March 23, 2006

Mr. Michael Kansler
President
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 3 - ISSUANCE OF AMENDMENT RE: EMERGENCY CORE COOLING SYSTEM THROTTLE VALVE SURVEILLANCE REQUIREMENTS (TAC NO. MC8581)

Dear Mr. Kansler:

The Commission has issued the enclosed Amendment No. 230 to Facility Operating License No. DPR-64 for the Indian Point Nuclear Generating Unit No. 3. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated October 3, 2005.

The amendment revises TS Surveillance Requirement 3.5.2.6, which verifies the position stop for Emergency Core Cooling System throttle valves, to add 9 throttle valves and to delete 2 throttle valves which are now locked closed.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely,

/RA/

John P. Boska, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-286

Enclosures:
1. Amendment No. 230 to DPR-64
2. Safety Evaluation

cc w/encls: See next page

Indian Point Nuclear Generating Unit No. 3

cc:

Mr. Gary J. Taylor
Chief Executive Officer
Entergy Operations, Inc.
1340 Echelon Parkway
Jackson, MS 39213

Mr. John T. Herron
Senior Vice President and
Chief Operating Officer
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. Fred R. Dacimo
Site Vice President
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
295 Broadway, Suite 1
P.O. Box 249
Buchanan, NY 10511-0249

Mr. Paul Rubin
General Manager, Plant Operations
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
295 Broadway, Suite 2
P.O. Box 249
Buchanan, NY 10511-0249

Mr. Oscar Limpias
Vice President Engineering
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. Brian O'Grady
Vice President, Operations Support
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. John F. McCann
Director, Licensing
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Ms. Charlene D. Faison
Manager, Licensing
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. Michael J. Columb
Director of Oversight
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. James Comiotes
Director, Nuclear Safety Assurance
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
295 Broadway, Suite 1
P.O. Box 249
Buchanan, NY 10511-0249

Mr. Patric Conroy
Manager, Licensing
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
295 Broadway, Suite 1
P. O. Box 249
Buchanan, NY 10511-0249

Mr. Travis C. McCullough
Assistant General Counsel
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Ms. Stacey Lousteau
Treasury Department
Entergy Services, Inc.
639 Loyola Avenue
Mail Stop: L-ENT-15E
New Orleans, LA 70113

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Indian Point Nuclear Generating Unit No. 3

cc:

Senior Resident Inspector's Office
Indian Point 3
U. S. Nuclear Regulatory Commission
P.O. Box 59
Buchanan, NY 10511

Mr. Peter R. Smith, President
New York State Energy, Research, and
Development Authority
17 Columbia Circle
Albany, NY 12203-6399

Mr. Paul Eddy
Electric Division
New York State Department
of Public Service
3 Empire State Plaza, 10th Floor
Albany, NY 12223

Mr. Charles Donaldson, Esquire
Assistant Attorney General
New York Department of Law
120 Broadway
New York, NY 10271

Mayor, Village of Buchanan
236 Tate Avenue
Buchanan, NY 10511

Mr. Ray Albanese
Executive Chair
Four County Nuclear Safety Committee
Westchester County Fire Training Center
4 Dana Road
Valhalla, NY 10592

Mr. William DiProfio
PWR SRC Consultant
139 Depot Road
East Kingston, NH 03827

Mr. Daniel C. Poole
PWR SRC Consultant
P.O. Box 579
Inglis, FL 34449

Mr. William T. Russell
PWR SRC Consultant
400 Plantation Lane
Stevensville, MD 21666-3232

Mr. Jim Riccio
Greenpeace
702 H Street, NW
Suite 300
Washington, DC 20001

Mr. Phillip Musegaas
Riverkeeper, Inc.
828 South Broadway
Tarrytown, NY 10591

Mr. Mark Jacobs
IPSEC
46 Highland Drive
Garrison, NY 10524

March 23, 2006

Mr. Michael R. Kansler
President
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 3 - ISSUANCE OF AMENDMENT RE: EMERGENCY CORE COOLING SYSTEM THROTTLE VALVE SURVEILLANCE REQUIREMENTS (TAC NO. MC8581)

Dear Mr. Kansler:

The Commission has issued the enclosed Amendment No. 230 to Facility Operating License No. DPR-64 for the Indian Point Nuclear Generating Unit No. 3. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated October 3, 2005.

The amendment revises TS Surveillance Requirement 3.5.2.6, which verifies the position stop for Emergency Core Cooling System throttle valves, to add 9 throttle valves and to delete 2 throttle valves which are now locked closed.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely,

/RA/

John P. Boska, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-286

Enclosures:
1. Amendment No. 230 to DPR-64
2. Safety Evaluation

cc w/encls: See next page

Accession Number: ML060680026 *see safety evaluation dated February 3, 2006

OFFICE	LPL1-1/PM	LPL1-1/LA	SPWB/BC	ITSB/BC	OGC	LPL1-1/BC
NAME	JBoska	SLittle	JNakoski*	TBoyce	PMoulding	RLaufer
DATE	3/15/06	3/16/06	2/3/06	3/17/06	3/21/06	3/22/06

Official Record Copy

DATED: March 23,2006

AMENDMENT NO. 230 TO FACILITY OPERATING LICENSE NO. DPR-64 INDIAN POINT UNIT 3

PUBLIC
LPL1-1 R/F
RidsNrrDorlLpla
RidsNrrLASLittle
RidsNrrPMJBoska
RidsOGCMailCenter
GHill (2)
RidsNrrDirsItsb
RidsAcrsAcnwMailCenter
ECobey, RI
KDesai

cc: Plant Mailing list

ENTERGY NUCLEAR INDIAN POINT 3, LLC

ENTERGY NUCLEAR OPERATIONS, INC.

DOCKET NO. 50-286

INDIAN POINT NUCLEAR GENERATING UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 230
License No. DPR-64

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Entergy Nuclear Operations, Inc. (the licensee) dated October 3, 2005, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (I) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-64 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 230, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Richard J. Laufer, Chief
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 23, 2006

ATTACHMENT TO LICENSE AMENDMENT NO. 230

FACILITY OPERATING LICENSE NO. DPR-64

DOCKET NO. 50-286

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove Page	Insert Page
3.5.2-3	3.5.2-3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 230 TO FACILITY OPERATING LICENSE NO. DPR-64

ENTERGY NUCLEAR OPERATIONS, INC.

INDIAN POINT NUCLEAR GENERATING UNIT NO. 3

DOCKET NO. 50-286

1.0 INTRODUCTION

By letter dated October 3, 2005, Agencywide Documents Access and Management System accession number ML052900404, Entergy Nuclear Operations, Inc. (Entergy or the licensee), submitted a request for changes to the Indian Point Nuclear Generating Unit No. 3 (IP3) Technical Specifications (TSs). The proposed TS change will add 9 throttle valves (SI-2165, 2166, 2168, 2169, 2170, 2171, 2172, 856B and 856G) to the scope of the TS 3.5.2.6 surveillance requirements (SRs). The proposed amendment will remove existing throttle valves SI-856A and SI-856F from the scope of the SR, since they are now being maintained in a locked-closed position and no longer perform a throttle function. The high-head safety injection (HHSI) system was modified as part of the IP3 stretch power uprate (SPU) program to provide increased cold leg and hot leg flow capabilities, to support hot leg switchover as early as 6.5 hours following a postulated loss-of-coolant accident (LOCA), to eliminate the potential for debris accumulation during recirculation, and to reduce or eliminate the potential for cavitation damage to the throttle valves. Since the valves being added to the scope of the SR can change position when being set, this SR is appropriate and will enhance emergency core cooling system (ECCS) performance during plant operation.

The Nuclear Regulatory Commission (NRC) staff had previously issued a license amendment to IP3 for a 4.85 percent SPU and relocation of cycle specific parameters on March 24, 2005 (Reference 2).

2.0 REGULATORY EVALUATION

The Commission's regulatory requirements related to the contents of TSs are set forth in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36, which assures the TS specified limiting conditions for operation are consistent with assumed values of the initial conditions in the licensee's safety analyses. In accordance with 10 CFR 50.36, the NRC staff and the Westinghouse Owners group previously developed improved Standard Technical Specifications (ISTS) that meet 10 CFR 50.36(c)(2)(ii) and 10 CFR 50.36(c)(3) requirements. The licensee converted to ISTS on July 3, 2002. ISTS requires verification that each ECCS throttle valve's position stop is in the correct position to assure that realigned valves are in the proper position for adequate flow.

10 CFR 50.46 establishes acceptance criteria for the ECCS. The HHSI system was modified during the SPU program. Nine throttle valves were added to trim system resistance during system flow balance testing. These changes were made to enhance ECCS performance during plant operation.

3.0 TECHNICAL EVALUATION

The HHSI system utilizes three pumps discharging into two headers for safety injection. Prior to the SPU, the boric injection tank (BIT) header discharged to four cold legs through two motor-operated valves and two manual valves and discharged into one hot leg through one motor-operated valve. The non-BIT header discharged into four cold legs through two different motor-operated valves and two different manual valves and discharged into one hot leg through one different motor-operated valve. Thus, a total of eight cold leg valves were used to throttle flow, and two hot leg valves were closed and de-energized until hot leg recirculation was initiated. For hot leg injection, these two hot leg valves were then opened to a preset throttled position. Since the SPU modification allows all valves except manual valves SI-856A and SI-856F to be used for trimming system resistance based on system flow balance testing, these valves (856B, 856C, 856D, 856E, 856G, 856H, 856J, and 856K) could be used to perform throttling and therefore they will remain in TS SR 3.5.2.6. During this cycle, these valves (856B, 856C, 856D, 856E, 856G, 856H, 856J, and 856K) have their limit switches adjusted so that they do not perform a throttle function.

The HHSI system was modified as part of the SPU program to provide increased cold leg and hot leg flow capabilities, to support hot leg switchover as early as 6.5 hours following a postulated LOCA, to eliminate the potential for debris accumulation during recirculation, and to reduce or eliminate the potential for cavitation damage to the throttle valves. The modification included the addition of 6 cold leg throttle valves (valves SI-2165, 2166, 2169, 2170, 2171, and 2172) and 1 hot leg throttle valve (SI-2168). These valves are manual valves that are designed to be set in a locked, throttled position after adjustment during flow balance testing. The locked position will provide the required HHSI flow while also limiting pump run-out flow. Since these seven valves can change position when being set, these valves are included within the scope of the SR.

The hot leg valves SI-856B and SI-856G are also used to throttle flow during hot leg recirculation. The throttle position is achieved by adjusting the limit switch so that when a valve is opened for hot leg recirculation, it will open to the proper position to throttle flow. Since these two hot leg valves perform a throttling function, they are also included within the scope of the SR. The existing throttle valves SI-856A and SI-856F are now being maintained in a locked-closed position and they will be removed from the SR, as the licensee's other administrative controls provide adequate assurance of proper valve position.

The proposed TS change to SR 3.5.2.6 thus adds a total of 9 valves to the scope of the SR and removes 2 valves in the HHSI system discharge lines from the scope. Alignment of valves in the HHSI flow path is necessary for proper ECCS performance. The HHSI throttle valve positions will be established by flow testing, and the SR requires verification that identified ECCS throttle valve position stops are in the correct position. By updating the SR to include the appropriate HHSI valves, the proposed TS change will enhance the ECCS performance during plant operation.

The NRC staff has reviewed the proposed TS changes and finds that these changes are in compliance with 10 CFR 50.36 criteria. These TS changes are consistent with the safety analyses and conform to NUREG-1431, Revision 3 guidelines (Reference 1). Therefore, the NRC staff concludes that the proposed TS changes are acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (70 FR 72670). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

7.0 REFERENCES

1. NUREG-1431, Revision 3, "Standard Technical Specifications, Westinghouse Plants," dated March 2004.
2. Letter from USNRC to Michael Kansler of Entergy Nuclear Operations Inc., Regarding IP3 Issuance of Amendment RE: 4.85 percent stretch power uprate and relocation of cycle specific parameters (TAC. No. MC3552) dated March 24, 2005.

Principal Contributor: K. Desai

Date: March 23, 2006