July 16, 2003

Mr. John Skolds Chairman and CEO AmerGen Energy Company, LLC 4300 Winfield Road 5<sup>th</sup> Floor Warrenville, IL 60555

# SUBJECT: THREE MILE ISLAND UNIT ONE SENIOR REACTOR OPERATOR INITIAL EXAMINATION REPORT NO. 50-289/03-301

Dear Mr. Skolds:

This report transmits the results of the senior reactor operator (SRO) licensing examination conducted by the NRC during the period of May 12-19, 2003. This examination addressed areas important to public health and safety and was developed and administered using the guidelines of the "Examination Standards for Power Reactors" (NUREG-1021, Revision 8, Supplement 1).

Based on the results of the examination, all four Senior Reactor Operator applicants passed all portions of the examination. Examination results indicated that the applicants were well prepared for the examination.

Mr. D'Antonio discussed performance insights observed during the examination with Mr. Marc Paul on May 15, 2002. On June 9, 2003, final examination results, including individual license numbers, were given during a telephone call between Mr. Paul and Mr. D'Antonio.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). These records include the final examination and are available in ADAMS (Master File - Accession Number ML021290026; RO/SRO Written - Accession Number ML031710806; SRO/RO Operating Section A - Accession Number ML031710811; SRO/RO Operating Section B - Accession Number ML031710813; and SRO/RO Operating Section C - Accession Number ML031710814). ADAMS is accessible from the NRC Web site at <a href="http://www.nrc.gov/reading-rm/ADAMS.html">http://www.nrc.gov/reading-rm/ADAMS.html</a> (the Public Electronic Reading Room).

Should you have any questions regarding this examination, please contact me at (610) 337-5183, or by E-mail at RJC@NRC.GOV.

Sincerely,

#### /RA/

Richard J. Conte, Chief Operational Safety Branch Division of Reactor Safety

Docket No. 50-289 License No. DPR-50

Enclosure: Initial Examination Report No. 50-289/03-301

<u>cc w/encl:</u>

AmerGen Energy Company - Correspondence Control Desk Chairman and CEO, AmerGen Energy Vice President, TMI Unit 1 Vice President, Mid-Atlantic Operations Support Vice President, General Counsel and Secretary, AmerGen Energy Company, LLC Senior Vice President, Nuclear Services Senior Vice President, Mid-Atlantic Regional Operating Group George Rombold, Regulatory Assurance Manager Plant Manager **Director-Licensing** Licensing and Regulatory Affairs- Vice President, AmerGen Energy E. Epstein, TMI-Alert (TMIA) R. Janati, Chief, Division of Nuclear Safety D. Allard, PADER M. Schoppman, Framatome Chairman, Board of County Commissioners of Dauphin County Chairman, Board of Supervisors of Londonderry Township

J. Johnsrud, National Energy Committee

Mr. John Skolds

Distribution w/encl: Region I Docket Room (with concurrences) C. Smith, DRP - Acting Senior Resident Inspector H. Miller, RA J. Wiggins, DRA J. Rogge, DRP R. Barkley, DRP J. Jolicoeur, OEDO R. Laufer, NRR J. Andersen, NRR T. Colburn, PM, NRR P. Tam, Backup PM, NRR J. White, INPO (whitejl@inpo.org) W. Lanning, DRS R. Crlenjak, DRS J. D'Antonio, DRS C. Buracker, DRS **OL** Master File

DRS File

DOCUMENT NAME: C:\ORPCheckout\FileNET\ML031970747.wpd After declaring this document "An Official Agency Record" it <u>will</u> be released to the Public. To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RI/DRS	RI/DRS	RI/DRP		
NAME	JD'Antonio	RConte	NPerry		
DATE	07/14/03	07/15/03	07/16/03		

# OFFICIAL RECORD COPY

# U. S. NUCLEAR REGULATORY COMMISSION

# **REGION I**

Docket No(s):	50-289
License No:	DPR-50
Report No:	50-289/03-301
Licensee:	AmerGen Energy Company, LLC
Facility:	Three Mile Island Unit One
Dates:	May 12-14, 2002 (Operating Test Administration) May 19, 2003 (Written Examination Administration) May 23, 2003 (Licensee Post Exam Letter) Received May 27, 2003 May 19-June 3, 2003 (Examination Grading and Evaluation)
Examiners:	Joseph M. D'Antonio, Operations Engineer (Chief Examiner) Dell McNeil, Senior Operations Engineer John Caruso, Senior Operations Engineer (part time support)
Approved by:	Richard J. Conte, Chief Operational Safety Branch Division of Reactor Safety

### SUMMARY OF FINDINGS

IR 05000289/03-301; May 12-19, 2003; Three Mile Island 1; Initial Operator Licensing Examination.

The written examinations were administered by the facility and the operating tests were administered by two NRC region-based examiners. There were no inspection findings of significance. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. NRC -Identified and Self Revealing Findings.

Cornerstone: Mitigating Systems

All four Senior Reactor Operator Upgrade applicants passed their examinations.

There were no inspection findings of significance.

B. <u>Licensee-Identified Violations.</u>

None

## Report Details

## 1. **REACTOR SAFETY**

## Mitigating Systems - Senior Reactor Operator (SRO) Initial License Examination

## a. <u>Scope of Review</u>

The NRC examiner reviewed the facility developed written and operating initial examinations and together with Three Mile Island training and operations personnel verified or ensured, as applicable, the following:

- The examination was prepared and developed in accordance with the guidelines of Revision 8, Supplement 1 of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors." A review was conducted both in the Region I office and at the Three Mile Island plant and training facility. Final resolution of comments and incorporation of test revisions were conducted during and following the onsite preparation week.
- Simulation facility operation was proper.
- A test item analysis was completed on the written examination for feedback into the systems approach to training program.
- Examination security requirements were met.

The NRC examiner administered the operating portion of the examination to all applicants from May 12-14, 2003. The written examination was administered by the Three Mile Island training staff on May 19, 2002. Final facility exam grading, analysis, and comments were received by the NRC on May 27, 2003 as documented in a letter dated May 23, 2003.

b. Findings

#### Grading and Results

All four SRO applicants passed all portions of the initial licensing examination.

The facility had four post-examination comments, which were provided to the NRC in a letter received on May 27, 2003. Resolution of these comments resulted in grading changes, but no changes to pass/fail results.

#### 4OA6 Exit Meeting Summary

The examination period was from May 12 to June 3, 2003, and it included administration, grading, and review of licensee post exam comments. On June 9, 2003, the NRC provided preliminary observations, examination results, and license numbers to Three Mile Island management representatives via telephone. The final exit call was held on June 17, 2003. Observations and comments related to exam validation and administration were discussed.

# KEY POINTS OF CONTACT

#### **LICENSEE**

Marc Paul, Training Director Russ Gumbert, Operations Training Manager

<u>TYPE</u>

<u>NRC</u>

Joseph D'Antonio, Operations Engineer

# LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

ITEM NUMBER

**DESCRIPTION** 

NONE

NRC RESOLUTION OF FACILITY COMMENTS

#### Q26:

### Comment: Accept two correct answers.

Resolution: To answer this question, the applicant has to determine the source of high activity water in the RCDT and the applicable procedures. Two possible failures - pressurizer system failure and loss of seal injection - are provided in the distractors. The correct answer assumes pressurizer control is the failure, however loss of seal injection also results in RCS leakoff to the RCDT. There is no information in the question to choose one failure over the other, therefore both answers listing the correct procedures for high activity/radiation and for either of these failures were accepted as correct.

Q42:

Comment: No correct answer, delete.

Resolution: The question answer assumes plant shutdown is required due to two pressurizer level channels inoperable, however the level transmitter failures specified in the key answer are both common to one channel. As a result, there is no correct answer. Question deleted.

Q43:

- Comment: The technically correct answer was not intended answer listed in the key; one of the other distractors is the correct answer. Change the key to the correct answer.
- Resolution: The question stem provides plant conditions including two dry OTSGs. The key answer assumes EOP Rule 4 applies, requiring 215 GPM or more EFW flow to each OTSG; the correct answer for the dry OTSG condition is to apply EOP Guide 13, "Dry OTSG", which requires limited MFW flow to each OTSG. Answer key changed to the distractor containing the technically correct answer.

Q74:

- Comment: Typographical error in answer key during question editing.
- Resolution: Key changed to the correct answer.