- Demolition of existing part of power plant not intended for beneficial reuse
- Environmental issues on site: in conformance with the Massachusetts contingency plan
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- Taxes
Early 1800's

Nathaniel Bowditch, Chart of the harbours of Salem, Marblehead, Beverly and Manchester, 1806, Courtesy of the Leventhal Map Center.
GM Hopkins Outline and Index Map of Salem Massachusetts, 1873, Courtesy of the Library of Congress
SIZE COMPARISON

Information from the SASAKI Site Assessment Study, January 2012
SALEM HARBOUR MUNICIPAL PLAN

Information from the SASAKI Site Assessment Study, January 2012
Total site is approx. 62 Acres

Site Breakdown:
- Includes a 10 Acre Easement for NGRID switchyard and substation
- Approximately 2 Acres Zoned Residential
- Majority Zoned Industrial
FOOTPRINT
SALEM HARBOR STATION

Facility Occupies

20 Acres

-or-

32% of total site
Hardscape Occupies 13 Acres
-or-
20% of total site
POWERPLANT ARCHITECTURE

IRT POWERHOUSE
New York City, 1904

McKim Mead & White
BANKSIDE POWER STATION (now the Tate Modern)
London, 1947

Sir Giles Gilbert Scott
WEST END STREET
RAILWAY CENTRAL
POWER STATION
(now SoWa Arts District)
Boston, 1892

William G Preston
GOWANUS POWER PLAN
New York City, 2008

COOKFOX Architects
GOWANUS POWER PLAN
New York City, 2008

COOKFOX Architects
PROPOSED PLANT

GAS COMPRESSOR
MARINE ACCESS FOR POWERPLANT CONSTRUCTION

COMMUNITY OUTREACH BUILDING
ADMINISTRATION BUILDING
LANDSCAPED BERM
AIR INLET FILTER
GAS TURBINE
HEAT RECOVERY STEAM GENERATOR
STACK
GAS COMPRESSOR
COOLING TOWERS

POWERPLANT EMPLOYEE ACCESS

STEAM TURBINE GENERATOR
SUBSTATION
SWITCHYARD

PROPOSED PLANT
PRELIMINARY STAGING PLAN

Stage 1
Initial Site Preparation
Starts: 8/13   Ends: 3/14
PRELIMINARY STAGING PLAN

Stage 1
Initial Site Preparation
Starts: 8/13    Ends: 3/14

Stage 2
Site Preparation
Starts: 3/14    Ends: 1/15
PRELIMINARY STAGING PLAN

Stage 1
Initial Site Preparation
Starts: 8/13  Ends: 3/14

Stage 2
Site Preparation
Starts: 3/14  Ends: 1/15

Stage 3
Foundation Construction
Starts: 7/14  Ends: 12/14
PRELIMINARY STAGING PLAN

Stage 1
Initial Site Preparation
Starts: 8/13     Ends: 3/14

Stage 2
Site Preparation
Starts: 3/14     Ends: 1/15

Stage 3
Foundation Construction
Starts: 7/14     Ends: 12/14

Stage 4
Above Ground Construction
Starts: 12/14    Ends: 4/16
Preliminary Staging Plan

Stage 1
Initial Site Preparation
Starts: 8/13    Ends: 3/14

Stage 2
Site Preparation
Starts: 3/14    Ends: 1/15

Stage 3
Foundation Construction
Starts: 7/14    Ends: 12/14

Stage 4
Above Ground Construction
Starts: 12/14   Ends: 4/16

Stage 5
Facility Operations Begin
April 2016
Phase 2

PRELIMINARY STAGING PLAN

Stage 1
Initial Site Preparation
Starts: 8/13  Ends: 3/14

Stage 2
Site Preparation
Starts: 3/14  Ends: 1/15

Stage 3
Foundation Construction
Starts: 7/14  Ends: 12/14

Stage 4
Above Ground Construction
Starts: 12/14  Ends: 4/16

Stage 5
Facility Operations Begin
April 2016

Phase 2
VISUAL IMPACT STUDY LOCATIONS

1) Bentley Elementary
2) Winter Island
3) Marblehead
4) Cat Cove
1) View from Bentley Elementary

Proposed May 4th 2012

500 FEET →

→ 230 FEET
3) View from Marblehead

Proposed

May 4th 2012

230 FEET

500 FEET
Established in 1974, added to the National Register of Historic Places in 1976.

Includes works by noted Salem architect Samuel McIntire and the House of Seven Gables
1667
House of the Seven Gables
Turner Street
“THE BOOK MAY BE READ STRICTLY AS A ROMANCE, HAVING A GREAT DEAL MORE TO DO WITH THE CLOUDS OVERHEAD THAN WITH ANY PORTION OF THE ACTUAL SOIL OF THE COUNTY OF ESSEX.”

Lenox, Jan 27, 1851
Hawkes House
Derby Street Historic District
1780
SAMUEL MCINTIRE (1757-1811)
Local Craftsman and Architect who worked in the Federal Style.
1792
Peirce-Nichols House
McIntire Historic District
“There is no visible roof at all: the balustrade of the late Georgian roof has been moved out to the very edge, to frame the facade like a lacy cornice.”

Kostof, Spiro, A History of Architecture, Oxford University Press 1985
PLANTINGS PRECEDENTS
1) VIEW FROM INTERSECTION OF DERBY STREET AND ENGLISH STREET
2) VIEW FROM INTERSECTION OF DERBY STREET AND FORT AVENUE
3) VIEW ACROSS CAT COVE FROM WINTER ISLAND
EXPECTED SEA LEVEL RISE

POWER PLANT

NEW ELEVATION +16'-0"

EXISTING ELEVATION +10'-0"

+2' 2100 (IPCC)

+0 2012
EXISTING PLANT

119,000,000 gallons of sea water per day

+/- 425,000 gallons of potable water per day

WATER USE COMPARISON
NEW PLANT WATER USE COMPARISON

EXISTING PLANT

119,000,000 gallons of sea water per day
+/- 425,000 gallons of potable water per day

NEW PLANT

+/- 145,000 gallons of potable water per day

99% REDUCTION
AIR EMISSIONS CREATED IN N.E. REGION BY POWER PLANTS

AIR EMISSIONS REDUCTION

AVOIDED EMISSIONS ACROSS ISO-NE

Avoided Emissions

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CO$_2$ REDUCTION

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Cars off the road

120,000
100,000
80,000
60,000
40,000
20,000
10,000
0
Annual average of 90,000 cars removed from the road
LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN

- Sustainable Sites
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environment Quality
- Innovation in Design
FOOTPRINT COMMITMENTS

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