DOCKET NO. 52

AN APPLICATION SUBMITTED BY OGDEN MARTIN SYSTEMS, INC., FOR THE BRISTOL RESOURCE RECOVERY PROJECT FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF AN ELECTRIC GENERATING FACILITY IN THE CITY OF BRISTOL, CONNECTICUT.	:	CONNECTICUT SITING COUNCIL
	:	August 29, 1985

O P I N I O N

Ogden Martin Systems of Bristol (OMSB) 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 facility.

The Council held a public hearing on July 29, 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 a minimal environmental impact.

The state of Connecticut faces a significant problem regarding the safe and efficient disposal of solid waste. State policy to remedy this problem is clearly expressed by statute and in the Connecticut Solid Waste Management Plan. The communities that have contracted to participate in this project are also not exempt from this problem. The regional urgency to dispose of waste generated from these communities has been well documented by local policy and municipal actions. As great and important 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 of the facility.

The need to utilize diversified, renewable, and indigenous sources of fuel as a means 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 the existing generating mix of Connecticut's electric producing utilities suggest that the use of MSW as fuel will help meet this need.

The 13.2 MW of net electricity generated from this project will help to meet the capacity needs of the region with an indigenous source of fuel, thus displacing approximately 150,000 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.

A need for additional capacity has been established by the Northeast Utilities Service Company (NU) and the New England Power Pool (NEPOOL). It is likely that the electricity produced by the facility will be mutually beneficial to NU ratepayers, the project operators, and participating communities. NEPOOL forecasts indicate that even after the completion of major nuclear fueled generation facilities presently under construction, its members will still need additional capacity.

Concerns regarding the liability, damages, and security for both NU and OMSB have been adequately resolved by contract. The energy purchase contract that NU and OMSB have entered into represents a mutually fair and reasonable agreement for the full term of the contract. NU has assumed the risk of oil price fluctuation in the early years of the contract with a relatively high floor rate payment to be made to help

ensure that the project will be economically feasible. However, the relatively low payment rates in the latter years of the contract will afford NU a reasonable expectation of recovering the costs of risks and payments above its avoided costs made during the early years.

The benefits to be shared between OMSB and the participating communities include energy credits, ferrous metal recovery credits, and other process residue recovery credits. These credits provide an incentive for an efficient, cost-effective means of using MSW fuel and electrical generation. 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.

The environmental effects associated with a generating facility are often wide-ranging and significant. Although the proposed site has been modified in the past, the existing natural resources must also be duly considered in this proceeding.

Air pollution, often the limiting factor with refuse incineration, has been investigated and will be continually reviewed and permitted by the State Department of Environmental Protection (DEP) for compliance with its air quality permitting program. The enclosed facility will employ dry scrubber/baghouse air pollution control systems that have been designed to meet accepted industry standards. As such, it is expected that the facility will meet or register below all state and federal odor and air pollution control regulations. The Council has concluded that although some deterioration of the air quality will occur as a result of the facility, such deterioration is minimal and unavoidable with the

existing technology. 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 on the ambient air quality of the state.

To minimize damage on the water resources of the site, safeguards have been designed to prevent expulsion or leakage of any facility cooling water discharge or waste onto the site. All waste products will be discharged to the planned sewage treatment plant and/or landfilled at a permitted landfill. However, the alteration of on-site water resources from the construction of the facility is certain to have some negative impacts. Stream channelization and a storm-water retention pond have been planned to absorb run-off produced by the development and to prevent downstream flooding. Even so, the water quality of this drainage system is uncertain, and the impacts on the water resources downstream from the site are also uncertain.

Water conservation techniques utilizing a significant quantity of tertiary sewage effluent have reduced the amount of public drinking water that otherwise might have been needed for industrial cooling processes. The Council finds the integrated re-use of tertiary sewage effluent for this project a meritorious example of efficiency worthy to serve as a model for other projects that require a large supply of water. However, the use of 94,000 to 96,000 gallons of potable water per day cannot be overlooked. In light of the recent water shortagess in the state, the requisition of large supplies of public drinking water can only be made with extreme caution and not without adequate contingency plans.

Although the site development will replace several acres of ecological habitat for buildings and paved areas, the most sensitive portion of the site will remain undeveloped and unaffected. None of the developed areas support unique or rare species. Mitigation measures planned to minimize the ecological impact to the general area include the implementation of air and water pollution controls and soil erosion control plans. While the incremental loss of ecological habitat cannot be condoned, the economic usefulness of the site has been balanced with the ecological productivity of the site. Assuming that air and water pollution impacts will be adequately mitigated, this development will not cause any significant long term impacts to the ecological resources of the general area.

Contruction and operation noise may at times annoy neighbors, but all noise levels will be within state and local regulations. The relatively long distance to the closest off-site neighbor and the proposed silencing controls lend confidence to the modeled prediction of modest noise impact.

Visual impacts will primarily be caused by the addition of the facility building with a maximum height of 117 feet above grade, a 292 foot stack, and periodic condensation from cooling towers. Although the facility may be viewed from some residential areas, the industrial nature of the majority of surrounding land uses reduces the overall visual impact of the facility. In addition, landscaping and natural vegetative screening will help to blend the facility into the industrial park. Given the constraints of refuse-to-energy technology and the distance of the site from sensitive, incompatible land uses, visual impacts have been reduced as much as possible and will not be significant.

The site's close proximity to a major transportation corridor, I-84, will help to minimize any traffic impacts produced by the facility. On-site queuing space and adequate tipping bay facilities will also reduce the potential for off-site traffic impacts. It is unlikely that traffic to the facility will create any unsafe or congested traffic conditions.

There has been no guarantee that the selected landfill will be adequate to dispose of wastes generated or by-passed from the facility for the full term of the contract unless additional landfill capacity is acquired, as planned. However, it has been stated that any additional expenses needed to dispose of wastes at an alternative site will be borne by the contracting communities. Although the safe disposal of residue ash and by-pass MSW is guaranteed by contract, it would seem only prudent to finalize arrangements for the disposal of such waste at a named facility. Otherwise, increased tipping fees might make the use of MSW as fuel for electrical generation economically infeasible.

The potential effects of the project, while individually minor, in aggregate have the potential for environmental disruption. However, the Council is confident that careful design and attention to environmental and community concerns minimize this potential. In addition, the project represents a significant contribution of diversified, non-oil, small scale electric generation to the state's capacity mix, 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 Bristol Resource Recovery Project and hereby directs that such certificate be issued subject to the terms, limitations, and conditions of the Decision and Order that accompanies the Opinion.