

# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

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### **CERTIFIED MAIL RETURN RECEIPT REQUESTED**

December 2, 2004

Stephen D. Murphy  
Planning Specialist  
Department of Public Works  
165 Capitol Avenue  
Hartford, CT 06106

RE: **PETITION NO. 698** - Department of Public Works petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed installation of a 25 kW fuel cell at the Dinosaur State Park, Rocky Hill, Connecticut.

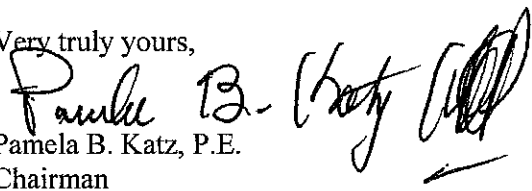
Dear Mr. Murphy:

At a public meeting held on December 1, 2004, the Connecticut Siting Council (Council) considered and ruled that this proposal would not have a substantial adverse environmental effect, and pursuant to General Statutes § 16-50k would not require a Certificate of Environmental Compatibility and Public Need.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition, dated October 19, 2004 and additional information received at our office on November 30, 2004 and December 1, 2004.

Enclosed for your information is a copy of the staff report on this project.

Very truly yours,

  
Pamela B. Katz, P.E.  
Chairman

PBK/laf

Enclosure: Staff Report dated December 1, 2004

c: The Honorable Todd E. Cusano, Mayor, Town of Rocky Hill  
Barbara Gilbert, Town Manager, Town of Rocky Hill  
Kimberly Ricci, Director of Planning, Town of Rocky Hill  
Michael S. Hsu, Ph.D., President, Ztek Corporation  
David Ljungquist, Technical Director, IntellEnergy  
Karen Mendes, Project Manager, Connecticut Clean Energy Fund  
Douglas M. Rode, P.E., Managing Director, Beacon Energy, LLC  
Meg Enkler & Larry Butts, Dinosaur State Park  
Lynn Stoddard & Linda Levine, Connecticut Dept. of Environmental Protection

**Petition No. 698**  
**Connecticut Department of Public Works**  
**Dinosaur State Park**  
**Rocky Hill, Connecticut**  
**December 1, 2004**  
**Staff Report**

On October 25, 2004, the Connecticut Siting Council (Council) received a petition from the Connecticut Department of Public Works for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed installation of a 25 kW fuel cell at the Dinosaur State Park on 400 West Street, Rocky Hill, Connecticut. The fuel cell would operate on natural gas and produce electric power and waste heat. All of the electricity and waste heat would be used on site.

The fuel cell is funded by the Connecticut Clean Energy Fund and the Office of Policy and Management. The fuel cell would be used for a 24 month demonstration. However, the possibility exists that this time period may be extended by Dinosaur State Park. The electric power output would be 25 kW at 3 phase 208 Volts. The fuel cell also produces approximately 90,000 Btu/hr of exhaust gas heat. The fuel cell would consume approximately 2 gallons of water per hour, 2,000 cubic feet of air per hour, and 200,000 Btu/hr of natural gas at 5 to 15 psig. A portion of the park's electrical demand (approx. 1/4 to 1/3) would be met by this unit. Also, the waste heat would be used to provide air conditioning for the visitor center via an absorption air conditioning system or heating via a hydronic system.

The overall dimensions of the complete fuel cell unit are 7 feet high, 6 feet wide and 6 feet deep. The fuel cell is located in a galvanized steel storage shed. The shed is 10 feet wide, 20 feet deep and 8 feet high. (The unit and shed are already in place.) The shed is located adjacent to the main building at the park. Bollards are in place to prevent the shed from being struck by a vehicle. The shed is secured by steel doors that lock. Also, the fuel cell would be monitored remotely by Ztek Corporation, the fuel cell manufacturer.

The site is not located near any homes. Noise is expected to be minimal given that the fuel cell is located inside a shed. No wetlands appear to be in the vicinity of the site. Further, a site drawing from the Department of Environmental Protection Bureau of Natural Resources indicates that the site is not in the vicinity of the archeologically sensitive area where the dinosaur tracks were found. The site is also not readily visible from the street due to the curved existing driveway. However, the issue of visual impact is largely moot due to the fact that the fuel cell would also be used for educational purposes and as a supplemental exhibit at the park. Thus, it is a display that is intended to be seen by the park's visitors.

This petition was field reviewed by Council member Dan Lynch and Mike Perrone of the Council Staff on November 29, 2004. Also present at the field review were: Linda Levine from Connecticut Dept. of Environmental Protection, State Parks Division; Dr. Michael Hsu from Ztek Corporation; Larry Butts from Dinosaur State Park; Steve Murphy from the Connecticut Dept. of Public Works; David Ljunquist from the Connecticut Clean Energy Fund; and Doug Rode from PSI<sup>2</sup>. From the field review, it was clear that the project was already largely complete. The concrete pad was poured, the shed was set in place, and the majority of the equipment was set inside and connected already. The heating and air conditioning system is also connected. All piping and wiring appears to be complete. Remaining work to be done would include the installation of a series of ceramic plates arranged in stacks within the fuel cell. This would make the fuel cell a complete working unit and ready for activation.