



COUNCIL ON ENVIRONMENTAL QUALITY

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Ms. Rintra McIntyre
Bureau of Air Management
Department of Energy and Environmental Protection
5th Floor
79 Elm Street
Hartford, CT 06106-5127

RE: Renewal of Title V permit for South Meadow Station (075-0252-TV)

Dear Ms. McIntyre:

The Council on Environmental Quality offers the following comments on the proposed renewal of the Title V permit for the South Meadow “jets” in Hartford. It is unusual for the Council to submit comments on an individual permit. However, in 2010 the Council determined that this facility puts out more particulate pollution on an hourly basis than nearly any other power plant in the state, and has determined that the facility’s continued operation warrants a thorough review.

The Council’s comments cover four points:

1. The use of the facility to meet peak electricity demand (as separate from its black-start capacity) represents a failure of state energy policy, and that failure can best be resolved by integrating state energy policy with pollution prevention, a strategy that previously was not available to the Department.
2. Upon review of the draft permit and the relevant regulations, it is not apparent to the Council that the jets may operate without emission monitoring equipment (specifically smoke monitors) even for a limited number of hours per year.
3. The Council requests a public informational hearing on this application.
4. If the permit is renewed, the Council recommends strongly that the expiration date be set no later than June 1, 2013. During the interim, a plan should be developed to phase out the facility’s peak-demand function.

Details on each of these points follow.

1. The use of the facility to meet peak electricity demand (as separate from its black-start capacity) represents a failure of state energy policy, and that failure can best be resolved by integrating state energy policy with pollution prevention.

This permit stands as a superb illustration of the need to integrate energy and environmental policies and presents an opportunity to solve an environmental challenge through improvements to state energy policy.

The South Meadow jets operate infrequently because the electricity they generate is the most expensive on the grid. There would be virtually no need for this facility if it were not called upon to provide reliable electricity on days of excessive demand – days which usually coincide with the state’s worst air quality. A particularly good example of such a day was September 2, 2010, during which Hartford- area residents breathed the highest levels of ambient ozone that they had breathed in more than two years along with the particulates from the South Meadow facility.

The term “excessive demand” in the previous paragraph was chosen deliberately. High demand for electricity on hot days is predictable, but the actual peak of demand is considerably higher when customers are using inefficient air conditioners and other appliances. There are several strategies available for reducing peak demand and/or meeting the grid’s reliability goals that do not involve the generation of additional electricity from highly-polluting power plants in order to keep inefficient air conditioners operating.

Resorting to the use of expensive kerosene-fueled jets to meet electricity demand on days of unhealthful air quality is the consequence of past energy policies that failed to promote efficiency sufficiently. To rectify this unfortunate product of past failures, the DEEP should outline a strategy for reducing peak demand that will preclude the need for the jets to operate.

The black-start function is a separate matter. The Council notes the utility of having black-start capability on the grid. Given the infrequent need for such a function, the Council sees no reason to not permit the jets to be maintained for that function only.

2. The facility must install smoke monitors, at a minimum.

Upon review of the draft permit and the relevant regulations, it is not apparent to the Council that the jets may operate without emission monitoring equipment, even for a limited number of hours per year. Section III-A-4-a-i of the draft permit requires each turbine engine to have a smoke monitor unless one of two conditions is met. In the Council’s analysis, neither of those conditions is met, as the turbines are not used “only to provide emergency heat or power,” nor do they operate with any “smoke control apparatus.” The requirement for smoke monitors is part of the federally-enforceable State Implementation Plan (SIP). While the parallel state regulation

(RCSA 22a-174-4(b)(3)) was modified, it is the Council's understanding that the relevant section of the SIP was not modified and therefore still governs operation of the facility.

The Council would like to note that the draft permit is not easily understandable. USEPA guidance on Title V permits (White Paper #2) requires that "...citations and references must be clear and unambiguous and be enforceable from a practical standpoint. " The USEPA further encourages permits to be drafted in a format that is easily understandable to the public. Two examples on page ten illustrate how this draft permit cannot be easily understood, specifically with regard to the question of whether Continuous Emission Monitoring (CEM) must be installed:

- "The Permittee shall install opacity CEM equipment for each Pratt & Whitney turbine engine with the maximum rated heat input greater than 250MMBtu/hr. The Permittee shall operate and maintain installed opacity CEM equipment in accordance with RCSA §22a-174-4(c)(3) and (c)(4) and retain the data generated in accordance with RCSA §22a-174-4(d). [RCSA §22a-174-4(b)(1)]"

Almost anyone reading that paragraph will conclude that the permittee will be required to install, operate and maintain opacity CEM equipment on each engine. Is that an accurate conclusion? Only when the reader consults RCSA §22a-174-4(b) does he or she find that there might be applicable exceptions to that requirement. Yet DEEP has access to all of the information that would clarify whether or not CEM equipment must be installed. If DEEP cannot make that determination, who can? If DEEP can in fact make that determination, and has concluded that the facility might qualify for exceptions, then why draft the permit so confusingly?

- "Any liquid or solid fuel burning equipment with a maximum rated heat input greater than or equal to 250 MMBtu/hr pursuant to RCSA §22a-174-4(b)(1)(B) shall not apply to any standby fuel burning equipment operating less than one hundred sixty-eight (168) hours in a calendar year. [RCSA §22a-174-4(b)(3)(A)]"

This non-sentence clearly is an editorial error, and the reader cannot determine its true meaning. Regardless, the jets are not "standby fuel burning equipment," so the inclusion of this section is mystifying. If it is intended to invoke the possibility of exceptions to the CEM requirement, then the comments above apply here as well: If DEEP knows whether or not CEM is required, then the permit should indicate the actual requirement. The requirement for unambiguous and understandable language is not being met. Why confuse the public or, worse, leave the reader with the impression that CEM will be required if it is not?

Furthermore, aside from the fact that it is unclear that the facility may operate for any amount of time without installing and maintaining smoke monitors (as dis-

cussed above in the first paragraph of this section), there would appear to be no basis for the commonly-cited limitation of 168 hours per year. Under the state regulations, only standby equipment (defined in the regulations as providing backup heat or power only, as opposed to power produced to meet demand) is subject to the 168-hour limitation. If the jets are deemed to be exempt from CEM requirements (again, a matter that is separate from the above-mentioned SIP requirement for smoke monitors), then they are likely exempt because of RCSA §22a-174-4(b)(3)(B), which does not appear to impose a limitation on hours. The draft permit does not include the other limitation on hours that is found in the expired permit. In the Council's view, this lack of limitation on operating hours makes the recommended phase-out of the facility for peak-demand production even more important.

3. The Council requests an informational hearing.

The regulations and permit requirements are complex and not well-suited to comment letters only. A hearing or meeting where all parties might discuss desirable outcomes, short-term as well as long-term, would suit this application.

4. If the permit is renewed, the Council recommends strongly that the expiration date be set no later than June 1, 2013.

Connecticut should set a goal of retiring the South Meadow jets as quickly as possible. The Council recommends that this renewal, if granted, should be for a period of time shorter than the usual five years. An expiration date of June 1, 2013 would allow the plant to keep its immediate role in maintaining reliability but would give the Department time to develop and implement the types of energy policies necessary to reduce peak demand and enhance reliability that in turn would allow the South Meadow facility to be retired.

During extreme hot weather, many people require air conditioning. Ironically, some of this need arises from the high pollution levels present on such days. It would be precipitous and potentially unhealthful to deny the permit for the South Meadow jets and create the risk of an inadequate power supply when people need it. With aggressive planning and implementation of energy policy that focuses on efficiency and reducing peak demand, Connecticut should be able to meet the public's need for cooling without the use of the highly-polluting jets by the summer of 2013.

Thank you for your consideration of these comments. I would be pleased to answer any questions you might have.

Sincerely,

Karl J. Wagener
Executive Director