AN APPLICATION FOR A CERTIFICATE : CONNECTICUT SITING

OF ENVIRONMENTAL COMPATIBILITY AND
PUBLIC NEED FOR THE GOODWIN AND : COUNCIL

COLEBROOK HYDROELECTRIC POWER PROJECT
OF THE METROPOLITAN DISTRICT : June 20, 1983

## OPINION

The Metropolitan District (MD) applied to the Connecticut Siting Council for a certificate of environmental compatiblity and public need to construct hydroelectric generating facilities at the Goodwin/Colebrook dam complex in Hartland and Colebrook. The proposal involves excavation, access road construction, generator building construction, and installation of three generators totaling approximately six megawatts.

The Council held a public hearing in Colebrook on the evening of May 18, 1983, at which the applicant presented testimony and exhibits to support its contention that the potential adverse environmental effects were not sufficient to outweigh the public need for the proposal's expected benefits. A party to the proceeding conducted cross examination of the applicant.

The primary public need asserted in this application is for an alternative to oil for electric generation. The applicant cited state and federal law which specifically encourages development of renewable energy resources. The state Office of Policy and Management, Energy Division, from which state energy policy flows, submitted comments pursuant to section 16-50j in favor of the proposal as a renewable energy alternative. The state Department of Economic Development also supported the proposal. The Department of Environmental Protection filed comments regarding environmental concerns and suggested resolutions.

In terms of energy production, the proposal is not insignificant.

Not only is the nearly 20 million kWh production that is expected

annually sufficient to provide electricity to 3,000 homes, it also is equivalent to forty thousand barrels of oil, although actual oil displacement would depend on dispatching requirements. The applicant intends to sell generated power to the Connecticut Light & Power Company under the provisions of Connecticut PA 82-164, which concerns the purchase of power produced by cogeneration or renewable resources.

The costs and financing of this project seem more complex than the project: a \$12,000,000 construction project will cost \$29,000,000 with finance charges included; member towns will subsidize the project for the first ten years; and actual rate structures await the results of other proceedings. Nonetheless, calculations based on conservative assumptions regarding expected inflation rates, rates of return on electric sales, and bond interest rates indicate an estimated net return to member towns of \$5,392,360 at the end of twenty years.

It is not for the Council to determine the appropriateness of the proposed financing mechanism but rather whether the total investment will result in generation at reasonable cost. Considering that the expected kWh cost will be less than that now expected for oil generation, which the state still uses heavily, and that generation after the fourteenth year of operation will be at minimal cost, the Council finds that this indeed constitutes necessary generation at reasonable cost.

The applicant notes that hydroelectric generation will not be the primary use of the site, and that, in addition to the economic benefits, licensing from the Federal Energy Regulatory Agency will help to protect the MD public water supply. This implies that federal energy policy could supercede state or local water policy. While this should be cause for concern by the Metropolitan District, and the Council commends

their foresightedness in this regard, the matter is a question of public need that is not directly at issue in this proceeding. On the other hand, the potential adverse environmental effects of a hydroelectric generation development proposal that would threaten a possible public water supply, assuming the state Department of Environmental Protection had not resolved the issue through its water diversion permit process, could well concern the Council.

The statutes requiring a Department of Environmental Protection water diversion permit for any such proposal do address, specifically, consideration of future water supply. It appears, therefore, that while the Metropolitan District's concerns for its future water supply run deep, the District would not be without several avenues of recourse with regard to hydroelectric development affecting District water. In any event, the Council does not find that a public water supply is threatened by or would necessarily be enhanced by this proposal, but rather notes that the entire complex operated by one entity, the Metropolitan District, would be a dam site better utilized.

The Council does find that the stated public policy and the District's interest regarding hydroelectric development are sufficient to outweigh the potential adverse environmental effects of the proposal. These expected effects, which are detailed in the findings of fact, are swamped by the effects on the natural environment caused by the existing dams. If this proposal required new construction creating water impoundments totaling 34.8 billion gallons, additional attention to the need for six megawatts of generating capacity might have been required.

Fortunately, this is not the case. Existing multiple use facilities will be adding another use to an impressive list that includes flood

control, recreation, and future water supply. This new use is not expected to alter or affect the existing uses detrimentally, although water level fluctuations during the actual construction will temporarily affect fish populations and recreational opportunity in the Goodwin impoundment. Water quality downstream may also be adversely affected, temporarily, during construction.

Access roads to the generator sites will require clearing, cutting, and filling. Some blasting will also be necessary for the site development, and there will be some heavy truck traffic to and from the sites. None of these should cause any lasting damage, and the Council expects that rehabilitation of construction sites will result in the same professionally and attractively landscaped grounds that were observed around the District property during the field review of this proposal.

Adverse environmental impacts of the operation of the facilities will be limited to some stocked trout losses from the turbines, a possible low hum from the generators, and minor effects on the water of Farmington River below the Goodwin Dam.

It remains, then, for the Council to determine whether the environmental impacts of the construction project, those of the addition of structures at the bases of both dams and the necessary access roads, and any potential effects of the operation of the facilities constitute damages that are so severe as to outweigh the state's need for six megawatts of renewable resources electricity generation. The Council finds that such impacts are not sufficient for denial of a certificate. Most anticipated effects are temporary; those that are permanent are not incompatible with the existing land use. Any potentially detrimental effects due to construction can be mitigated by a development and management

plan requiring standard construction practices, erosion/siltation control, and site rehabilitation; other Council orders will assure consideration for the community and recreational use of the area.

Based on the foregoing, the Council concludes that a certificate of environmental compatibility and public need is warranted for the construction of hydroelectric generators at the Goodwin/Colebrook dam sites and hereby directs that such certificate be issued subject to the terms, limitations, and conditions of the Decision and Order that accompanies this Opinion.