



October 17, 2007

Ian A. Bowles, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge St., Suite 900
Boston MA 02114

Attn. Nicholas Zavalas, MEPA Office

**Subject: OAR Comments on Draft Environmental Impact Report
Billerica Energy Center; EOE #13925**

Dear Secretary Bowles,

On behalf of the Organization for the Assabet River (OAR), thank you for the opportunity to review and comment on the above DEIR for the Billerica Energy Center. OAR is a membership organization representing approximately 900 households and businesses in the Assabet and Concord watersheds. Our mission is to protect, preserve, and enhance the Assabet River, its tributaries and watershed. Our program includes the Concord River, on which this project is located.

We are primarily concerned that the large volume of water to be used by the power plant could have a detrimental impact on the water quantity (flow) and water quality of the Concord River. The proponent calculates water use at up to 0.18 million gallons per day (MGD), assuming plant operation of 6 hours per day. The source of this water will be wastewater from the Billerica wastewater treatment plant, with municipal drinking water as a back-up source.

According to the DEIR this water would be used in the power plant mainly for nitrogen oxide (NOx) reduction and routine maintenance/cleaning. We understand from the consultant¹ that 90% of the water would be used in the combustion chambers (to reduce the combustion temperature). This water would be released as steam, and no contaminants from the combustion chamber would be returned to the WWTP. The remaining 10% of water used would be used for backwashing filters used in the wastewater filtering and deionizing process, cleaning and maintenance. We understand that this water would contain no combustion byproducts when returned to the WWTP, although it would have a higher concentration of the original pollutants found in the wastewater. We request that this information be made part of the FEIR. We also ask that new contaminants added to the wastewater be described.

The Town of Billerica has stated that it could supply up to 60 million gallons per year (MGY) of wastewater, and an equivalent amount of municipal drinking water (Fig. 11-1). Municipal water is withdrawn from the Concord River, and municipal wastewater is discharged to the Concord River. Hence, whichever source of water is used, it will ultimately affect flow in the Concord River. The question is whether the amount is significant relative to the river's existing flow regime, and the quality of water discharged to the river. Please clarify whether an Industrial Discharge Permit will be required, and if so, list it in Table 1-1.

¹ A.J. Jablonowski, Senior Consultant, Epsilon Associates Inc. pers. com. 9/24/07.

OAR supports using treated wastewater rather than municipal water. This is in line with statewide efforts to re-use wastewater in industrial processes and reduce the stress on aquifers and rivers. The municipal wastewater discharge to the river will still need to conform to effluent pollutant discharge levels as specified under their NPDES permit. The proponent should explain why the amount of municipal water tentatively approved by the Town of Billerica need be so high, since it is only a back-up source. Presumably, during the course of a year, the municipal water would have far less use than the primary (wastewater) source. If at any time the proponent seeks to switch water sources, making either municipal water or well water the primary source, this would be a major change in the project and should trigger a Notice of Project Change.

The Final EIR needs to contain a more complete analysis of possible impacts on the flow of the Concord River on a seasonal basis. The water demand figures provided are averages and based on assumptions about the number of hours per day of plant operation. However, the most likely scenario is for peak electricity demand, and hence plant operation, to coincide with the lowest flow periods of the river, e.g., hot and dry summer conditions.² Time-of-day restrictions will not make a significant difference under low flow conditions in the Concord River if the overall withdrawal increases. The FEIR needs to show *maximum* water use during realistic peak operation scenarios, and provide this as a percentage of minimum monthly flow (Table 10-1) and 7Q10 during those same periods.

The need for this peaking power plant is supported by the 2006 ISO Regional System Plan to some degree, but Central Massachusetts it is not considered a “major load pocket” (p. 95). The report states: “New England could also meet its resource needs through energy efficiency, conservation, and load management, improved unit availability, and purchases of firm capacity from neighboring control areas.” (p. 41) We ask that the proponents commit themselves to provide significant financial support to energy-efficiency and energy conservation efforts in the region to reduce peak loads.

Lastly, we requested that the EIR contain photographs and descriptions of the appearance of the facility to evaluate the view of the plant *from the Concord River*. The visual analysis provided in the DEIR is only from well vegetated land areas and has no views from the river. The FEIR should provide photos of the site taken from the river, with the site in a winter/leafless condition, with a representation of the location and height of all proposed structures and stacks.

In summary, the various options presented by the proponent confer a degree of uncertainty to the project’s likely impacts. If there are changes in primary process water supply, a need for groundwater, or increase in permitted hours of operation, an NPC should be filed for the project. If the project were to rely on municipal water sources, this could put pressure on the town of Billerica to seek higher permitted withdrawal volumes from the Concord River. As the peak water needs of the plant are likely to coincide with low flow periods of the river, this would be of concern.

Thank you for considering our comments. Please call me or Alison Field-Juma, OAR’s Policy Director, if you have any questions concerning this letter.

Sincerely,

Forsyth P. Kineon
Executive Director

² For example, the report uses the mean annual flow of the Concord River of 659 cfs; however today (10/17/07), during a dry fall, the flow is only 69 cfs (USGS gage).

CC: Billerica Conservation Commission
Billerica Planning Department
Billerica Watchers
Mass. Division of Fisheries and Wildlife
Mass. Riverways Program
USEPA
DEP-NERO