

The Commonwealth of Massachusetts  
Executive Office of Energy and Environmental Affairs

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August 24, 2007

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CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS  
ON THE  
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : General Electric Jet Engine Test Cells No. 2 and 5  
Modifications  
PROJECT MUNICIPALITY : 1000 Western Avenue - Lynn  
PROJECT WATERSHED : North Coastal  
EEA NUMBER : 14064  
PROJECT PROPONENT : General Electric Company  
DATE NOTICED IN MONITOR : July 25, 2007

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** the preparation of an Environmental Impact Report (EIR).

According to the Environmental Notification Form (ENF), the project consists of the modification of existing jet engine Test Cells No. 2 and 5, both of which are located within Building 29, a 156,900 square foot (sf) facility. The proponent is proposing to use these cells for the GE38-1B engine development program. The General Electric (GE) River Works Facility has a total of 17 permitted test cells available for various modes of operation for engine and component development, testing and production. An engine test cell is a "room" consisting of a frame or cartridge into which an engine or component is mounted and connected to an array of links including exhaust stack, fuel, and extensive mechanical and instrumentation controls. In the cell, the engine is run under a range of operating conditions simulating the engine's mission while engineers and operators observe and control the test run from a nearby control room. The test cell modifications will largely be internal to Building 29, with the exception of a replacement stack for Test Cell No. 5, a replacement air inlet ductwork for Test Cell No. 2 and the installation of hush houses for both cells to control noise. The principal changes will include new digital data management systems, engine mounting arrangements and power absorption facilities. The proponent is considering two different power absorption facilities: one using air as the absorption media, the other using water. The hush house will be installed only for the air



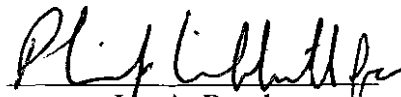
option. For the water option, a closed loop cooling system will be used. The closed loop system will employ a small cooling tower and will have minimal blowdown and minimal supplemental water requirements. The blowdown will be recirculated back into the system and reused, so there will be no wastewater stream. The GE Aviation River Works Facility is an industrial complex located on approximately 221 acres.

The project is subject to review pursuant to Section 11.03(8)(b)(2) of the MEPA regulations because it will require a new permit for the modification of an existing major stationary source resulting in a significant net increase in actual emissions of approximately 25 tons per year (tpy) of Nitrogen Oxide (NOx). It will require a Major Comprehensive Plan Approval (CPA) Non-Attainment New Source Review (NSR) Permit from the Department of Environmental Protection (MassDEP). The project will need to obtain a Prevention of Significant Deterioration (PSD) Air Permit from the U.S Environmental Protection Agency. MEPA jurisdiction is limited to those aspects of the project within the subject matter of state permits and that may have significant environmental impacts (air quality).

The proponent has estimated 3,000 hours per year per test cell as a worst case. It assumes hourly emission rates for both cells operating simultaneously at maximum power. According to the proponent, the project will generate the following tonnage increase in air pollution: Particulate Matter(PM) 0.031 tons per day (tpd); Carbon Monoxide (CO) 0.139 tpd; Sulfur Dioxide (SO2) 0.106 tpd; Volatile Organic Compounds (VOC) 0.012 tpd; Nitrogen Oxide (NOx) 1.27 tpd; Lead (Pb) N/A tpd; Hazardous Air Pollutant (HAP) Negligible; and Carbon Dioxide (CO2) 74.14 tpd.

Based on a review of the information provided by the proponent and after consultation with relevant public agencies, I find that the potential impacts of this project do not warrant the preparation of an EIR and can be adequately addressed within the state and local permitting processes.

August 24, 2007  
Date

  
Ian A. Bowles

Comments received:

General Electric (GE), 7/25/07  
GE, 7/27/07  
CH2M, 8/20/07

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