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**TOWN OF UXBRIDGE
INDUSTRIAL DEVELOPMENT COMMITTEE MEETING MINUTES
BOARD OF SELECTMEN'S MEETING ROOM
21 S. MAIN STREET, UXBRIDGE, MA 01569
MONDAY, FEBRUARY 29, 2016 – 6:00PM**

Present: Mark Andrews, Susan Arena, Ernie Esposito, Barry McCloskey, Mike Volpe, MaryPat Wickstrom
Not Present: Jeff Stewart

I. CALL TO ORDER

Town Manager David Genereux discussed the formation of the Industrial Development Committee and their charge and responsibilities as relates to the power generation plant.

II. NEW BUSINESS

1. Committee organization

MOTION: I, Mr. Esposito, move that the committee nominate MaryPat Wickstrom as Chair. Seconded by Mr. McCloskey, the motion carried 5-0-1 (Ms. Wickstrom abstained). MOTION: I, Mr. Esposito, nominate Mr. McCloskey as Vice Chair. Seconded by Mr. Volpe, the motion carried 5-0-1 (Mr. McCloskey abstained). MOTION: I, Mr. Andrews, nominate Ms. Arena as Clerk. Seconded by Mr. Volpe the motion carried 5-0-1 (Ms. Arena abstained).

2. Discussion – Power Generation Plant, project overview, next steps

Mr. Charles Doherty and Mr. Jack Arruda with EMI/Next Gen were present and discussed the power generation plant. (Presentation attached to the minutes and made part of the record). There was discussion on project overview, next steps and zoning bylaw amendments. The Board will continue discussions at their next scheduled meeting on March 8th.

3. Scheduled tour, surrounding facilities – Mr. Volpe, committee member and Plant Manager of the Bellingham facility, will coordinate a tour of his facility members. The committee will schedule a date at its meeting on March 12th.

III. ADJOURNMENT

At 7:25pm, Ms. Wickstrom adjourned the meeting.

MPW

MaryPat Wickstrom, Chair

Barry McCloskey

Barry McCloskey, Vice Chair

Susan Arena

Susan Arena, Clerk

Mark Andrews

Mark Andrews, Member

Ernie Esposito

Ernie Esposito, Member

Jeff Stewart, Member

Mike Volpe, Member

Date 3/9/16

WILSON
of
MILWAUKEE

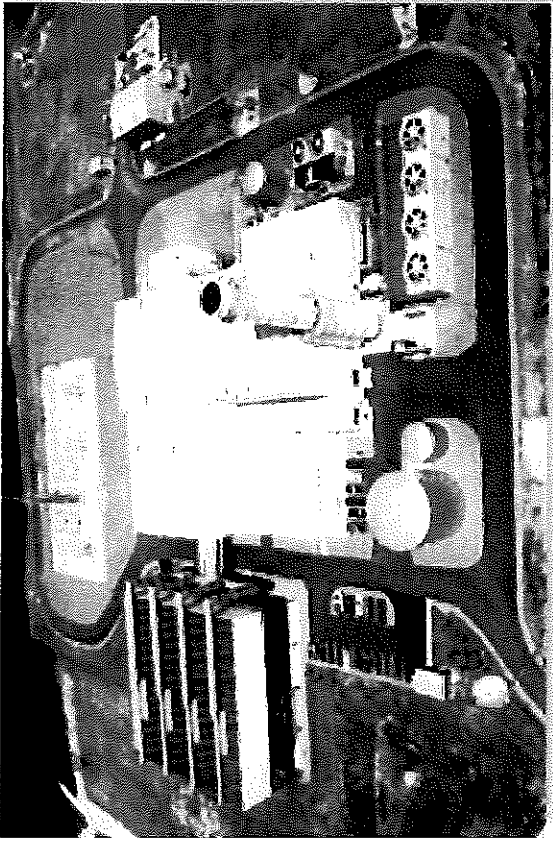
1911
MAY 10

Dear Sir:

I have the honor to acknowledge the receipt of your letter of the 2nd inst. in relation to the above matter.

The same has been referred to the proper authorities for their consideration.

I am, Sir, very respectfully,
Yours truly,
W. J. Wilson



270 MW Tiverton Power project developed and built by EMI

NEXTGEN UXBRIDGE

FEBRUARY 29, 2016



EMI HISTORY

LEADING DEVELOPER OF CLEAN ENERGY PROJECTS IN NEW ENGLAND

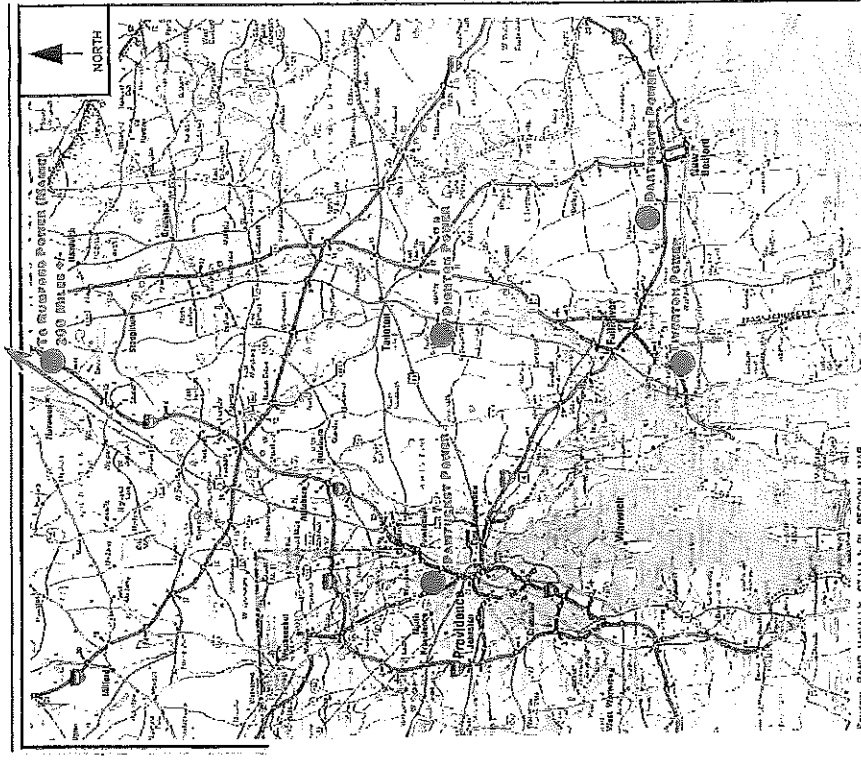
- Privately-held energy company with 40-year track record of developing, financing, constructing and operating independent power generation facilities
- EMI successfully developed, financed and constructed 6 combined-cycle power projects in New England
 - 265 MW Rumford Power, Rumford, Maine
 - 265 MW Tiverton Power, Tiverton, Rhode Island
 - 170 MW Dighton Power, Dighton, Massachusetts
 - 68 MW Dartmouth Power, Dartmouth, Massachusetts
 - 61 MW Pawtucket Power, Pawtucket, Rhode Island
 - 40 MW Pepperell Power, Pepperell, Massachusetts

• Utilized range of technologies

- Combined-cycle gas turbine
- Combined heat and power
- Biomass
- Wind
- Solar photovoltaic

• Developed several innovative and first-of-a-kind power projects

- First combined-cycle, air cooled and first inlet chilled power projects in New England
- Largest biomass projects in United States
- Largest solar photovoltaic power project in Massachusetts
- First independent power project in New England and first fully merchant power project in United States

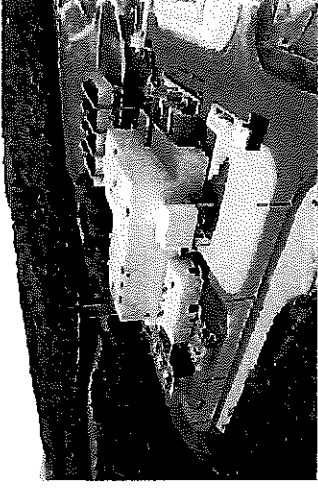


NATURAL GAS POWER PROJECTS

EMI OWNED AND OPERATED A PORTFOLIO OF 5 COMBINED-CYCLE POWER PROJECTS UNTIL 2000

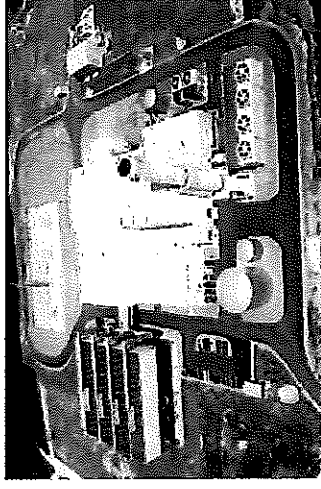
• Rumford Power Associates, Rumford, Maine

- 265 Megawatts
- Gas-Fired Merchant Power Facility
- U.S. \$139,000,000 in construction costs
- Development began in 1996; financing in 1998; commercial operation in 1999; interest sold in 2000



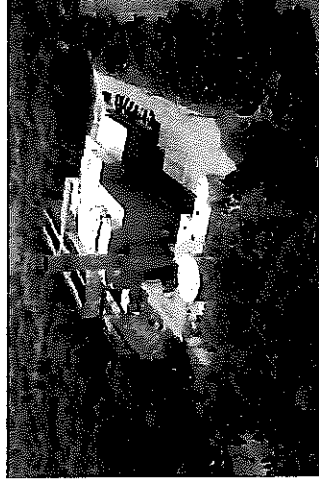
• Tiverton Power Associates, Tiverton, Rhode Island

- 265 Megawatts
- Gas-Fired Merchant Power Facility
- U.S. \$145,500,000 in construction costs
- Development began in 1996; financing in 1998; commercial operation in 1999; interest sold in 2000



• Dighton Power Associates, Dighton, Massachusetts

- 170 Megawatts
- Gas-Fired Merchant Power Facility
- U.S. \$104,000,000 in construction costs
- Development began in 1994; financing in 1997; commercial operation in 1998; interest sold in 2000

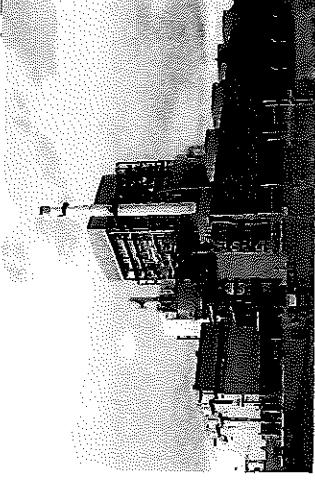


BIOMASS POWER PROJECTS

GAINESVILLE AND NACOGDOCHES PROJECTS ARE THE LARGEST BIOMASS POWER PROJECTS IN THE U.S.

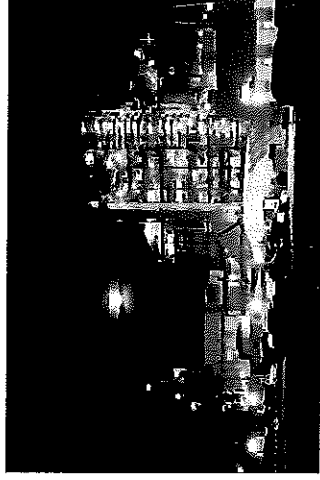
- **Gainesville Renewable Energy Center, Gainesville, Florida**

- 100 Megawatts
- Wood-Fired Power Plant
- U.S. \$500,000,000 Project Finance
- Development began in 2006; financing in 2011; commercial operation in 2013



- **Nacogdoches Power, Sacul, Texas**

- 100 Megawatts
- Wood-Fired Power Plant
- Development began in 2006; sold to Southern Power in 2009; commercial operation in 2012



- **Alexandria Power Associates, Alexandria, New Hampshire**

- 15 Megawatts
- Wood-Fired Power Plant
- U.S. \$25,400,000 in construction costs
- Development began in 1984; financing in 1986; commercial operation in 1987; interest sold in 1993



SOLAR PROJECTS

DARTMOUTH SOLAR IS THE LARGEST PV SOLAR FACILITY IN MASSACHUSETTS

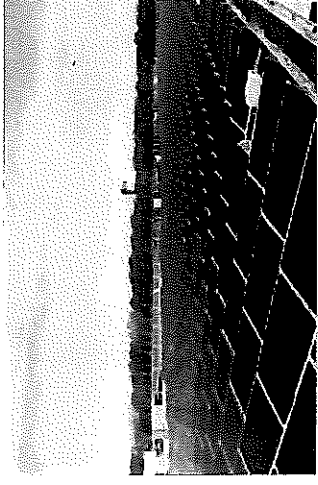
- **Dartmouth Solar, Dartmouth, MA**

- 7.5 Megawatts
- Solar Photovoltaic Array
- Largest PV Solar Facility in Massachusetts
- U.S. \$18,000,000 Project Finance
- Development in 2011; sold to Rockland Capital in 2013; construction began in 2013; commercial operation in 2014



- **Avon Solar, Avon, Massachusetts on the roof of a Preferred Freezer Facility**

- 1.2 Megawatt
- Solar Photovoltaic Array
- Development began in 2013; construction began in 2014; commercial operation in 2014

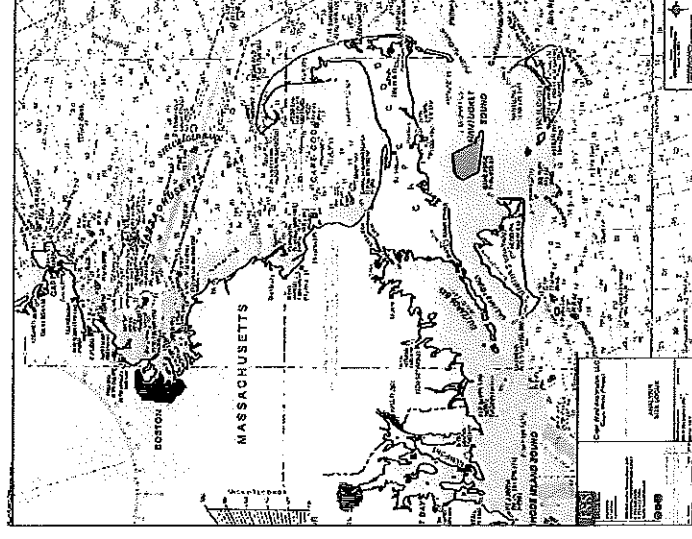
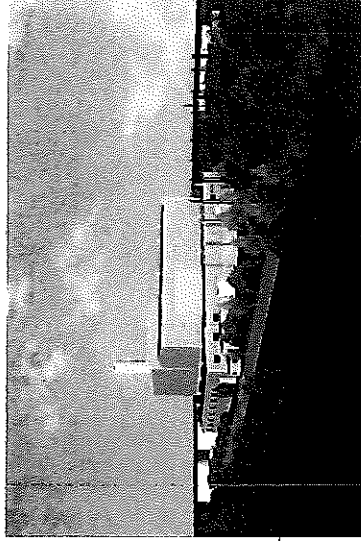


- **Additional projects under development**

OTHER RECENT PROJECTS



- ❑ 400 MW combined-cycle natural gas-fired facility in Westfield, MA
- ❑ Dual-fuel (natural gas and ULSD)
- ❑ 115kV transmission line for interconnection runs through site
- ❑ Gas supply from TGP through lateral owned by Westfield Gas & Electric
- ❑ Fully permitted
- ❑ Interconnection Agreement executed with ISO-NE and Western Massachusetts Electric Company on May 11, 2012
- ❑ Interest sold in January 2015



- ❑ 468 MW offshore wind facility in Nantucket Sound
- ❑ Long-term federal lease executed with BOEM in 2010
- ❑ Fully permitted
- ❑ Completed structural design
- ❑ Construction and Operation Plan approved by BOEM in 2014
- ❑ First utility-scale offshore wind farm in the U.S.



PUBLIC SUPPORT

EMI IS PROUD TO BE KNOWN AS A DEVELOPER OF CLEAN, COMMUNITY-FRIENDLY POWER PLANTS

“FROM THE START THEY WERE ALWAYS CONCERNED ABOUT GOOD PUBLIC RELATIONS AND EVERY COMMITMENT THEY MADE, THEY KEPT. EMI WAS A BIG BOOST, NOT ONLY ON THE ECONOMIC SIDE, BUT ALSO THEY IMPROVED OUR COMMUNITY BY DONATING MONEY AND TIME TO MANY WORTHY PROGRAMS.”

ROBERT C. WELCH
TOWN MANAGER
RUMFORD, ME

“EMI REPRESENTATIVES HAVE HONORED EVERY PROMISE MADE FROM THE FIRST DAY THEY STEPPED INTO THE TOWN HALL. THEY PROVIDED THIS COMMUNITY WITH A POSITIVE ASSET THAT IS CLEAN AND SAFE, AND PROVIDES JOBS AND TAX REVENUE. THEY CONTINUE TO BE ACTIVELY AND POSITIVELY INVOLVED IN THE COMMUNITY.”

ROBERT G. PERRY
SELECTMAN
DIGHTON, MA



UXBRIDGE PROJECT LOCATION

SELECTED COMMUNITY-FRIENDLY SITE

- **Immanuel Quarry Site**

- ±198 Acres located at 775 Millville Road
- Previously disturbed property, minimal clearing required
- Positioned away from residential areas
- Near existing industrial facilities
- Existing forested buffer will minimize visual and noise impacts
- Potential for future growth
- Potential rail access
- Existing gas and electric transmission onsite, no need for new ROW

- **Natural gas supply**

- Main Spectra Energy, Algonquin Gas Transmission pipeline runs through proposed facility site
- Spectra Energy's proposed Access Northeast project will provide significant capacity and infrastructure improvements on the AGT system

- **Electric transmission**

- Multiple 345 kV and 115kV transmission circuits bifurcate site in existing ROW.
- POI will be new National Grid 345kV Line which runs through site connecting major substations West Farnum and Millbury 3.
- Significant enhancements to the local electric transmission system have occurred during past few years.
- Depending on results of 2017 Forward Capacity Auction (FCA-11), construction could start as early as October 2017 with COD May 2020



NEXTGEN UXBRIDGE PROJECT SUMMARY

CLEAN, EFFICIENT SOURCE OF BASELOAD GENERATION FOR SOUTHEAST MASSACHUSETTS

• Advanced technology for clean and efficient operation

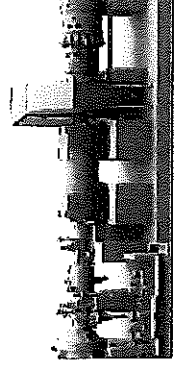
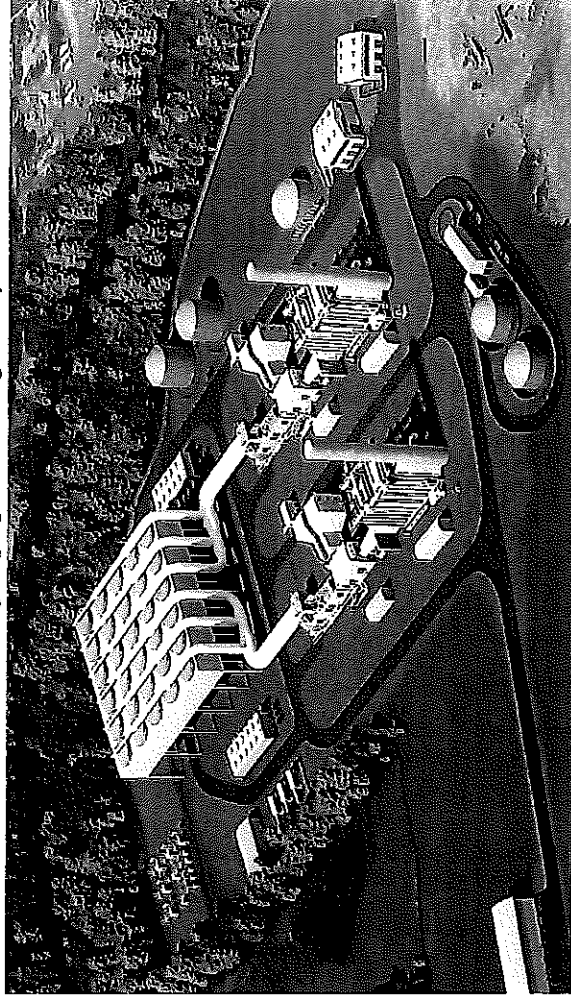
- Approximately 1000 MW dual fuel combined-cycle power project
- H-Class advanced gas turbine technology has significantly increased output and efficiency from previous class
 - nearly 50% increase in output compared to F-class turbine
 - overall combined-cycle efficiency greater than 61%
 - Fast start technology results in lower startup emissions
 - Increased efficiency will result in displacement of less efficient and less environmental friendly generators
- Emissions will comply with the most stringent MADEP & EPA air quality standards by utilizing Best Available Control Technology (BACT) and Lowest Achievable Emissions Rates (LAER)
- Air cooled technology minimizes water consumption
- Supplemental duct firing for maximum summer output.
- Dual fuel (ULSD) capability allows operation for limited hours should there be an interruption in the natural gas supply.

• Significant economic benefits to local community

- ~22-24 permanent high paying professional plant jobs
- ~300-350 construction jobs
- ~\$3 million in annual property tax revenue
- Minimal impact on town resources
- Potential to participate in infrastructure upgrades
- Support local interests and businesses



Rendering of proposed Uxbridge facility



GAS RESOURCES

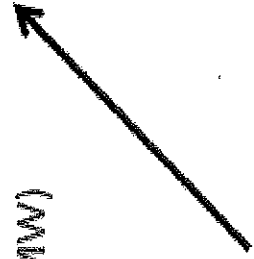
- **New generation facilities needed**

- Massachusetts continues to have highest population growth in Northeast
- Significant retirement of coal, oil and nuclear assets (Salem Harbor, Brayton Point, Vermont Yankee, Pilgrim)
- Minimal construction of new generating facilities since 2005
- Aging infrastructure stretched to limit
 - ISO-NE has identified approximately 6000MW of additional plants at risk of retirement beyond 2018.
 - Average age of potential retirements is 55-years old

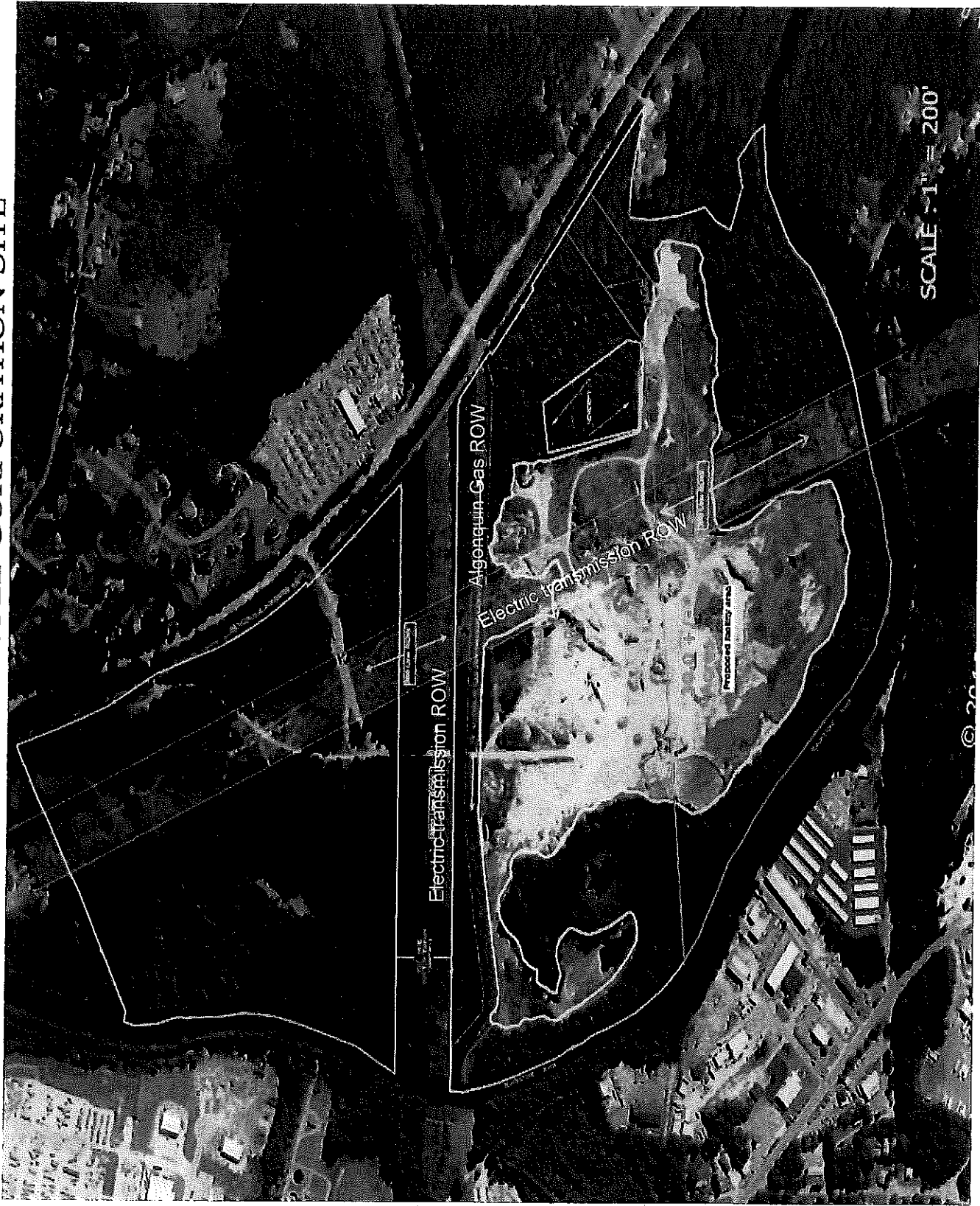
More than 3,500 MW to retire by 2018, (10% of the generating fleet) including major nuclear, coal and oil resources:

- Salem Harbor Station (749 MW)
 - 4 units (coal & oil)
- Vermont Yankee Station (604 MW)
 - 1 unit (nuclear)
- Norwalk Harbor Station (342 MW)
 - 3 units (oil)
- Brayton Point Station (1,535 MW)
 - 4 units (coal & oil)
- Mount Tom Station (143 MW)
 - 1 unit (coal)
- *Additional generation at-risk*

Unit	Unit Type	MW Maximum Assumed	Age by 2020
BRIDGEPORT HBR 3	Coal	401	52
CANAL 1	Oil	597	52
CANAL 2	Oil	599	44
MERRIMACK 1	Coal	121	60
MERRIMACK 2	Coal	343	52
MIDDLETOWN 2	Oil	123	62
MIDDLETOWN 3	Oil	248	56
MIDDLETOWN 4	Oil	415	47
MONTVILLE 5	Oil	85	66
MONTVILLE 6	Oil	418	49
MYSTIC 7	Oil	615	45
NEW HAVEN HBR	Oil	483	45
NEWINGTON 1	Oil	424	46
SCHILLER 4	Coal	51	68
SCHILLER 6	Coal	51	63
W. SPRINGSFIELD 3	Oil	111	63
YARMOUTH 1	Oil	56	63
YARMOUTH 2	Oil	56	62
YARMOUTH 3	Oil	122	55
YARMOUTH 4	Oil	632	42

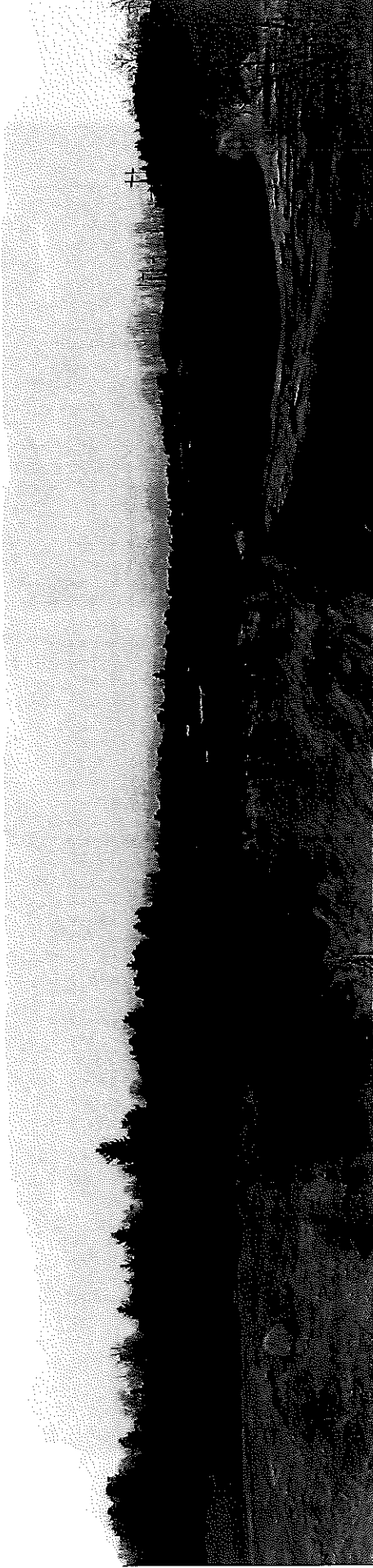


1170 ACKE IMMANUEL CORPORATION SITE

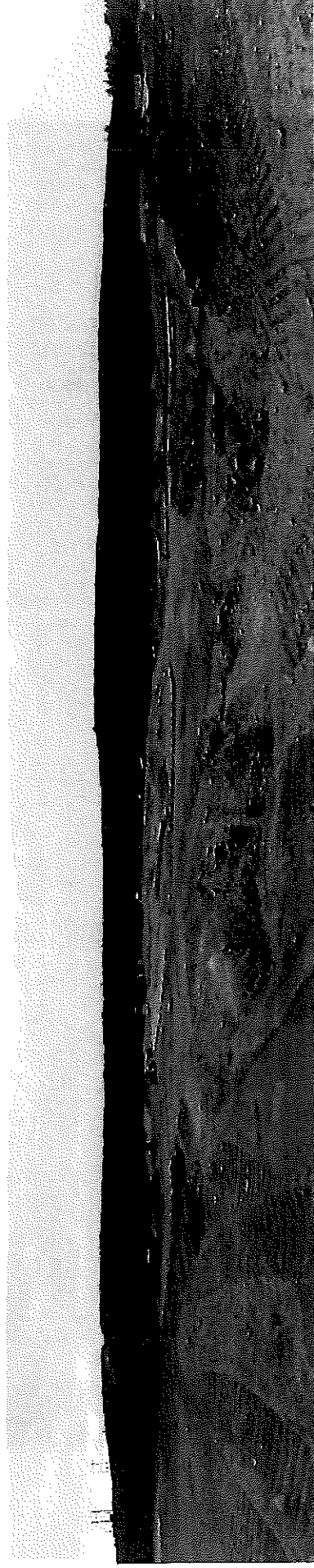


IMMANUEL CORPORATION SITE

View Looking North



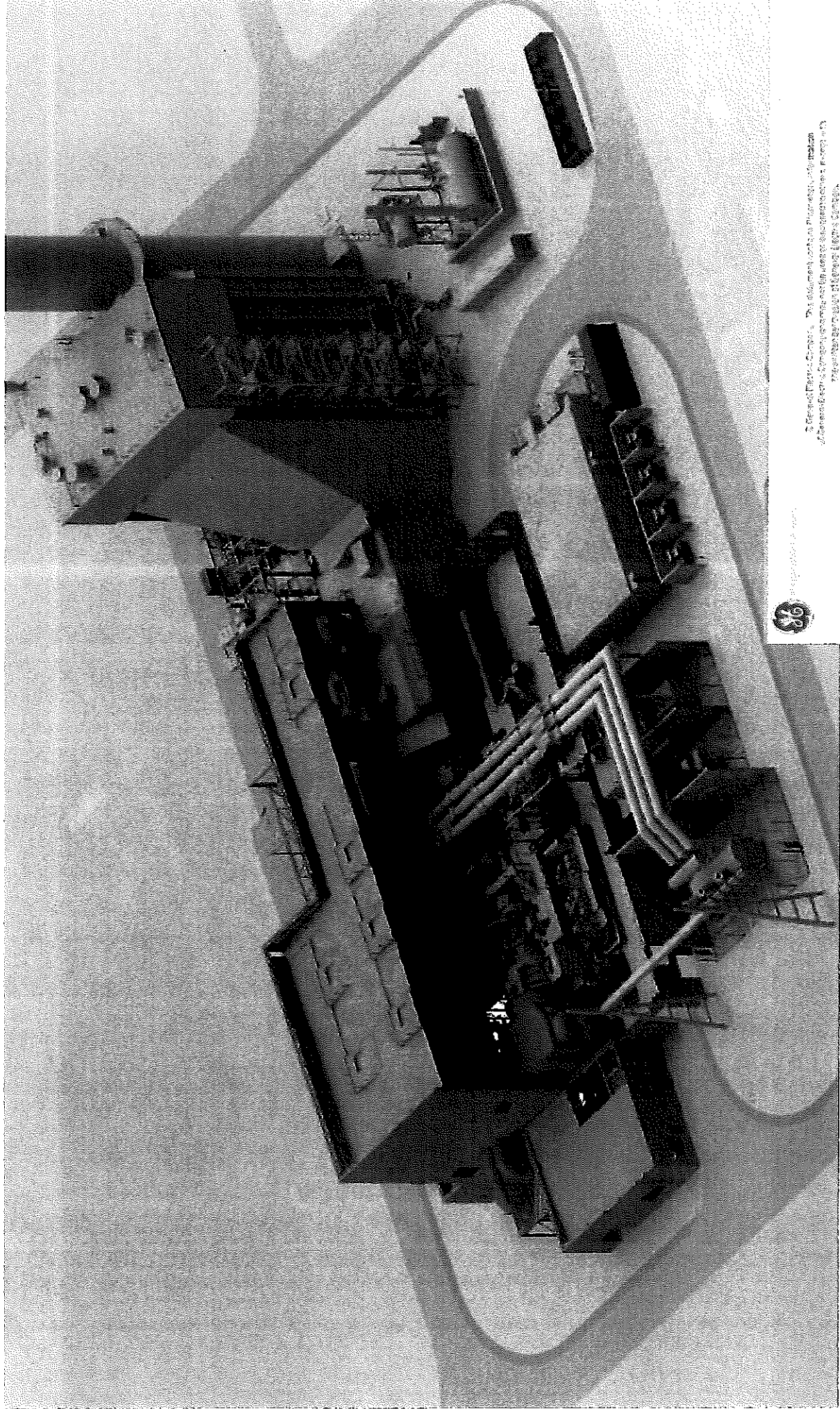
View Looking South



RENDERING OF PROPOSED PROJECT



EXAMPLE: 1X1 SINGLE SHAFT 7HA CONFIGURATION



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