Transitioning to the Era of RE-Shared Economy

How BEL plans to respond to changing consumer demands
Who We Are

- **Renewable Energy**: 58%
- **Imported Energy**: 37%
- **Non-Renewable Energy**: 5%

**Accessibility**: 92%

- **Customer Accounts**: 94,450
- **Miles of Transmission and Distribution Lines**: 1,900

| Belize Electricity Limited | Transitioning to an era of RE-Shared Economy |
The Face of Energy ...is Changing

Traditional Energy Systems

- One-way distribution
- Manually operated and maintained, low tech
- Centralized
- Oil-dependent and environmentally insensitive
# Status Update RFPEG - 2013

<table>
<thead>
<tr>
<th>Qualifying Projects</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS Energy - 1ST Phase 8 MWe (Biomass)</td>
<td>SETTLED</td>
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<tr>
<td>SREL New Macal - 19.3 MWe (run-of-river)</td>
<td>29% HIGHER</td>
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<tr>
<td>GSR Advance Biofuels - 35 MWe (Biomass)</td>
<td>87% HIGHER</td>
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<tr>
<td>BAPCOL - 3rd Wartsila 7.5 MWe (Fossil)</td>
<td>SETTLED</td>
</tr>
<tr>
<td>SREL Upper Swasey - 9 MWe (run-of-river)</td>
<td>DELAYED</td>
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<tr>
<td>BAPCOL - Solar 15 MWe</td>
<td>PLANNING</td>
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</tbody>
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60 MW of Firm Capacity & 15 MW of Intermittent Load
Future Generation - 2030

- **Installed Capacity**: 302 MW
- **CFE**: 60 MW (20%)
- **LNG**: 45 MW (15%)
- **Biomass**: 30 MW (10%)
- **Wind**: 39 MW (13%)
- **Solar**: 40 MW (13%)
- **Hydro**: 88 MW (29%)

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The Face of Energy is Changing

Modern Energy Systems

- Two-way distribution
- Renewables driven
- Decentralized (Distributed Generation & Micro-grids)
- High-levels of Automation: Monitoring, Maintenance & Restoration
The Risks of RE Grid Penetration

- Increased competition from off-grid power supply solutions
- Constrained ability to maintain low rates under traditional fixed tariff structure
- Failure to meet customer demands for new tech (solar water heaters, electric vehicles etc.) – loss of market share
The Opportunities

- Revenue Diversification: Electric Vehicles; Wheeling; Engineering Services etc.
- Greater energy supply redundancies with Distributed Generation – potentially lower cost of power and less power outages
- Enhanced operational efficiency – greater automation
What can we do about it?
The Strategic Shift

Stakeholders critically reviewed electricity sector’s internal and external environment.

Determined ‘who we are?’ and the major priorities for the Company over the next 40 years.
Our New Focus
The Future Electricity Sector

- Generation Flexibility
- Diversify & Customize Services
- System Automation
- Grid Adaptation for the Modern System
Thank You
for your attention

Questions?

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