

ENF Environmental Notification Form

<i>For Office Use Only</i> <i>Executive Office of Environmental Affairs</i>	
EOEA No.:	13962
MEPA Analyst:	HOLLY JOHNSON
Phone: 617-626-	X 1023

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: Lawrence Hydroelectric Project; Inflatable Flashboard Installation		
Street: 9 South Broadway		
Municipality: Lawrence	Watershed: Merrimack River	
Universal Transverse Mercator Coordinates: 322565E 4729426N (NAD 27)	Latitude: 42.6988° N	Longitude: 71.1664° W (NAD 27)
Estimated commencement date: 7/15/2007	Estimated completion date: 9/15/2007	
Approximate cost: \$3,000,000.	Status of project design: 15	%complete
Proponent: Lawrence Hydroelectric Associates c/o Enel North America, Inc.		
Street: One Tech Drive, Suite 220		
Municipality: Andover	State: MA	Zip Code: 01810
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Skip Medford, Regulatory Specialist		
Firm/Agency: Enel North America, Inc.	Street: One Tech Drive, Suite 220	
Municipality: Andover	State: MA	Zip Code: 01810
Phone: 978-681-1900	Fax: 978-681-7727	E-mail: skip.medford@northamerica.enel.it

- 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. 556 [DEQE]) 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: COORDINATED, EXPEDITED 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): N/A

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify: FERC, ACOE, DEP, NHESP, USFWS, MHC, MADF&W, MADMF, NMFS, LAWRENCE ConComm) No

List Local or Federal Permits and Approvals: FERC LICENSED PROJECT No. 2800-MA

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

- | | | |
|---------------------------------|--|--|
| <input type="checkbox"/> Land | <input checked="" type="checkbox"/> Rare Species | <input checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> 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 checked="" type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>
Total site acreage	N/A			
New acres of land altered		0		
Acres of impervious area	N/A	0	N/A	
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	N/A	0	N/A	
Number of housing units	N/A	0	N/A	
Maximum height (in feet)	N/A	0	N/A	
TRANSPORTATION				
Vehicle trips per day	N/A	0	N/A	
Parking spaces	N/A	0	N/A	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	N/A	0	N/A	
GPD water withdrawal	N/A	0	N/A	
GPD wastewater generation/ treatment	N/A	0	N/A	
Length of water/sewer mains (in miles)	N/A	0	N/A	

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 NHESP 2006 MA EST. HABITATS OF RARE WILDLIFE, NHESP 2006 MA PRIORITY HABITATS OF RARE SPECIES) 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_Essex or "Great Stone" Dam_) 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.*)

SEE ADDITIONAL PAGE "INFLATABLE FLASHBOARD SYSTEM INSTALLATION"

INFLATABLE FLASHBOARD SYSTEM INSTALLATION

January 24, 2007

Lawrence Hydroelectric Project, FERC No. P-2800-MA

The Essex Company with its co-licensee Lawrence Hydroelectric Associates (collectively, "LHA") own and operate the Lawrence Hydroelectric Project (FERC No. 2800), a 16.8 MW hydropower facility (the "Project") located on the Merrimack River in the City of Lawrence, Massachusetts. The Lawrence Project works include the Essex (or "Great Stone") Dam, a 900-foot long cut granite block structure, wholly owned by the Essex Company, which impounds water for the Project. The impoundment created by the dam and flashboards extends upstream some 9.8 miles to Hunt's Falls, in the City of Lowell, Massachusetts, and encompasses an area of about 655 acres.

LHA proposes to replace the existing five-foot high wooden flashboards on the dam with an identical height "inflatable flashboard" system. No other changes to project operation or structures are proposed. This proposed change will provide improved environmental benefits, increased worker safety, improve operational control of river flow and level at certain flows, enhance project economics and contribute to improved dam aesthetics.

LHA proposes to replace the wooden flashboards on the crest of the Essex Dam with a multiple-operating-zone inflatable bladder anchored into the present dam crest, potentially separated by concrete piers. The proposed system would consist of inflatable air bladders anchored into the entire length of the dam crest. Some potential manufacturers also incorporate hinged steel panels on the upstream side of the bladders. By controlling air pressure within the bladder, and thus increasing or decreasing "flashboard" height, the bladder can be used to maintain the normal headpond elevation at the Project, or other elevations between the normal water level and crest of dam, depending upon river user needs, flow and weather conditions as well as a number of other factors. At least two intermediate piers may need to be installed along the dam's alignment. A compressor system used to inflate the bladder would be installed by LHA within a suitable structure near the dam.

LHA has consulted with a number of state and federal resource agencies regarding this proposal. To date, all responding resource agencies and organizations have concurred with our proposal to install an inflatable flashboard system upon the Essex Dam. The responding agencies include: the U.S. Department of the Interior/Fish and Wildlife Service, Massachusetts Historical Commission, Massachusetts Divisions of Marine Fisheries and Fisheries & Wildlife, and the Executive Office of Environmental Affairs/Department of Environmental Protection/Division of Watershed Management

Pending timely approvals, we anticipate that construction to install the bladder on the dam could occur outside of the fish passage season, between July 15 and September 15, 2007, a typically low flow period within the watershed. A partial impoundment drawdown to a safe level below the dam crest (about 7-8' below impoundment normal water elevation) would be necessary during the construction period to allow installation of the inflatable flashboard system.

Environmental monitoring and protection measures developed with the appropriate resource agencies during project permitting will be undertaken during the construction period. No permanent negative impacts to natural resources within the project area are anticipated from this project.

LHA's proposal to replace the existing wooden flashboards on the crest of the Essex Dam with an inflatable flashboard system would provide multiple benefits to present and potential users of the water resource. Approval of the proposed action would not change the existing and historic impoundment elevation of the Merrimack River at the Lawrence Hydroelectric Project, nor would it adversely affect the ability of the Project to pass high river flows during flood conditions. The purpose of the currently-authorized wooden flashboards, to raise the impoundment level while providing flood mitigation when necessary, would not be compromised.