June 1, 2023

Climate Resiliency: Preparing and Adapting through Innovation and Commitment to Path to Clean

Presented by BGE Large Customer Services
Welcome!

Large Customer Services

Large Customer Services
Agenda

1. Welcome
2. Safety and DEI Message
3. Panel Discussion
4. Q&A Session
5. Closing
Summer Safety – Heat Stress

As we approach the “dog days of summer,” the risk of heat stress and potential life-threatening situations becomes more likely. We typically experience a sudden increase in temperature and may not be physically or mentally prepared for the change. Although no heat stress disorders have been reported at this time, we still need to keep the seriousness of an occurrence in front of us. Be aware and prepare for warmer temperatures with the following safety tips:

Beware of safety risks
- Heat cramps can affect muscles in arms, legs, or abdomen
- Heat exhaustion symptoms are exhaustion, dizziness, nausea, pale & clammy skin, rapid pulse, and low blood pressure
- Heat stroke victims stop sweating, the body temperature rises, the heart pounds rapidly and the skin is hot and red.

Prevention is the best defense against Heat Stress:
- Discuss acclimation to weather.
- Avoid alcoholic beverages.
- Pre-hydrate – drink 8 to 16 ounces of water before starting work.
- Hydrate – drink water every 15-20 minutes even if not thirsty.
- Breaks – take frequent breaks and share workload with crew members.
- Watch out for each other – be alert for signs of fatigue or heat related symptoms.
I don't like that man. I must get to know him better.

Abraham Lincoln

BrainyQuote
Climate Resiliency: Preparing and Adapting through Innovation and Commitment to Path to Clean (AM Session)
Meet Our Panelists:

- Fleet Services, Support Services
- Facilities Operations, Property Management
- Capacity Planning, Distribution Planning
- Gas Engineering and Asset Performance Gas Distribution
Climate Resiliency: Preparing and Adapting through Innovation and Commitment to Path to Clean (PM Session)

Meet Our Panelists:

- Fleet Services, Support Services
- Facilities Operations, Property Management
- Capacity Planning, Distribution Planning
- Strategy and Regulatory Affairs
BGE EV Fleet
Solar Carport
and EV Charging
Parking lot

Battery Energy Storage System (BESS)

Switchgear / Microgrid System

Existing OSF Building/ Switchgear

Existing Ground Based Solar

Solar Carport and EV Charging Parking lot

Battery Energy Storage System (BESS)
Project Outcomes

- 49 Chargers for a total of 82 spots (Level 2 and Level 3)
- ~460 kW DC solar carport
- Upgrading the existing solar field to 180 kW DC System
- 500 kW/hours battery energy storage system (BESS) expandable to 1000 kW/hours
- Microgrid interconnected solar and battery storage with the grid to offset loads of the OSF building and the EV charging
Positive Impact on the Environment

On average yearly solar energy production avoids:

- 600 METRIC TONS/YEAR
- 121 HOMES POWERED
- 70,000 GALLONS OF GASOLINE
Additional Benefits

- Lowered risk of slips, trips, and falls
- Improved safety for drivers and others
- Shading and coverage for vehicles and drivers
- Protection from adverse weather conditions (i.e., sun, rain and snow)
- Decreased need for plowing and salting operations
- Reduced operations and maintenance spend
Hydro Boiler Project

• BGE Facilities is in the design phase of a Boiler replacement with a Hydrogen Blended Boiler in the Oil Recovery Facility.

• We will be analyzing the data on Heating Blended Technologies to support a net zero future.
BGE Programs for Your Business

For Your Business

Save energy and money by taking advantage of these programs and tools for your business.

Incentives

- Take advantage of BGE's Energy Efficiency Program incentives that can help you save money and reduce your energy consumption.

Building Optimization

- Operate your building more efficiently, lowering energy costs while enhancing occupant comfort and increasing productivity.

Benchmark Your Building

- Check out online tools to analyze your company's energy usage and find programs that pay for using less.
# Integrated Energy System Scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>1. Limited Gas</th>
<th>Integrated Energy System Scenarios</th>
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<tbody>
<tr>
<td></td>
<td>High-electrification and shift away from delivered gas</td>
<td>Leverage an increasingly clean system, electrification, and gas network</td>
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<tr>
<td>Description</td>
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<tr>
<td>Buildings</td>
<td>Electrification</td>
<td>Electrification with gas/electric hybrid heating</td>
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<tr>
<td>Industry</td>
<td>Electrification</td>
<td>Electrification and alternative fuels</td>
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<tr>
<td>Transportation</td>
<td>Light duty vehicle electrification with alternative fuels for medium and heavy-duty vehicles</td>
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<tr>
<td>Electricity</td>
<td>Zero-carbon electricity by 2045</td>
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<tr>
<td>Other Sectors</td>
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<td>66% reduction by 2045</td>
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<tr>
<td>Net Incremental Cost 2020-2045</td>
<td>$52 Billion</td>
<td>$38 Billion</td>
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<tr>
<td>Overall Risk Level</td>
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<td></td>
<td></td>
<td>Moderate</td>
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<tr>
<td></td>
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<td>Moderate to High</td>
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*Figure 1. Incremental costs include renewable energy capacity and energy, clean gaseous fuels, customer equipment conversions, transmission & distribution infrastructure, and net of savings from avoided gasoline and fossil fuel usage.*
Renewable Natural Gas Plant
Questions?
We Would Like to Hear from You

Please use the QR Code to complete a short survey

Link: https://forms.office.com/r/4jXqNUDw8e
Thank you