

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
THE HARTFORD ELECTRIC LIGHT COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
THE YORK WATER POWER COMPANY
NORTH ASSET UTILITIES SERVICE COMPANY
NORTHEAST NEW ENGLAND ENERGY COMPANY

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August 3, 1979

Docket No. 50-423

Director of Nuclear Reactor Regulation
Attn: Mr. Olan D. Parr, Chief
Light Water Reactors Branch #3
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Gentlemen:

Millstone Nuclear Power Station, Unit No. 3
Construction Permit No. CPPR-113

Pursuant to the provisions of 10CFR, Section 50.55(b), Northeast Nuclear Energy Company (NNECO), et. al. (the "Permittees") hereby request that Construction Permit No. CPPR-113 be amended by extending the latest date for completion of construction of Millstone Unit No. 3 from October 1, 1979 to December, 1985, with commercial operation scheduled for May, 1986.

The extension requested in this application is required due to two deferrals of the in-service date of the Unit. The first of these deferrals occurred in December, 1975, when the decision was made to move the in-service date of the Unit from November, 1979 to May, 1982. The second deferral occurred in October, 1977, when the decision was made to move the in-service date of the Unit from May, 1982 to May, 1986.

Since the extension is required due to deferrals of the in-service date of the Unit, it cannot be analyzed in terms of specific delays in construction activities occurring at the site. Rather, in determining whether there is "good cause" for the extension and whether the extension requested is for "a reasonable period of time", the Permittees believe that the Commission must focus on the factors which caused the deferrals. In doing so, the Permittees believe that the Commission will conclude that those factors were "beyond the control" of the Permittees, as contemplated by 10CFR, Section 50.55(b), and that, in light of those factors, the extension requested is for "a reasonable period of time". The Permittees believe that each of these two requirements is met for the extension requested in this application for the reasons stated below.

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I. The Deferral from 1979 to 1982

In September, 1975, Westinghouse Electric Corporation notified Northeast Utilities that because of an unexpected rise in the price of uranium concentrates which began in late 1973, there had occurred the kind of contingency which would excuse Westinghouse's performance of the uranium contract between Westinghouse and the Permittees. The Permittees (and other utilities) brought suit claiming that the contract had been breached and that Westinghouse should not be excused from its uranium obligations. The immediate effect of Westinghouse's action was that, in order to ensure an adequate initial fuel supply for the Unit, the Permittees would have to seek alternative uranium supplies in a market in which prices were already rising. The market was further aggravated by the entry of the utilities affected by the Westinghouse action, which were seeking to secure a large supply of uranium concentrates at one time.

The Westinghouse commitment to the Permittees was for delivery of uranium concentrates in the 1978 - 1982 period at a price of \$11 - \$13 per pound, for the initial core of the Unit and three reload batches. The Westinghouse uranium was expected to be a source of low-cost, nuclear fuel for the years 1980 to 1984, years in which it was recognized that there would be excess capacity on the Northeast Utilities' system. An earlier evaluation performed in February, 1975 had shown that despite such excess capacity, it would be economic to maintain the 1979 in-service date due to a savings in fossil fuel costs. After Westinghouse refused to honor its uranium obligations, estimated to be 2,770,000 pounds of uranium concentrates, the Permittees did an evaluation to determine what uranium prices were likely to be in the ensuing period. Based on estimates made in 1975, it was believed that uranium concentrates could average \$50/lb., for purchases made in 1975 for a unit going into operation in 1980, and could average \$65/lb., for purchases made in 1975 for delivery in the period 1980 - 1990. It was later determined that uranium could not be purchased on customary terms in 1975 for delivery in the 1980's.

The Westinghouse position on uranium and the new estimates of uranium prices prompted a major re-evaluation of the schedule and cost estimate for the Unit. Among other factors, the Permittees re-evaluated, (1) the construction schedule in light of strikes which had occurred, (2) fuel cycle costs in light of the new estimates of uranium prices and other fuel cost increases, and (3) total capital costs in light of new regulatory requirements, current estimates of inflation, and other factors. This re-evaluation disclosed the following:

- (1) At the end of May, 1975, the site labor force aggregated 767 employees, including about 200 carpenters. The major work

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areas were the turbine, auxiliary and control buildings, with emphasis on concrete foundations, walls and floor slabs. Approximately 1850 cubic yards of concrete was placed for these buildings in May, 1975 and the work was within one month of being on schedule aimed at November, 1979 commercial operation. On June 11, 1975, the carpenters' union went on strike. The primary effect of the strike was to delay indefinitely substantially all anticipated concrete work for lack of forms as evidenced by the fact that only 221 cubic yards of concrete were poured over the next two months. In addition, other crafts were affected by lack of staging, temporary construction facilities, etc. The carpenters remained off the site until September 15, 1975, when a new agreement was signed. It should be noted that turbine building work was being conducted on a two-shift basis at the inception of the strike. Thus, at least in that area, there was no possibility of making up any of the three months of time lost.

On October 1, 1975, the boilermakers' union went on strike. Even though this strike had no immediate effect on other crafts employed on the site, it directly impacted erection of the steel containment liner, a critical path operation. The strike continued until December 22, 1975, causing a delay of nearly three months. Little of this time could be made up.

It should be noted that in November, 1975, a work slowdown was put into effect at the Millstone Unit No. 3 site, in recognition of the probability of a delay in the schedule. Second and third shift activities at the site were essentially eliminated.

- (2) Fuel cycle costs, including the estimates for uranium discussed above and newly developed estimates of enrichment, fabrication, and reprocessing costs, had risen from a February, 1975 estimate of 4.1 mills/KWh to 8.5 mills/KWh on a ten-year levelized basis for the period 1980 - 1990.
- (3) Total project cost was estimated to be \$900 million for a May, 1980 in-service date, a \$92.5 million increase over a February, 1975 estimated based on November, 1979 in-service date. This increase was attributed to increased engineering costs due to a new regulatory requirements and other changes in scope, increased AFUDC, increased owner's costs (property taxes, longer environmental studies, etc.) and increased construction costs.

Because of the rise in nuclear fuel and capital costs, bringing the Unit into service in 1979 - 1980 on the basis of reductions in replacement fuel costs was not as economically favorable as it had been in February, 1975. Oil would have to cost \$19 per barrel in 1981 to justify such an in-service date, whereas in December, 1975, the Permittees estimated that it would not exceed \$15 - \$16 a barrel in 1981. Thus, it was concluded that the in-service date would have to be established by capacity requirements and long-term financial and economic considerations.

A review of capacity requirements and financial and economic factors resulted in the following determinations:

- (1) Due to an unexpected decline in the demand for electricity beginning in 1973, Northeast Utilities had an excess of capacity over forecast requirements during the early 1980's. A 1982 in-service date, coupled with the sale of a share of its ownership interest in Millstone Unit no. 3 and its entire ownership interest in Pilgrim 2 and Seabrook Unit Nos. 1 and 2, would leave Northeast Utilities with less excess capacity in relation to forecast loads, yet would still enable the Northeast Utilities' system to accommodate reasonable load growth.
- (2) Although the Unit could have been deferred to 1984 based on load forecasts alone, other New England utilities needed additional nuclear base load capacity in the early 1980's. Several other utilities had expressed interest in purchasing portions of Millstone Unit No. 3 with an in-service date of 1982 and all or substantially all of Northeast Utilities' ownership interest in the Pilgrim and Seabrook units.
- (3) An in-service date of 1982, reduced ownership in Millstone Unit No. 3 and sale of its ownership interests in the Pilgrim and Seabrook units would have the advantage of reducing Northeast Utilities' financing requirements from 1976 through 1979 by about \$400 million in comparison with the currently authorized capital program. This would benefit consumers by reducing revenue requirements, and it would permit improvement in Northeast Utilities' overall financial condition by making it easier to retire short-term debt and to improve the price of equity and the quality of senior securities.
- (4) A postponement of the in-service date of Millstone Unit No. 3 would permit the Permittees to obtain uranium at a later date and possibly under conditions more favorable than those which existed in 1975.

Based on the foregoing conclusions, in December, 1975, the Northeast Utilities' Board of Trustees voted to defer the in-service date of the Unit to May, 1982, to reduce the Northeast Utilities' ownership in Millstone Unit No. 3 to approximately 65% and to sell all or substantially all of Northeast Utilities' ownership interest in Seabrook Unit Nos. 1 and 2 and Pilgrim 2.

The factors which led to the first deferral were clearly "beyond the control" of the Permittees. Construction delays and shortages of necessary crafts, increases in fuel cycle costs due to the Westinghouse action and other fuel cycle developments, increases in capital costs due to new regulatory requirements, inflation, and other factors and reductions in load forecasts are all factors which cannot, in any sense, be attributed to negligence on the part of the Permittees. In light of the nature of these factors, the deferral from 1979 to 1982 was for "a reasonable period of time".

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II. The Deferral From 1982 - 1986

In October, 1977, the Connecticut Public Utilities Control Authority granted the Connecticut Light and Power Company (CL&P) and the Hartford Electric Light Company (HELCO) only 39% of the rate increase they had requested. As a result of this decision, it was necessary to take immediate action to reduce CL&P's and HELCO's construction programs in the years 1978, 1979, and 1980 to levels which reflected the impaired ability of the Northeast Utilities' system to obtain permanent debt and equity capital.

An analysis prepared for the Northeast Utilities' Board of Trustees in October, 1977 projected inadequate 1978 per-share earnings for Northeast Utilities, making it imprudent to issue additional common stock, an inability on the part of Northeast Utilities to make capital contributions to CL&P and HELCO and a limited ability on the part of CL&P and HELCO to issue mortgage bonds. The analysis also projected excessive amounts of short-term borrowings by CL&P outstanding at the end of 1978.

On October 25, 1977, the Board of Trustees of Northeast Utilities voted to defer the in-service date of Millstone Unit No. 3 an additional four years from May, 1982 to May, 1986. This deferral had the immediate effect of reducing total project cash requirements by over \$115 million for the 1978 - 1979 period. This translated into a reduction of \$39.6 million for CL&P and \$20.9 million for HELCO. In the period between November, 1977 and February, 1978, to achieve these necessary cash flow reductions, approximately 750 manual and approximately 100 non-manual workers were laid off at the construction site, and phased reductions of Stone & Webster engineering support began. In addition, the Permittees deferred as many purchase orders as possible to delay equipment deliveries to meet the new in-service date and to delay payment on those orders.

The factors which led to the second deferral were also clearly "beyond the control" of the Permittees. Inadequate rate relief, resulting in an impaired financial condition and a need to reduce cash requirements, are all factors which cannot be attributed to negligence on the part of the Permittees. In light of the nature of these factors, and the severity of the problems evidenced thereby, the deferral from 1982 to 1986 was for "a reasonable period of time".

III. The 1979 Rate Decision

In June, 1979, the Connecticut Department of Business Regulation, Division of Public Utility Control (DPUC) issued its decision on the most recent rate application filed by CL&P and HELCO. In July, 1979, Northeast Utilities announced that the rate increases granted were not sufficient to permit an advancement of the in-service date of the Unit from 1986 to 1984 without a reduction of the ownership interests of CL&P and HELCO to lessen cash flow requirements, particularly in 1980 and 1981. Accordingly, Northeast Utilities is proceeding with an offering to New England and New York utilities.

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to sell an estimated 10 - 15% ownership interest in the Unit. It is not presently known whether this offering will be successful, or if it is, whether the sale of an additional portion of the Unit, by itself, will allow the advancement of the in-service date of the Unit.

The Permittees do not believe that the extension requested in this application involves any significant hazard or change in environmental impact. This request only involves activities previously reviewed and approved by the Commission as outlined below:

- (1) Safety Evaluation Report issued March 13, 1974 and supplemented May 16, 1974 and public hearings with respect to this proceeding held on June 17, 1974.
- (2) Final Environmental Statement issued February, 1974 and public hearings with respect to this proceeding held March 6, 1974 and May 16, 1974.

The Permittees have made changes in plant design since formal issuance of the present NRC Construction Permit. These changes, however, were only made to (1) increase the Permittees' ability to more closely meet Regulatory requirements promulgated during the interim; (2) to incorporate "state-of-the-art" advancements in designs, and (3) to improve plant reliability. In the interim, the Permittees have also obtained all permits and environmental approvals required from various Federal and State agencies. Therefore, the application does not involve a significant hazard or change the environmental impact.

Enclosed is a check for twelve hundred dollars (\$1,200.00), the Class II fee, payable pursuant to 10CFR, Section 170.22.

Respectfully Submitted,

NORTHEAST NUCLEAR ENERGY COMPANY, ET. AL.
By: Northeast Nuclear Energy Company
Their Agent

By: W. G. Council
W. G. Council
Vice President

Enclosure

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