

Petition No. 1105

PSEG Power Connecticut, LLC

1 Atlantic Street, Bridgeport

Staff Report

July 10, 2014

On May 28, 2014, the Connecticut Siting Council (Council) received a Petition (Petition) from PSEG Power Connecticut, LLC (PSEG) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed modifications to the existing Bridgeport Harbor No. 3 generating unit (Unit 3) at 1 Atlantic Street, Bridgeport. Unit 3 is a 383 megawatt (MW) (summer rating) generating unit that is dual-fired low-sulfur coal and residual oil. The United States Environmental Protection Agency (EPA) issued its final rule for Mercury and Air Toxic Standards (MATS) on February 16, 2012. EPA promulgated MATS to reduce emissions of heavy metals and acid gasses from new and existing coal and oil-fired electric generating units. Generating units with a capacity of over 25 MW are required to comply with the reduced emissions limits by April 15, 2015. PSEG has already installed a mercury emissions reduction system to meet the emission requirements of Public Act 03-72 – An Act Concerning Mercury Emissions from Coal-fired Electricity Generators. The Council granted approval of Petition No. 756 on March 22, 2006 to PSEG to install the mercury emission reduction system.

The petition was field reviewed by Council member Robert Hannon and Michael Perrone of the Council staff on June 24, 2014. Attorney Tom Regan from Brown Rudnick LLP (representing PSEG); Abdul Dawlatzai, Project Engineering Manager from PSEG; and Robert Silvestri, Fossil Environmental Compliance and Programs Manager from PSEG also attended the field review.

The new MATS emission limit for hydrogen chloride (HCl) is 0.002 lb/MMBtu. PSEG must install additional control technology to achieve the new HCl limit by the April 2015 compliance date. Specifically, PSEG proposes to install a dry sorbent injection system (DSI Project), which would remove acid gasses from the boiler flue gas. The DSI Project will be installed adjacent to the existing baghouse and will include a small control building, a silo for the hydrated lime, and related piping, conduits, and cable trays. The DSI project would be a two-step process. First, the hydrated lime would be injected into the flue gas stream as it passes through the ductwork between the precipitator and the baghouse filter. The hydrated lime, which is a powerful sorbent, would react with and adsorb/neutralize HCl and other acid gasses. Next, the flue gas would pass through the baghouse filter which will capture solid particles resulting from the hydrated lime reacting with HCl and other acid gasses. This project is designed to reduce HCl emissions to levels at or below 0.00185 lb/MMBtu to comply with MATS.

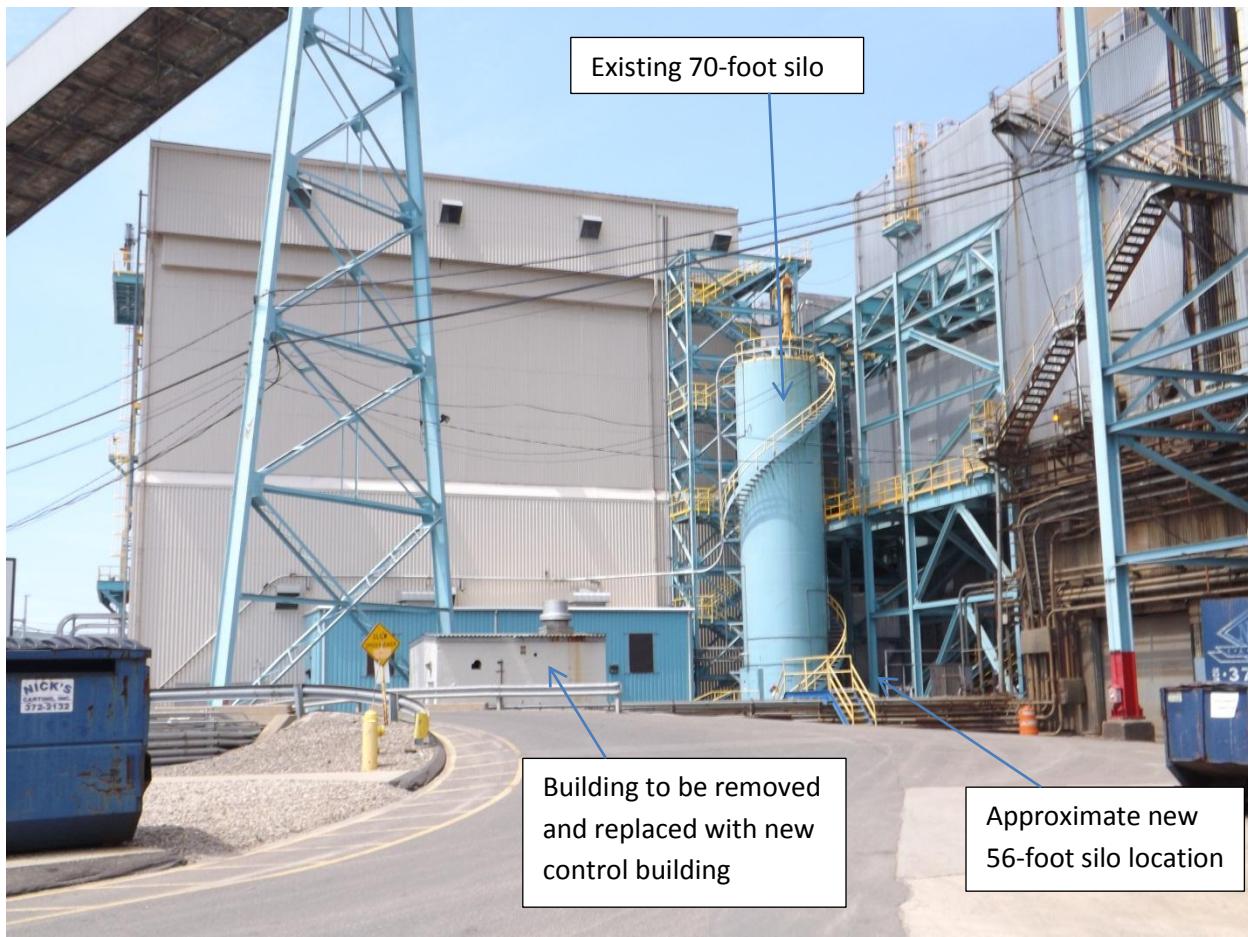
The subject property is already heavily developed with utility infrastructure. An existing masonry block building structure would be removed for the new pre-fabricated 20-foot by 32-foot by 13-foot high control building to be installed. A new silo, approximately 56 feet tall, would be constructed next to the existing 70-foot existing silo which would remain. (See attached photograph.) Furthermore, Unit 3 has even taller existing equipment including a 497-foot stack. Thus, the incremental visual impact associated with this emission reduction project is expected to be negligible.

The project area would be on pre-developed property. Proper erosion and sedimentation controls would be utilized at the site during the construction process. The project is expected to meet all applicable noise standards. The project would be designed to be installed 18 inches higher than the 100-year flood elevation, consistent with the existing PSEG facility. The project would not significantly affect vehicular traffic to the PSEG facility. Hydrated lime would be delivered by truck approximately once every nine days.

PSEG has provided notice to all abutting property owners, the City of Bridgeport, and others as required on May 27, 2014. By letter dated May 28, 2014, Mayor Bill Finch of the City of Bridgeport indicated that the City does not object to the proposed project. No other comments have been received.

On July 8, 2014, the Council received a minor revision to the petition to include a jib crane at the top of the silo structure. This would support the efficient service, repair, and maintenance of the silo by providing workers with a safe way to raise and lower equipment. The jib crane would be a permanent feature that would increase the total height by about 3-foot 7-inches to approximately 59 feet 7 inches. This is not expected to materially affect visibility given the existing 90-foot building and 70-foot silo. See attached drawing.

If approved, the project is expected to be fully operational by March 2015, in advance of the April 15, 2015 deadline.



Drawing of proposed silo with jib crane on top

