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An Exelon/British Energy Company

10 CFR 50.90

August 14, 2001 5928-01-20121

U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555-0001

Dear Sir or Madam:

SUBJECT:

THREE MILE ISLAND, UNIT 1 (TMI UNIT 1)

OPERATING LICENSE NO. DPR-50

**DOCKET NO. 50-289** 

TECHNICAL SPECIFICATION CHANGE REQUEST (TSCR) NO. 298, REVISION 1 – INDEPENDENT ONSITE SAFETY REVIEW GROUP

In accordance with 10 CFR 50.4(b)(1), enclosed is Technical Specification Change Request (TSCR) No. 298, Revision 1. Following our submittal of TSCR No. 298 on August 9, 2000 discussions were held with the NRC regarding submittals by South Texas Project (STP) on March 9, 1999 and May 3, 1999; submittals by the Tennessee Valley Authority (TVA) on March 2, 1999, June 2, 1999, and August 25, 1999; and the August 26, 1999 Safety Evaluation by the NRC approving the TVA request for elimination of the independent safety review requirements of their Nuclear Quality Assurance Plan. This submittal replaces the August 9, 2000 AmerGen submittal of TSCR No. 298 in its entirety and incorporates applicable elements of those similar requests by STP and TVA.

This revision of TSCR No. 298 proposes to remove the Independent Onsite Safety Review Group (IOSRG) from the Administrative Controls in Section 6 of the TMI Unit 1 Technical Specifications. To satisfy the NUREG-0737 guidance concerning organizational independence, the proposed IOSRG alternative provides for technical expertise by onsite engineering and licensing organizations. These site engineering and licensing organizations report through the Site Vice-President and are independent of the production reporting chain through the plant manager. Additionally, high-level management positions are located in the corporate and regional offices for these engineering and licensing organizations which set policy and have responsibility for governance and oversight of these functional areas. These corporate and regional high-level positions are not in the management chain for power production.

5928-01-20121 August 14, 2001 Page 2 of 2

Clarification for this alternative oversight of safety is being added to the AmerGen Operational Quality Assurance Plan (OQAP). Changes to the OQAP conforming to the amendment approving this change will become effective within thirty (30) days of NRC approval of this request. Proposed changes to the OQAP are included as Enclosure 3.

Using the standards in the 10 CFR 50.92, AmerGen Energy Company, LLC (AmerGen) has concluded that these proposed changes do not constitute a significant hazards consideration, as described in the enclosed analysis performed in accordance with 10 CFR 50.91(a)(1). Pursuant to 10 CFR 50.91(b)(1), a copy of this TSCR is provided to the designated official of the Commonwealth of Pennsylvania, Bureau of Radiation Protection, as well as the chief executives of the township and county in which the facility is located.

If any additional information is needed, please contact Bob Knight at (717) 948-8554.

Sincerely yours.

Mark E. Warner

Vice President, TMI Unit 1

#### MEW/mrk

Enclosures:

- 1) TMI Unit 1 TSCR No. 298, Revision 1, Safety Evaluation and No Significant Hazards Consideration
- 2) Proposed Changes to the TMI Unit 1 Technical Specification Pages (Hand Markup)
- 3) Proposed Changes to the AmerGen TMI Unit 1 Operational Quality Assurance Plan (Markup) Conforming to this Proposed Amendment

cc:

- H. J. Miller, USNRC, Regional Administrator, Region I
- T. G. Colburn, USNRC, Senior Project Manager, TMI Unit 1
- J. D. Orr, USNRC, Senior Resident Inspector, TMI Unit 1
- D. Allard, Director, Bureau of Radiation Protection PA Department Of Environmental Resources

Chairman, Board of County Commissioners of Dauphin County Chairman, Board of Supervisors of Londonderry Township File No. 00079

#### AMERGEN ENERGY COMPANY, LLC

# THREE MILE ISLAND NUCLEAR STATION, UNIT 1

Operating License No. DPR-50 Docket No. 50-289 License Amendment Request No. 298, Revision 1

| COMMONWEALTH OF PENNSYLVANIA | )    |
|------------------------------|------|
|                              | ) SS |
| COUNTY OF DAUPHIN            | )    |

This Technical Specification Change Request is submitted in support of Licensee's request to change the Technical Specifications for Three Mile Island Nuclear Station, Unit 1. As a part of this request, proposed marked up pages for the TMI Unit 1 Technical Specifications are also included. All statements contained in this submittal have been reviewed, and all such statements made and matters set forth therein are true and correct to the best of my knowledge.

AmerGen Energy Company, LLC

Sworn and Subscribed to before me

Notary Public

Notarial Seal

Linda C. Witter, Notary Public Londonderry Twp., Dauphin County My Commission Expires Sept. 25, 2004

Member, Pennsylvania Association of Notaries

# ENCLOSURE 1

TMI Unit 1 Technical Specification Change Request No. 298, Revision 1

Safety Evaluation and No Significant Hazards Consideration

5928-01-20121 August 14, 2001 Enclosure 1 Page 1 of 8

# I. <u>Technical Specification Change Request No. 298, Revision 1</u>

AmerGen Energy Company, LLC (AmerGen) requests that the following changed replacement pages be inserted into the existing Technical Specification:

Revised Technical Specification Pages: v, 6-8, and 6-9.

Marked up Technical Specification pages showing the requested changes are provided in Enclosure 2.

The proposed changed pages to the current AmerGen TMI Unit 1, Operational Quality Assurance Plan (OQAP), Revision 23, are provided as Enclosure 3 in a markup conforming to this proposed amendment. The affected OQAP sections/pages are as follows: Section 1.8 on page 14, Section 1.10 on page 16, Section 1.21 on page 21, Section 2.12 on page 29, and Appendix E on page 88. Changes to the OQAP will become effective within thirty (30) days of issuance by the NRC of the amendment approving this request.

The following lists the changes proposed for each of the pages affected by TSCR No. 298, Revision 1.

#### Page v:

The table of contents is revised to show that TS 6.5.4, Independent Onsite Safety Review Group (IOSRG) is being deleted.

#### Page 6-8:

- 1. TS 6.5.3.1.k currently states that audits of unit activities shall be performed in accordance with the TMI-1 OQAP and shall encompass any other area of unit operation considered appropriate by the IOSRG or the Chief Nuclear Officer. This section is revised to replace the IOSRG with the site Nuclear Oversight Manager as a position which may consider other areas of unit operation, in addition to those areas named in subsections 6.5.3.1.a through 6.5.3.1.j above, as appropriate for audits of unit activities to be performed.
- 2. TS 6.5.4, "Independent Onsite Safety Review Group (IOSRG) Structure," is deleted.

#### Page 6-9:

The balance of TS 6.5.4 as continued on this page is deleted.

# II. Reason for Change

The proposed amendment revises the Administrative Controls, in Section 6 of the Technical Specifications (TS) to delete Section 6.5.4, "Independent Onsite Safety Review Group," and all associated subsections.

5928-01-20121 August 14, 2001 Enclosure 1 Page 2 of 8

Upon issuance of the amendment approving this change, the AmerGen TMI Unit 1, Operational Quality Assurance Plan (OQAP) will be revised in accordance with 10CFR50.54(a)(3). The OQAP will be revised to show a three-tiered approach for oversight of safety.

- The first element of oversight of safety is the collection of program elements for implementing and/or reviewing areas of quality of plant operations and nuclear safety under this plan. Specific guidance is contained in applicable procedures and programs.
- The second element of oversight of safety is the Nuclear Oversight staff, who assess
  and perform quality verification inspection aspects of AmerGen activities within the
  scope of this plan or relating to safety. This provides for an overview of activities
  affecting or potentially affecting safety.
- The third element of oversight of safety is the Nuclear Safety Review Board (NSRB).
   This is an offsite committee that reports to and advises the President and Chief
   Nuclear Officer of the results of independent oversight of plant operation relative to nuclear safety.

To satisfy the NUREG-0737 guidance concerning organizational independence, the proposed IOSRG alternative provides for technical expertise by onsite engineering and licensing organizations. These site engineering and licensing organizations report through the Site Vice-President and are independent of the production reporting chain through the plant manager. Additionally, high-level management positions are located in the corporate and regional offices for these engineering and licensing organizations which set policy and have responsibility for governance and oversight of these functional areas. These corporate and regional high-level positions are not in the management chain for power production.

Performance of the nuclear safety oversight function at TMI will benefit from the more efficient utilization of resources as a result of this change.

TS 6.5.4 and its associated subsections describe the function, composition, responsibilities, and record keeping of the IOSRG. This technical specification administrative requirement was implemented in response to NUREG-0737, "Clarification of TMI Action Plan Requirements," which stated that each applicant for an operating license shall establish an onsite safety review group to oversee plant activities.

The IOSRG composition requirement restricts the capability to utilize resources to their maximum advantage, and does not enhance the protection of public health and safety beyond that provided by other processes. Assigning the duties and qualifications specifically to the IOSRG is unnecessary because other aspects of the Three Mile Island Unit 1 organization satisfy the intended requirements. Therefore, AmerGen proposes to delete the IOSRG from the technical specifications, with conforming changes to the OQAP.

5928-01-20121 August 14, 2001 Enclosure 1 Page 3 of 8

# III. Safety Evaluation Justifying Change

TS 6.5.4, and the associated subsections, states that:

- The review functions of the IOSRG are the evaluation for technical adequacy and clarity of procedures important to the safe operation of the unit, evaluation of unit operations from a safety perspective, assessment of unit safety programs, assessment of unit performance regarding compliance to safety requirements, and any other matter involving unit nuclear safety.
- The IOSRG shall have access to the unit and unit records necessary to perform their primary function. Based on its reviews, the IOSRG shall provide recommendations to the management responsible for the area reviewed.
- The IOSRG is to be composed of a minimum staff of three full time multi-disciplined engineers who have a degree in Engineering or Physical Science and three years professional experience in nuclear power, or eight years appropriate experience in nuclear power plant operations.

Three Mile Island has implemented the following improvements in programs and practices since publication of NUREG-0737:

- The System Engineering group has been developed within the onsite Engineering
  Department to provide individuals specifically responsible for the performance of their
  assigned systems. This is an enhancement over typical industry practice in 1979.
- The capability of onsite engineering, and offsite company engineering support, has been improved, with reduced reliance on contracted architect/engineering providers.
- Quality oversight programs have been improved and matured with an increased capability to address concerns typically handled by the IOSRG.
- A system for review of plant activities by the use of departmental self-assessments has been developed and implemented since 1979. Self-assessments provide a mechanism for self-critical evaluations.
- The Maintenance Rule Program, including the maintenance rule assessment function has been implemented as an additional oversight program since 1979. This program continually trends maintenance data to determine the relative health of those plant systems subject to the Maintenance Rule.
- The TMI Corrective Action Program (CAP) has evolved considerably since 1979, including the ability to trend identified deficiencies to ensure the effectiveness of corrective actions

5928-01-20121 August 14, 2001 Enclosure 1 Page 4 of 8

- The NSRB periodically reviews plant activities for nuclear safety issues, potential weaknesses, or areas for potential improvement.
- The Plant Operations Review Committee (PORC) provides oversight of nuclear safety issues.
- A Peer Group Process establishes accountabilities, standardization, and for the identification and common resolution of emerging issues.
- Management is advised of plant issues through mechanisms such as the Monthly Review Meeting minutes/report and performance indicators.
- An Operating Experience Review Program was initiated since 1979. Its purpose is to identify and distribute industry event reports issued by INPO, NRC, and vendors for "information" and for "action" based on the applicability of the report to TMI Unit 1. The program is intended to prevent events, minimize repetitive errors, and stop recurring events.

Organizational and procedural changes at Three Mile Island Unit 1 since the issuance of NUREG-0737 have made the requirements for an IOSRG unnecessary. This safety evaluation describes how Three Mile Island Unit 1 will ensure that the intent of NUREG-0737 regarding an Independent Safety Evaluation Group (ISEG) is met. In light of the considerable improvement in the processes listed above, the contribution of three full time engineers assigned as a separate group to address nuclear safety oversight is not significant in comparison to the contribution of the overall organization.

#### Review of unit operating characteristics:

Three Mile Island Unit 1 has implemented the System Engineering group within the Engineering Department since 1979. An engineer is assigned as the principal contact and owner of a specific system. Multidisciplinary teams, consisting of personnel with varied disciplines, assist in the evaluation of system performance issues. Overview of system performance is better defined and more thorough than that typically found in the industry in 1979.

Onsite engineering and corporate engineering support, have matured and improved such that design changes and modifications are routinely controlled and implemented within the company. Reliance on outside contractors, such as architects and design engineers, for the implementation of design changes has been reduced.

NUREG-0737 specifically addressed the oversight of nuclear safety. In 1979 there was typically a distinct division between quality oversight, and nuclear safety oversight. Since 1979 quality assurance programs have evolved and matured in a manner that this distinction is no longer clear or necessary.

5928-01-20121 August 14, 2001 Enclosure 1 Page 5 of 8

Departmental self-assessment programs have come to the forefront of organizational oversight since 1979. The requirement for departments to perform critical self-assessments of their own activities is now a standard expectation at TMI. The AmerGen program at TMI is defined, documented, and implemented with coordination by a management position responsible for the performance of this oversight function. Building quality at the worker level, with oversight by departmental personnel and quality assurance assessors, is now the standard at TMI.

Implementation of the mandated Maintenance Rule Program has provided another level of oversight for review of the material condition and relative health of plant components and systems covered by the maintenance rule. Data generated by station personnel is continually assessed by engineering personnel to make these determinations. This level of oversight exceeds NUREG-0737 guidance.

The External Operating Experience Program provides a documented review of industry events, NRC issuances, and vendor notifications for applicability to the TMI Unit 1. Reports having similarities are distributed for information and action requests are issued for reports with the potential for direct applicability to the plant. The review responses are documented and any resulting corrective actions are linked to the assigned department task tracking process, which are followed and tracked to completion.

Three Mile Island has made continual improvements to the Corrective Action Program (CAP) process since 1979. The process has been consolidated and provides a structured system for the identification, classification, trending, reporting, determining root cause, and providing corrective actions to resolve deficiencies and prevent their recurrence. The process is owned by the unit and utilized to document deficiencies or areas for improvement. Unit management is required to take an active role in the classification, resolution, and evaluation of corrective action issues. Reportability and operability determinations are required to be performed by a Senior Reactor Operator (SRO) licensed individual for all documented deficiencies. The Management Review Team is also required to review those determinations and either concur with the determination or challenge it.

The NSRB is comprised of high level nuclear industry personnel, supplemented by company management personnel, whose charter specifically requires the assessment of unit performance and nuclear safety. The NSRB meets at each of the company units. This allows the NSRB to have the unique oversight opportunity to compare the performance of different units to identify the best practices of the collective plants.

The Plant Operations Review Committee (PORC) is comprised of trained and experienced site personnel who are tasked with the review of all proposed license changes, safety evaluations, and other issues related to nuclear safety and safe plant operation.

A Monthly Review Meeting (MRM) is held at the site each month to discuss plant issues and plant performance with unit management. The report from this meeting, coupled with

5928-01-20121 August 14, 2001 Enclosure 1 Page 6 of 8

quality assurance assessment reports, NSRB minutes, PORC minutes, Corrective Action Program Trend Reports, and System Health Indicator Program Reports, all serve to inform unit management as to the status of plant operations and nuclear safety at the site.

A Peer Group Process has been established and is comprised of corporate executive sponsors, along with regional sub-groups for functional areas that: facilitate the identification and common resolution of emerging issues; encourage ownership of and commitment to required changes; accomplish explicit goals and objective aligned with business needs; and promote standardization and optimization where appropriate for the business and continuous improvement.

# IV. No Significant Hazards Consideration

AmerGen has determined that this License Amendment Request poses no significant hazards considerations as defined by 10 CFR 50.92.

1. Operation of the facility in accordance with the proposed amendment would not involve a significant increase in the probability or consequences of an accident previously evaluated.

This change involves deletion of the TS requirements for the Independent Onsite Safety Review Group. To satisfy the NUREG-0737 guidance concerning organizational independence, the proposed IOSRG alternative provides for technical expertise by onsite engineering and licensing organizations. These site engineering and licensing organizations report through the Site Vice-President and are independent of the production reporting chain through the plant manager. Additionally, high-level management positions are located in the corporate and regional offices for these engineering and licensing organizations which set policy and have responsibility for governance and oversight of these functional areas. These corporate and regional high-level positions are not in the management chain for power production.

Organizational and procedural changes at TMI Unit 1 following the issuance of NUREG-0737 have resulted in improvements to the review processes that meet the intent of the requirements NUREG-0737 for an IOSRG. Therefore inclusion of the IOSRG in the plant or plant support organization is unnecessary. In light of the considerable improvement in the processes listed above, the contribution of three full time engineers assigned as a separate group to address nuclear safety oversight is not significant in comparison to the contribution of the overall organization. This change does not affect assumptions contained in the plant safety analyses, the physical design and/or operation of the plant, nor does it affect Technical Specifications that preserve safety analysis assumptions. No Technical Specification Limiting Condition of Operation, Action Statement, or Surveillance Requirement is affected by this change. The proposed change does not alter design, function, operation, or reliability of any plant component. This change

5928-01-20121 August 14, 2001 Enclosure 1 Page 7 of 8

does not involve a physical modification to the plant, a mode of operation, or a change to the UFSAR transient analyses. Normal and accident dose to plant personnel or to the pubic are unaffected.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Operation of the facility in accordance with the proposed amendment would not create the possibility of a new or different kind of accident from any accident previously evaluated.

This change to remove the IOSRG from the TS is administrative in nature and does not affect the assumptions contained in the plant safety analyses, the physical design and/or modes of plant operation defined in the plant operating license that preserve safety analysis assumptions.

This proposed change does not introduce a new mode of plant operation or surveillance requirement, nor involve a physical modification to the plant. The proposed change does not alter the design, function, or operation of any plant system or component.

Therefore, the change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Operation of the facility in accordance with the proposed amendment would not involve a significant reduction in a margin of safety.

This change only involves Technical Specification Section 6, "Administrative Controls," which does not include any margins of safety. None of the proposed changes involve a physical modification to the plant, a new mode of operation, an instrument setpoint, or a change to the UFSAR transient analyses. No Limiting Safety System Setting, Technical Specification Limiting Condition for Operation, Action Statement, or Surveillance Requirement is affected. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Therefore, the proposed changes meet the requirements of 10 CFR 50.92(c) and pose no significant hazards consideration.

#### V. Environmental Consideration

AmerGen Energy Company, LLC (i.e., AmerGen) has evaluated this proposed change against the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21, "Criteria for and identification of licensing and regulatory actions requiring environmental assessments." We have determined that this proposed change is a revision to an administrative

5928-01-20121 August 14, 2001 Enclosure 1 Page 8 of 8

requirement as described in 10 CFR 51.22(c)(10) and therefore meets the criteria for a categorical exclusion. This determination is based on the fact that this change to the Three Mile Island Unit 1 Technical Specifications, Section 6, "Administrative Controls," to delete the requirements for and Independent Onsite Safety Review Group in Section 6.5.4 is administrative in nature.

Pursuant to 10 CFR 51.22(b), an environmental assessment of the proposed changes is not required.

#### VI. Implementation

AmerGen requests that the amendment authorizing this change become effective upon issuance and implemented within 30 days.

# **ENCLOSURE 2**

TMI Unit 1 Technical Specification Change Request No. 298, Revision 1

Proposed Changes to the TMI Unit 1 Technical Specification Pages (Markup)

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#### TABLE OF CONTENTS

| Section                  |   | <u>Page</u>  |
|--------------------------|---|--------------|
| 5                        | DESIGN FEATURES   | 5-l          |
| 5.1                      | SITE  | 5-1          |
| 5.2                      | CONTAINMENT   | 5-2          |
| 5.2.1                    | REACTOR BUILDING  | 5-2          |
| 5.2.2                    | REACTOR BUILDING ISOLATION SYSTEM                                       | 5-3          |
| 5.3                      | REACTOR   | 5-4          |
| 5,3.1                    | REACTOR CORE  | 5-4          |
| 5.3.2                    | REACTOR COOLANT SYSTEM  | 5-4          |
| 5.4                      | NEW AND SPENT FUEL STORAGE FACILITIES                                   | 5-6          |
| 5.4.1                    | NEW FUEL STORAGE  | 5-6          |
| 5.4.2                    | SPENT FUEL STORAGE  | 5-6          |
| 5.5                      | AIR INTAKE TUNNEL FIRE PROTECTION SYSTEMS                               | 5-8          |
| 6                        | ADMINISTRATIVE CONTROLS   | 6-1          |
| 6.1                      | RESPONSIBILITY  | 6-1          |
| 6.2                      | <u>ORGANIZATION</u>   | 6-1          |
| 6.2.1                    | CORPORATE   | 6-1          |
| 6.2.2                    | UNIT STAFF  | 6-1          |
| 6.3                      | UNIT STAFF QUALIFICATIONS   | 6-3          |
| 6.4                      | TRAINING  | 6-3          |
| 6.5                      | REVIEW AND AUDIT  | 6-3          |
| 6.5.1                    | TECHNICAL REVIEW AND CONTROL  | 6-4          |
| 6.5.2                    | INDEPENDENT SAFETY REVIEW   | 6-5          |
| 6.5.3                    | AUDITS  | 6-7          |
| 6.5.4                    | PIDEPENDENT ONSITE SAFETY REVIEW GROUP DELETED                          | 6-8          |
| 6.6                      | REPORTABLE EVENT ACTION   | 6-10         |
| 6.7                      | SAFETY LIMIT VIOLATION  | 6-10         |
| 6.8                      | PROCEDURES AND PROGRAMS   | 6-11         |
| 6.9                      | REPORTING REQUIREMENTS  | 6-12         |
| 6.9.1                    | ROUTINE REPORTS   | 6-12         |
| 6.9.2                    | DELETED   | 6-14         |
| 6.9.3                    | ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT                      | 6-17<br>6-18 |
| 6.9.4                    | ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT CORE OPERATING LIMITS REPORT | 6-18         |
| 6.9.5<br>6.10            | RECORD RETENTION  | 6-20         |
| 6.10<br>6.11             | RADIATION PROTECTION PROGRAM  | 6-22         |
| 6.11<br>6.12             | HIGH RADIATION AREA   | 6-22         |
| 6.12<br>6.13             | PROCESS CONTROL PROGRAM   | 6-23         |
| 6.13<br>6.14             | OFFSITE DOSE CALCULATION MANUAL (ODCM)                                  | 6-24         |
| 6.1 <del>4</del><br>6.15 | DELETED   | 6-24         |
| 6.15<br>6.16             | POST ACCIDENT SAMPLING PROGRAMS   | 6-24         |
| 0.10                     | NUREG 0737 (II.B.3, II.F.1.2)   | U-24         |
| 6.17                     | MAJOR CHANGES TO RADIOACTIVE WASTE TREATMENT SYSTEMS                    | 6-25         |
| V. 1 /                   | WILLOW CHILITOLD TO KNOTCHIEF WHOLE HEATINEN DISTENS                    |              |

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- The Process Control Program and implementing procedures for solidification of radioactive wastes.
- j. The performance of activities required by the Quality Assurance Program to meet criteria of Regulatory Guide 4.15, December, 1977.
- k. Any other area of unit operation considered appropriate by the HOSRG or the Chief Nuclear Officer
- 6.5.3.2 Audits of the following shall be performed under the cognizance of the department director responsible for technical support:
  - a. An independent fire protection and loss prevention program inspection and audit shall be performed utilizing either qualified licensee personnel or an outside fire protection firm.
  - b. An inspection and audit of the fire protection and loss prevention program, by an outside qualified fire consultant.

#### **RECORDS**

- 6.5.3.3 Audit reports encompassed by sections 6.5.3.1 and 6.5.3.2 shall be forwarded for action to the management positions responsible for the areas audited within 60 days after completion of the audit. Upper management shall be informed per the Operation Quality Assurance Plan.
- 6.5.4 INDEPENDENT ONSITE SAFETY REVIEW GROUP (IOSRG) STRUCTURE
- 6.5.4.1 The IOSRG shall be a full-time group of engineers, experienced in nuclear power plant engineering, operations and/or technology, independent of the unit staff, and located on site.

# **ORGANIZATION**

- 6.5.4.2 a. The IOSRG shall consist of a manager and a minimum staff of 3 members who meet the qualifications of 6.5.4.5. Group expertise shall be multi-disciplined.
  - b. In the event of an unanticipated vacancy in the IOSRG staff, the number of staff can be two (2) members for a period of not to exceed six (6) months while the vacancy is being filled.
  - The IOSRG shall report to the director responsible for nuclear quality assurance.

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#### **FUNCTION**

- 6.5.4.3 The periodic review functions of the IOSRG shall include the following on a selective and overview basis:
  - Evaluation for technical adequacy and clarity of procedures important to the safe operation of the unit.
  - 2) Evaluation of unit operations from a safety perspective.
  - 3) Assessment of unit nuclear safety programs.
  - 4) Assessment of the unit performance regarding conformance to requirements related to safety.
  - 5) Any other matter involving safe operations of the nuclear power plant that the onsite IOSRG manager deems appropriate for consideration.

#### **AUTHORITY**

6.5.4.4 The IOSRG shall have access to the unit and unit records as necessary to perform its evaluations and assessments. Based on its reviews, the IOSRG shall provide recommendations to the management positions responsible for the areas reviewed.

#### **QUALIFICATIONS**

6.5.4.5 The IOSRG engineers shall have either: (1) a Bachelor's Degree in Engineering or the Physical Sciences and three years of professional level experience in the nuclear power field including technical supporting functions, or (2) eight years of appropriate experience in nuclear power plant operations and/or technology. Credit toward experience will be given for advance degrees on a one-to-one basis up to a maximum of two years.

#### **RECORDS**

6.5.4.6 Reports of evaluations and assessments encompassed in Section 6.5.4.3 shall be prepared, approved, and transmitted to the director responsible for nuclear quality assurance, the Vice President-TMI Unit 1, the Chief Nuclear Officer and the management positions responsible for the areas reviewed.

# **ENCLOSURE 3**

TMI Unit 1 License Amendment Request No. 298, Revision 1
Proposed Changes to the AmerGen TMI Unit 1 Operational Quality Assurance Plan (Markup)
Conforming to this Proposed Amendment

|                                    |                                    | Number           |
|------------------------------------|------------------------------------|------------------|
|                                    | Operational Quality Assurance Plan | 1000-PLN-7200.01 |
| Title                              |                                    | Revision No.     |
| Operational Quality Assurance Plan |                                    | 23<br>Draft      |

the responsibility to keep management informed of conditions concerning quality. The Vice President Nuclear Oversight may delegate "Stop Work" authority to the Senior Vice President Nuclear Services for vendor related deficiencies. The Senior Vice President Nuclear Services has unencumbered access to the Vice President Nuclear Oversight for vendor/supplier corrective action escalation.

#### 1.8 Director – Mid-Atlantic ROG Nuclear Oversight

The Director - Mid-Atlantic ROG Nuclear Oversight reports to the Vice President – Nuclear Oversight. The Director - Mid-Atlantic ROG Nuclear Oversight has the functional authority, independence and responsibility to assure the effective implementation of and compliance to the Quality Assurance Program. Consistent with this responsibility is the authority to render interpretations in writing on those activities to which this Plan applies and the extent to which the Plan applies to those activities. The Site Nuclear Oversight Manager assists the Director, Mid Atlantic ROG Nuclear Oversight by implementing day-to-day oversight of TMI. The Site Nuclear Oversight Manager reports directly to the Director, Mid Atlantic ROG Nuclear oversight.

Additional responsibilities include providing recommendations or solutions to quality problems, and performing assessments, inspections, and independent oversight for all areas.

For on-site independent review safety issues, the Nuclear Oversight Manager and the Independent Onsite Safety Review Group (IOSRG) have has the authority to directly report to and communicate with the Chief Nuclear Officer and the Vice President - TMI - Unit 1.

The Director - Mid-Atlantic ROG Nuclear Oversight reports directly to the Vice President - Nuclear Oversight and has unencumbered access to Chief Nuclear Officer on all TMI - Unit 1 quality matters and has direct unencumbered access to the Vice President - TMI - Unit 1 with regard to activities affecting quality. This reporting relationship has been established to provide sufficient independence from the influence of costs and schedules to be able to effectively assure conformance to Quality Assurance Program requirements.

The Director - Mid-Atlantic ROG Nuclear Oversight has no duties or responsibilities unrelated to the responsibilities contained in this document that would prevent the required attention to quality assurance matters. The Director - Mid-Atlantic ROG Nuclear Oversight has the authority and responsibility to:

- a. Develop and administer the maintenance of the TMI -Unit 1 Operational Quality Assurance Plan and Nuclear Oversight procedures required to assure that all TMI Unit 1 activities provide the required high degree of safety and reliability.
- b. Assess and inspection of TMI Unit 1 activities to assure that they provide the required high degree of safety and reliability and are carried out consistent with all applicable laws, regulations, regulatory commitments, licenses, corporate policies and other requirements. Assessment schedules are developed and implemented to ensure all required areas are assessed.
- c. Establish and conduct nuclear safety review and assessment activities which include those of the IOSRG and the assessment of Nuclear Safety Review Board (NSRB) activities.
- d. Identify and report nonconformances as they may exist. Initiate, recommend or provide solutions through designated channels. Verify implementation of resolutions as required.

|                                    |                                    | Number           |
|------------------------------------|------------------------------------|------------------|
|                                    | Operational Quality Assurance Plan | 1000-PLN-7200.01 |
| Title                              |                                    | Revision No.     |
| Operational Quality Assurance Plan |                                    | 23<br>Draft      |

- a. Provide in coordination with the TMI Unit 1 Regulatory Assurance organization principal interface and control with all non-financial, regulatory agencies for AmerGen including NRC, appropriate state agencies, and supporting legal services. In addition, ensure preparation and coordination of responses to regulatory agencies, including NRC inspections and enforcement bulletins, circulars, notices and generic letters, and activities associated with INPO and NEI.
- b. Provide for maintenance of the operating license for the Nuclear Plant.
- c. Direct and manage the Licensing organizational element.
- d. Provide a working interface and line of communication with other organizational elements and other appropriate industry and regulatory groups for all licensing and regulatory matters.

#### 1.10 Director - Site Engineering

The Director - Site Engineering reports directly to the Vice President - TMI - Unit 1. The Director's Quality Assurance Plan responsibilities consist of providing the requisite engineering and technical support to: maintain the design basis of the nuclear plants; maintain the configuration control documents including development and maintenance of the Component Record List (CRL); conduct operating experience assessment; maintenance rule assessment; provide nuclear fuel management; provide core performance monitoring; monitor and analyze the technical performance and reliability of systems and components; provide selective review of plant operations and testing procedures, and associated training; provide technical control and coordination of plant modifications as required by Section 6.10 of this Plan; coordinate and implement In-Service Inspection services; and provide a weld program and a repair program, provide management direction and accountability for information technology.

Additional specific responsibilities associated with the above are:

- a. Ensuring programs are established and maintained for the special processes of welding, heat treating, and nondestructive examination. (Section 6.3)
- b. Performing a startup and test function to assure new or substantially modified plants, facilities and systems are tested in compliance with this Plan. (Section 6.4)
- Establishing, implementing and maintaining document distribution and record retention programs and facilities.
- d. Ensuring that nonconformances are reported and corrected for all activities within the scope of this Plan. Items such as failures, malfunctions and deficiencies are handled in a manner consistent with their importance to nuclear safety and reviewed in accordance with appropriate procedures and the applicable Technical Specification. (Section 6.7 & 8)

#### 1.11 Director - Training

The Director -Training reports directly to the Vice President -TMI - Unit 1. The Director's Quality Assurance Plan responsibilities consist of establishing and delivering training and education programs sufficient to assure safe, reliable and efficient operation.

|                                    |                                    | Number           |
|------------------------------------|------------------------------------|------------------|
|                                    | Operational Quality Assurance Plan | 1000-PLN-7200.01 |
| Title                              |                                    | Revision No.     |
| Operational Quality Assurance Plan |                                    | 23<br>Draft      |

#### 1.20 External Organizations

Suppliers who provide Items and/or services which are within the scope of this Plan shall have a Quality Assurance Plan and implementing procedures appropriate for the Items, consumables, and/or services. The suppliers Quality Assurance Program may be supplemented or replaced by this Plan. The supplier's Quality Assurance Program shall be subject to review for concurrence by Senior Vice President - Nuclear Services or his designee. The extent to which the supplier's Quality Assurance Program will be applied will be specified by procurement documents.

#### 1.21 Minimum Qualifications of Assessment and Inspection Personnel

The Director - Mid-Atlantic ROG Nuclear Oversight shall have, as a minimum, a baccalaureate degree in engineering or science, with at least fifteen (15) years of technical experience including ten years of managerial/supervisory experience in operational, technical support and/or quality assurance activities associated with nuclear power plants. At least one year of this experience shall be in a nuclear assessment oversight organization or a special training program approved by the CNO and will be completed within six months of assuming the position. Additionally, the Director - Mid-Atlantic ROG Nuclear Oversight must be knowledgeable in operating license conditions, other regulatory requirements and commitments, plans, procedures and quality and technical standards.

The Nuclear Oversight Manager who reports to the Director - Mid-Atlantic ROG Nuclear Oversight shall have an academic degree in engineering or a physical science and 10 years of professional level experience in nuclear power or related technical fields. Managers must have at least 3 years experience in a position responsible for supervision of operational, technical and/or oversight activities. The degree requirements may be waived for personnel with demonstrated exceptional capability and a minimum of 15 years of appropriate experience.

Each IOSRG Engineer shall have an academic degree in engineering or a physical science field and 3 years of professional level experience in the nuclear power field including technical supporting functions or 8 years of appropriate experience. Credit toward experience will be given for advanced degrees on a one-to-one basis up to a maximum of two years.

For personnel performing inspection, examination, and special processes, the qualification criteria shall be delineated to the techniques of inspection or items being inspected and the technical abilities of the person being certified will be consistent with the assigned tasks (e.g., electrical inspection, mechanical inspection.)

The qualification requirements and experience levels for other Nuclear Oversight personnel are such as to assure competence commensurate with the responsibilities of and the Regulatory Guides associated with the activities performed by the position.

|                                    |                                    | Number           |
|------------------------------------|------------------------------------|------------------|
|                                    | Operational Quality Assurance Plan | 1000-PLN-7200.01 |
| Title                              |                                    | Revision No.     |
| Operational Quality Assurance Plan |                                    | 23<br>Draft      |

The Director - Site Engineering shall make the decision on matters related to classification of items, and technical requirements or design changes.

The responsibility of the Director - Mid-Atlantic ROG Nuclear Oversight for Quality Assurance Plan implementation takes precedence over his other duties. The Nuclear Oversight Manager has authority to report directly to the CNO.

The Director - Mid-Atlantic (ROG) Nuclear Oversight shall be responsible for evaluating deficiencies generated by Nuclear Oversight, as specified in 8.2.8 of this Plan. Escalation of significant deficiencies to higher management levels shall be evaluated in accordance with written procedures when inadequate or untimely responses occur.

#### 2.11 Safety Review Program

The Safety Review Program will consist of one or more of the following three stages:

- 50.59 Applicability Review
- 50.59 Screening
- 50.59 Evaluation

Each activity will enter the safety review process by performing a 50.59 Applicability Review. The purpose of the Applicability Review is to determine whether the proposed activity is within the scope of 10CFR50.59. This review is performed by a qualified 50.59 Screener / Evaluator / Reviewer on documents and substantive revisions to documents, as specified by the Review and Approval Matrix contained in administrative procedures.

If it is determined that the activity is in the scope of the 10CFR50.59 process, then the next step is to perform a 50.59 Screening. The purpose of the Screening is to determine whether a proposed activity requires performance of a 10CFR50.59 Evaluation. The 50.59 Screening is performed by a qualified 50.59 Screener / Evaluator / Reviewer on activities in the area of the individual's expertise. A qualified reviewer will review all screenings that do not require an evaluation.

The purpose of the Evaluation is to determine if the proposed activity requires NRC approval via License Amendment under 10CFR50.90 prior to implementation. The 50.59 evaluations are prepared by qualified 50.59 Evaluators / Reviewers on activities in the area of the individual's expertise. All evaluations are reviewed by a second independent qualified reviewer prior to implementation.

#### 2.12 Independent Safety Oversight

The first element of oversight of safety is the IOSRG. The IOSRG has no line responsibilities or line functions and is devoted solely to safety matters. It is independent of the plant staff and reports to the Nuclear Oversight Manager who reports to the Director - Mid-Atlantic ROG Nuclear Oversight. The IOSRG will consist of a minimum of a manager and three full time engineers / technical staff.

The IOSRG shall have access to the unit and unit records as necessary to perform its evaluations and assessments. Based on its reviews, the IOSRG shall provide recommendations to the management positions responsible for the areas reviewed. IOSRG reports of evaluations and assessments shall be transmitted to the Director - Mid-Atlantic ROG Nuclear Oversight and the management positions responsible for the areas reviewed collection of program elements for implementing and/or reviewing areas of quality of plant operations and nuclear safety within the scope of this plan. Specific guidance is contained in the applicable procedures and programs.

|                                    |                                    | Number           |
|------------------------------------|------------------------------------|------------------|
|                                    | Operational Quality Assurance Plan | 1000-PLN-7200.01 |
| Title                              | ***                                | Revision No.     |
| Operational Quality Assurance Plan |                                    | 23<br>Draft      |

# APPENDIX E APPENDIX E

#### **Assessment Frequencies**

| TMI Ref.                                  | <u>Description</u>   | Maximum Frequency                   |
|---|--|-------------------------------------|
| 6.5.3.1 (A)                               | The conformance of unit operations to provisions contained within the Technical Specifications and applicable license conditions.  | 24 Months                           |
| 6.5.3.1 (B)                               | The performance, training and qualifications of the entire unit staff.   | 24 Months                           |
| 6.5.3.1 (C)                               | The verification of the nonconformances and corrective actions program to be properly implemented and documented as related to action taken to correct deficiencies occurring in unit equipment, structures, systems or methods of operation that affect nuclear safety.   | 24 Months<br>(See Note 1)           |
| 6.5.3.1 (D)                               | The performance of activities required by the Operational Quality Assurance Plan to meet the criteria of Appendix "B", 10CFR50.  | 24 Months                           |
| 6.5.3.1 (E)                               | The Emergency Plan and implementing procedures.  | As defined by 10 CFR 50.54(t)       |
| 6.5.3.1 (F)                               | The Security Plan and implementing procedures.   | As defined by<br>10 CFR 50.54(p)(3) |
| 6.5.3.1 (G)<br>6.5.3.2 (A)<br>6.5.3.2 (B) | The Fire Protection Program and implementing procedures. Including an independent fire protection and loss prevention program inspection and assessment shall be performed utilizing either qualified licensee personnel or an outside fire protection firm; and an inspection and assessment of the fire protection and loss prevention program, by an outside qualified fire consultant. | 24 Months                           |
| 6.5.3.1 (H)                               | The Offsite Dose Calculation Manual and implementing procedures.   | 24 Months                           |
| 6.5.3.1 (I)                               | The Process Control Program and implementing procedures for solidification of radioactive wastes.  | 24 Months                           |
| 6.5.3.1 (J)                               | The performance of activities required by the Quality Assurance Program to meet criteria of Regulatory Guide 4.15, December, 1977.   | 24 Months                           |
| 6.5.3.1 (K)                               | Any other area of unit operation considered appropriate by the IOSRG site Nuclear Oversight Manager or the CNO.  | As Requested                        |

Note 1: Corrective action will be a standard assessment scope item for all individual assessments.