Outline

1. Why project is Transformational
2. Project Structure
3. GOG Commitments to GPL and Project
4. Project Benefits
5. Project Risks and Allocation of these risks
6. GOG Performance Guarantee for GPL & Context
7. Electricity Overview and GPL Key statistics
8. GPL Costs, Tariffs and expected savings from project
9. GPL Reform and Improvement Plan (CDP)
Amaila Falls: A Transformational Investment

Reduce Cost of Electricity

Improve Macroeconomic indicators

Improve reliability & generation of power

LCDS/Climate Finance

Economic Growth & Development: Improve regional competitiveness, private sector investment, FDI

Conversion of reliance on thermal generation to renewable energy

Public-Private Partnership utilizing payments for ecosystem services
Project Structure

- The construction period for the hydropower project is 39 months.

- A 20-year take-or-pay Power Purchase Agreement will be entered into by the state-owned Guyana Power and Light (GPL).

- At the end of 20 years, ownership of all facilities will be transferred to the Government of Guyana at zero cost.

- Total Project costs are currently estimated to be ~$858 million and will be funded with approximately 70% debt.

- Of the ~$252 million in Project equity, it is expected that:
  
  - Sithe Global will contribute approximately ~$157 million
  
  - the GoG will contribute $80 million, sourced from the GRIF
  
  - the GoG will fund $32-$35 million for the access road construction. On completion, this outlay will be converted to an equity contribution from GoG.

- The Government of Guyana has described Amaila Falls as the “flagship” of the Low Carbon Development Strategy, and it will eliminate approximately 90% of the country’s energy-related greenhouse gas emissions, after emissions from the plant’s construction are taken into account.

- The project is highlighted in the report of the United Nations Secretary General’s Advisory Group on Climate Finance, as a path-finder for (i) using public climate finance to leverage private finance and (ii) using REDD+ financing to deliver further greenhouse gas abatement in the non-forestry sector.
Project Structure (continued)

- Political Risk Insurer
  - Breach of Contract Coverage

- China Railway First Group (China Rail)
  - EPC Contract

- Sinosure
  - Political and Commercial Risk Coverage

- Government of Guyana (GoG)
  - Equity Contribution/Shareholders Agreement
  - GoG Guarantee
  - Implementation Agreement
  - Hydro License
  - Environmental Permit

- Sithe Global Amaila Holdings, Ltd.
  - Equity Contribution

- Amaila Falls Hydro Inc.
  - Financing Documents

- China Development Bank (CDB)

- Inter-American Development Bank (IDB)

- Sithe Global Affiliate
  - O&M Agreement

- Guyana Power and Light, Inc. (GPL)
  - Power Purchase Agreement (PPA) Receivables Agreement
Project Structure (continued)

<table>
<thead>
<tr>
<th>2010 Capitalization</th>
<th>2013 Capitalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assumed Debt Tranche</td>
<td>$491,561</td>
</tr>
<tr>
<td>Total Committed Equity</td>
<td>$210,669</td>
</tr>
<tr>
<td>Committed Sources</td>
<td><strong>702,230</strong></td>
</tr>
<tr>
<td>Sithe Equity</td>
<td>157,467</td>
</tr>
<tr>
<td>Total Committed Equity</td>
<td>257,467</td>
</tr>
</tbody>
</table>

WACC 13.10% WACC 8.78%
Generation Cost- Average of Generation Cost- Average of
BOOT per/KwH US$10.55 cents US$9.3 cents

- Project cost increases (due in large part to RMB and commodity escalations) have been largely mitigated through project structuring and reductions in the weighted average cost of capital to finance the transaction.
- The result is an average cost of power from Amaila that is in fact lower.
GPL-Amaila Financial Commitments

- Commitments to GPL to D&E (2013--2017) and to cover deficit in operating costs:
  - US$90 M for Capital; US$15.3 M for operating deficits

- GOG/GPL provides certain reserves (security arrangements of app US$90 M +):
  - Debt Service; Tolling Fee Reserve; Geotechnical

- GOG invests into the equity of the project (AFHI) directly with the objective of lowering annual payment > US$100M
Key Project Benefits

• Transform Guyana’s electricity sector from almost entirely oil dependent to one built on renewable, clean energy
  – Greenhouse gas emissions from electricity generation will be reduced by nearly 90%
• Project will deliver US$200 M on average in fuel savings .
  – In 2012 Guyana spent over US$500 M on fuel; Guyana Power and Light (GPL) fuel bill was approximately US$118 M or over 20% of the total
• GPL will pay an average of US$97M over 20 years for
  – In 2012, GPL’s fuel bill alone was $118 MM for 727 GWh of generation; this translates to a variable cost of generation of US$19 cents
  – With Amaila, the total cost will be reduced to ~11 cents/kWh in the first year of operation and ~9 cents/kWh over the 20 year PPA term
  – Once the asset is transferred to GPL after 20 years, the cost will be less than 2 cents/kWh
• Guyana benefits primarily from
  – elimination of subsidy (app 25% of end user tariffs),
  – reduction of end user tariffs by at least 10% (20% projected in 2017) and
  – insulation from increasing costs of fuel over time
• Project is right sized for Guyana:
  – Expected supply from Amaila approximating expected demand by time Amaila comes on line in 2017; Supply has been confirmed by a number of hydrology studies which places expected supply at app. 1,050 GWH; theoretical maximum at 1445 GWH
  – demand is existing GPL demand (730 GWH) Linden (diesel power) (>70 GWH), self generators (largely diesel) > 130 GWH, and growth in demand between now and completion of the hydro (>100 GWH): these total over 1,030 GWH
Key Project Benefits (Continued)

- Decrease GPL’s cost of electricity generation, saving a net estimated US$ 3.8 billion for consumers over the 20 year PPA term as a result of reduced fuel costs, operating costs and replacement capital costs.
## Primary Project Risks and Mitigants

<table>
<thead>
<tr>
<th>Risk</th>
<th>Description</th>
<th>Sharing</th>
<th>Probability/Impact</th>
<th>Mitigant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Cost</td>
<td>EPC contract and project cost increasing</td>
<td>CR except Geo-Technical</td>
<td>Low/Variable</td>
<td>Fixed Price, Lump Sum, Date Fixed EPC Contract</td>
</tr>
<tr>
<td>Construction Delays</td>
<td>Delays to commissioning due to contractor delays</td>
<td>CR except Force Majeure/ Geotechnical</td>
<td>Low/High</td>
<td>Fixed Price, Lump Sum, Date Fixed EPC Contract</td>
</tr>
<tr>
<td>Geotechnical</td>
<td>Delay or cost increase due to ground condition event</td>
<td>GoG/Sithe</td>
<td>Low/Variable</td>
<td>Engineering studies, GoG/Sithe cost sharing arrangement</td>
</tr>
<tr>
<td>Hydrology</td>
<td>Likelihood of insufficient water to generate power</td>
<td>GoG</td>
<td>Low/Variable</td>
<td>Hydrologic surveys, storage basin</td>
</tr>
<tr>
<td>Political Force Majeure (e.g. nationalization)</td>
<td>Cost incurred if GoG caused event leads to termination</td>
<td>GoG</td>
<td>Low/High</td>
<td></td>
</tr>
<tr>
<td>Other Force Majeure</td>
<td>Damages to be paid in the event of a FM event</td>
<td>All parties</td>
<td>Low/Low</td>
<td>Project finance structure allocating risk</td>
</tr>
<tr>
<td>GPL</td>
<td>Risk that GPL demand not sufficient</td>
<td>GoG/GPL and Consumers</td>
<td>Low/Low</td>
<td>Project sized based on extensive demand forecasting</td>
</tr>
<tr>
<td>GPL Payment Risk</td>
<td>Risk of GPL revenue not sufficient to meet PPA obligations</td>
<td>GoG/GPL and Consumers</td>
<td>Low/Low-High</td>
<td>Receivables Agreement, Implementation Agreement and GPL performance guarantee</td>
</tr>
<tr>
<td>Interest Rates</td>
<td>Interest rate risk</td>
<td>Project</td>
<td>Low/Low</td>
<td>Fixed interest rate</td>
</tr>
<tr>
<td>FX</td>
<td>Loans and payments in USD, revenue in GYD</td>
<td>GoG/EPC</td>
<td>Low/Variable</td>
<td>EPC contractor takes FX risk, GYD historically stable</td>
</tr>
</tbody>
</table>
PPA Performance Guarantee

- The GoG is providing a backstop of certain GPL obligations
  - GoG shall use governmental authority to support GPL in timely payment of all financial obligations
- The performance guarantee is NOT a guarantee by GoG of the debt that AFHI owes to CDB & IDB
- The guarantee is only effective if there is a breach of contract by GPL or GoG and only makes explicit what is already implied by GoG being the sole shareholder of GPL

**Average Tariff**

<table>
<thead>
<tr>
<th>Years</th>
<th>Tariff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yrs 1-20</td>
<td>$97 MM</td>
</tr>
<tr>
<td>Yrs 1-12</td>
<td>$122 MM</td>
</tr>
<tr>
<td>Yrs 13-20</td>
<td>$60 MM</td>
</tr>
</tbody>
</table>

**Principal & Interest**

- Portion of Tariff: $76.5 MM

**O&M Backstop**

- $8.74 MM

**Theoretical Maximum under Performance Guarantee:**

- Buy-out clause

**Operating Expenses**

- Insurance, O&M, etc.

**Lenders**

- $600 MM
Amaila Falls Hydropower Project is a private sector led project following on Guyana’s strong macro-position

• Fiscal and Economic overview:
  – GDP: $3 billion
  – Compounded GDP growth over last 5 years of 4.5%; 2012 growth of 4.7%
  – Guyana continues to be one of the fastest growing economies in the region
  – External Reserves: in excess of $800 million

**Given that the Government is only issuing a performance guarantee, this project will not increase the national debt or debt service.**

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Debt to GDP</td>
<td>602%</td>
<td>356%</td>
<td>206%</td>
<td>189%</td>
<td>68%</td>
<td>67%</td>
<td>64%</td>
</tr>
<tr>
<td><em>external debt to GDP</em></td>
<td>561%</td>
<td>318%</td>
<td>169%</td>
<td>148%</td>
<td>46%</td>
<td>47%</td>
<td>48%</td>
</tr>
<tr>
<td>Public Debt to Revenue</td>
<td>1641%</td>
<td>1076%</td>
<td>649%</td>
<td>553%</td>
<td>290%</td>
<td>291%</td>
<td>285%</td>
</tr>
<tr>
<td><em>external debt to Revenue</em></td>
<td>1531%</td>
<td>962%</td>
<td>532%</td>
<td>432%</td>
<td>197%</td>
<td>203%</td>
<td>213%</td>
</tr>
<tr>
<td>Public Debt Service to Revenue</td>
<td>111%</td>
<td>74%</td>
<td>61%</td>
<td>14%</td>
<td>14%</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td><em>external debt service to Revenue</em></td>
<td>76%</td>
<td>52%</td>
<td>41%</td>
<td>9%</td>
<td>5%</td>
<td>7%</td>
<td>7%</td>
</tr>
</tbody>
</table>
Electricity Overview (GPL)

- Guyana Power and Light (GPL), a wholly state-owned company, generates, transmits and distributes electricity to the citizens of Guyana
  - GPL has a current capacity of 130 MW (reliable capacity) and produced approximately 730 GwH last year
  - GPL has approximately 167,000 customers
- Electricity is currently produced using HFO and diesel generators
  - Generation cost in 2012 was 19 US cents
- In 2012, Guyana spent over $500 million on fuel
  - GPL’s fuel bill was approximately $118 million or over 20 % of the total
  - Linden consumers cost app US$15 M for generation; alone; total cost for Linden app US$22 M
  - 622 self-generators are currently operating and the top 36 have an installed capacity of 46MW
- The current average tariff to the residential customer is 31 cents per KwH. The actual cost of providing this power is approximately 39 cents per KwH. The Government provides a subsidy to make up the difference
  - In 2012, the Government provided an US$ 30 million subsidy (excluding capital works) towards electricity
- Electricity cost is one of the highest expenses for the average Guyanese household
- GPL electricity tariffs is one of the lowest in the region; Barbados and Jamaica costs is in the range of US 45 cents per kWh.
Electricity Overview (GPL) ctd

- The Government of Guyana maintains a near monopoly in the generation, sale and distribution of electricity within Country with 4 primary producers:
  - Guyana Power & Light - 130W & 167,000 customers
  - Linden Electricity Inc (LEC) & Bosai- 18MW
  - Lethem Power Company - 0.5MW
  - Kwakwani Utilities - 1MW

- All of GPL’s installed capacity is based on thermoelectric plants with diesel-engine driven generators
  - The majority are inefficient as the utility has resorted to the use of owned and rented high-cost small independent generation units in order to enhance generation capacity in some regions
  - Imports a large amount of diesel fuel oil to power the plants exposing the sector to price shocks and the inherent volatility of the international oil markets

- Electricity in Guyana is also generated by a limited number of Independent Power Producers (“IPPs”)
  - IPPs are generally large corporate firms, mainly in the sugar and mining sector, that generate power for their own needs and sell excess capacity to the national grid
  - Self-supply of electricity in Guyana meets a significant proportion of the country’s electricity demand (150 GWh-year, approximately 20% of GPL’s demand), although it is costly and generates economic inefficiencies
  - 622 self-generators are currently operating and the top 36 have an installed capacity of 46MW
## Strong Customer Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Customer number</th>
<th>Increase over previous years</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>166,878</td>
<td>6,216</td>
<td>3.9%</td>
</tr>
<tr>
<td>2011</td>
<td>160,662</td>
<td>9,374</td>
<td>6.2%</td>
</tr>
<tr>
<td>2010</td>
<td>151,288</td>
<td>4,253</td>
<td>2.9%</td>
</tr>
<tr>
<td>2009</td>
<td>147,035</td>
<td>4,596</td>
<td>3.2%</td>
</tr>
<tr>
<td>2008</td>
<td>142,439</td>
<td>4,718</td>
<td>3.4%</td>
</tr>
<tr>
<td>2007</td>
<td>137,721</td>
<td>7,833</td>
<td>6.0%</td>
</tr>
<tr>
<td>2006</td>
<td>129,888</td>
<td>2,812</td>
<td>2.2%</td>
</tr>
<tr>
<td>2005</td>
<td>127,076</td>
<td>218</td>
<td>0.2%</td>
</tr>
<tr>
<td>2004</td>
<td>126,858</td>
<td>1,634</td>
<td></td>
</tr>
</tbody>
</table>
Despite an increase in sales revenue (largely driven by customer demand) of almost G$10 B since 2007, fuel costs and system losses have been the principal eroding factors in GPL’s financial performance.

Fuel accounted for 70% of total expenses and 83% of revenue in 2012.
Overview of Losses

Technical and Commercial Losses

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Loss</td>
<td>11.4</td>
<td>11.4</td>
<td>13.4</td>
<td>14.3</td>
<td>14.5</td>
<td>14.65</td>
</tr>
<tr>
<td>Commercial Loss</td>
<td>22.5</td>
<td>22.6</td>
<td>20.9</td>
<td>17</td>
<td>17.1</td>
<td>17.05</td>
</tr>
<tr>
<td>Total Losses</td>
<td>33.9</td>
<td>34</td>
<td>34.3</td>
<td>31.3</td>
<td>31.6</td>
<td>31.7</td>
</tr>
</tbody>
</table>

- Technical Losses have remained stagnant
- Commercial losses generally down but have stagnated most recently due to rising theft
GPL Cost of Generation (Measured based on End User Sales/Billings)
Expected Benefits—Generation Costs, Tariffs (2012 vs. 2017 with Amaila)

- **Cost of Generation (2012)**
  - Cost in 2012 close to 38.5 US cents (reflects generation, O&M, employment, return on rate base)
    - Generation is 30.2
    - Employment & Other is 6.8
    - Return on Rate Base is 1.42
  - Tariffs today are 31 US cents

- **With Amaila (2017)**
  - Costs decrease to 24.8 cents
  - Tariffs reduced to cover costs (24.8 cents)

- **Benefits**
  - Costs down by 36%
  - End User tariffs reduced by 20%
  - Subsidy removed
Overall technical and commercial losses now targeted at 24% in 2017; takes account of current pilot program (to reduce losses) with IDB funding which in turn will determine level of capital funding needed for project.
Thank You