

POLICY ISSUE NOTATION VOTE

April 20, 2012

SECY-12-0062

FOR: The Commissioners

FROM: R. W. Borchardt
Executive Director for Operations

SUBJECT: RENEWAL OF FULL-POWER OPERATING LICENSE FOR PILGRIM
NUCLEAR POWER STATION

PURPOSE:

This paper (1) requests that the Commission authorize the Director of the Office of Nuclear Reactor Regulation (NRR) to renew the operating license for Pilgrim Nuclear Power Station (PNPS) for an additional 20 years, and (2) informs the Commission of the results of the U.S. Nuclear Regulatory Commission (NRC) staff's review of the PNPS license renewal application (LRA) (Ref. 1) submitted by Entergy Nuclear Generation Company (Entergy Nuclear) and Entergy Nuclear Operations, Inc. (ENO) (owner and operator, respectively, of PNPS). In the Staff Requirements Memorandum for SECY-02-0088, "Turkey Point Nuclear Plant, Units 3 and 4, Renewal of Full-Power Operating Licenses," dated June 5, 2002, the Commission authorized the Director of NRR to renew operating licenses without prior Commission authorization "for uncontested license renewal reviews." Since the PNPS application is contested, the staff now requests Commission approval to issue the renewed license. This paper does not address any new commitments or resource implications.

BACKGROUND:

By letter dated January 25, 2006, Entergy Nuclear and ENO submitted the application (Ref. 1) to renew the operating license for PNPS in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," and 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants." In their submittal, Entergy Nuclear and ENO requested the renewal of Operating License No. DPR-35, which was initially issued under Section 104b of the Atomic Energy Act, for a period of 20 years beyond the current license expiration of June 8, 2012.

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Following the submittal of the PNPS LRA by Entergy Nuclear and ENO, the staff initiated its environmental and safety reviews in accordance with NRC regulations. The staff completed the safety review, presented the resulting safety evaluation report (SER), "Safety Evaluation Report Related to the License Renewal of Pilgrim Nuclear Power Station," to the Advisory Committee on Reactor Safeguards (ACRS), and subsequently issued the SER as NUREG-1891 (Ref. 2). The staff later issued supplements to the SER (Refs. 3 and 4). The staff determined that Entergy Nuclear and ENO have taken, or will take, appropriate actions to manage the effects of aging during the period of extended operation as reflected in modifications to the licensing basis. Therefore, the staff found that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the current licensing basis for PNPS.

The staff performed its environmental review of the PNPS LRA and issued the final supplemental environmental impact statement (SEIS) as NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 29, Regarding Pilgrim Nuclear Power Station," in July 2007 (Ref. 5). The SEIS concludes that adverse environmental impacts of license renewal for PNPS are not so great that preserving the option of license renewal for energy-planning decisionmakers would be unreasonable.

DISCUSSION:

Staff Performance of Safety Review

The staff performed its safety review of the PNPS LRA in accordance with 10 CFR Part 54 using the guidance in NUREG-1800, Revision 1, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants," issued September 2005. The staff issued the SER with open items in March 2007 (Ref. 6) and issued the final SER, "Safety Evaluation Report Related to the License Renewal of Pilgrim Nuclear Power Station," in June 2007 (Ref. 7). The SER, published as NUREG-1891 (Ref. 2), presents the conclusions of the staff's review. The staff subsequently issued supplements to the SER in September 2007 (Ref. 3) and June 2011 (Ref. 4). The SER and supplements document the results of the staff's review of the scoping and screening, aging management programs, and time-limited aging analyses, in accordance with the requirements of 10 CFR Part 54. The staff concluded that Entergy Nuclear and ENO meet the standards for issuance of a renewed license, as set by 10 CFR 54.29.

To support the review of the PNPS LRA, Region I conducted a series of inspections at PNPS in accordance with Inspection Manual Chapter 2516, "Policy and Guidance for the License Renewal Inspection Program," and Inspection Procedure 71002, "License Renewal Inspection." The results of these inspections verified that the contents of the application, the aging management programs, the implementation of activities required before the period of extended operation, and other activities related to the license renewal of PNPS are in accordance with docketed commitments and regulatory requirements.

On April 4, 2007, the staff briefed the ACRS subcommittee about the staff's safety review for the PNPS license renewal. The staff briefed the ACRS full committee on the SER on September 6, 2007. The staff discussed open items, resolutions, and resulting commitments during these briefings.

On September 26, 2007, the ACRS issued its "Report on the Safety Aspects of the License Renewal Application for Pilgrim Generating Station." The ACRS concluded that, on the basis of its review of the PNPS LRA, the SER, and its discussions during the ACRS briefing, Entergy Nuclear and ENO had properly identified the structures, systems, and components that are subject to aging management review. Furthermore, ACRS concluded that the programs instituted to manage aging-related degradation of the identified structures, systems, and components are appropriate and provide reasonable assurance that PNPS can be operated in accordance with its current licensing basis for the period of extended operation without undue risk to public health and safety. Finally, ACRS concluded that the application for the renewal of the PNPS operating license should be approved with the proposed license conditions.

On January 24, 2010, Entergy Nuclear and ENO submitted correctly benchmarked reactor vessel neutron fluence calculations (Ref. 8). The information submitted resolved a proposed license condition documented in NUREG-1891 (Ref. 2). The staff approved the analysis as documented in a safety evaluation dated January 26, 2011 (Ref. 9).

Accordingly, the staff finds that there is reasonable assurance that the activities authorized by the renewed license will continue to be safely conducted in accordance with the current licensing basis for PNPS.

Staff Performance of Environmental Review

The staff performed its environmental review of the PNPS LRA in accordance with 10 CFR Part 51 using the guidelines described in NUREG-1555, "Standard Review Plans for Environmental Reviews for Nuclear Power Plants," issued March 2000, and its Supplement 1, "Operating License Renewal," issued October 1999.

On April 14, 2006, the staff published a notice of intent to prepare an SEIS and conduct scoping, thus initiating a 60-day scoping period. The SEIS, prepared by the staff for the plant-specific review, is a supplement to the Generic Environmental Impact Statement, NUREG-1437. The SEIS for PNPS is Supplement 29 to NUREG-1437 (Ref. 5). The staff visited the PNPS site in May 2006 and held two public scoping meetings on May 17, 2006, in Plymouth, MA. The staff reviewed the comments received during scoping, reviewed related documents, and consulted with other Federal, State, and local agencies. On December 8, 2006, the staff issued its draft SEIS for PNPS, which contained the preliminary results of the staff's evaluation and recommendation.

With the publication of the U.S. Environmental Protection Agency's notice of filing of the draft SEIS, the NRC initiated a 75-day public comment period on the preliminary results of the staff's review. During this comment period, two public meetings took place in Plymouth, MA, on January 24, 2007. At these meetings, the staff described the approach and the results of the NRC environmental review and answered questions from the public. The comment period for the draft SEIS ended on February 28, 2007. The staff evaluated the comments received on the draft SEIS and completed its analysis, considering and weighing the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and the alternatives available for reducing or avoiding adverse effects. The NRC issued the final SEIS for PNPS on July 27, 2007 (Ref. 5). The SEIS concludes that the adverse environmental impacts of PNPS license renewal are not so great that preserving the option of license renewal for energy-planning decisionmakers would be unreasonable.

Hearings, Petitions, and Adjudicatory Requests

Several requests for hearings and adjudicatory motions were filed in the course of the staff's review of the PNPS LRA.

Two requests for hearing and petitions for leave to intervene were filed related to the PNPS proceeding in response to the *Federal Register* notice published on March 27, 2006. Pilgrim Watch filed one petition on May 25, 2006, which included five contentions. The Board admitted two contentions. Subsequently, the Board granted summary disposition in favor of the applicant on one contention (Contention 3), leaving the other contention (Contention 1) for evidentiary hearing. The Massachusetts Attorney General (AG) filed the other petition, requesting a hearing on one contention. The Board denied the AG's petition. The Board's ruling was subsequently upheld on appeal to the Commission, CLI-07-03, 65 NRC 13 (2007); CLI-07-13, 65 NRC 211 (2007); and on judicial review in *Massachusetts v. United States*, 522 F. 3d 115 (1st Cir. 2008).

The initial decision of the Atomic Safety and Licensing Board (ASLB) released on October 30, 2008 (LBP-08-22), resolved Pilgrim Watch's Contention 1 in favor of Entergy Nuclear and ENO. The third administrative judge issued a concurring opinion on October 31, 2008. On November 12, 2008, Pilgrim Watch and the Massachusetts AG submitted petitions for the Commission to review the ASLB decision. The Commission denied both petitions for review in CLI-09-10, 69 NRC 521(2009).

On March 26, 2010, the Commission remanded to the ASLB a portion of Contention 3 for reconsideration in accordance with specific instructions. Subsequently, the ASLB partial initial decision was released on July 19, 2011 (LBP-11-18), finding in favor of Entergy Nuclear. Pilgrim Watch submitted a petition for the Commission to review the ASLB order. On February 9, 2012, the Commission denied Pilgrim Watch's petition in CLI-12-01.

During the interval between the remand and ruling on Contention 3, Pilgrim Watch filed requests for hearing on five new contentions—the first two in November and December 2010, a followup to the December contention filed in January 2011, a fourth in May 2011, and a fifth in June 2011. ASLB orders issued on August 11, 2011 (LBP-11-20), and September 8, 2011 (LBP-11-23), denied Pilgrim Watch's requests for hearings on all five contentions. Pilgrim Watch submitted petitions for the Commission to review both ASLB orders. On February 22, and March 30, 2012, the Commission denied Pilgrim Watch's petitions to review ASLB orders LBP-11-23 and LBP-11-20 in CLI-12-03 and CL1-12-10, respectively.

On June 2, 2011, the Massachusetts AG submitted a request for hearing on a new contention. On November 18, 2011, Pilgrim Watch also submitted a request for hearing on a new contention. The ASLB orders issued on November 28, 2011 (LBP-11-35), and January 11, 2012 (LBP-12-01), denied the requests for hearings. Massachusetts AG and Pilgrim Watch submitted petitions for the Commission to review the ASLB orders. On March 8, 2012, the Commission denied the petition to review the ASLB ruling on the Massachusetts AG request in CLI-12-06.

On March 8, 2012, Pilgrim Watch and Jones River Watershed Association submitted a request for a hearing on a new contention. On March 30, 2012, the Commission referred the petition to the ASLB.

Renewed Licenses and Adjudicatory Appeals

Although a new late-filed contention has been referred to the Board and an appeal of an ASLB decision is pending before the Commission, the NRC is not compelled to await exhaustion of administrative or judicial appeals before renewing the operating license for PNPS for up to an additional 20 years (56 FR 64943). As the Commission observed in CLI-08-13, 10 CFR 54.31(c) provides that: “[A] license may be set aside (or appropriately conditioned) even after it has been issued, upon subsequent administrative or judicial review.”

Conclusion

The staff finds that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted safely in accordance with the current licensing basis for PNPS. Based on a review of the PNPS LRA submitted by Entergy Nuclear and ENO and on ASLB’s initial decision in favor of Entergy Nuclear and ENO, the staff also finds that there is sufficient basis to support the option of license renewal from an environmental perspective.

RECOMMENDATION:

The staff recommends that the Commission authorize the Director of NRR to renew the operating license for PNPS upon his making the appropriate findings on safety and environmental matters.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objections.

Copies of this paper will be served on the parties to this proceeding via the Electronic Information Exchange.

/RA by Martin J. Virgilio for/

R. W. Borchardt
Executive Director
for Operations

Enclosure:
[Reference List](#)

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REFERENCES

- (1) "License Renewal Application Pilgrim Generating Station," January 25, 2006. (Agencywide Documents Access and Management System (ADAMS) Accession No. ML060300028)
- (2) NUREG-1891, "Safety Evaluation Report Related to the License Renewal of Pilgrim Nuclear Power Station," November 2007. (ADAMS Accession No. ML073241016)
- (3) "Supplement 1, Safety Evaluation Report Related to the License Renewal of Pilgrim Nuclear Power Station," September 2007. (ADAMS Accession No. ML072210487)
- (4) "Supplement 2, Safety Evaluation Report Related to the License Renewal of Pilgrim Nuclear Power Station," June 2011. (ADAMS Accession No. ML11147A036)
- (5) NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 29, Regarding Pilgrim Nuclear Power Station," Final Report, Volumes 1 and 2, July 2007. (ADAMS Accession Nos. ML071990020 and ML071990027)
- (6) "Safety Evaluation Report with Open Items Related to the License Renewal of Pilgrim Nuclear Power Station," March 2007. (ADAMS Accession No. ML070600798)
- (7) "Safety Evaluation Report Related to the License Renewal of Pilgrim Nuclear Power Station," June 2007. (ADAMS Accession No. ML071410455)
- (8) "Proposed License Amendment to Technical Specifications: Revised P-T Limit Curves and Relocation of Pressure-Temperature (P-T) Curves to the Pressure Temperature Limits Report (PTLR)," January 2010. (ADAMS Accession No. ML100270054)
- (9) "Safety Evaluation by the Office of Nuclear Reactor Regulation Related to Amendment No. 234 to Facility Operating License No. DPR-35 Entergy Nuclear Generation Company Entergy Nuclear Operating, Inc. Pilgrim Nuclear Power Station Docket No. 50-293," January 2011. (ADAMS Accession No. ML110050298)

ENCLOSURE