

GE Technology to Repower Footprint Power's Salem Harbor Station, Reducing Emissions and Ensuring Reliable Electric Service for Greater Boston Area

- *Replacing the Old Facility in Salem Will Solve Local Reliability Issue and Reduce Regional Greenhouse Gas and Other Emissions*
- *New Plant to Support Renewable Energy with Area's First "Rapid Response" Combined-Cycle Power Island*
- *Smaller "Footprint" Plant Opens up Public Access to More than 40 Waterfront Acres*

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SALEM, Mass.--([BUSINESS WIRE](#))--GE (NYSE: GE) steam turbines installed at Salem Harbor Station have provided reliable power to Massachusetts' North Shore for more than 60 years. Today, GE is announcing an agreement with Footprint Power to provide Salem Harbor Station with a new 674-megawatt (MW) natural gas facility to address local reliability needs, reduce regional emissions and facilitate the introduction of the renewable resources Massachusetts requires to meet greenhouse gas emissions reduction goals.

"We selected GE's technology because it provided the best combination of performance and world-class flexibility and efficiency," said Scott Silverstein, president and COO, Footprint Power. "As one of the most flexible and lowest emitting plants on the grid, we can reduce system-wide emissions and system-wide wholesale energy costs while efficiently utilizing natural gas and enabling the integration of additional renewable resources onto the power grid."

Footprint Power has built on the city of Salem's efforts to study the potential uses for the power plant site, minimizing the size of the new plant and maximizing the land available for future, non-power uses. Footprint Power's new combined-cycle plant will soon replace the existing Salem Harbor Station while occupying just 20 acres of the 65-acre site.

"GE is working closely with Footprint Power, Salem officials and Massachusetts regulators to turn this 62-year-old facility into a much smaller, much quieter, and much cleaner 21st century plant," said Victor Abate, president and CEO of Power Generation Products—GE Power & Water. "Occupying less than a third of the current site, the new plant will efficiently use the land to allow the community to reclaim and reshape the Salem waterfront."

For the \$200 million power equipment contract, GE will supply its [FlexEfficiency* 60 technology](#). Built on this advanced solution, the Salem Harbor Redevelopment Project:

Dramatically Reduces regional CO₂, NO_x, SO₂ and mercury emissions.

The GE units will be among the most environmentally advanced in the country, meeting or exceeding the environmental performance of every other fossil fuel power-generating facility in New England. For example, the new plant will reduce regional carbon emissions by an average of approximately 450,000 tons per year—the equivalent of taking 90,000 cars a year off the road in New England.

The new plant will have the ability to turn down during off-peak hours, eliminating the extra fuel and emissions output associated with a plant startup. With the new plant in operation, it is projected that regional NO_x emissions will be reduced by 10 percent; SO₂ emissions will be reduced by 8 percent; and mercury emissions will be reduced by 6 percent. These reductions result from the efficiency and flexibility of the GE equipment in the new facility. Reductions resulting from retirement of the existing coal and oil facility are not even counted in these totals. The plant will also use air-cooled condensers, completely eliminating the use of hundreds of millions of gallons of water per day from Salem Harbor for once-through cooling.

Supports renewable energy while ensuring reliable energy.

The facility, which will utilize two GE 7F 5-series gas turbines, will include the first “Rapid Response” power island to be deployed in New England. The “Rapid Response” capability will enable the plant to add 300 MW of power to the grid within 10 minutes, supporting the continued deployment of wind and other renewable energy sources, while maintaining an efficiency level that rivals any fossil fuel unit in New England.

Opens up public access to more than 40 acres of prime waterfront property.

Options for this newly available land range from docking for cruise ships to commercial and light industrial marine related uses. The last time this entire stretch of the waterfront was accessible to the public, Harry Truman was president.

According to ISO New England, Inc. (ISO-NE), Footprint’s new Salem Harbor facility is needed to maintain the reliability of electricity supply in the greater Boston area beginning on June 1, 2016. In February 2013, Footprint cleared the ISO-NE Forward Capacity Auction to supply electric generating capacity beginning in 2016. The project will receive a five-year capacity payment incentive to construct the facility and fill the power gap in the Northeastern Massachusetts (NEMA)/Boston zone.

Earlier this month, the Energy Facilities Siting Board (EFSB) approved Footprint Power’s petition to construct the new power plant, a key step in moving forward with the project that followed unanimous approvals of the Salem’s Planning Board, Zoning Board of Appeal and

Conservation Commission. Construction of the plant will create an average of 320 construction jobs, peaking at 600 jobs and ending up with 30 to 40 permanent positions.

The existing coal and oil-fired Salem Harbor Station will shut down at the end of May 2014, and GE's equipment will ship in late 2014/early 2015. To reduce the impact on area residents, heavy equipment will be delivered by boat, rather than via streets in local neighborhoods. Commercial operation is planned for June 2016.

To view artist renderings of the new power plant in Salem, please [click here](#) and [here](#).

About Footprint Power

A New Jersey-based company, Footprint Power was formed in 2009 by longtime power-industry executives to identify opportunities for the re-powering or re-purposing of older fossil-fuel fired generation facilities. The company was founded on the simple idea that instead of ignoring older, less-efficient coal and oil-fired power plants, it makes more sense to face head on the challenges they pose, while also taking stock of the many opportunities they present. For more information about Footprint Power, visit www.footprintpower.com.

About GE

GE (NYSE: GE) works on things that matter. The best people and the best technologies taking on the toughest challenges. Finding solutions in energy, health and home, transportation and finance. Building, powering, moving and curing the world. Not just imagining. Doing. GE works. For more information, visit the company's website at www.ge.com.

About GE Power & Water

GE Power & Water provides customers with a broad array of power generation, energy delivery and water process technologies to solve their challenges locally. Power & Water works in all areas of the energy industry including renewable resources such as wind and solar; biogas and alternative fuels; and coal, oil, natural gas and nuclear energy. The business also develops advanced technologies to help solve the world's most complex challenges related to water availability and quality. Power & Water's six business units include Distributed Power, Nuclear Energy, Power Generation Products, Power Generation Services, Renewable Energy and Water & Process Technologies. Headquartered in Schenectady, N.Y., Power & Water is GE's largest industrial business.

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