

AN APPLICATION SUBMITTED BY THE CONNECTICUT RESOURCES RECOVERY AUTHORITY FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF AN ELECTRIC GENERATING FACILITY IN THE CITY OF BRIDGEPORT, CONNECTICUT. : CONNECTICUT SITING COUNCIL : August 16, 1985

O P I N I O N

The Connecticut Resources Recovery Authority (CRRA) applied to the Connecticut Siting Council (Council) for a certificate of environmental compatibility and public need for the construction of a solid waste, refuse-to-energy processing facility that includes a turbine-generator and electrical interconnection facilities.

The Council held a public hearing on May 28, 1985, at which time the applicant presented testimony and witnesses to support its contention that the project is consistent with state policy, is necessary, and will have minimal environmental impact.

The State of Connecticut faces a significant problem regarding the safe and efficient disposal of solid waste. The public need to remedy this problem is clearly expressed by statute, in the Connecticut Solid Waste Management Plan, and by many of the state's municipalities by policy and/or action. As great as this need is, however, the Council's primary responsibility is to examine the environmental compatibility of and public need for the proposed electrical generating capacity.

The need to utilize diversified, renewable, indigenous sources of fuel to generate electricity has been declared by state energy policy, as expressed by statute, Department of Public Utility Control decisions, and the Connecticut Energy Advisory Board. The technology of refuse-to-energy facilities, the projected long-term availability of municipal solid waste (MSW), and existing generating capacity of Connecticut's

electric producing utilities suggest municipal solid waste as fuel should help meet this need.

A need for additional capacity has been established by UI, which has entered into a contract to purchase electricity from the project. NEPOOL forecasts indicate that even after completion of major nuclear facilities presently under construction, its members will need additional capacity. UI's customers will benefit either from the addition of this source to UI's generating capacity or by the sale of the capacity by UI to other NEPOOL members.

The 55 MW of electricity generated from this project that UI includes in its forecast will help to meet the capacity needs of the region with an indigenous source of fuel, thus displacing approximately 580,000 barrels of oil per year. Otherwise this energy source might have to be provided by the importation of fossil fuels, thereby increasing the regional dependence on foreign oil.

In addition, many of the costs associated with constructing and operating a utility-owned facility will not be borne by ratepayers. Instead, the potential costs of construction overruns, abandonment, premature retirement, and capital improvements will be absorbed by a private corporation as part of the total facility contract price.

It has been shown that the recovery of energy from the combustion of the MSW will help to defray the costs of disposal. Eventually, additional cost reduction might be achieved by recovering ferrous metals. Though ferrous metal recovery is not planned, it might help reduce the overall facility operating costs through combination of salvage recovery credits and the elimination of landfilling costs.

The adverse effects associated with a generating facility may be wide-ranging and significant. However, in this case, many effects will be reduced because the site is already occupied by a defunct waste processing facility and is surrounded by other industrial developments. The modifications necessary to redevelop the existing site will change visual, noise, recreational, air, water, and traffic impacts.

Visual impacts will be caused by the addition of a new stack for emissions and the facility buildings and by the discharge of steam from the cooling tower. These impacts will be most noticeable to occupants of the area, motorists on I-95, and barge traffic within Cedar Creek. Given the constraints of refuse-to-energy technology, little can be done to reduce these impacts other than to segregate the facility away from sensitive, incompatible land uses to the greatest extent possible, as has been done.

Construction and operational noise may at times be a source of annoyance to neighbors, but all noise levels will be within state and local regulations. The relatively long distance to the closest resident and the silencing controls to be used lends confidence to the modeling analysis that the noise impact will be minimal.

The facility will have impacts on Seaside Park, but the effects should be minimal as the most notable vista from the park will be to the south, away from the facility.

Reduced waterfront access may be the greatest potential loss of recreational opportunities. Although the use of this waterfront for recreation is at best a long-range possibility, access should not be pre-empted.

Air pollution, often the limiting factor with refuse incineration, has been adequately considered and resolved with the Department of Environmental Protection (DEP). The Council carefully examined emission rates, applicable standards, and air pollution control equipment and is confident that the equipment and procedures to be used by the facility operators will meet all state and federal regulations and minimize the facility's potential adverse environmental effect. Air emission monitoring required as a condition of DEP's air permit will provide further confidence that the facility will operate as designed with a minimal long-term impact.

Potential water impacts will result from cooling tower discharge into Cedar Creek. Yet, modeling has shown that the impact to the Creek will be minimal when the quality of the discharge is compared to existing ambient water conditions. However, modeling cannot perfectly predict the intricate dynamics of an actual creek located on the Sound. Although the DEP National Pollution Discharge Elimination System Permit gives credibility, specialized water quality monitoring for chemical and thermal impacts may be necessary to ensure the long-term usefulness of the creek. Groundwater pollution will be adequately managed by impermeable holding facilities and the disposal of potential pollutants within state-regulated landfill areas and the proposed Bridgeport sewage treatment plant.

An additional impact of public water useage must be considered in light of the high demand of the facility for water and the recent water shortages in the state. Although the use and supply has been well justified, so might the diversion of a portion of the facility's water for other uses if strict conservation measures were to be applied.

The existing infrastructure and the close proximity of a major transportation corridor, I-95, reduce expected traffic impact. Facility operators have promised to schedule trucks and provide site queuing space.

The potential effects of the project, while individually minor, in the aggregate have the potential for environmental disruptions. However, the Council is confident that careful design and attention to environmental and community concerns minimize this potential. On the other hand, the project represents a significant contribution of diversified, non-oil, small scale, baseload electric generation to the state's capacity mix. Together, these factors more than outweigh the potential adverse effects of the proposed facility. In addition, this facility represents a new and improved method of generating electricity in Connecticut, which the statutes direct the Council to encourage.

Based on the foregoing, the Council concludes that a certificate of environmental compatibility and public need is warranted for the Bridgeport Resco Project and hereby directs that such certificate be issued subject to the terms, limitations, and conditions of the Decision and Order that accompanies this Opinion.