DOCKET NO. 225C - Kleen Energy Systems, LLC Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a Electric Generating Facility and Switchyard on River Road, Middletown, Connecticut. Reopening of this docket pursuant to Connecticut General Statutes § 4-181a(b) Council limited to Council consideration of changed conditions and of the attachment of conditions to the certificate consistent with the findings and recommendations contained in the Final Report issued by the Kleen Energy Plant Investigation Review Panel.

Opinion

On November 21, 2002, the Connecticut Siting Council (Council) granted a Certificate of Environmental Compatibility and Public Need (Certificate) to Kleen Energy Systems, LLC (Kleen) for the construction, maintenance and operation of a 620-megawatt natural-gas fired combined cycle electric generating facility off of River Road in Middletown. On February 7, 2010, during construction of the facility, there was an explosion that was caused by the release and combustion of natural gas that was being used to clean natural gas piping at the facility, a procedure otherwise known as a "gas blow". The project was estimated at 97 percent complete at the time of the explosion.

The Kleen facility was designed to use primarily natural gas to fuel two turbines to generate electricity. Natural gas for the plant is obtained from an existing Algonquin pipeline on River Road, adjacent to the facility. During construction of the interconnecting natural gas piping and fuel piping used in the plant, debris such as rust, dirt, welding slag or other materials accumulated and remained within interior sections of the fuel piping. This material needed to be removed to prevent damage to the turbine blades. To remove the debris, Kleen used high pressure natural gas to force the material out. This gas blow cleaning procedure is common in the power plant industry. On February 7, 2010, the concentration of the natural gas vented to the exterior, rear portion of the plant reached explosive levels, and it found an ignition source, causing the explosion.

After the explosion, Kleen began to survey the entire facility to determine what repair and construction work remained. For the fuel pipe system, Kleen estimates 80 percent of the fuel piping was cleaned to specifications prior to the explosion, with cleaning necessary for a remaining 600 to 800 linear feet.

As a result of the explosion, Governor M. Jodi Rell established a commission, the Kleen Energy Plan Investigation Review Panel, chaired by Judge Alan Nevas (the "Nevas Commission"), to identify the cause and origin of the explosion and to provide information necessary for a second Commission (Thomas Commission) to provide recommendations for necessary legislative and regulatory changes. On June 3, 2010, the Nevas Commission issued its Final Report that included an analysis of existing regulations concerning the "cleaning" or "blowing" of natural gas pipelines and recommended changes to regulatory criteria for consideration by the Thomas Commission to prevent the recurrence of such an explosion.

On June 23, 2010, Kleen filed a Request for an Extension of its Certificate with the Council to allow for additional time to repair and complete construction at the site, through and including June 30, 2011. The project was estimated to be 80 percent complete at the time of the filing. The Certificate currently expires on November 30, 2010.

On July 1, 2010, the Council, on its own motion, reopened the Docket 225 record for the limited purpose of consideration of changed conditions and of the attachment of conditions to the Certificate consistent with the findings and recommendations in the Final Report issued by the Kleen Energy Plant Investigation Review Panel.

The specific findings of the Nevas Commission are as follows:

- a. "The Commission finds that the February 7, 2010 explosion was the product of a process used to clean a natural gas pipeline using large quantities of natural gas that came into contact with an ignition source known as a gas blow";
- b. "The Commission finds that, although the Kleen Energy construction project was heavily regulated by a variety of agencies, no agency regulated the process used or any process that might be used such as gas purging to clean the natural gas pipeline that was the source of the explosion"; and
- c. "The Commission finds, and recommends to the Thomas Panel, that there are significant regulatory steps that should be taken to ensure that the events of February 7, 2010 are not repeated".

In its review of the Nevas Commission findings and recommendations, the Council must consider its jurisdiction over these matters. Jurisdiction over electric generating facilities is conferred upon the Council pursuant to the Public Utility Environmental Standards Act (PUESA). PUESA does not charge the Council with any authority to impose or enforce occupational safety and hazard standards and regulations. The Council recognizes that the tragic accident that occurred at the Kleen facility is an isolated incident with unique circumstances and that the Council's decision in this reopened docket should not be considered precedent for any possible future Council actions regarding any gas-related incidents at other electric generating facilities under the Council's jurisdiction. In the event of a future incident, the Council will consider the adoption of any specific findings and recommendations of any Commissions that may be appointed by the Governor in response to such an incident.

Notwithstanding its statutory jurisdictional limitations, the Council has considered changed conditions in this docket. Upon review of the Nevas Commission findings and recommendations for further examination of potential changes to the regulatory process by the Thomas Commission concerning gas blows, and a recommendation by the United States Chemical Safety Board to prohibit natural gas blows during power plant construction, the Council finds changed conditions in industry practices specifically pertaining to the gas pipe cleaning process used for the construction of the Kleen facility. The Nevas Commission urges the Council to attach conditions to Kleen's Certificate consistent with the Commission's findings and recommendations relative to gas blow procedures.

Based on the changed conditions concerning Kleen's Certificate, the Council adopts the findings and recommendations of the Nevas Commission and will attach conditions to Kleen's Certificate consistent with those findings and recommendations. The Council will modify Kleen's Certificate to ban the use of high pressure natural gas for turbine fuel pipe cleaning and will further require Kleen to provide detailed plans for the cleaning of the remaining turbine fuel pipe system. The Council is cognizant that the Thomas Commission will be examining the findings and recommendations of the Nevas Commission to develop proposed changes to the existing regulatory framework to address "gas blow procedures, and thus, as recommended by the Nevas Commission, the Council will again reopen the Docket 225 record to consider and adopt any pertinent recommendations made by the Thomas Commission to prevent the recurrence of such a tragic event.