

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
CONSOLIDATED EDISON COMPANY) Docket No. 50-247
OF NEW YORK, INC.)
(Indian Point Station,)
Unit No. 2))

APPLICATION FOR AMENDMENT TO
OPERATING LICENSE

Pursuant to Section 50.90 of the Regulations of the Nuclear Regulatory Commission ("NRC"), Consolidated Edison Company of New York, Inc. ("Consolidated Edison"), as holder of Facility Operating License DPR-26, hereby applies for amendment of that License. Consolidated Edison requests to amend the provisions of the license bearing upon duration of operations so that the date upon which the unit operating license would expire would be 40 years from the date of issuance. Specifically, it is requested that paragraph 3 be revised as follows: "3. This license is effective as of the date of issuance, and shall expire at midnight on September 28, 2013."

A Safety Assessment of the proposed change is set forth in Attachment A to this Application. This assessment demonstrates that the proposed

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change does not represent a significant hazards consideration and the implementation of this change will not result in an undue risk to the health and safety of the public.

CONSOLIDATED EDISON COMPANY
OF NEW YORK, INC.

By: Donald A. Downing for John O'Toole
John D. O'Toole
Vice President

Subscribed and sworn to
before me this 27 day
of December, 1985.

Conrad Tromba
Notary Public
CONRAD TROMBA
Notary Public, State of New York
No. 30-4022875
Qualified in Nassau County
Terms expires March 30, 1987

ATTACHMENT A

Safety Assessment

Consolidated Edison Company of New York, Inc.
Indian Point Unit No. 2
Facility Operating License No. DPR-26
Docket No. 50-247
December, 1985

SAFETY ASSESSMENT

Proposed Change

The requested license amendment proposes to amend the provisions of the license bearing upon duration of operations so that the date upon which the unit operating license would expire would be 40 years from the date of issuance, which is September 28, 2013.

Discussion

The plant is currently licensed for a term of 40 years commencing with the issuance of the construction permit on October 14, 1966. The plant's license will therefore expire on October 14, 2006. This represents an effective operating license of 33 years. We are requesting a full 40 year operating license for Indian Point Unit No. 2, as permitted by the Atomic Energy Act, 42 U.S.C. 2133. The basis for granting this request has been established by the Commission's more recent policy in granting operating licenses to new plants, as well as its regulations. In particular, 10CFR 50.51 states that the Commission will issue the license for the term requested by the applicant (not to exceed 40 years).

Operation of the unit until September 28, 2013 will be both practicable and economical. Electricity generated by the unit is the least expensive power generated and sold by the licensee. The additional years of plant operation allowed by the proposed change would defer the need to install replacement base load capacity, which would result in substantial additional capital expenditures. Licensee seeks a license amendment at this time due to requirements for lengthy advance planning for its capacity needs.

Determination of No Significant Hazards Consideration

A license condition permitting a full 40 years of unit operation does not involve a significant hazards consideration since the plant was initially designed, constructed and licensed based upon an assumed 40 year service life. The Final Safety Analysis Report (FSAR) and the Final Environmental Statement for the unit contemplated a 40 year period of operation at a thermal power level of 2758 Mwt. Accordingly, none of the licensing issues which formed the basis for the initial issuance of the operating license need be reconsidered in connection with this proposed amendment, since the amendment, if granted, would be fully supported by the initial licensing record. Similarly, since the initial environmental analysis assumed 40 years of unit operation, there can be no previously unconsidered environmental impacts associated with the proposed amendment. Nonetheless, certain factors bearing upon a license requirement for expiration of service life in 2013 were evaluated. In each instance, safety related considerations were at least as conservative as had been assumed during initial licensing.

We have evaluated reactor vessel life and find that it is not a limiting consideration. The reactor vessel was initially designed and licensed based on an assumed 40 year life with an 80% plant capacity factor. We have evaluated the RT_{NDT} at the end of 40 years of operation and find that it will be well below the NRC's screening criterion per 10CFR 50.61. Analysis of the surveillance specimens placed inside the reactor vessel allows for monitoring the cumulative effects of neutron fluence. Periodic vessel inservice inspection and testing requirements provide further assurance that any degradation will be identified in a timely manner. We conclude that the life of the reactor vessel is not a limiting consideration in connection with a 40 year term for the operating license of the plant.

Aging analyses have been performed for safety related electrical equipment in accordance with 10CFR 50.49 concerning "Environmental qualification of electrical equipment important to safety for nuclear power plants," identifying qualified lifetimes for this equipment. To ensure that safety related equipment remains qualified and available, these lifetimes have been included in the normal equipment maintenance and replacement procedures.

Although some components will be expected to require replacement during the plant lifetime, as in all power plants, these will be replaced using normal maintenance activities, and are unaffected by the requested change in the operating license. Design features have been incorporated and inservice programs are in place to facilitate the inspection of systems and equipment ensuring continuous operating integrity. Surveillance and maintenance practices which are implemented in accordance with ASME codes and the facility Technical Specifications provide assurance that any unexpected degradation in plant equipment will be identified and corrected.

The storage of spent fuel was considered. Under the federal Nuclear Waste Policy Act of 1982, off-site spent fuel storage will be available prior to 2006, and therefore the storage of spent fuel generated between 2006 and 2013 is not a concern.

In connection with this safety assessment, the Final Environmental Statement (September 1972) (FES), the Safety Evaluation of the Indian Point 2 plant by the AEC Division of Reactor Licensing dated November 16, 1970, and the Supplemental Environmental Report (including Supplements 2 and 3) were reviewed. There were two areas in which a specific operating life was assumed or discussed:

1. Site Area Population Projection
2. Benefit-Cost Analysis

The population in the vicinity of the plant was considered. The FES uses the projected 1980 population distribution in the assessment of the Environmental Impacts of Postulated Accidents. Supplement 3 of the Environmental Report also refers to the projected 1980 population in the Benefit-Cost Analysis. Actual population distributions from the 1980

census data were 26% below those predicted in the FES and 22% below those predicted in the original FSAR, which formed the basis for the initial issuance of the operating license. These earlier assessments would therefore be unaffected by plant operating license expiration in 2013 versus 2006. Also, according to the Official Population Projections for New York State Counties: 1980-2010, (New York State Department of Commerce - State Data Center, April 1985), the population within the four counties surrounding Indian Point is not expected to experience any large increases toward the end of this period.

The Benefit-Cost Analysis described in the Environmental Report and the FES assumed a 30 year plant life. This assumption is evidently a standard accounting procedure unrelated to expected actual plant life. The FES clearly states that we were applying for a 40 year operating license. Changes in the data assumed for purposes of the initial Benefit-Cost Analysis since the time of its preparation have been in the direction of improvement in the indicators supporting plant operation.

We have upgraded the Indian Point radiation protection program including procedures, personnel training, radiological audits and assessment, and significantly increased our awareness and commitment to the ALARA concept. This commitment has already led to significant reductions in personnel exposures, the volume of radioactive waste generated, and the number of contaminated areas. Based on this commitment, occupational exposure during the period covered by the requested amendment is not a significant consideration.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards considerations exists by providing certain examples (48 FR 14870). Example (vii) of those involving no significant hazards considerations discusses a change to make a license conform to changes in the regulations but where the change has a minor effect on facility operations and is clearly in keeping with the regulations. The proposed change bearing upon duration of operations (10CFR 50.51) involves a similar change. Consistent with the Commission's criteria for determining whether a proposed amendment to an operating license involves no significant hazards considerations, 10CFR 50.92 (48 FR 871), we have determined that the proposed change will not increase the probability or the consequences of an accident previously evaluated since the change entails no physical changes in plant equipment or operating procedures; does not create the possibility of a new or different kind of accident from any previously evaluated since a 40 year service life was assumed in the design and construction of the plant; and does not involve a significant reduction in a margin of safety since the FSAR, which describes various accident analyses, assumes a 40 year operating life.

Safety Committee Review

The proposed changes have been reviewed by the Consolidated Edison Nuclear Facilities Safety Committee. The Committee concludes that implementation of this change will not result in an undue risk to the health and safety of the public.