Village of Bald Head Island Retreat

Grid Improvement Update

FEBRUARY 18, 2022



Grid Improvement Update

Duke Energy Progress Upgrades to the Energy Infrastructure on Bald Head Island

Key Tenets and Benefits for our Customers

Key Pieces of Work Completed

Primary Work Remaining

Thank You for Your Patience

Duke Energy Upgrades to the Energy Infrastructure on Bald Head Island

Duke Energy is working hard to make sure the energy infrastructure serving the Bald Head Island community can reliably serve customers now and in the future. Improvements will help harden our system to storms and allow for isolation of outages and remote automatic repairs.

-Duke Energy Progress



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Key Tenets

- Improve reliability
- Strengthen the grid
- Expand solar and renewables
- Give more options and control

Grid Improvement INITIATIVE



Customer-focused grid improvements

Data-driven to manage costs

Strategic & targeted to maximize value

making the grid smarter, cleaner, more reliable and more secure

Key Pieces of Work Completed

The key pieces of work completed to date include:

- Replacing and extending the main underground power lines on the island
- Upgrading switchgear
- Adding new switching equipment that can automatically reroute power
- Installing new smart meters
- Enhanced approximately 50 overhead power poles
- Installed approximately 30 new poles on the overhead portion of the main line that begins in Smithville and runs submarine to the island

Primary Work Remaining

While a lot of the visible work on the island is concluding in the new year, there are important updates to our operating systems taking place now so we can fully leverage these upgrades in the future. The primary work remaining includes:

- Adding three automatic switches that are being custom manufactured for the island. This solution is a first of its kind for Duke Energy in the Carolinas. These were delivered to the island and sent back for manufacturer requested improvement.
- Upgrading switches serving the southeast portion of the island and connecting the existing underground lines to create isolation of outages and the ability to reroute power. This work is likely to require some short isolated planned outages.

Thank You for Your Patience



We appreciate the community's patience and support as we continue this work in 2022. Above is an example of crews working to install new underground power lines with specialty equipment to minimize open digging.



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