

# THE BELCO SOLUTION

As a regulated company under The Electricity Act 2016, BELCO must acquire approval from The Regulatory Authority in order to make changes to its electricity infrastructure.

**BELCO has submitted a proposal for 3 major projects for approval:**

## 1 REPLACEMENT GENERATION

The development and construction of new, dual-fuel, high efficiency replacement generators on BELCO's existing Pembroke facility.

## 2 TRANSMISSION & DISTRIBUTION UPGRADE

Upgrades to overhead and underground cables/ infrastructure and the implementation of advanced metering technology.

## 3 LIQUEFIED NATURAL GAS

Implementation of a liquefied natural gas (LNG) supply chain through importation of LNG, using a competitive tendering process for supply, which would be processed through a third party LNG terminal and natural gas pipeline built in Bermuda.

27 Serpentine Road  
Hamilton HM 07  
Bermuda

TO THE OCCUPIER



# BERMUDA'S ELECTRICITY SYSTEM IS AT A CRITICAL CROSSROAD

BELCO has the critical responsibility for generating a safe and continual supply of electricity to our customers. We take our obligation to serve this community very seriously.

After decades of service, our infrastructure is in urgent need of replacement and upgrades. If nothing is done, approximately \$26 million in additional cost per year will continue to be spent on a deteriorating system that will deliver sub-standard operational, economic and environmental outcomes. Put simply, Bermuda's electricity supply is at risk.

YOUR ENERGY FUTURE STARTS HERE



**Our path is clear: NOW is the time to invest in a better energy future for Bermuda.**

To take an interactive video tour explaining why we need to upgrade, visit:

[www.yourenergyfuture.bm](http://www.yourenergyfuture.bm)

**BELCO**



## 1 REPLACEMENT GENERATION

## 2 TRANSMISSION & DISTRIBUTION UPGRADE



## 3 LIQUEFIED NATURAL GAS

# WHAT'S NEXT

- The replacement generation received planning permission in 2012.
- Now all we need is Regulatory approval.
- **NOW** is the time to invest in a brighter future for Bermuda.

### Why?

- By 2020, approximately 50% of BELCO's current generating capacity is scheduled to be decommissioned. A significant portion of the generation fleet is at the end of, or beyond, its useful service life. Without a new generation plant, BELCO cannot maintain a reliable, safe and cost effective electricity supply for Bermuda.

### How?

- Build a new, dual-fuel, high efficiency generation plant on BELCO's existing Pembroke facility. Replacement is the most cost effective solution.
- Use dual-fuel generators that will run primarily on natural gas. This will allow for the flexibility to run on fuel oil should the need arise.
- Convert the remaining equipment to natural gas operation.

### Benefits

- Increased system reliability.
- Improved rate stability.
- More cost effective electricity generation.
- More environmentally friendly electricity generation.

### Why?

- BELCO's Transmission & Distribution cables and infrastructure are well beyond their useful lives, resulting in a higher number of faults and higher maintenance costs. Without these upgrades, BELCO cannot support future economic development activities such as new hotels, marinas, public infrastructure and private projects.
- The upgrades will allow for increased renewable energy generation.

### How?

- Replace underground transmission cables and upgrade distribution assets and facilities.
- Implement advanced metering infrastructure.

### Benefits

- Increased system reliability.
- More cost effective supply of electricity.
- Operations that are safer and cleaner for the environment.
- Customers will have greater insight into their electricity consumption.
- Improved data utilization will enable us to improve outage restoration performance, reduce operational costs and be more efficient in our planning.

### Why?

- Fuel oil prices are more volatile than natural gas prices – a cost that is a burden on our customers. Without LNG, rates will be more exposed to the volatility of oil prices and an opportunity to deliver significant environmental benefits to Bermuda would be missed.

### How?

- Introduce natural gas to Bermuda through a competitive LNG procurement process with appropriate governance oversight.
- Undertake a competitive bidding process to select a vendor to build, operate and maintain an LNG import terminal and gas transmission pipeline to BELCO's central plant.

### Benefits

- Stabilized electricity costs and customer rates.
- Significant environmental benefits, e.g. emission reductions of 99% for sulfur dioxide, 85% for nitrogen dioxide, 99% for particulates and 32% for CO2.

## BELCO proposes implementing these projects simultaneously to deliver maximum benefits including:

- The lowest cost of electricity for Bermuda with the least environmental impact.
- Increased reliability of Bermuda's electricity supply.
- Significant environmental improvements.
- The creation of approximately 200 jobs and additional sub-contracted work.
- Over \$300 million invested into Bermuda's infrastructure.

### Visit:

[www.yourenergyfuture.bm](http://www.yourenergyfuture.bm)  
or email us at [info@belco.bm](mailto:info@belco.bm)  
for more information.

