

**Petition No. 694**  
**Bozrah Light & Power Company**  
**Bozrah, Connecticut**  
**October 7, 2004**  
**Staff Report**

On September 7, 2004, the Connecticut Siting Council (Council) received a petition from Bozrah Light & Power Company (BLPC) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required to install a third transformer and associated switchgear and other equipment at an existing substation located at Stockhouse Road, Bozrah, Connecticut. On September 24, 2004, this petition was field reviewed by Council member James J. Murphy, Jr. and Michael Perrone of the Council staff.

BLPC provides retail electric service in the Town of Bozrah and portions of the Towns of Lebanon and Montville. BLPC's electric distribution system is connected to the regional transmission grid at the Stockhouse Road substation. The substation interconnects with the Connecticut Light and Power Company 1490 and 1090 115-kV transmission lines.

Specifically, BLPC seeks to: install a third 27 MVA transformer; replace existing switchgear; replace a 115-kV disconnect switch; install circuit switchers for transformer protection; and increase the number of distribution feeders emanating from the substation from two to five. BLPC's existing non-industrial load is approximately 10 MW, and its industrial load required to serve AGA Gas Inc. (AGA) is approximately 20 MW. This gives a total of about 30 MW. Thus, if one existing 27 MVA transformer were to fail, the other existing transformer would be unable to serve the system's peak load. Therefore, BLPC seeks the additional transformer to preserve single contingency reliability of the substation. Also, the existing switchgear has no margin for supplying the projected 30 MW peak load. The proposed new switchgear would have a capacity rating of 48 MW which could meet the peak load with sufficient margin.

The substation site is 0.91 acres with a crushed stone surface and surrounded by a six-foot high chain link fence with barbed wire. The property is zoned I-80 industrial. Warehouse facilities are located on the opposite side of Stockhouse Road from the substation, as well as on either side of the substation facing Stockhouse Road. Woodlands and marsh abut the substation footprint to the north. The AGA facility property abuts the site to the west. The nearest residence is located approximately 350 feet to the west of the substation site. (The home was not visible from the site due to surrounding trees as well as being surrounded by industrial and warehouse facilities.) The substation site is located outside of the 100-year flood plain and outside the habitat area of any endangered or threatened species as delineated in the natural diversity database maintained by the Connecticut Department of Environmental Protection. The site is also not located within any wetlands or watercourses. The increase in noise at the site boundaries is not expected to be significant. Further, incremental increases in electromagnetic fields (EMF) from the existing substation equipment and the overhead 115-kV transmission line are not expected. Also, no significant increases in EMFs are expected at the nearest residence, given the distance.

Piles would be driven into the ground and concrete pads would be placed on top of piles to support the transformer and switchgear. An impermeable spill containment barrier holding a volume equal to 120% of the volume of the transformer's insulating oil would be installed around the transformer foundation pad. (The transformer would use a mineral oil with no PCBs) Hay bales and sedimentation fences will be placed around all construction and installation work to minimize any impact to nearby wetlands. The new transformer and switchgear would be similar in size to their respective existing equipment and thus are not expected to have a significant incremental visual impact. All equipment would remain within the existing fenced substation footprint. Lastly, on September 9, 2004, the site plan was approved by the Town of Bozrah Planning and Zoning Commission.