Each	
21	Construction of Secondary Dead End Pole Structure-4 wire	Each	
Total			
TABLE 5: STRINGING AND TENSIONING OF CONDUCTOR			
1	Stringing and tensioning of aluminium conductor - Tulip	meter	
2	Stringing and tensioning of aluminium conductor - Oxlip	meter	
3	Stringing and tensioning of aluminium conductor - Poppy	meter	
4	Stringing and tensioning of conductor - Triplex- Service	meter	
5	Stringing and tensioning of conductor - Triplex -Lepas	meter	
6	Stringing and tensioning of conductor - Duplex Service	meter	
7	Stringing and tensioning of conductor - Gammarus Service	meter	
8	Stringing and tensioning of conductor - Quadruplex Service	meter	
9	Stringing and tensioning of conductor - Lobster	meter	

10	Stringing and tensioning of conductor - Cosmos	meter	
Total			
TABLE 6: SECONDARY LINE HARDWARE TRANSFERS – Three wire.			
1	Line Hardware Transfer (Intermediate)	Each	
2	Line Hardware Transfer (Branch Pole)	Each	
3	Line Hardware Transfer (Heavy Angle)	Each	
4	Line Hardware Transfer (Light Angle)	Each	
5	Line Hardware Transfer (Double Dead End Pole)	Each	
6	Line Hardware Transfer (Dead End Pole)	Each	
Total			
TABLE 7: SECONDARY LINE HARDWARE TRANSFERS – Four wire.			
1	Line Hardware Transfer (Intermediate)	Each	
2	Line Hardware Transfer (Branch Pole)	Each	
3	Line Hardware Transfer (Heavy Angle)	Each	
4	Line Hardware Transfer (Light Angle)	Each	
5	Line Hardware Transfer (Double Dead End Pole)	Each	
6	Line Hardware Transfer (Dead End Pole)	Each	
Total			
TABLE 8: FIX CHARGES.			
1	Transportation Cost of materials ***excluding pole*** -- between 2 to 12 miles	Lump Sum	
2	Transportation Cost of materials ***excluding pole*** -- between 12 to 32 miles	Lump Sum	
3	Transportation Cost of materials ***excluding pole***-- between 32 to 52 miles	Lump Sum	
4	Transportation Cost of materials ***excluding pole***-- over 52 miles	Lump Sum	
5	Transportation Cost of ***pole*** -- between 2 to 12 miles	Lump Sum	
6	Transportation Cost of ***pole*** -- between 12 to 32 miles	Lump Sum	
7	Transportation Cost of ***pole***-- between 32 to 52 miles	Lump Sum	
8	Transportation Cost of ***pole***-- over 52 miles	Lump Sum	
10	Mobilization (based on scope and nature of work)	Lump Sum	
Total			

Appendix VII: Team Composition

Lot	Number of Members per team (inclusive of leader)	Composition
1	3	Team leader, 2 technicians
2	7	Supervisor , Team leader, 5 Technicians (Tech I to IV)
3		

Appendix VIII: Team Member Declaration Schedule

LOT #:

No	Designation	Name	Qualification		Years Experience	
			Course/Certificate	Year	Place of Employ-Designation	Year
1	Supervisor					
2	Team Leader					
3	Technician I					
4	Technician II					
5	Technician III					
6	Technician IV					
7						
8						
9						
10						
11						