

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
 EOE No.: **13705**
 MEPA Analyst: **Ann Canaday**
 Phone: 617-626-**1035**

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Lowell Power Generators Project		
Street: 282 Lincoln Street		
Municipality: Lowell	Watershed: Merrimack River	
Universal Transverse Mercator Coordinates: 310462.3 E 4722297.5 N UTM Zone 19 (NAD83)	Latitude: 42° 37' 47.32" N	
	Longitude: 71° 18' 41.39" W	
Estimated commencement date: July 2006	Estimated completion date: May 2007	
Approximate cost: N/A	Status of project design: 25	%complete
Proponent: Lowell Power Generators, LLC		
Street: 89 South Street		
Municipality: Needham	State: MA	Zip Code: 02492
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Joseph Freeman		
Firm/Agency: Earth Tech, Inc.	Street: 196 Baker Avenue	
Municipality: Concord	State: MA	Zip Code: 01742
Phone: (978) 371-4000	Fax: (978) 371-2468	E-mail: joseph.freeman@earthtech.com

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes No
- Has this project been filed with MEPA before?
 Yes (EOEA No. _____) No
- Has any project on this site been filed with MEPA before?
 Yes (EOEA No. 12251) No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8)) Yes No
 - a Special Review Procedure? (see 301 CMR 11.09) Yes No
 - a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes No
 - a Phase I Waiver? (see 301 CMR 11.11) Yes No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres):

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify _____) No

List Local or Federal Permits and Approvals: **Local: Site Plan Approval (Planning Board); Wetlands Determination of Applicability (Conservation Commission). Federal: none.**

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- Land
- Water
- Energy
- ACEC

- Rare Species
- Wastewater
- Air
- Regulations

- Wetlands, Waterways, & Tidelands
- Transportation
- Solid & Hazardous Waste
- Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions* <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input checked="" type="checkbox"/> New Source Approval <input checked="" type="checkbox"/> DEP or MWRA Sewer Connection/Extension Permit <input type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i> * Potential Determination of Applicability or Order of Conditions for work within 100-foot Buffer Zone
Total site acreage	~6.1			
New acres of land altered		~4.3		
Acres of impervious area	0	1.86	1.86	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		0		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	0	30,400	30,400	
Number of housing units	N/A	N/A	N/A	
Maximum height (in feet)	0	80	80	
TRANSPORTATION				
Vehicle trips per day	0	6	6	
Parking spaces	0	8	8	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	0	348,500	348,500	
GPD water withdrawal	N/A	N/A	N/A	
GPD wastewater generation/treatment	0	36,000	36,000	
Length of water/sewer mains (in miles)	N/A	<0.25	<0.25	

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of

Rare Species, or Exemplary Natural Communities?

Yes (Specify _____) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

The proposed project consists of constructing a new peaking power generating facility in Lowell, Massachusetts. The project site is 282 Lincoln Street in Lowell, located southeast of, and adjacent to, an existing power generating facility, Lowell Power, operated by Delta Power Services. The property is part of a previously disturbed 7.5-acre lot surrounded by heavy industrial land uses, and currently used for trailers and related storage. The property is primarily located in a GI (General Industrial) zoning district, with the southern portion located in an LI (Light Industrial) zoning district, as designated under the Lowell Zoning Ordinance. Power generation facilities are a permitted use in these zoning districts. Due to the existing zoning designation, the nature of both the historic and existing land use and surrounding land uses, and the location of the property adjacent to an existing power generating facility, the environmental impacts associated with the development of this property are anticipated to be minimal. The facilities to be constructed on the proposed site are described below.

Lowell Power Generators LLC is proposing to install two combustion turbines firing natural gas as the primary fuel and low-sulfur diesel fuel for back-up. The proposed units will have a nominal capacity of 99 megawatts (MW). The new generating units will be General Electric LM-6000 simple-cycle combustion turbines. They will be designed, built, and operated for the purpose of providing power during peak electric demand periods and to support the transmission grid during system imbalances and emergencies. An immediate regional need for more peaking power resources is anticipated by 2007 for Massachusetts, the Greater Boston metropolitan area, and the Independent System Operator for New England (ISO-NE). Construction of the project is scheduled to begin in July 2006, with commercial operation beginning in the summer of 2007. The project site plan is presented in Attachment A.

An existing subsurface natural gas supply line and an overhead 115 kV electric corridor presently serve the adjacent Lowell Power site. These facilities will be able to support the proposed project with limited upgrades to the existing infrastructure. Therefore, the site is well suited for the proposed project with respect to utility infrastructure. The required upgrades are discussed in the attached ENF Energy Schedule.

The proposed site is a previously disturbed, currently undeveloped lot surrounded by heavy industrial land uses. These existing uses are not in transition and are to remain, according to City plans. The project is an industrial land use and is therefore consistent with the current and long-term character of the area. Regarding zoning, as described above, the lot is primarily located in a GI (General Industrial) zoning district, with the southern portion located in an LI (Light Industrial) zoning district. Power facilities are a permitted use in these zoning districts. The project is consistent with the character and zoning associated with the proposed site.

With regard to project impacts, Lowell Power Generators LLC is committed to building a facility with minimal impacts on the environment and the community. Resources impacted include air, water, wastewater, and land.

Regarding air impacts, the turbines will burn natural gas as their primary fuel, with low-sulfur diesel oil as back-up. Natural gas is the cleanest burning fuel available for combustion turbine generators. Low-sulfur diesel oil has the lowest sulfur content and particulate emissions of any available petroleum fuel. Furthermore, Lowell Power Generators LLC is proposing to use combustion and post-combustion controls to limit air quality impacts. The use of these emission control technologies will reduce emissions to levels below those determined by EPA to constitute a “major source” of air pollution.

Regarding noise, impacts on receptors are anticipated to be minimal due to the industrial nature of the area. However, noise abatement measures will be employed to mitigate noise impacts to the maximum extent necessary to ensure compliance with local and state regulatory standards, notwithstanding the industrial nature of the surrounding area. The turbines and ancillary equipment will be enclosed to limit noise impacts. Additional noise mitigation measures will be implemented based on the results of a noise survey of the project and project site area.

Regarding water and wastewater, the project will utilize city water and wastewater infrastructure. The city infrastructure has sufficient available capacity to accommodate the project.

The new peaking units will require 348,500 gallons per day (gpd) assuming operation for a full 24-hour period during peak summer demand periods. The new units are anticipated to be operated mainly during hours of peak electrical demand and, therefore, daily water demands will generally be less than the 348,500 gpd 24-hour operating scenario.

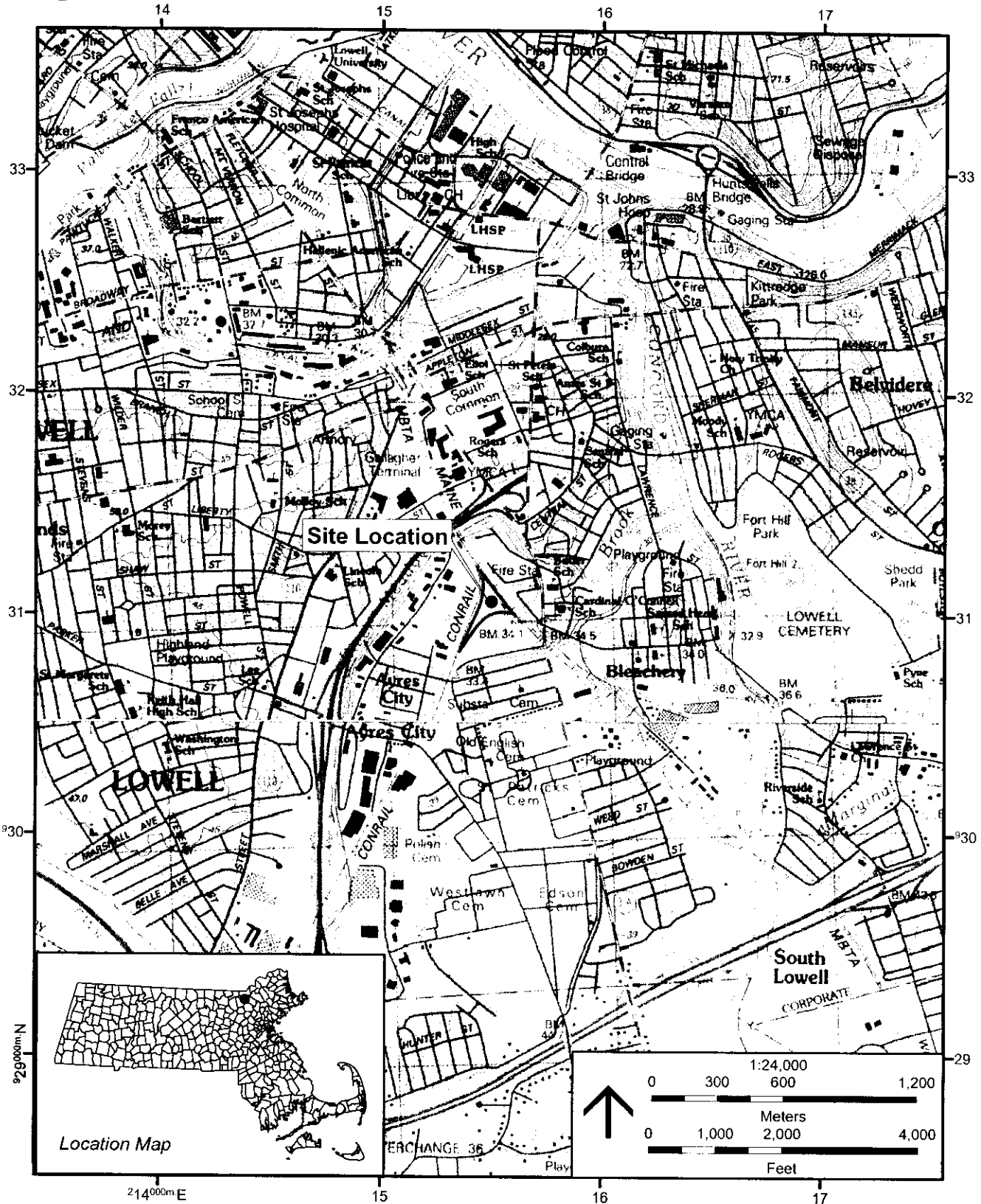
The Lowell municipal waste water treatment facility has a maximum design capacity of 30 million gallons per day (MGD). The plant treats approximately 15 MGD on average and approximately 20 to 21 MGD during peak periods in the summer. Therefore, even during the peak demand periods the plant has a spare treatment capacity of 9 to 10 MGD. While the project will require up to 348,500 gpd under the maximum daily demand scenario, this is process water that will be evaporated in the turbine exhaust and cooling tower. The project’s maximum wastewater discharge will be only 36,000 gpd. This is less than 0.4 percent of the available spare treatment capacity for the plant.

Alternatives

No Action Alternative. The no action alternative was considered and rejected because Massachusetts and ISO-NE face a current shortage of power resources, particularly appropriately scaled peaking resources. The no action alternative would mean additional operation of existing power plants instead of displacing them with cleaner and more appropriately scaled peaking units pursuant to the Massachusetts restructured electric energy system. Finally, the proposed site is an oddly-shaped parcel constrained by rail lines and the former Silresim site. While it is suited for a peaking unit, no other “best” use for the site has emerged.

Alternative Site Locations. There are few alternative project sites in this region that are of the appropriate size, that have no other apparent use, and that lie immediately adjacent to both an existing natural gas pipeline and the existing transmission corridor. Other sites in the immediate neighborhood of the proposed site were considered. These sites are developed properties in an industrial zoning district and would thus have similar environmental impacts to those associated with the proposed site. However, these alternative sites are either unavailable due to pending development plans, or would involve the additional cost of relocating existing business, and are therefore inferior to the proposed site.

Alternative Technologies. Onsite alternatives such as wind power or other renewable technologies are not feasible for the proposed site.



Map Document: (L:\work\89877\GIS\locus.mxd)
11/22/2005 - 10:47:00 AM

Portion of Lowell and
Billerica 7.5' USGS quadrangles.
Scanned quadrangle supplied by EOE, MassGIS.
Date of quads: 1987.
10,000 Meter Grid Massachusetts State Plane NAD83.

Figure 1
Site Locus Map
Lowell, Massachusetts

December 30, 2005

Secretary Stephen R. Pritchard
Executive Office of Environmental Affairs
100 Cambridge Street – Suite 900
Boston, MA 02114

Attn: MEPA Office

RE: Environmental Notification Form - Lowell Power Generators Project, Lowell

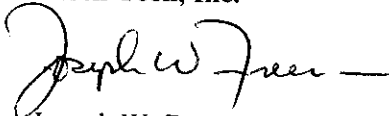
Dear Secretary Pritchard:

On behalf of Lowell Power Generators, LLC, Earth Tech is submitting two (2) copies of a completed Environmental Notification Form (ENF) for the proposed Lowell Power Generators project at 282 Lincoln Street in Lowell. Also enclosed are copies of the first four pages of the ENF, as well as a color reproduction of a section of the USGS quadrangle map for the project site. Each copy of the ENF includes the required distribution list. The Public Notice of Environmental Review will be published in the *Lowell Sun* on or before the January 10 date of the next issue of the *Environmental Monitor*.

Please contact me directly at (978) 371-4208 to schedule a scoping meeting and site visit. I can also be contacted for copies of the ENF – the contact information is as listed on the first page of the ENF.

If you have any questions on the enclosed material, do not hesitate to call or email me.

Very Truly Yours,
Earth Tech, Inc.



Joseph W. Freeman
Senior Program Director
Ecological Sciences and Planning

/jwf

cc: T. Buchanan
E. Liston
J. Fitzpatrick
L. Modica