

I. PROJECT IDENTIFICATION

I.1. Program:

I. GTG - Growing the Grid

I.2. Initiative:

GTG.1 Monrovia Corridors Electrification

I.3. Project Name:

GTG.1.1.1 Monrovia Corridors West Extension - Phase 1

I.4. Project ID:

GTG.1.1.1

I.5 Regions:

| Region 3 | Region 4 |

II. PROJECT DESCRIPTION

II.1. Description:

First stage implementation of the Monrovia West Corridor high voltage network - Construction of Virginia and Kle Substations and 66kV power lines. Medium voltage extension from Kle to Tubmanburg, Robertsport and Bo Waterside. Tubmanburg, Robertsport, Brewerville City among other rural communities first phase electrification.

II.2. Phase:

Phase 1 - 2015-2020

II.3. Precedent Projects:

None

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

1 Year

III.2. Construction duration:

2 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 1 Settlements</i>	<i>Region 3 - 15860 Habitants</i>
<i>Region 4 - 34 Settlements</i>	<i>Region 4 - 10706 Habitants</i>
<i>Total: 35 Settlements</i>	<i>Total: 26566 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

12 620.8

V.2. Peak Demand (MW):

3.3

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

0.00

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

5 385

Distribution and Connection Cost:

\$US 4 021 067

VII.2. Medium Voltage extension line:

Lenght (m):

178 560

Total Line Cost:

\$US 6 414 050

VII.3. High Voltage line:

Lenght (m):

40

Total Line Cost:

\$US 3 490 737

VII.4. High Voltage Substations Intervened:

Number:

2

Total HV Substations Cost:

\$US 5 200 000

VII.5. Generation

Total Installed Capacity (MW)

0.000

Generation Cost:

\$US 0

VII.6. Total Costs:

\$US 19 125 853

I. PROJECT IDENTIFICATION

I.1. Program:

I. GTG - Growing the Grid

I.2. Initiative:

GTG.1 Monrovia Corridors Electrification

I.3. Project Name:

GTG.1.1.2 Monrovia Corridors West Extension - Phase 2

I.4. Project ID:

GTG.1.1.2

I.5 Regions:

| Region 3 | Region 4 |

II. PROJECT DESCRIPTION

II.1. Description:

Second stage implementation of the Monrovia West Corridor high voltage network - Reinforcement of Virginia and Kle Substations and 66kV power lines. Implementation of Tubmanburg Substation and 66kV to connect to Kle Substation. Tubmanburg, Robertsport, Brewerville City, Bopulu and other rural communities electrification extension.

II.2. Phase:

Phase 2 - 2020-2025

II.3. Precedent Projects:

GTG.1.1.1

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

1 Year

III.2. Construction duration:

1 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 1 Settlements</i>	<i>Region 3 - 13328 Habitants</i>
<i>Region 4 - 35 Settlements</i>	<i>Region 4 - 10991 Habitants</i>
<i>Total: 36 Settlements</i>	<i>Total: 24319 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

11 638.1

V.2. Peak Demand (MW):

3.2

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

0.00

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

4 895

Distribution and Connection Cost:

\$US 3 686 995

VII.2. Medium Voltage extension line:

Lenght (m):

5 538

Total Line Cost:

\$US 157 162

VII.3. High Voltage line:

Lenght (m):

59

Total Line Cost:

\$US 4 890 730

VII.4. High Voltage Substations Intervened:

Number:

3

Total HV Substations Cost:

\$US 2 800 000

VII.5. Generation

Total Installed Capacity (MW)

0.000

Generation Cost:

\$US 0

VII.6. Total Costs:

\$US 11 534 887

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.1 Monrovia Corridors Electrification</i>
I.3. Project Name: <i>GTG.1.1.3 Monrovia Corridors West Extension - Phase 3</i>	I.4. Project ID: <i>GTG.1.1.3</i>
I.5 Regions: <i> Region 3 Region 4 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Tubmanburg, Robertsport, Brewerville City, Bopulu and other rural communities electrification extension.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>GTG.1.1.2</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 1 Settlements</i>	<i>Region 3 - 14317 Habitants</i>
<i>Region 4 - 35 Settlements</i>	<i>Region 4 - 16654 Habitants</i>
<i>Total: 36 Settlements</i>	<i>Total: 30971 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>16 418.4</i>	V.2. Peak Demand (MW): <i>4.6</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>6 162</i>	Distribution and Connection Cost: <i>\$US 4 970 128</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>299</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 4 970 128</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.1 Monrovia Corridors Electrification</i>
I.3. Project Name: <i>GTG.1.2.1 Monrovia West Corridor rural grid extension - Phase 1</i>	I.4. Project ID: <i>GTG.1.2.1</i>
I.5 Regions: <i> Region 3 Region 4 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage of the Rural grid extension from the Monrovia West Corridor</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>GTG.1.1.2</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 41 Settlements</i>	<i>Region 3 - 13994 Habitants</i>
<i>Region 4 - 33 Settlements</i>	<i>Region 4 - 4800 Habitants</i>
<i>Total: 74 Settlements</i>	<i>Total: 18794 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>7 221.6</i>	V.2. Peak Demand (MW): <i>1.8</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>3 586</i>	Distribution and Connection Cost: <i>\$US 3 363 950</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>105 923</i>	Total Line Cost: <i>\$US 3 725 235</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 7 089 185</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.1 Monrovia Corridors Electrification</i>
I.3. Project Name: <i>GTG.1.2.2 Monrovia West Corridor rural grid extension - Phase 2</i>	I.4. Project ID: <i>GTG.1.2.2</i>
I.5 Regions: <i> Region 3 Region 4 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage of the Rural grid extension from the Monrovia West Corridor</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>GTG.1.1.2</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 46 Settlements</i>	<i>Region 3 - 16274 Habitants</i>
<i>Region 4 - 128 Settlements</i>	<i>Region 4 - 17789 Habitants</i>
<i>Total: 174 Settlements</i>	<i>Total: 34063 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>10 660.7</i>	V.2. Peak Demand (MW): <i>2.8</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>6 460</i>	Distribution and Connection Cost: <i>\$US 6 336 158</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>101 907</i>	Total Line Cost: <i>\$US 3 678 851</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 10 015 009</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.1 Monrovia Corridors Electrification</i>
I.3. Project Name: <i>GTG.1.3.1 Monrovia Corridors North Extension - Phase 1</i>	I.4. Project ID: <i>GTG.1.3.1</i>
I.5 Regions: <i> Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage implementation of the Monrovia North Corridor high voltage network - Construction of Kakata Substation and 66kV power lines. MV line extension Kakata-Salala-Totota. Kakata City first phase electrification.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 1 Settlements</i>	<i>Region 3 - 17698 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 1 Settlements</i>	<i>Total: 17698 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>8 047.1</i>	V.2. Peak Demand (MW): <i>2.1</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>3 612</i>	Distribution and Connection Cost: <i>\$US 2 451 928</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>51</i>	Total Line Cost: <i>\$US 4 072 409</i>
VII.4. High Voltage Substations Intervened: Number: <i>1</i>	Total HV Substations Cost: <i>\$US 2 800 000</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 9 324 337</i>	

I. PROJECT IDENTIFICATION

I.1. Program:

I. GTG - Growing the Grid

I.2. Initiative:

GTG.1 Monrovia Corridors Electrification

I.3. Project Name:

GTG.1.3.2 Monrovia Corridors North Extension - Phase 2

I.4. Project ID:

GTG.1.3.2

I.5 Regions:

| Region 3 |

II. PROJECT DESCRIPTION

II.1. Description:

Second stage implementation of the Monrovia North Corridor high voltage network - Reinforcement of Kakata Substation and 66kV power lines. Construction of the 66kV line to connect Kakata and RIA Substations. Kakata City electrification extension.

II.2. Phase:

Phase 2 - 2020-2025

II.3. Precedent Projects:

GTG.1.3.1

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

1 Year

III.2. Construction duration:

1 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 1 Settlements</i>	<i>Region 3 - 14872 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 1 Settlements</i>	<i>Total: 14872 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

7 555.3

V.2. Peak Demand (MW):

2.0

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

0.00

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

3 036

Distribution and Connection Cost:

\$US 2 103 338

VII.2. Medium Voltage extension line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Lenght (m):

88

Total Line Cost:

\$US 7 166 066

VII.4. High Voltage Substations Intervened:

Number:

1

Total HV Substations Cost:

\$US 200 000

VII.5. Generation

Total Installed Capacity (MW)

0.000

Generation Cost:

\$US 0

VII.6. Total Costs:

\$US 9 469 404

I. PROJECT IDENTIFICATION

I.1. Program:

I. GTG - Growing the Grid

I.2. Initiative:

GTG.1 Monrovia Corridors Electrification

I.3. Project Name:

GTG.1.3.3 Monrovia Corridors North Extension - Phase 3

I.4. Project ID:

GTG.1.3.3

I.5 Regions:

| Region 3 |

II. PROJECT DESCRIPTION

II.1. Description:

Third stage implementation of the Monrovia North Corridor high voltage network - Construction of Bong Mines Substation and 66kV power lines. Kakata City electrification extension.

II.2. Phase:

Phase 3 - 2025-2030

II.3. Precedent Projects:

GTG.1.3.2

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

1 Year

III.2. Construction duration:

1 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 1 Settlements</i>	<i>Region 3 - 15977 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 1 Settlements</i>	<i>Total: 15977 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

8 975.3

V.2. Peak Demand (MW):

2.5

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

0.00

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

3 260

Distribution and Connection Cost:

\$US 2 302 388

VII.2. Medium Voltage extension line:

Lenght (m):

12 212

Total Line Cost:

\$US 440 837

VII.3. High Voltage line:

Lenght (m):

37

Total Line Cost:

\$US 4 740 623

VII.4. High Voltage Substations Intervened:

Number:

1

Total HV Substations Cost:

\$US 2 600 000

VII.5. Generation

Total Installed Capacity (MW)

0.000

Generation Cost:

\$US 0

VII.6. Total Costs:

\$US 10 083 848

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.1 Monrovia Corridors Electrification</i>
I.3. Project Name: <i>GTG.1.4.1 Monrovia North Corridor rural grid extension - Phase 1</i>	I.4. Project ID: <i>GTG.1.4.1</i>
I.5 Regions: <i> Region 2 Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage of the Rural grid extension from the Monrovia North Corridor. Includes Bensonville, Totota and Salala settlements electrification</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>GTG.1.3.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 24 Settlements</i>	<i>Region 2 - 4133 Habitants</i>
<i>Region 3 - 30 Settlements</i>	<i>Region 3 - 10131 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 54 Settlements</i>	<i>Total: 14264 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>6 468.5</i>	V.2. Peak Demand (MW): <i>1.7</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>2 850</i>	Distribution and Connection Cost: <i>\$US 2 381 392</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>120 286</i>	Total Line Cost: <i>\$US 4 182 752</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 6 564 144</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.1 Monrovia Corridors Electrification</i>
I.3. Project Name: <i>GTG.1.4.2 Monrovia North Corridor rural grid extension - Phase 2</i>	I.4. Project ID: <i>GTG.1.4.2</i>
I.5 Regions: <i> Region 2 Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage of the Rural grid extension from the Monrovia North Corridor. Includes Bensonville, Totota, Salala, Bong Mines, Careysburg and Suacoco electrification</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>GTG.1.4.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>2 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 187 Settlements</i>	<i>Region 2 - 22146 Habitants</i>
<i>Region 3 - 308 Settlements</i>	<i>Region 3 - 26987 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 495 Settlements</i>	<i>Total: 49133 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>12 674.3</i>	V.2. Peak Demand (MW): <i>3.3</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>9 744</i>	Distribution and Connection Cost: <i>\$US 10 836 388</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>257 571</i>	Total Line Cost: <i>\$US 9 157 700</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 19 994 088</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.1 Monrovia Corridors Electrification</i>
I.3. Project Name: <i>GTG.1.4.3 Monrovia North Corridor rural grid extension - Phase 3</i>	I.4. Project ID: <i>GTG.1.4.3</i>
I.5 Regions: <i> Region 2 Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Third stage of the Rural grid extension from the Monrovia North Corridor. Includes Bensonville, Totota, Salala, Bong Mines, Careysburg and Suacoco electrification extension.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>GTG.1.4.3</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 187 Settlements</i>	<i>Region 2 - 22551 Habitants</i>
<i>Region 3 - 308 Settlements</i>	<i>Region 3 - 29404 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 495 Settlements</i>	<i>Total: 51955 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>18 764.7</i>	V.2. Peak Demand (MW): <i>5.2</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>10 004</i>	Distribution and Connection Cost: <i>\$US 9 038 222</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 9 038 222</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.1 Monrovia Corridors Electrification</i>
I.3. Project Name: <i>GTG.1.5.1 Monrovia Corridors East Extension - Phase 1</i>	I.4. Project ID: <i>GTG.1.5.1</i>
I.5 Regions: <i> Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage implementation of the Monrovia East Corridor high voltage network - Construction of RIA and Schefflien Substations and 66kV power lines. Harbel and Cotton Tree first phase electrification.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 3 Settlements</i>	<i>Region 3 - 25243 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 3 Settlements</i>	<i>Total: 25243 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>12 706.8</i>	V.2. Peak Demand (MW): <i>3.4</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>5 154</i>	Distribution and Connection Cost: <i>\$US 3 566 600</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>32 585</i>	Total Line Cost: <i>\$US 1 176 326</i>
VII.3. High Voltage line: Lenght (m): <i>39</i>	Total Line Cost: <i>\$US 3 107 204</i>
VII.4. High Voltage Substations Intervened: Number: <i>2</i>	Total HV Substations Cost: <i>\$US 5 200 000</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 13 050 130</i>	

I. PROJECT IDENTIFICATION

I.1. Program:

I. GTG - Growing the Grid

I.2. Initiative:

GTG.1 Monrovia Corridors Electrification

I.3. Project Name:

GTG.1.5.2 Monrovia Corridors East Extension - Phase 2

I.4. Project ID:

GTG.1.5.2

I.5 Regions:

| Region 3 |

II. PROJECT DESCRIPTION

II.1. Description:

Second stage implementation of the Monrovia East Corridor high voltage network - Reinforcement of RIA and Schefflien Substations and 66kV power lines. Harbel and Cotton Tree electrification extension.

II.2. Phase:

Phase 2 - 2020-2025

II.3. Precedent Projects:

GTG.1.5.1

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

1 Year

III.2. Construction duration:

1 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 3 Settlements</i>	<i>Region 3 - 21221 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 3 Settlements</i>	<i>Total: 21221 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

12 107.0

V.2. Peak Demand (MW):

3.4

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

0.00

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

4 329

Distribution and Connection Cost:

\$US 3 072 291

VII.2. Medium Voltage extension line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Lenght (m):

39

Total Line Cost:

\$US 1 864 322

VII.4. High Voltage Substations Intervened:

Number:

2

Total HV Substations Cost:

\$US 400 000

VII.5. Generation

Total Installed Capacity (MW)

0.000

Generation Cost:

\$US 0

VII.6. Total Costs:

\$US 5 336 613

I. PROJECT IDENTIFICATION

I.1. Program:

I. GTG - Growing the Grid

I.2. Initiative:

GTG.1 Monrovia Corridors Electrification

I.3. Project Name:

GTG.1.5.3 Monrovia Corridors East Extension - Phase 3

I.4. Project ID:

GTG.1.5.3

I.5 Regions:

| Region 3 |

II. PROJECT DESCRIPTION

II.1. Description:

Third stage implementation of the Monrovia East Corridor high voltage network - Construction of Buchannan Substation and 66kV power line. Harbel and Cotton Tree electrification extension.

II.2. Phase:

Phase 3 - 2025-2030

II.3. Precedent Projects:

GTG.1.5.2

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

1 Year

III.2. Construction duration:

1 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 3 Settlements</i>	<i>Region 3 - 22812 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 3 Settlements</i>	<i>Total: 22812 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

14 576.7

V.2. Peak Demand (MW):

4.3

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

0.00

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

4 656

Distribution and Connection Cost:

\$US 3 377 550

VII.2. Medium Voltage extension line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Lenght (m):

70

Total Line Cost:

\$US 9 016 899

VII.4. High Voltage Substations Intervened:

Number:

1

Total HV Substations Cost:

\$US 2 800 000

VII.5. Generation

Total Installed Capacity (MW)

0.000

Generation Cost:

\$US 0

VII.6. Total Costs:

\$US 15 194 449

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.1 Monrovia Corridors Electrification</i>
I.3. Project Name: <i>GTG.1.6.1 Monrovia East Corridor rural grid extension - Phase 1</i>	I.4. Project ID: <i>GTG.1.6.1</i>
I.5 Regions: <i> Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage of the Rural grid extension from the Monrovia East Corridor.</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>GTG.1.5.2</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 80 Settlements</i>	<i>Region 3 - 13761 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 80 Settlements</i>	<i>Total: 13761 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>5 533.8</i>	V.2. Peak Demand (MW): <i>1.4</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>2 638</i>	Distribution and Connection Cost: <i>\$US 2 531 304</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>59 977</i>	Total Line Cost: <i>\$US 2 165 160</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 4 696 464</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.1 Monrovia Corridors Electrification</i>
I.3. Project Name: <i>GTG.1.6.2 Monrovia East Corridor rural grid extension - Phase 2</i>	I.4. Project ID: <i>GTG.1.6.2</i>
I.5 Regions: <i> Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage of the Rural grid extension from the Monrovia East Corridor.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>GTG.1.6.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 80 Settlements</i>	<i>Region 3 - 9349 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 80 Settlements</i>	<i>Total: 9349 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>3 278.1</i>	V.2. Peak Demand (MW): <i>0.9</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>1 761</i>	Distribution and Connection Cost: <i>\$US 1 621 209</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 1 621 209</i>	

I. PROJECT IDENTIFICATION

I.1. Program:

I. GTG - Growing the Grid

I.2. Initiative:

GTG.2 Gbarnga Corridors Extension

I.3. Project Name:

GTG.2.1.1 Gbarnga Corridors Extension - Phase 1

I.4. Project ID:

GTG.2.1.1

I.5 Regions:

| Region 2 |

II. PROJECT DESCRIPTION

II.1. Description:

First stage implementation of the Gbarnga Corridor high voltage network - Construction of Ganta Substation and 66kV power lines extension to Ganta and Bogota substations. Gbarnga and Ganta cities electrification extension.

II.2. Phase:

Phase 2 - 2020-2025

II.3. Precedent Projects:

None

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

1 Year

III.2. Construction duration:

2 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 2 Settlements</i>	<i>Region 2 - 36867 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 2 Settlements</i>	<i>Total: 36867 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

18 636.8

V.2. Peak Demand (MW):

5.0

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

0.00

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

7 524

Distribution and Connection Cost:

\$US 5 218 166

VII.2. Medium Voltage extension line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Lenght (m):

112

Total Line Cost:

\$US 14 306 343

VII.4. High Voltage Substations Intervened:

Number:

3

Total HV Substations Cost:

\$US 6 400 000

VII.5. Generation

Total Installed Capacity (MW)

0.000

Generation Cost:

\$US 0

VII.6. Total Costs:

\$US 25 924 509

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.2 Gbarnga Corridors Extension</i>
I.3. Project Name: <i>GTG.2.1.2 Gbarnga Corridors Extension - Phase 2</i>	I.4. Project ID: <i>GTG.2.1.2</i>
I.5 Regions: <i> Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage implementation of the Gbarnga Corridor high voltage network - Construction of Saclepea Substation and 66kV power lines extension to Saclepea and Kakata substations. Gbarnga and Ganta cities electrification extension.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>GTG.2.1.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>2 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 2 Settlements</i>	<i>Region 2 - 39605 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 2 Settlements</i>	<i>Total: 39605 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>22 156.4</i>	V.2. Peak Demand (MW): <i>6.2</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>8 082</i>	Distribution and Connection Cost: <i>\$US 5 698 550</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>161</i>	Total Line Cost: <i>\$US 18 823 769</i>
VII.4. High Voltage Substations Intervened: Number: <i>1</i>	Total HV Substations Cost: <i>\$US 2 600 000</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 27 122 319</i>	

I. PROJECT IDENTIFICATION

I.1. Program:

I. GTG - Growing the Grid

I.2. Initiative:

GTG.2 Gbarnga Corridors Extension

I.3. Project Name:

GTG.2.2.1 Gbarnga Corridors rural grid extension- Phase 1

I.4. Project ID:

GTG.2.2.1

I.5 Regions:

| Region 2 |

II. PROJECT DESCRIPTION

II.1. Description:

*First stage of the Rural grid extension from the Gbarnga Corridor.
Includes Saclepea electrification extension*

II.2. Phase:

Phase 2 - 2020-2025

II.3. Precedent Projects:

GTG.2.1.1 | DG.2.1

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

1 Year

III.2. Construction duration:

1 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 157 Settlements</i>	<i>Region 2 - 11662 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 157 Settlements</i>	<i>Total: 11662 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

2 650.5

V.2. Peak Demand (MW):

0.7

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

0.00

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

2 295

Distribution and Connection Cost:

\$US 2 636 493

VII.2. Medium Voltage extension line:

Lenght (m):

74 912

Total Line Cost:

\$US 2 704 316

VII.3. High Voltage line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.4. High Voltage Substations Intervened:

Number:

0

Total HV Substations Cost:

\$US 0

VII.5. Generation

Total Installed Capacity (MW)

0.000

Generation Cost:

\$US 0

VII.6. Total Costs:

\$US 5 340 809

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.2 Gbarnga Corridors Extension</i>
I.3. Project Name: <i>GTG.2.2.2 Gbarnga Corridors rural grid extension- Phase 2</i>	I.4. Project ID: <i>GTG.2.2.2</i>
I.5 Regions: <i> Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage of the Rural grid extension from the Gbarnga Corridor. Includes Saclepea and Bahn electrification extension</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>GTG.2.1.2 DG.2.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>2 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 354 Settlements</i>	<i>Region 2 - 124159 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 354 Settlements</i>	<i>Total: 124159 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>29 146.6</i>	V.2. Peak Demand (MW): <i>7.6</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>23 733</i>	Distribution and Connection Cost: <i>\$US 24 443 149</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>462 092</i>	Total Line Cost: <i>\$US 16 681 508</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 41 124 657</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.3 CLSG Electrification</i>
I.3. Project Name: <i>GTG.3.1.1 Yekepa (CLSG) major cities electrification and Rural extension - Phase 1</i>	I.4. Project ID: <i>GTG.3.1.1</i>
I.5 Regions: <i> Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage of the grid extension from the CLSG Yekepa Substation. Saniquellie and Yekepa first phase electrification.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 2 Settlements</i>	<i>Region 2 - 10378 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 2 Settlements</i>	<i>Total: 10378 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>4 958.4</i>	V.2. Peak Demand (MW): <i>1.2</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>2 119</i>	Distribution and Connection Cost: <i>\$US 1 517 577</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 1 517 577</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.3 CLSG Electrification</i>
I.3. Project Name: <i>GTG.3.1.2 Yekepa (CLSG) major cities electrification and Rural extension - Phase 2</i>	I.4. Project ID: <i>GTG.3.1.2</i>
I.5 Regions: <i> Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage of the grid extension from CLSG Yekepa Substation. Includes Saniquellie and Yekepa electrification extension. Medium voltage rural grid extension.</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>GTG.3.1.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>2 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 96 Settlements</i>	<i>Region 2 - 29008 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 96 Settlements</i>	<i>Total: 29008 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>9 205.0</i>	V.2. Peak Demand (MW): <i>2.4</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>5 680</i>	Distribution and Connection Cost: <i>\$US 5 527 794</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>153 909</i>	Total Line Cost: <i>\$US 5 556 104</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 11 083 898</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.3 CLSG Electrification</i>
I.3. Project Name: <i>GTG.3.1.3 Yekepa (CLSG) major cities electrification and Rural extension - Phase 3</i>	I.4. Project ID: <i>GTG.3.1.3</i>
I.5 Regions: <i> Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Third stage of the grid extension from CLSG Yekepa Substation. Includes Saniquellie and Yekepa electrification extension.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>GTG.3.1.2</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 96 Settlements</i>	<i>Region 2 - 35909 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 96 Settlements</i>	<i>Total: 35909 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>12 006.4</i>	V.2. Peak Demand (MW): <i>3.2</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>6 986</i>	Distribution and Connection Cost: <i>\$US 6 479 046</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 6 479 046</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.3 CLSG Electrification</i>
I.3. Project Name: <i>GTG.3.2.1 Buchannan (CLSG) city electrification and rural grid extension - Phase 1</i>	I.4. Project ID: <i>GTG.3.2.1</i>
I.5 Regions: <i> Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage of the grid extension from CLSG Buchannan Substation. Buchannan first phase electrification.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 2 Settlements</i>	<i>Region 3 - 33545 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 2 Settlements</i>	<i>Total: 33545 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>16 959.9</i>	V.2. Peak Demand (MW): <i>4.6</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>6 847</i>	Distribution and Connection Cost: <i>\$US 4 739 067</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>11 171</i>	Total Line Cost: <i>\$US 403 279</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 5 142 346</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.3 CLSG Electrification</i>
I.3. Project Name: <i>GTG.3.2.2 Buchanan (CLSG) city electrification and rural grid extension - Phase 2</i>	I.4. Project ID: <i>GTG.3.2.2</i>
I.5 Regions: <i> Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage of the grid extension from CLSG Buchanan Substation. Includes Buchanan electrification extension. Medium voltage rural grid extension.</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>GTG.3.2.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 5 Settlements</i>	<i>Region 3 - 28572 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 5 Settlements</i>	<i>Total: 28572 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>16 453.9</i>	V.2. Peak Demand (MW): <i>4.6</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>5 827</i>	Distribution and Connection Cost: <i>\$US 4 154 677</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>436</i>	Total Line Cost: <i>\$US 15 754</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 4 170 431</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.3 CLSG Electrification</i>
I.3. Project Name: <i>GTG.3.2.3 Buchanan (CLSG) city electrification and rural grid extension - Phase 3</i>	I.4. Project ID: <i>GTG.3.2.3</i>
I.5 Regions: <i> Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Third stage of the grid extension from CLSG Buchanan Substation. Includes Buchanan electrification extension.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>GTG.3.2.2</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 5 Settlements</i>	<i>Region 3 - 30436 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 5 Settlements</i>	<i>Total: 30436 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>19 562.3</i>	V.2. Peak Demand (MW): <i>5.7</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>6 210</i>	Distribution and Connection Cost: <i>\$US 4 497 290</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 4 497 290</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.3 CLSG Electrification</i>
I.3. Project Name: <i>GTG.3.3.1 CLSG SWER rural electrification - Phase 1</i>	I.4. Project ID: <i>GTG.3.3.1</i>
I.5 Regions: <i> Region 2 Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage of the rural grid extension from CLSG SWER.</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 96 Settlements</i>	<i>Region 2 - 13084 Habitants</i>
<i>Region 3 - 74 Settlements</i>	<i>Region 3 - 8362 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 170 Settlements</i>	<i>Total: 21446 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>2 850.6</i>	V.2. Peak Demand (MW): <i>0.7</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>4 167</i>	Distribution and Connection Cost: <i>\$US 4 767 059</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>141 120</i>	Total Line Cost: <i>\$US 5 094 429</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 9 861 488</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.3 CLSG Electrification</i>
I.3. Project Name: <i>GTG.3.3.2 CLSG SWER rural electrification - Phase 2</i>	I.4. Project ID: <i>GTG.3.3.2</i>
I.5 Regions: <i> Region 2 Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage of the rural grid extension from CLSG SWER.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>GTG.3.3.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 96 Settlements</i>	<i>Region 2 - 15488 Habitants</i>
<i>Region 3 - 74 Settlements</i>	<i>Region 3 - 7736 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 170 Settlements</i>	<i>Total: 23224 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>6 570.3</i>	V.2. Peak Demand (MW): <i>1.8</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>4 413</i>	Distribution and Connection Cost: <i>\$US 4 219 869</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 4 219 869</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.3 CLSG Electrification</i>
I.3. Project Name: <i>GTG.3.4. Mano rural grid Extension</i>	I.4. Project ID: <i>GTG.3.4</i>
I.5 Regions: <i> Region 4 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Rural grid extension from the CLSG Mano Substation.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 38 Settlements</i>	<i>Region 4 - 15027 Habitants</i>
<i>Total: 38 Settlements</i>	<i>Total: 15027 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>0.0</i>	V.2. Peak Demand (MW): <i>0.8</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>2 851</i>	Distribution and Connection Cost: <i>\$US 3 009 721</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>64 788</i>	Total Line Cost: <i>\$US 2 338 837</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 5 348 558</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.4 Renewable generation IPPs for the National Grid</i>
I.3. Project Name: <i>GTG.4.1 Renewable generation IPP for the National Grid - Phase 1</i>	I.4. Project ID: <i>GTG.4.1</i>
I.5 Regions: <i> Nationwide </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Construction of renewable power generation plants to be connected to the national grid. Implementation of a PV plant with an installed capacity of 20MW and a Biomass power plant with 5MW.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>2 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 0 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>0.0</i>	V.2. Peak Demand (MW): <i>0.0</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>0</i>	Distribution and Connection Cost: <i>\$US 0</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 2 000 000</i>
VII.6. Total Costs: <i>\$US 2 000 000</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.4 Renewable generation IPPs for the National Grid</i>
I.3. Project Name: <i>GTG.4.2 Renewable generation IPP for the National Grid - Phase 2</i>	I.4. Project ID: <i>GTG.4.2</i>
I.5 Regions: <i> Nationwide </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Construction of renewable power generation plants to be connected to the national grid. Implementation of a PV plant with an installed capacity of 20MW and a Biomass power plant with 5MW.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>GTG.4.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>2 Year</i>	III.2. Construction duration: <i>2 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 0 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>0.0</i>	V.2. Peak Demand (MW): <i>0.0</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>25.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>0</i>	Distribution and Connection Cost: <i>\$US 0</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>25.000</i>	Generation Cost: <i>\$US 45 000 000</i>
VII.6. Total Costs: <i>\$US 45 000 000</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>I. GTG - Growing the Grid</i>	I.2. Initiative: <i>GTG.4 Renewable generation IPPs for the National Grid</i>
I.3. Project Name: <i>GTG.4.3 Renewable generation IPP for the National Grid - Phase 3</i>	I.4. Project ID: <i>GTG.4.3</i>
I.5 Regions: <i> Nationwide </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Construction of renewable power generation plants to be connected to the national grid. Implementation of a PV plant with an installed capacity of 20MW, a Biomass power plant with 5MW and Small-Hydro Plants with an installed capacity of 15MW in Phase 2 period and implementation of a PV plant with an installed capacity of 20MW and Small-Hydro Plants with an installed capacity of 15MW</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>GTG.4.2</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>2 Year</i>	III.2. Construction duration: <i>2 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 0 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>0.0</i>	V.2. Peak Demand (MW): <i>0.0</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>75.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>0</i>	Distribution and Connection Cost: <i>\$US 0</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>75.000</i>	Generation Cost: <i>\$US 195 000 000</i>
VII.6. Total Costs: <i>\$US 195 000 000</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.1 Diesel/Solar Transitional Mini-Grids</i>
I.3. Project Name: <i>DG.1.1 County Capitals and Large Cities Transitional Grids</i>	I.4. Project ID: <i>DG.1.1</i>
I.5 Regions: <i> Region 1 Region 2 Region 3 Region 4 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Electrification of Greenville City, Bong Mines, Barclayville, Cestos City, Bopulu, Wayzohn Community, Kanweaken, Vahun and Ziah Town with Solar/Diesel hybrid transitional systems</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>2 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 4 Settlements</i>	<i>Region 1 - 30502 Habitants</i>
<i>Region 2 - 2 Settlements</i>	<i>Region 2 - 12498 Habitants</i>
<i>Region 3 - 2 Settlements</i>	<i>Region 3 - 5504 Habitants</i>
<i>Region 4 - 1 Settlements</i>	<i>Region 4 - 1208 Habitants</i>
<i>Total: 9 Settlements</i>	<i>Total: 49712 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>32 835.7</i>	V.2. Peak Demand (MW): <i>8.7</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>8.71</i>	VI.2. Source 2 Installed Capacity (MW) <i>8.71</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>10 072</i>	Distribution and Connection Cost: <i>\$US 7 136 464</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>17.424</i>	Generation Cost: <i>\$US 21 780 000</i>
VII.6. Total Costs: <i>\$US 28 916 464</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.1 Diesel/Solar Transitional Mini-Grids</i>
I.3. Project Name: <i>DG.1.2.1 East Liberia (Region 1) Diesel/Solar Transitional Mini-Grids - Phase 1</i>	I.4. Project ID: <i>DG.1.2.1</i>
I.5 Regions: <i> Region 1 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage implementation of Solar/Diesel hybrid isolated systems in Region 1 (10 settlements).</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 10 Settlements</i>	<i>Region 1 - 12435 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 10 Settlements</i>	<i>Total: 12435 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>2 860.3</i>	V.2. Peak Demand (MW): <i>0.7</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.76</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.76</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>2 352</i>	Distribution and Connection Cost: <i>\$US 2 212 408</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>1.524</i>	Generation Cost: <i>\$US 1 905 000</i>
VII.6. Total Costs: <i>\$US 4 117 408</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.1 Diesel/Solar Transitional Mini-Grids</i>
I.3. Project Name: <i>DG.1.2.2 East Liberia (Region 1) Diesel/Solar Transitional Mini-Grids - Phase 2</i>	I.4. Project ID: <i>DG.1.2.2</i>
I.5 Regions: <i> Region 1 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage implementation of Solar/Diesel hybrid isolated systems in Region 1 (10 settlements).</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 14 Settlements</i>	<i>Region 1 - 11431 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 14 Settlements</i>	<i>Total: 11431 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>2 764.7</i>	V.2. Peak Demand (MW): <i>0.7</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.74</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.74</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>2 165</i>	Distribution and Connection Cost: <i>\$US 2 036 000</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>1.488</i>	Generation Cost: <i>\$US 1 860 000</i>
VII.6. Total Costs: <i>\$US 3 896 000</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.1 Diesel/Solar Transitional Mini-Grids</i>
I.3. Project Name: <i>DG.1.3.1 North and South Liberia (Regions 2 & 3) Diesel/Solar Transitional Mini-Grids - Phase 1</i>	I.4. Project ID: <i>DG.1.3.1</i>
I.5 Regions: <i> Region 2 Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage implementation of Solar/Diesel hybrid isolated systems in Regions 2 and 3 (10 settlements).</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 4 Settlements</i>	<i>Region 2 - 6669 Habitants</i>
<i>Region 3 - 6 Settlements</i>	<i>Region 3 - 3893 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 10 Settlements</i>	<i>Total: 10562 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>4 354.5</i>	V.2. Peak Demand (MW): <i>1.1</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>1.15</i>	VI.2. Source 2 Installed Capacity (MW) <i>1.15</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>2 035</i>	Distribution and Connection Cost: <i>\$US 1 914 112</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>2.292</i>	Generation Cost: <i>\$US 2 865 000</i>
VII.6. Total Costs: <i>\$US 4 779 112</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.1 Diesel/Solar Transitional Mini-Grids</i>
I.3. Project Name: <i>DG.1.3.2 North and South Liberia (Regions 2 & 3) Diesel/Solar Transitional Mini-Grids - Phase 2</i>	I.4. Project ID: <i>DG.1.3.2</i>
I.5 Regions: <i> Region 2 Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage implementation of Solar/Diesel hybrid isolated systems in Regions 2 and 3 (10 settlements).</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 1 Settlements</i>	<i>Region 2 - 1541 Habitants</i>
<i>Region 3 - 8 Settlements</i>	<i>Region 3 - 3928 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 9 Settlements</i>	<i>Total: 5469 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>1 628.0</i>	V.2. Peak Demand (MW): <i>0.4</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.44</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.44</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>1 035</i>	Distribution and Connection Cost: <i>\$US 931 296</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.876</i>	Generation Cost: <i>\$US 1 095 000</i>
VII.6. Total Costs: <i>\$US 2 026 296</i>	

I. PROJECT IDENTIFICATION

I.1. Program:

II. DG Decentralized Grids

I.2. Initiative:

DG.1 Diesel/Solar Transitional Mini-Grids

I.3. Project Name:

DG.1.4.1 West Liberia (Region 4) Diesel/Solar Transitional Mini-Grids - Phase 1

I.4. Project ID:

DG.1.4.1

I.5 Regions:

| Region 4 |

II. PROJECT DESCRIPTION

II.1. Description:

First stage implementation of Solar/Diesel hybrid isolated systems in Region 4 (10 settlements).

II.2. Phase:

Phase 2 - 2020-2025

II.3. Precedent Projects:

None

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

1 Year

III.2. Construction duration:

1 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 7 Settlements</i>	<i>Region 4 - 7647 Habitants</i>
<i>Total: 7 Settlements</i>	<i>Total: 7647 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

1 734.6

V.2. Peak Demand (MW):

0.4

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

0.46

VI.2. Source 2 | Installed Capacity (MW)

0.46

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

1 444

Distribution and Connection Cost:

\$US 1 358 120

VII.2. Medium Voltage extension line:

Length (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Length (m):

0

Total Line Cost:

\$US 0

VII.4. High Voltage Substations Intervened:

Number:

0

Total HV Substations Cost:

\$US 0

VII.5. Generation

Total Installed Capacity (MW)

0.924

Generation Cost:

\$US 1 155 000

VII.6. Total Costs:

\$US 2 513 120

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.1 Diesel/Solar Transitional Mini-Grids</i>
I.3. Project Name: <i>DG.1.4.2 West Liberia (Region 4) Diesel/Solar Transitional Mini-Grids - Phase 2</i>	I.4. Project ID: <i>DG.1.4.2</i>
I.5 Regions: <i> Region 4 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage implementation of Solar/Diesel hybrid isolated systems in Region 4 (10 settlements).</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 6 Settlements</i>	<i>Region 4 - 4556 Habitants</i>
<i>Total: 6 Settlements</i>	<i>Total: 4556 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>1 220.0</i>	V.2. Peak Demand (MW): <i>0.3</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.31</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.31</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>862</i>	Distribution and Connection Cost: <i>\$US 810 720</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.612</i>	Generation Cost: <i>\$US 765 000</i>
VII.6. Total Costs: <i>\$US 1 575 720</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.2 Decentralized grids and Cross Border consolidation</i>
I.3. Project Name: <i>DG.2.1 Nimba Cross Border Grid consolidation and extension to Gbarna and Saclepea</i>	I.4. Project ID: <i>DG.2.1</i>
I.5 Regions: <i> Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Consolidation of the Nimba Cross Border grid. Medium voltage extension form Ganta to Gbarnga and from Ganta to Saclepea. Includes Ganta, Gbarnga and Saclepea electrification.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 101 Settlements</i>	<i>Region 2 - 49650 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 101 Settlements</i>	<i>Total: 49650 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>21 175.3</i>	V.2. Peak Demand (MW): <i>5.4</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>10 138</i>	Distribution and Connection Cost: <i>\$US 7 765 514</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>172 255</i>	Total Line Cost: <i>\$US 6 218 416</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 13 983 930</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.2 Decentralized grids and Cross Border consolidation</i>
I.3. Project Name: <i>DG.2.2 Grand Gedeh Cross Border Grid consolidation</i>	I.4. Project ID: <i>DG.2.2</i>
I.5 Regions: <i> Region 1 Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Consolidation of the Grand Gedeh Cross Border grid. Includes Zwedru, Tappita City and Zleh electrification.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 9 Settlements</i>	<i>Region 1 - 13717 Habitants</i>
<i>Region 2 - 12 Settlements</i>	<i>Region 2 - 1563 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 21 Settlements</i>	<i>Total: 15280 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>6 506.0</i>	V.2. Peak Demand (MW): <i>1.7</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>3 112</i>	Distribution and Connection Cost: <i>\$US 2 357 938</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>939</i>	Total Line Cost: <i>\$US 33 909</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 2 391 847</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.2 Decentralized grids and Cross Border consolidation</i>
I.3. Project Name: <i>DG.2.3 Maryland Cross Border Grid consolidation and extension to Fish Town</i>	I.4. Project ID: <i>DG.2.3</i>
I.5 Regions: <i> Region 1 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Consolidation of the Maryland Cross Border grid. Medium voltage extension from Pleebo City to Fish Town. Includes Harper City, Pleebo City and Fish Town electrification.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 27 Settlements</i>	<i>Region 1 - 26932 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 27 Settlements</i>	<i>Total: 26932 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>12 092.1</i>	V.2. Peak Demand (MW): <i>3.1</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>5 465</i>	Distribution and Connection Cost: <i>\$US 3 914 413</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>101 599</i>	Total Line Cost: <i>\$US 3 667 715</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 7 582 128</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.2 Decentralized grids and Cross Border consolidation</i>
I.3. Project Name: <i>DG.2.4 Foya Town/Kolahun/Voinjama decentralized grid</i>	I.4. Project ID: <i>DG.2.4</i>
I.5 Regions: <i> Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Implementation of the Lofa County mini-grid connected to the Kaiha 2 small hydro power plant. Includes Voinjama, Foya Town, Kolahun and Masambolahun electrification.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>DG.3.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 22 Settlements</i>	<i>Region 2 - 43411 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 22 Settlements</i>	<i>Total: 43411 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>17 874.5</i>	V.2. Peak Demand (MW): <i>4.5</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>8 814</i>	Distribution and Connection Cost: <i>\$US 6 811 756</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>115 724</i>	Total Line Cost: <i>\$US 4 124 405</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 10 936 161</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.2 Decentralized grids and Cross Border consolidation</i>
I.3. Project Name: <i>DG.2.5.1 Maryland / Grand Kru decentralized grid extension - Phase 1</i>	I.4. Project ID: <i>DG.2.5.1</i>
I.5 Regions: <i> Region 1 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage rural extension of the Maryland Cross Border grid. Includes Harper City, Pleebo City, Kanweaken, Barclayville and Fish Town electrification extension.</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>DG.3.2</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>2 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 158 Settlements</i>	<i>Region 1 - 45611 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 158 Settlements</i>	<i>Total: 45611 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>14 318.2</i>	V.2. Peak Demand (MW): <i>3.7</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>9 017</i>	Distribution and Connection Cost: <i>\$US 8 241 665</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>222 138</i>	Total Line Cost: <i>\$US 8 019 197</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 16 260 862</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.2 Decentralized grids and Cross Border consolidation</i>
I.3. Project Name: <i>DG.2.5.2 Maryland / Grand Kru decentralized grid extension - Phase 2</i>	I.4. Project ID: <i>DG.2.5.2</i>
I.5 Regions: <i> Region 1 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage rural extension of the Maryland Cross Border grid. Includes Harper City, Pleebo City, Kanweaken, Barclayville and Fish Town electrification extension.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>DG.2.5.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 184 Settlements</i>	<i>Region 1 - 72672 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 184 Settlements</i>	<i>Total: 72672 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>25 365.8</i>	V.2. Peak Demand (MW): <i>6.8</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>14 103</i>	Distribution and Connection Cost: <i>\$US 12 705 951</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>88 351</i>	Total Line Cost: <i>\$US 3 189 467</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 15 895 418</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.2 Decentralized grids and Cross Border consolidation</i>
I.3. Project Name: <i>DG.2.6.1 Grand Gedeh / Nimba decentralized grid extension - Phase 1</i>	I.4. Project ID: <i>DG.2.6.1</i>
I.5 Regions: <i> Region 1 Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage rural extension of the Grand Gedeh Cross Border grid. Includes Zwedru, Tappita City and Zleh electrification extension.</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 36 Settlements</i>	<i>Region 1 - 16091 Habitants</i>
<i>Region 2 - 78 Settlements</i>	<i>Region 2 - 9673 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 114 Settlements</i>	<i>Total: 25764 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>9 139.1</i>	V.2. Peak Demand (MW): <i>2.4</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>5 114</i>	Distribution and Connection Cost: <i>\$US 4 876 392</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>88 868</i>	Total Line Cost: <i>\$US 3 208 140</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 8 084 532</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.2 Decentralized grids and Cross Border consolidation</i>
I.3. Project Name: <i>DG.2.6.2 Grand Gedeh / Nimba decentralized grid extension - Phase 2</i>	I.4. Project ID: <i>DG.2.6.2</i>
I.5 Regions: <i> Region 1 Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage rural extension of the Grand Gedeh Cross Border grid. Includes Zwedru, Tappita City and Zleh electrification extension.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>DG.2.6.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 36 Settlements</i>	<i>Region 1 - 18750 Habitants</i>
<i>Region 2 - 78 Settlements</i>	<i>Region 2 - 14085 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 114 Settlements</i>	<i>Total: 32835 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>12 059.0</i>	V.2. Peak Demand (MW): <i>3.3</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>6 453</i>	Distribution and Connection Cost: <i>\$US 5 781 309</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 5 781 309</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.2 Decentralized grids and Cross Border consolidation</i>
I.3. Project Name: <i>DG.2.7 Greenville decentralized grid creation</i>	I.4. Project ID: <i>DG.2.7</i>
I.5 Regions: <i> Region 1 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Medium voltage level connection of Greenville City to Greenville small hydro.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>DG.3.7</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 1 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 1 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>0.0</i>	V.2. Peak Demand (MW): <i>0.0</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>0</i>	Distribution and Connection Cost: <i>\$US 505 680</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>12 809</i>	Total Line Cost: <i>\$US 462 405</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 968 085</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.2 Decentralized grids and Cross Border consolidation</i>
I.3. Project Name: <i>DG.2.8 Foya Town/Kolahun/Voinjama/Zorzor decentralized grid</i>	I.4. Project ID: <i>DG.2.8</i>
I.5 Regions: <i> Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Implementation of the Lofa County Large Decentralized Grid connected to the Kaiha 2 and Woozi Creek small hydro power plants. Includes Voinjama, Foya Town, Kolahun, Masambolahun, Zorzor, Barkedu and Salayea electrification extension.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>DG.3.6</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>2 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 155 Settlements</i>	<i>Region 2 - 69988 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 155 Settlements</i>	<i>Total: 69988 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>20 454.2</i>	V.2. Peak Demand (MW): <i>5.5</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>13 683</i>	Distribution and Connection Cost: <i>\$US 13 481 945</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>256 883</i>	Total Line Cost: <i>\$US 9 273 481</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.000</i>	Generation Cost: <i>\$US 0</i>
VII.6. Total Costs: <i>\$US 22 755 426</i>	

I. PROJECT IDENTIFICATION

I.1. Program:

II. DG Decentralized Grids

I.2. Initiative:

DG.3 Generation IPP for decentralized grids

I.3. Project Name:

DG.3.1 Kaiha 2 hydro power plant

I.4. Project ID:

DG.3.1

I.5 Regions:

| Region 2 |

II. PROJECT DESCRIPTION

II.1. Description:

Construction of the small hydro power plant Kaiha 2 located in the Kaiha river in Lofa County. The small hydro is projected to have an installed capacity of 2 MW and will supply the Large Decentralized grid of Lofa County.

II.2. Phase:

Phase 1 - 2015-2020

II.3. Precedent Projects:

None

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

2 Year

III.2. Construction duration:

2 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
Total: 0 Settlements	Total: 0 Habitants

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

0.0

V.2. Peak Demand (MW):

0.0

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

3.00

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

0

Distribution and Connection Cost:

\$US 0

VII.2. Medium Voltage extension line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.4. High Voltage Substations Intervened:

Number:

0

Total HV Substations Cost:

\$US 0

VII.5. Generation

Total Installed Capacity (MW)

3.000

Generation Cost:

\$US 14 000 000

VII.6. Total Costs:

\$US 14 000 000

I. PROJECT IDENTIFICATION

I.1. Program:

II. DG Decentralized Grids

I.2. Initiative:

DG.3 Generation IPP for decentralized grids

I.3. Project Name:

DG.3.2 River Gee hydro power plant

I.4. Project ID:

DG.3.2

I.5 Regions:

| Region 1 |

II. PROJECT DESCRIPTION

II.1. Description:

Construction of the small hydro power plant located in the River Gee in River Gee County. The small hydro is projected to have an installed capacity of 5.79 MW and will supply the Large Decentralized grid of Maryland and River Gee.

II.2. Phase:

Phase 1 - 2015-2020

II.3. Precedent Projects:

None

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

2 Year

III.2. Construction duration:

2 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
Total: 0 Settlements	Total: 0 Habitants

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

0.0

V.2. Peak Demand (MW):

0.0

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

5.79

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

0

Distribution and Connection Cost:

\$US 0

VII.2. Medium Voltage extension line:

Length (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Length (m):

0

Total Line Cost:

\$US 0

VII.4. High Voltage Substations Intervened:

Number:

0

Total HV Substations Cost:

\$US 0

VII.5. Generation

Total Installed Capacity (MW)

5.790

Generation Cost:

\$US 21 080 000

VII.6. Total Costs:

\$US 21 080 000

I. PROJECT IDENTIFICATION

I.1. Program:

II. DG Decentralized Grids

I.2. Initiative:

DG.3 Generation IPP for decentralized grids

I.3. Project Name:

DG.3.3 Mein River hydro power plant

I.4. Project ID:

DG.3.3

I.5 Regions:

| Region 2 |

II. PROJECT DESCRIPTION

II.1. Description:

Construction of the small hydro power plant located in the Mein River in Bong County. The small hydro is projected to have an installed capacity of 1 MW and will initially supply the Cuttington University and the Phebe Hospital.

II.2. Phase:

Phase 1 - 2015-2020

II.3. Precedent Projects:

None

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

2 Year

III.2. Construction duration:

2 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 0 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

0.0

V.2. Peak Demand (MW):

0.0

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

1.00

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

0

Distribution and Connection Cost:

\$US 0

VII.2. Medium Voltage extension line:

Length (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Length (m):

0

Total Line Cost:

\$US 0

VII.4. High Voltage Substations Intervened:

Number:

0

Total HV Substations Cost:

\$US 0

VII.5. Generation

Total Installed Capacity (MW)

1.000

Generation Cost:

\$US 6 694 000

VII.6. Total Costs:

\$US 6 694 000

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.3 Generation IPP for decentralized grids</i>
I.3. Project Name: <i>DG.3.4.1 Biomass / Hybrid power plants - Phase 1</i>	I.4. Project ID: <i>DG.3.4.1</i>
I.5 Regions: <i> Region 1 Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Construction of Biomass/Diesel Hybrid systems in Voinjama and Plebbo City to operate as backup in the isolated grids of Lofa County and Maryland/River Gee Counties.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 0 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>0.0</i>	V.2. Peak Demand (MW): <i>0.0</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>5.00</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>0</i>	Distribution and Connection Cost: <i>\$US 0</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>5.000</i>	Generation Cost: <i>\$US 11 250 000</i>
VII.6. Total Costs: <i>\$US 11 250 000</i>	

I. PROJECT IDENTIFICATION

I.1. Program:

II. DG Decentralized Grids

I.2. Initiative:

DG.3 Generation IPP for decentralized grids

I.3. Project Name:

DG.3.4.2 Biomass / Hybrid power plants - Phase 2

I.4. Project ID:

DG.3.4.2

I.5 Regions:

| Region 1 | Region 2 |

II. PROJECT DESCRIPTION

II.1. Description:

Construction of Biomass/Diesel Hybrid systems in Foya Town, Harper City and Zwedru to operate as backup in the isolated grids of Lofa County, Maryland/River Gee /Grand KruCounties and Grand Gedeh County.

II.2. Phase:

Phase 2 - 2020-2025

II.3. Precedent Projects:

None

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

1 Year

III.2. Construction duration:

1 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 0 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

0.0

V.2. Peak Demand (MW):

0.0

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

10.00

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

0

Distribution and Connection Cost:

\$US 0

VII.2. Medium Voltage extension line:

Length (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Length (m):

0

Total Line Cost:

\$US 0

VII.4. High Voltage Substations Intervened:

Number:

0

Total HV Substations Cost:

\$US 0

VII.5. Generation

Total Installed Capacity (MW)

10.000

Generation Cost:

\$US 22 500 000

VII.6. Total Costs:

\$US 22 500 000

I. PROJECT IDENTIFICATION

I.1. Program:

II. DG Decentralized Grids

I.2. Initiative:

DG.3 Generation IPP for decentralized grids

I.3. Project Name:

DG.3.4.3 Biomass / Hybrid power plants - Phase 3

I.4. Project ID:

DG.3.4.3

I.5 Regions:

| Region 1 |

II. PROJECT DESCRIPTION

II.1. Description:

Construction of Biomass/Diesel Hybrid systems in Fish Town to operate as backup in the isolated grids of Maryland/River Gee/Grand Kru Counties.

II.2. Phase:

Phase 3 - 2025-2030

II.3. Precedent Projects:

None

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

1 Year

III.2. Construction duration:

1 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 0 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

0.0

V.2. Peak Demand (MW):

0.0

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

0.50

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

0

Distribution and Connection Cost:

\$US 0

VII.2. Medium Voltage extension line:

Length (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Length (m):

0

Total Line Cost:

\$US 0

VII.4. High Voltage Substations Intervened:

Number:

0

Total HV Substations Cost:

\$US 0

VII.5. Generation

Total Installed Capacity (MW)

0.500

Generation Cost:

\$US 1 125 000

VII.6. Total Costs:

\$US 1 125 000

I. PROJECT IDENTIFICATION

I.1. Program:

II. DG Decentralized Grids

I.2. Initiative:

DG.3 Generation IPP for decentralized grids

I.3. Project Name:

DG.3.5 Barclayville hydro power plant

I.4. Project ID:

DG.3.5

I.5 Regions:

| Region 1 |

II. PROJECT DESCRIPTION

II.1. Description:

Construction of the small hydro power plant located in the River Na in Grand Kru County. The small hydro is projected to have an installed capacity of 4,5 MW and will supply the Large Decentralized grid of Grand Kru, Maryland and River Gee Counties.

II.2. Phase:

Phase 2 - 2020-2025

II.3. Precedent Projects:

None

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

2 Year

III.2. Construction duration:

2 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 0 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

0.0

V.2. Peak Demand (MW):

0.0

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

4.50

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

0

Distribution and Connection Cost:

\$US 0

VII.2. Medium Voltage extension line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.4. High Voltage Substations Intervened:

Number:

0

Total HV Substations Cost:

\$US 0

VII.5. Generation

Total Installed Capacity (MW)

4.500

Generation Cost:

\$US 18 498 000

VII.6. Total Costs:

\$US 18 498 000

I. PROJECT IDENTIFICATION

I.1. Program:

II. DG Decentralized Grids

I.2. Initiative:

DG.3 Generation IPP for decentralized grids

I.3. Project Name:

DG.3.6 Woozi Creek hydro power plant

I.4. Project ID:

DG.3.6

I.5 Regions:

| Region 2 |

II. PROJECT DESCRIPTION

II.1. Description:

Construction of the small hydro power plant located in the River Via in Lofa County. The small hydro is projected to have an installed capacity of 5 MW and will supply the Large Decentralized grid of Lofa County.

II.2. Phase:

Phase 3 - 2025-2030

II.3. Precedent Projects:

None

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

2 Year

III.2. Construction duration:

2 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 0 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

0.0

V.2. Peak Demand (MW):

0.0

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

5.00

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

0

Distribution and Connection Cost:

\$US 0

VII.2. Medium Voltage extension line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.4. High Voltage Substations Intervened:

Number:

0

Total HV Substations Cost:

\$US 0

VII.5. Generation

Total Installed Capacity (MW)

5.000

Generation Cost:

\$US 19 539 000

VII.6. Total Costs:

\$US 19 539 000

I. PROJECT IDENTIFICATION

I.1. Program:

II. DG Decentralized Grids

I.2. Initiative:

DG.3 Generation IPP for decentralized grids

I.3. Project Name:

DG.3.7 Greenville hydro power plant

I.4. Project ID:

DG.3.7

I.5 Regions:

| Region 1 |

II. PROJECT DESCRIPTION

II.1. Description:

Construction of the small hydro power plant located in in the River Sinoe Sinoe County. The small hydro is projected to have an installed capacity of 2 MW and in a first stage will supply the city of Greenville.

II.2. Phase:

Phase 3 - 2025-2030

II.3. Precedent Projects:

None

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

2 Year

III.2. Construction duration:

2 Year

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 0 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

0.0

V.2. Peak Demand (MW):

0.0

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

2.00

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

0

Distribution and Connection Cost:

\$US 0

VII.2. Medium Voltage extension line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.4. High Voltage Substations Intervened:

Number:

0

Total HV Substations Cost:

\$US 0

VII.5. Generation

Total Installed Capacity (MW)

2.000

Generation Cost:

\$US 14 194 000

VII.6. Total Costs:

\$US 14 194 000

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.4 Micro-Systems</i>
I.3. Project Name: <i>DG.4.1 Solumba Micro-Biomass Village</i>	I.4. Project ID: <i>DG.4.1</i>
I.5 Regions: <i> Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Implementation of the Solumba biomass pilot. The power plant is projected to have an installed capacity of 35kW and will supply the village of Solumba.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 1 Settlements</i>	<i>Region 2 - 397 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 1 Settlements</i>	<i>Total: 397 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>120.7</i>	V.2. Peak Demand (MW): <i>0.0</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.04</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>75</i>	Distribution and Connection Cost: <i>\$US 72 435</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.035</i>	Generation Cost: <i>\$US 61 250</i>
VII.6. Total Costs: <i>\$US 133 685</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.4 Micro-Systems</i>
I.3. Project Name: <i>DG.4.2 Kwendin Micro-Biomass Village</i>	I.4. Project ID: <i>DG.4.2</i>
I.5 Regions: <i> Region 2 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Implementation of the Kwendin biomass pilot. The power plant is projected to have an installed capacity of 60kW and will supply the village of Kwendin.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 1 Settlements</i>	<i>Region 2 - 1608 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 1 Settlements</i>	<i>Total: 1608 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>359.7</i>	V.2. Peak Demand (MW): <i>0.1</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.06</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>304</i>	Distribution and Connection Cost: <i>\$US 293 520</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.060</i>	Generation Cost: <i>\$US 105 000</i>
VII.6. Total Costs: <i>\$US 398 520</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.4 Micro-Systems</i>
I.3. Project Name: <i>DG.4.3 North and South Liberia (Regions 2 & 3) Micro-Hydro Villages</i>	I.4. Project ID: <i>DG.4.3</i>
I.5 Regions: <i> Region 2 Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Construction of micro-hydro power plants in the villages of Wobu Kenor, Bawomai, Baimbata Village and Bardobozohn, in Regions 2 and 3.</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 3 Settlements</i>	<i>Region 2 - 804 Habitants</i>
<i>Region 3 - 1 Settlements</i>	<i>Region 3 - 408 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 4 Settlements</i>	<i>Total: 1212 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>235.0</i>	V.2. Peak Demand (MW): <i>0.1</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.21</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>230</i>	Distribution and Connection Cost: <i>\$US 221 926</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.208</i>	Generation Cost: <i>\$US 3 847 467</i>
VII.6. Total Costs: <i>\$US 4 069 393</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.4 Micro-Systems</i>
I.3. Project Name: <i>DG.4.4 West Liberia (Region 4) Micro-Hydro Villages</i>	I.4. Project ID: <i>DG.4.4</i>
I.5 Regions: <i> Region 4 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Construction of micro-hydro power plants in the villages of Timba, Beaden and Mecca in Region 4.</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 3 Settlements</i>	<i>Region 4 - 1424 Habitants</i>
<i>Total: 3 Settlements</i>	<i>Total: 1424 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>301.4</i>	V.2. Peak Demand (MW): <i>0.1</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.21</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>270</i>	Distribution and Connection Cost: <i>\$US 260 662</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.209</i>	Generation Cost: <i>\$US 3 677 343</i>
VII.6. Total Costs: <i>\$US 3 938 005</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>II. DG Decentralized Grids</i>	I.2. Initiative: <i>DG.4 Micro-Systems</i>
I.3. Project Name: <i>DG.4.5 East Liberia (Region 1) Micro-Hydro Villages</i>	I.4. Project ID: <i>DG.4.5</i>
I.5 Regions: <i> Region 1 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Construction of micro-hydro power plants in the villages of Toubo Sweaken and Darlue in Region 1.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>1 Year</i>	III.2. Construction duration: <i>1 Year</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 2 Settlements</i>	<i>Region 1 - 538 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 2 Settlements</i>	<i>Total: 538 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>103.2</i>	V.2. Peak Demand (MW): <i>0.0</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.08</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>102</i>	Distribution and Connection Cost: <i>\$US 98 366</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.084</i>	Generation Cost: <i>\$US 1 837 935</i>
VII.6. Total Costs: <i>\$US 1 936 301</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>III. BTG Beyond the Grid</i>	I.2. Initiative: <i>BTG.1 Solar Villages & Home Systems</i>
I.3. Project Name: <i>BTG.1.1.1 East Liberia (Region 1) Solar Villages - Phase 1</i>	I.4. Project ID: <i>BTG.1.1.1</i>
I.5 Regions: <i> Region 1 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage implementation of Solar Villages in Region 1. Includes Boe-Geewon, Judu, Kayweah, Piddy, Sawtoken, Wrejah, Yorken, Zloh, Baliken and Joploken villages.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>6 Months</i>	III.2. Construction duration: <i>6 Months</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 10 Settlements</i>	<i>Region 1 - 2977 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 10 Settlements</i>	<i>Total: 2977 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>506.0</i>	V.2. Peak Demand (MW): <i>0.1</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.35</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>566</i>	Distribution and Connection Cost: <i>\$US 0</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.348</i>	Generation Cost: <i>\$US 1 044 600</i>
VII.6. Total Costs: <i>\$US 1 044 600</i>	

I. PROJECT IDENTIFICATION

I.1. Program:

III. BTG Beyond the Grid

I.2. Initiative:

BTG.1 Solar Villages & Home Systems

I.3. Project Name:

BTG.1.1.2 East Liberia (Region 1) Solar Villages - Phase 2

I.4. Project ID:

BTG.1.1.2

I.5 Regions:

| Region 1 |

II. PROJECT DESCRIPTION

II.1. Description:

Second stage implementation of Solar Villages in Region 1. Includes Dodruken, Makla, Zoroken, Niplaihko, Zean, Sumliken, Konosu, Bentley Mining Camp, Seator and Zanwonjah villages.

II.2. Phase:

Phase 2 - 2020-2025

II.3. Precedent Projects:

BTG.1.1.1

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

6 Months

III.2. Construction duration:

6 Months

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 10 Settlements</i>	<i>Region 1 - 2347 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 10 Settlements</i>	<i>Total: 2347 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

463.4

V.2. Peak Demand (MW):

0.1

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

0.32

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

446

Distribution and Connection Cost:

\$US 0

VII.2. Medium Voltage extension line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.4. High Voltage Substations Intervened:

Number:

0

Total HV Substations Cost:

\$US 0

VII.5. Generation

Total Installed Capacity (MW)

0.321

Generation Cost:

\$US 964 200

VII.6. Total Costs:

\$US 964 200

I. PROJECT IDENTIFICATION

I.1. Program: <i>III. BTG Beyond the Grid</i>	I.2. Initiative: <i>BTG.1 Solar Villages & Home Systems</i>
I.3. Project Name: <i>BTG.1.1.3 East Liberia (Region 1) Solar Villages - Phase 3</i>	I.4. Project ID: <i>BTG.1.1.3</i>
I.5 Regions: <i> Region 1 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Third stage implementation of Solar Villages in Region 1. Includes Samuel Village, Toffoi, Tarworken, Rock Town and Kaytoken villages.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
II.3. Precedent Projects: <i>BTG.1.1.2</i>	

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>6 Months</i>	III.2. Construction duration: <i>6 Months</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 5 Settlements</i>	<i>Region 1 - 1076 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 5 Settlements</i>	<i>Total: 1076 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>165.0</i>	V.2. Peak Demand (MW): <i>0.0</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.11</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>206</i>	Distribution and Connection Cost: <i>\$US 0</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.115</i>	Generation Cost: <i>\$US 343 800</i>
VII.6. Total Costs: <i>\$US 343 800</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>III. BTG Beyond the Grid</i>	I.2. Initiative: <i>BTG.1 Solar Villages & Home Systems</i>
I.3. Project Name: <i>BTG.1.2.1 North and South Liberia (Regions 2 & 3) Solar Villages - Phase 1</i>	I.4. Project ID: <i>BTG.1.2.1</i>
I.5 Regions: <i> Region 2 Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage implementation of Solar Villages in Regions 2 and 3. Includes Balagwalazu, David Village, Degei, Dorgbor, Gbai, Gblo/Bar, Quimen, Sackie town/Sway village, Taywaye Civil Compound, Troyah, Wumuyeazu Village, Yolo, Zeyan and Zulo villages.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>6 Months</i>	III.2. Construction duration: <i>6 Months</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 6 Settlements</i>	<i>Region 2 - 2061 Habitants</i>
<i>Region 3 - 8 Settlements</i>	<i>Region 3 - 2040 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 14 Settlements</i>	<i>Total: 4101 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>877.0</i>	V.2. Peak Demand (MW): <i>0.2</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.60</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>779</i>	Distribution and Connection Cost: <i>\$US 0</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.603</i>	Generation Cost: <i>\$US 1 810 200</i>
VII.6. Total Costs: <i>\$US 1 810 200</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>III. BTG Beyond the Grid</i>	I.2. Initiative: <i>BTG.1 Solar Villages & Home Systems</i>
I.3. Project Name: <i>BTG.1.2.2 North and South Liberia (Regions 2 & 3) Solar Villages - Phase 2</i>	I.4. Project ID: <i>BTG.1.2.2</i>
I.5 Regions: <i> Region 2 Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage implementation of Solar Villages in Regions 2 and 3. Includes Bemah, Bukai, Freeman, Geeyah, I T I Camp Garwru, Jae-na, Koryou, Massawo, Mulbah, Palala, Tarloe, Totoquelleh, Wrylyee and Wuomai villages.</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>BTG.1.2.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>6 Months</i>	III.2. Construction duration: <i>6 Months</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 6 Settlements</i>	<i>Region 2 - 1392 Habitants</i>
<i>Region 3 - 8 Settlements</i>	<i>Region 3 - 1511 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 14 Settlements</i>	<i>Total: 2903 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>306.9</i>	V.2. Peak Demand (MW): <i>0.1</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.21</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>554</i>	Distribution and Connection Cost: <i>\$US 0</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.213</i>	Generation Cost: <i>\$US 638 400</i>
VII.6. Total Costs: <i>\$US 638 400</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>III. BTG Beyond the Grid</i>	I.2. Initiative: <i>BTG.1 Solar Villages & Home Systems</i>
I.3. Project Name: <i>BTG.1.2.3 North and South Liberia (Regions 2 & 3) Solar Villages - Phase 3</i>	I.4. Project ID: <i>BTG.1.2.3</i>
I.5 Regions: <i> Region 2 Region 3 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Third stage implementation of Solar Villages in Regions 2 and 3. Includes Bafahun, Gayea, James Boto Town, Nangbo, Qwrakpo, Weh and Yarkpai villages.</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>BTG.1.2.2</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>6 Months</i>	III.2. Construction duration: <i>6 Months</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 3 Settlements</i>	<i>Region 2 - 642 Habitants</i>
<i>Region 3 - 4 Settlements</i>	<i>Region 3 - 712 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 7 Settlements</i>	<i>Total: 1354 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>149.5</i>	V.2. Peak Demand (MW): <i>0.0</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.10</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>259</i>	Distribution and Connection Cost: <i>\$US 0</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.103</i>	Generation Cost: <i>\$US 309 600</i>
VII.6. Total Costs: <i>\$US 309 600</i>	

I. PROJECT IDENTIFICATION

I.1. Program:

III. BTG Beyond the Grid

I.2. Initiative:

BTG.1 Solar Villages & Home Systems

I.3. Project Name:

BTG.1.3.1 West Liberia (Region 4) Solar Villages - Phase 1

I.4. Project ID:

BTG.1.3.1

I.5 Regions:

| Region 4 |

II. PROJECT DESCRIPTION

II.1. Description:

First stage implementation of Solar Villages in Region 4. Includes Bo-Mafa, Kpakla, Kpawolozu, Manunvordor, Memeh and Sorbeh villages.

II.2. Phase:

Phase 1 - 2015-2020

II.3. Precedent Projects:

None

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

6 Months

III.2. Construction duration:

6 Months

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 6 Settlements</i>	<i>Region 4 - 1807 Habitants</i>
<i>Total: 6 Settlements</i>	<i>Total: 1807 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

275.7

V.2. Peak Demand (MW):

0.1

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

0.19

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

344

Distribution and Connection Cost:

\$US 0

VII.2. Medium Voltage extension line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.4. High Voltage Substations Intervened:

Number:

0

Total HV Substations Cost:

\$US 0

VII.5. Generation

Total Installed Capacity (MW)

0.189

Generation Cost:

\$US 567 600

VII.6. Total Costs:

\$US 567 600

I. PROJECT IDENTIFICATION

I.1. Program: <i>III. BTG Beyond the Grid</i>	I.2. Initiative: <i>BTG.1 Solar Villages & Home Systems</i>
I.3. Project Name: <i>BTG.1.3.2 West Liberia (Region 4) Solar Villages - Phase 2</i>	I.4. Project ID: <i>BTG.1.3.2</i>
I.5 Regions: <i> Region 4 </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage implementation of Solar Villages in Region 4. Includes Beagona, Camp Alpha, Gbesseh, Kalagban, Mbama and Zuanni-1 villages.</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>BTG.1.3.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>6 Months</i>	III.2. Construction duration: <i>6 Months</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 6 Settlements</i>	<i>Region 4 - 1593 Habitants</i>
<i>Total: 6 Settlements</i>	<i>Total: 1593 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>255.1</i>	V.2. Peak Demand (MW): <i>0.1</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.18</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>303</i>	Distribution and Connection Cost: <i>\$US 0</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.176</i>	Generation Cost: <i>\$US 527 400</i>
VII.6. Total Costs: <i>\$US 527 400</i>	

I. PROJECT IDENTIFICATION

I.1. Program:

III. BTG Beyond the Grid

I.2. Initiative:

BTG.1 Solar Villages & Home Systems

I.3. Project Name:

BTG.1.3.3 West Liberia (Region 4) Solar Villages - Phase 3

I.4. Project ID:

BTG.1.3.3

I.5 Regions:

| Region 4 |

II. PROJECT DESCRIPTION

II.1. Description:

Third stage implementation of Solar Villages in Region 4. Includes AMA Sign Board, Building Camp and Kormawuyama villages.

II.2. Phase:

Phase 3 - 2025-2030

II.3. Precedent Projects:

BTG.1.3.2

III. CALENDAR / TIMINGS

III.1. Design & Tender duration:

6 Months

III.2. Construction duration:

6 Months

IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 3 Settlements</i>	<i>Region 4 - 765 Habitants</i>
<i>Total: 3 Settlements</i>	<i>Total: 765 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh):

123.4

V.2. Peak Demand (MW):

0.0

VI. GENERATION

VI.1. Source 1 | Installed Capacity (MW)

0.09

VI.2. Source 2 | Installed Capacity (MW)

0.00

VII. BUDGET SUMMARY

VII.1. Residential Clients

Total Connections:

145

Distribution and Connection Cost:

\$US 0

VII.2. Medium Voltage extension line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.3. High Voltage line:

Lenght (m):

0

Total Line Cost:

\$US 0

VII.4. High Voltage Substations Intervened:

Number:

0

Total HV Substations Cost:

\$US 0

VII.5. Generation

Total Installed Capacity (MW)

0.086

Generation Cost:

\$US 258 000

VII.6. Total Costs:

\$US 258 000

I. PROJECT IDENTIFICATION

I.1. Program: <i>III. BTG Beyond the Grid</i>	I.2. Initiative: <i>BTG.2 Solar Community Services</i>
I.3. Project Name: <i>BTG.2.1 Solar Community Services - Health Facilities</i>	I.4. Project ID: <i>BTG.2.1</i>
I.5 Regions: <i> Nationwide </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>First stage implementation of solar community services (Health, Security and Education facilities). In this stage all non electrified health facilities are included in the program. Remote community services will also be in the program.</i>	II.2. Phase: <i>Phase 1 - 2015-2020</i>
	II.3. Precedent Projects: <i>None</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>6 Months</i>	III.2. Construction duration: <i>6 Months</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 0 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>0.0</i>	V.2. Peak Demand (MW): <i>0.0</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.94</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>0</i>	Distribution and Connection Cost: <i>\$US 0</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.943</i>	Generation Cost: <i>\$US 2 829 429</i>
VII.6. Total Costs: <i>\$US 2 829 429</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>III. BTG Beyond the Grid</i>	I.2. Initiative: <i>BTG.2 Solar Community Services</i>
I.3. Project Name: <i>BTG.2.2 Solar Community Services - Schools and Security</i>	I.4. Project ID: <i>BTG.2.2</i>
I.5 Regions: <i> Nationwide </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Second stage implementation of solar community services (Health, Security and Education facilities).</i>	II.2. Phase: <i>Phase 2 - 2020-2025</i>
	II.3. Precedent Projects: <i>BTG.2.1</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>6 Months</i>	III.2. Construction duration: <i>6 Months</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 0 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>0.0</i>	V.2. Peak Demand (MW): <i>0.0</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.24</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>0</i>	Distribution and Connection Cost: <i>\$US 0</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.237</i>	Generation Cost: <i>\$US 710 571</i>
VII.6. Total Costs: <i>\$US 710 571</i>	

I. PROJECT IDENTIFICATION

I.1. Program: <i>III. BTG Beyond the Grid</i>	I.2. Initiative: <i>BTG.2 Solar Community Services</i>
I.3. Project Name: <i>BTG.2.3 Solar Community Services - Schools and Security Phase 2</i>	I.4. Project ID: <i>BTG.2.3</i>
I.5 Regions: <i> Nationwide </i>	

II. PROJECT DESCRIPTION

II.1. Description: <i>Third stage implementation of solar community services (Health, Security and Education facilities).</i>	II.2. Phase: <i>Phase 3 - 2025-2030</i>
	II.3. Precedent Projects: <i>BTG.2.2</i>

III. CALENDAR / TIMINGS

III.1. Design & Tender duration: <i>6 Months</i>	III.2. Construction duration: <i>6 Months</i>
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IV. BENEFITTED AREAS

IV.1. Area Number of Settlements benefitted	IV.2. Number of habitants benefitted:
<i>Region 1 - 0 Settlements</i>	<i>Region 1 - 0 Habitants</i>
<i>Region 2 - 0 Settlements</i>	<i>Region 2 - 0 Habitants</i>
<i>Region 3 - 0 Settlements</i>	<i>Region 3 - 0 Habitants</i>
<i>Region 4 - 0 Settlements</i>	<i>Region 4 - 0 Habitants</i>
<i>Total: 0 Settlements</i>	<i>Total: 0 Habitants</i>

V. ESTIMATED DEMAND

V.1. Consumption (MWh): <i>0.0</i>	V.2. Peak Demand (MW): <i>0.0</i>
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VI. GENERATION

VI.1. Source 1 Installed Capacity (MW) <i>0.17</i>	VI.2. Source 2 Installed Capacity (MW) <i>0.00</i>
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VII. BUDGET SUMMARY

VII.1. Residential Clients Total Connections: <i>0</i>	Distribution and Connection Cost: <i>\$US 0</i>
VII.2. Medium Voltage extension line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.3. High Voltage line: Lenght (m): <i>0</i>	Total Line Cost: <i>\$US 0</i>
VII.4. High Voltage Substations Intervened: Number: <i>0</i>	Total HV Substations Cost: <i>\$US 0</i>
VII.5. Generation Total Installed Capacity (MW) <i>0.167</i>	Generation Cost: <i>\$US 499 714</i>
VII.6. Total Costs: <i>\$US 499 714</i>	