**Commonwealth of Massachusetts**
**Executive Office of Environmental Affairs ■ MEPA Office**

# ENF Environmental Notification Form

| For Office Use Only<br>Executive Office of Environmental Affairs |
|---|
| EOEA No.: 13192<br>MEPA Analyst: Anne Canaday<br>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: Peabody Power Electric Generating Station | | |
| Street: 58 Pulaski Industrial Park | | |
| Municipality: Peabody, MA 01906-1829 | Watershed: North Coastal | |
| Universal Tranverse Mercator Coordinates: 341262 E 4711548 N (NAD27) | Latitude: 42° 32.52' N<br>Longitude: 70° 55.64' W | |
| Estimated commencement date: Q2, 2004 | Estimated completion date: Q2, 2005 | |
| Approximate cost: $ 45 M | Status of project design: 20 %complete | |
| Proponent: Peabody Power, LLC | | |
| Street: Foot of John Street | | |
| Municipality: Lowell | State: MA | Zip Code: 01852-1131 |
| Name of Contact Person From Whom Copies of this ENF May Be Obtained: Tanya Howard | | |
| Firm/Agency: TRC Environmental Corporation | Street: Foot of John Street | |
| Municipality: Lowell | State: MA | Zip Code: 01852-1131 |
| Phone: 978-656-3668 | Fax: 978-453-1995 | E-mail: thoward@trcsolutions.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._____) ☒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 301CMR 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): None

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

List Local or Federal Permits and Approvals: Peabody Zoning Permits (potential site plan approval, subdivision plan approval, building permit, height variance (if needed), water connection permit), Non-major Comprehensive Source Air Plans Approval (310 CMR 7.02), NPDES Stormwater General Permit Coverage (SWPPP, Construction & Operational)

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 |
|---|---|---|---|
| **LAND** | | | |
| Total site acreage | ~4.0 | | |
| New acres of land altered | | 0.0 | |
| Acres of impervious area | | 0.0 | |
| Square feet of new bordering vegetated wetlands alteration | | 0.0 | |
| Square feet of new other wetland alteration | | 0.0 | |
| Acres of new non-water dependent use of tidelands or waterways | | 0.0 | |
| **STRUCTURES** | | | |
| Gross square footage | 0 | < 6,000 | <6,000 |
| Number of housing units | 0 | 0 | 0 |
| Maximum height (in feet) | 0 | 70' (125' stack) | 70' (125' stack) |
| **TRANSPORTATION** | | | |
| Vehicle trips per day | >10* | <10 | <10 |
| Parking spaces | >10* | <10 | <10 |
| **WATER/WASTEWATER** | | | |
| Gallons/day (GPD) of water use | 0 | 0** | 0** |
| GPD water withdrawal | 0 | 0** | 0** |
| GPD wastewater generation/ treatment | 0 | 0 | 0 |
| Length of water/sewer mains (in miles) | Adjacent to site | Adjacent to site | Adjacent to site |

**State Permits & Approvals**

- ☐ Order of Conditions
- ☐ Superseding Order of Conditions
- ☐ Chapter 91 License
- ☐ 401 Water Quality Certification
- ☐ MHD or MDC Access Permit
- ☐ Water Management Act Permit
- ☒ New Source Approval
- ☐ DEP or MWRA Sewer Connection/ Extension Permit
- ☐ Other Permits (*including Legislative Approvals*) – Specify:

* The Project area currently serves as parking for about 100-150 storage trailers. The number of these units cycled by Wayside Leasing on a daily basis is not clear. However, the evolution of the area from a trailer parking area to a small generating facility is likely to reduce local traffic impacts.

** When fuel oil back up is used, water will be injected into the combustion turbine to control nitrogen oxide ($NO_x$) formation. This rate varies with operating conditions but will not exceed 200 gallons per minute (gpm). This water will be obtained from the existing municipal water system in the industrial park. Peak withdrawal levels will be reduced through the use of on-site water storage.

**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 Confirmation has been sought.

**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 Confirmation has been sought.

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.*)

Peabody Power, LLC is proposing to license and develop a 99 megawatt (MW) simple cycle combustion turbine peaking electric generator in Peabody, Massachusetts. The proposed Project will consist of one ALSTOM GT11N2 combustion turbine operating in simple cycle mode on an existing gravel parking lot. The Project is proposed to be located on an approximately four acre parcel of land adjacent to the existing Peabody Municipal Light Plant (PMLP) combustion turbine site (Locus Plan is attached as Figure 1). The parcel is zoned Light Industrial under the Peabody Zoning Ordinance, and electric generation is an allowed use in that zone.

The Project will be fueled primarily by natural gas and use very low sulfur distillate as a back up fuel. Gas will be provided to the Project under an agreement with PMLP through an existing lateral under the Waters River connecting to the nearby Tennessee Gas pipeline which was originally installed to supply gas to the existing PMLP combustion turbine generators. The Maritimes & Northeast Phase III pipeline is located adjacent to the Tennessee Gas pipeline, and could provide an additional fuel source.

The Project will interconnect with the regional high voltage transmission system by connecting to one of two 115 kilovolt (kV) New England Power circuits that cross the site.

The Project will be equipped with selective catalytic reduction (SCR) to control $NO_x$ emissions. Carbon monoxide (CO) emissions and volatile organic compounds (VOCs) will be controlled to very low levels with efficient combustion control. Sulfur emissions will be very limited through the use of very low sulfur fuels (natural gas primarily with low-sulfur distillate oil backup).

The Project will have minimal water use, requiring water only when burning oil, its backup fuel, for $NO_x$ control. Maximum water demand is expected to be less than 200 gpm. Wastewater resulting from maintenance operations will be stored in a tight tank and removed from the site by truck for appropriate offsite processing and disposal.

Peabody Power is obtaining a "derated" GT11N2 turbine which will be limited to 99 MW gross output. This limitation will be accomplished with an active control system that will limit the turbine's gross generating capacity to no more than 99 MW by controlling fuel supply to the turbine. The load limiting controller will be physically separated from the main control system accessible by plant operators, and will be sealed and secured to ensure that it is not tampered with.

**Alternatives**

The Project purpose is to fulfill a need for additional peaking generation in the North Shore area of northeastern Massachusetts. Three different sites were considered, all of which shared the characteristics of close proximity to the 115 kV electric transmission system and an interstate gas transmission line.

An alternate site was considered in Middleton, adjacent to the existing Middleton Municipal Light Department substation. The site was wooded and bordered conservation land. Although in a sparsely populated area, some residences would be within a few hundred feet of the Project at this location. Because the area was relatively rural, it was anticipated that background noise levels would be relatively low, which may have made Project noise mitigation more difficult. A site was also examined in Danvers, near the closed Danvers landfill. The landfill itself occupies nearly the entire parcel. Building on top of the landfill is impractical because of foundation considerations, as well as the implications of disturbing the cap of a presently closed landfill. A site adjacent to the landfill was considered, but was held by a private entity, and it was unclear a timely purchase could be accomplished. The area is presently zoned residential and would require a zoning change if selected as the Project site. Although protected by a thickly wooded buffer, a relatively quiet residential neighborhood is a few hundred feet away. Other recently built residences line the other side of the landfill parcel and may also have been impacted were the Project located on this site.

The proposed Peabody site is in an existing industrially developed area. The site is adjacent to a similar activity (the PMLP combustion turbine generators). It is at least as distant to sensitive receptors as the other sites and has similar gas and electric interconnection opportunities. The existing zoning (Industrial – Light) allows for electric generation use. The area under consideration has already been heavily disturbed and is presently used to store shipping containers and box trailers to be used for off-site storage. Due to the compatibility of land use and zoning, this site was selected for the proposed Project. Project elements have been proposed to be located in the northwestern corner of the site to maximize the distance to sensitive receptors.