EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-219

OYSTER CREEK NUCLEAR GENERATING STATION

RENEWED FACILITY OPERATING LICENSE

Renewed License No. DPR-16

- 1. The Nuclear Regulatory Commission (the Commission) having previously made the findings set forth in License No. DPR-16, has now found that:
 - A. The application for a Renewed Facility Operating License No. DPR-16 filed by the applicant 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 and all required notifications to other agencies or bodies have been duly made;
 - B. DELETED
 - C. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the term of this Renewed Facility Operating License No. DPR-16 on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1); and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by the renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for the facility, and that any changes made to the facility's current licensing basis in order to comply with 10 CFR 54.29(a) are in accordance with the Act and the Commission's regulations;
 - The facility will be maintained in conformity with the application, as amended; the provisions of the Act; and the rules and regulations of the Commission;
 - E. There is reasonable assurance (i) that the activities authorized by this license 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 rules and regulations set forth in 10 CFR Chapter I;
 - F. Exelon Generation Company, LLC (Exelon Generation Company) is technically qualified to engage in the activities authorized by this license in accordance with the rules and regulations of the Commission;

- G. Exelon Generation Company has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
- H. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;
- The receipt, possession and use of source, byproduct, and special nuclear materials as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70; and
- J. The issuance of this license is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
- 2. Facility Operating License No. DPR-16, dated July 2, 1991, as amended, is superseded in its entirety by Renewed Facility Operating License No. DPR-16, hereby issued to Exelon Generation Company, to read as follows:
 - A. This renewed license applies to the Oyster Creek Nuclear Generating Station, a boiling-water reactor and associated equipment (the facility). The facility is located in Ocean County, New Jersey, and is described in the licensee's Updated Final Safety Analysis Report, as supplemented and amended, and in the licensee's Environmental Report, as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Exelon Generation Company:
 - (1) Pursuant to Section 104b of the Act and 10 CFR Part 50, to possess and use Oyster Creek Nuclear Generation Station at the designated location on the Oyster Creek site in Ocean County, New Jersey, in accordance with the procedures and limitations set forth in this renewed license;
 - (2) Pursuant to the Act and 10 CFR Part 70, to possess at any time special nuclear material that was used as reactor fuel, in accordance with the limitations for storage, as described in the Updated Final Safety Analysis Report, as supplemented and amended;
 - (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source, or special nuclear materials as sealed neutron sources that were used for reactor startup, sealed sources that were used for calibration of reactor instrumentation and are used in radiation monitoring equipment, and as fission detectors in amounts as required;
 - (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess and use in amounts as required any byproduct, source, or special nuclear materials without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

- (5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate such byproduct, source, or special nuclear materials that were produced by the operation of the facility.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect and is subject to the additional conditions specified or incorporated below:
 - (1) DELETED
 - (2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 295, are hereby incorporated in the license. Exelon Generation Company shall maintain the facility in accordance with the Permanently Defueled Technical Specifications (PDTS).

- (3) DELETED
- (4) Exelon Generation Company shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822), and the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans¹, submitted by letter dated May 17, 2006, is entitled: "Oyster Creek Nuclear Generating Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 5." The set contains Safeguards Information protected under 10 CFR 73.21.

Exelon Generation Company shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Exelon Generation Company CSP was approved by License Amendment No. 280 and modified by License Amendment Nos. 288 and 292.

- (5) DELETED
- (6) DELETED
- (7) DELETED

¹ The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.

(8) <u>Mitigation Strategy License Condition</u>

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
 - 1. Pre-defined coordinated fire response strategy and guidance
 - 2. Assessment of mutual aid fire fighting assets
 - 3. Designated staging areas for equipment and materials
 - 4. Command and control
 - 5. Training of response personnel
- (b) Operations to mitigate fuel damage considering the following:
 - 1. Protection and use of personnel assets
 - 2. Communications
 - 3. Minimizing fire spread
 - 4. Procedures for implementing integrated fire response strategy
 - 5. Identification of readily-available pre-staged equipment
 - 6. Training on integrated fire response strategy
 - 7. Spent fuel pool mitigation measures
- (c) Actions to minimize release to include consideration of:
 - 1. Water spray scrubbing
 - 2. Dose to onsite responders
- (9) The licensee shall implement and maintain all Actions required by Attachment 2 to NRC Order EA-06-137, issued June 20, 2006, except the last action that requires incorporation of the strategies into the site security plan, contingency plan, emergency plan and/or guard training and qualification plan, as appropriate.
- (10) DELETED
- (11) DELETED
- (12) DELETED
- (13) DELETED
- (14) DELETED
- (15) DELETED

(16) License Renewal Commitments

The UFSAR supplement, as revised, describes certain future activities to be completed prior to April 9, 2009, and during the term of this renewed operating license No. DPR-16. Exelon Generation Company shall complete these activities in accordance with Appendix A of NUREG-1875, "Safety Evaluation Report Related to the License Renewal of Oyster Creek Generating Station," dated March 2007, as supplemented on September 19, 2008, and shall notify the NRC in writing when implementation of those activities required prior to April 9, 2009 are complete and can be verified by NRC inspection.

(17) Biological Opinion

Within 30 days from the issuance date of the renewed license, Exelon Generation Company shall comply with the terms and conditions of the Incidental Take Statement associated with certain sea turtles in the Biological Opinion in effect or as subsequently issued by the National Marine Fisheries Service regarding operation of the facility.

- D. DELETED
- E. DELETED
- F. The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- 3. Sale and License Transfer Conditions:
 - A. DELETED
 - B. DELETED
 - C. DELETED
 - D. DELETED
 - E. DELETED
 - F. DELETED
 - G. DELETED
 - H. DELETED
 - 1. DELETED
 - J. DELETED

- K. DELETED
- L. DELETED
- M. DELETED
- 4. This license is effective as of the date of issuance and is effective until the Commission notifies the licensee in writing that the license is terminated.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Bruce S. Mallett
Deputy Executive Director for Reactor
and Preparedness Programs
Office of the Executive Director for Operations

Attachment: Appendices A and B -Technical Specifications

Date of Issuance: April 8, 2009

Docket No. 50-219

October 1, 1986

APPENDIX A TO PROVISIONAL OPERATING LICENSE DPR-16* TECHNICAL SPECIFICATIONS

AND BASES

FOR

OYSTER CREEK NUCLEAR POWER PLANT

UNIT NO. 1

OCEAN COUNTY, NEW JERSEY

AMERGEN ENERGY COMPANY, LLC

*Per Errata Sheet dated 4-6-69

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OYSTER CREEK

Amendment No.: 161,106,205,241,276 290 295

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SECTION I DEFINITIONS

The following frequently used terms are defined to aid in the uniform interpretation of the specifications.

1.1 ACTIONS

ACTIONS shall be that part of a Specification that prescribes Required-Actions to be taken under designated Conditions within specified Completion Times.

1.2 CERTIFIED FUEL HANDLER

A CERTIFIED FUEL HANDLER is an individual who complies with provisions of the CERTIFIED FUEL HANDLER training program required by Specification 6.3.2.

1.3 NON-CERTIFIED OPERATOR

A NON-CERTIFIED OPERATOR is a non-licensed operator who complies with the qualification requirements of Specification 6.3.1, but is not a CERTIFIED FUEL HANDLER.

SECTION 3/4

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

3/4.0 <u>LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENT</u> APPLICABILITY

Applicability: Applies to all Limiting Conditions for Operation and Surveillance Requirements.

Objective: To preserve the single failure criterion for safety systems.

LCO Applicability

LCO 3.0.1 LCOs shall be met during the specified conditions in the TS, except as provided in LCO 3.0.2.

LCO 3.0.2 Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met.

If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required, unless otherwise stated.

Surveillance Requirement Applicability

- SR 4.0.1 Surveillance requirements shall be met during the specified conditions in the applicability for individual LCOs, unless otherwise stated in the surveillance requirements. Failure to meet a surveillance, whether such failure is experienced during the performance of the surveillance or between performances of the surveillance, shall be failure to meet the LCO. Failure to perform a surveillance within the specified frequency shall be failure to meet the LCO except as provided in 4.0.2. Surveillances do not have to be performed on variables outside specified limits.
- SR 4.0.2 If it is discovered that a surveillance was not performed within its specified frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified frequency, whichever is greater. This delay period is permitted to allow performance of the surveillance. A risk evaluation shall be performed for any surveillance delayed greater than 24 hours and the risk impact shall be managed.

If the surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable condition(s) must be entered.

When the surveillance is performed within the delay period and the surveillance is not met, the LCO must immediately be declared not met, and the applicable condition(s) must be entered.

SR 4.0.3 Entry into a specified condition in the Applicability of an LCO shall only be made when the LCO's Surveillance has been met within its specified frequency, except as provided by 4.0.2.

This provision shall not prevent entry into other specified conditions in the Applicability that are required to comply with LCO requirements or that are part of a shutdown of the unit.

SR 4.0.4 The specified frequency for each SR is met if the surveillance is performed within 1.25 times the interval specified in the frequency, as measured from the previous performance.

3/4.1 SPENT FUEL STORAGE

Applicability: During movement of irradiated fuel assemblies in the spent fuel pool.

Objective: To assure safe storage of spent fuel.

LCO: 3.1 Spent Fuel Pool Water Level

Whenever irradiated fuel is stored in the spent fuel storage pool, water level shall be maintained at a level ≥ 117 feet 8 inches (elevation above sea level) with the exception of planned cask movements.

ACTIONS:

Condition	Required Action	Completion Time
Spent fuel pool water level is not within limit.	Suspend movement of irradiated fuel assemblies and movement of loads over the storage racks containing fuel.	Immediately

SURVEILLANCE REQUIREMENTS

-	<u>Surveillance</u>	
4.1	Verify the spent fuel pool water level is ≥ 117 feet 8 inches.	24 hours

3/4.2 RADIOACTIVE LIQUID STORAGE

Applicability: Applies at all times to outdoor tanks used to store radioactive liquids.

Objective:

To assure that radioactive effluents are not released to the environment in an uncontrolled manner and to assure that the radioactive concentrations of any material released is kept as low as is reasonably achievable and, in any event, within the limits of 10 CFR Part 20.1301 and 40 CFR Part 190.10(a).

LCO: 3.2

The quantity of radioactive material, excluding tritium, noble gases, and radionuclides having half-lives shorter than three days, contained in outdoor storage tanks shall not exceed 10.0 curies. Included in this specification are all outdoor storage tanks that contain radioactivity that are not surrounded by liners, dikes, or walls capable of holding the tank contents, or that do not have tank overflows and surrounding area drains connected to the liquid radwaste treatment system.

ACTIONS:

Condition	Required Action	Completion Time
In the event the quantity of radioactive material in any applicable storage tank exceeds 10.0 curies.	Begin treatment and continue it until the total quantity of radioactive material in the tank is 10 curies or less, and describe the reason for exceeding the limit in the next Annual Effluent Release Report.	As soon as reasonably achievable

SURVEILLANCE REQUIREMENTS

Surveillance		Frequency
4.2 Liquids contained in outdoor storage tanks included in this specification shall be sampled and analyzed for radioactivity.		Once per 7 days when radioactive liquid is being added to the tank

Amendment No.: 295

SECTION 5

DESIGN FEATURES

5.1 <u>SITE</u>

A. The reactor (center line) is located 1,358 feet west of the east boundary of New Jersey State Highway Route 9 which is the minimum exclusion distance as defined in 10 CFR 100.3. The licensee will at all times retain the complete authority to determine and maintain sufficient control of all activities through ownership, easement, contract and/or other legal instruments on property which is closer to the reactor (center line) than 1,358 feet. This includes the authority to exclude or remove personnel and property within the minimum exclusion distance.

5.2 SPENT FUEL STORAGE

5.2.1 Spent Fuel Storage

- A. The spent fuel storage facilities are designed and shall be maintained with a K-effective equivalent to less than or equal to 0.95 including all calculational uncertainties.
- B. The temperature of the water in the spent fuel storage pool, measured at or near the surface, shall not exceed 125°F.
- C. The maximum amount of spent fuel assemblies stored in the spent fuel storage pool shall be 3035.

ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The Plant Manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during the Plant Manager's absence.

The Plant Manager or the designee shall approve, prior to implementation, each proposed test, experiment, or modification to systems or equipment that affect safe storage and maintenance of spent nuclear fuel.

6.1.2 The Shift Manager shall be responsible for the shift command function.

6.2 **ORGANIZATION**

6.2.1 Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for facility staff and corporate management. The onsite and offsite organization shall include the positions for activities affecting the safe storage and handling of spent nuclear fuel.

- a. Lines of authority, responsibility and communication shall be established and defined from the highest management levels through intermediate levels to and including facility organization positions. These relationships shall be documented and updated as appropriate, in the form of organizational descriptions. These organizational descriptions will be documented in the Updated FSAR and updated in accordance with 10 CFR 50.71e.
- b. The Plant Manager shall be responsible for overall facility safe operation and shall have control over those onsite activities necessary for safe storage and maintenance of spent nuclear fuel.
- c. A responsible officer shall have corporate responsibility for the safe storage and handling of spent nuclear fuel and shall take measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the facility to ensure safe management of spent nuclear fuel.
- d. Individuals who train the CERTIFIED FUEL HANDLERs and those who carry out the health physics and quality assurance functions may report to the appropriate manager on site; however, these individuals shall have sufficient organizational freedom to ensure their ability to perform their assigned functions.

6.2.2 Facility Staff

The facility organization shall meet the following:

- a. Each on duty shift shall include at least the following shift staffing:
 - One (1) Shift Manager (see f. below)
 - One (1) NON-CERTIFIED OPERATOR (see g. below)
- b. Shift crew composition may be one less than the minimum requirements of 6.2.2.a for a period of time not to exceed two hours, in order to accommodate unexpected absence of on-duty shift crew members. Immediate action must be

taken to restore the shift crew composition to within the requirements given above. During such absences, no fuel movement or movement of loads over the spent fuel shall be permitted. This provision does not permit any shift crew position to be unmanned upon shift change due to an incoming shift crew member being late or absent.

- c. At all times when nuclear fuel is stored in the spent fuel pool, at least one person qualified to stand watch in the control room (NON-CERTIFIED OPERATOR or CERTIFIED FUEL HANDLER) shall be present in the control room.
- d. Oversight of fuel handling operations shall be provided by a CERTIFIED FUEL HANDLER.
- e. An individual qualified in radiation protection measures shall be on site during movement of fuel and during the movement of loads over the fuel.
- The Shift Manager shall be a CERTIFIED FUEL HANDLER.
- g. The position of NON-CERTIFIED OPERATOR may be filled by a CERTIFIED FUEL HANDLER.

6.3 FACILITY STAFF QUALIFICATIONS

- 6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1 of 1978 for comparable positions unless otherwise noted in the Technical Specifications. Technicians and maintenance personnel who do not meet ANSI/ANS 3.1 of 1978, Section 4.5, are permitted to perform work for which qualification has been demonstrated.
- 6.3.2 The management position responsible for radiological controls shall meet or exceed the qualifications of Regulatory Guide 1.8 (Rev. 1-R, 9/75). Each other member of the radiation protection organization for which there is a comparable position described in ANSI N18.1-1971 shall meet or exceed the minimum qualifications specified therein, or in the case of radiation protection technicians, they shall have at least one year's continuous experience in applied radiation protection work in a nuclear facility dealing with radiological problems similar to those encountered in nuclear power stations and shall have been certified by the management position responsible for radiological controls as qualified to perform assigned functions. This certification must be based on an NRC approved, documented program consisting of classroom training with appropriate examinations and documented positive findings by responsible supervision that the individual has demonstrated his ability to perform each specified procedure and assigned function with an understanding of its basis and purpose.
- 6.3.3 The NRC approved training and retraining program for CERTIFIED FUEL HANDLERs shall be maintained.
- 6.4 DELETED
- 6.5 DELETED
- 6.6 DELETED
- 6.7 DELETED

6.8 PROCEDURES AND PROGRAMS

- 6.8.1 Written procedures shall be established, implemented, and maintained covering the items referenced below:
 - a. The procedures applicable to safe storage of nuclear fuel recommended in Appendix "A" of Regulatory Guide 1.33 as referenced in the Decommissioning Quality Assurance Program (DQAP).
 - b. Surveillance and test activities of equipment that affects nuclear safety and radioactive waste management equipment.
 - c. Fuel Handling Operations.
 - d. Security Plan Implementation.
 - e. Fire Protection Program Implementation.
 - f. Emergency Plan Implementation.
 - g. Process Control Plan Implementation.
 - h. Offsite Dose Calculation Manual Implementation.
 - i. Quality Assurance Program for effluent and environmental monitoring using the guidance in Regulatory Guide 4.15, Revision 1.
- 6.8.2 Each procedure required by 6.8.1 above, and substantive changes thereto, shall be reviewed and approved prior to implementation and shall be reviewed periodically as set forth in administrative procedures.
- 6.8.3 Temporary changes to procedures of 6.8.1, above, may be made provided:
 - a. The intent of the original procedure is not altered;
 - b. The change is approved by two members of the licensee's management staff knowledgeable in the area affected by the procedure. For changes which may affect the operational status of facility systems or equipment, at least one of these individuals shall be a member of operations management or supervision who is a CERTIFIED FUEL HANDLER.
 - c. The change is documented, reviewed and approved within 14 days of implementation.

251,273, 290, 295

6.8.4 The following programs shall be established, implemented and maintained:

a. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluent and for maintaining the doses to members of the public from radioactive effluent as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including the surveillance tests and setpoint determination in accordance with the methodology in the ODCM,
- Limitations on the concentrations of radioactive material released in liquid effluent to the unrestricted area conforming to less than the concentration values in Appendix B, Table 2, Column 2 to 10 CFR 20.1001-20.2402.
- Monitoring, sampling, and analysis of radioactive liquid and gaseous effluent in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM.
- Limitations on the annual and quarterly doses and dose commitment to a member
 of the public from radioactive materials in liquid effluent released to the unrestricted
 area conforming to Appendix I of 10 CFR 50,
- 5. Determination of cumulative dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days. Determination of projected dose contributions from radioactive effluents in accordance with the methodology in the ODCM at least every 31 days.
- Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in the 31 day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR 50,
- 7. Limitations on the dose rate resulting from radioactive materials released in gaseous effluents from the site to the unrestricted area shall be limited to the following:
 - a. For noble gases: Less than or equal to a dose rate of 500 mRems/yr to the total body and less than or equal to a dose rate of 3000 mRems/yr to the skin, and
 - b. For iodine-131, iodine-133, tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: Less than or equal to a dose rate of 1500 mRems/yr to any organ.
- Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents to the unrestricted area conforming to Appendix I of 10 CFR 50,

- 9. Limitations on the annual and quarterly doses to a member of the public from I-131, I-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluent released beyond the site boundary conforming to Appendix I of 10 CFR 50,
- Limitations on the annual dose or dose commitment to any member of the public due to releases of radioactivity and to radiation from Uranium fuel cycle sources conforming to 40 CFR Part 190.

b. Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radionuclides in the environs of the plant. The program shall provide (1) representative measurements of radioactivity in the highest potential exposure pathways, and (2) verification of the accuracy of the effluent monitoring program and modeling of environmental exposure pathways. The program shall (1) be contained in the ODCM, (2) conform to the guidance of Appendix I to 10 CFR Part 50, and (3) include the following:

1. Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM,

6.9 REPORTING REQUIREMENTS

In addition to the applicable reporting requirements of 10 CFR, the following identified reports shall be submitted to the Administrator of the NRC Region I office unless otherwise noted.

6.9.1 Routine Reports

a. Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the facility during the previous year shall be submitted prior to May 1 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluent and solid waste released from the facility. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1.

b. Annual Radiological Environmental Operating Report

The Annual Radiological Environmental Operating Report covering the operation of the facility during the previous calendar year shall be submitted prior to May 1 of each year.

The Report shall include summaries, interpretations, and an analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in: (1) the ODCM; and, (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR Part 50.

6.10 RECORD RETENTION

- 6.10.1 Quality Assurance Records shall be retained as specified by the DQAP.
- 6.11 DELETED
- 6.12 DELETED

6.13 HIGH RADIATION AREA

- 6.13.1 In lieu of the "control device" or "alarm signal" required by Section 20.1601 of 10 CFR 20, each high radiation area in which the intensity of radiation at 30 cm (11.8 in.) is greater than deep dose equivalent of 100 mRem/hr but less than 1,000 mRem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP).
- NOTE: Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they are following plant radiation protection procedures for entry into high radiation areas.

An individual or group of individuals permitted to enter such areas shall be provided with one or more of the following:

- A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a pre-set integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel have been made knowledgeable of them.
- c. A health physics qualified individual (i.e., qualified in radiation protection procedures) with a radiation dose rate monitoring device who is responsible for providing positive exposure control over the activities within the area and who will perform periodic radiation surveillance at the frequency in the RWP. The surveillance frequency will be established by the management position responsible for radiological controls.
- 6.13.2 Specification 6.13.1 shall also apply to each high radiation area in which the intensity of radiation is greater than deep dose equivalent of 1,000 mRem/hr at 30 cm (11.8 in.) but less than 500 rads in 1 hour at 1 meter (3.28 ft.) from sources of radioactivity. In addition, locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of operations and/or radiation protection supervision on duty.
- 6.14 DELETED

- 6.15 DELETED
- 6.16 DELETED
- 6.17 DELETED
- 6.18 DELETED

6.19 OFFSITE DOSE CALCULATION MANUAL

- a. Licensee initiated changes to the ODCM shall be submitted to the NRC in the Annual Radioactive Effluent Release Report for the period in which the changes were made. This submittal shall contain:
 - 1. sufficiently detailed information to justify the changes without benefit of additional or supplemental information;
 - 2. a determination that the changes did not reduce the accuracy or reliability of dose calculations or setpoint determination; and,
 - 3. documentation that the changes have been reviewed and approved pursuant to Section 6.8.2.
- b. Change(s) shall become effective upon review and approval by licensee management.
- 6.20 DELETED

6.21 TECHNICAL SPECIFICATIONS (TS) BASES CONTROL PROGRAM

This program provides a means for processing changes to the Bases of these Technical Specifications.

- a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
- b. Licensees may make changes to Bases without prior NRC approval provided the changes do not require either of the following:
 - 1. A change in the TS incorporated in the license or
 - 2. A change to the updated FSAR (UFSAR) or Bases that requires NRC approval pursuant to 10 CFR 50.59.
- The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the UFSAR.
- d. Proposed changes that meet the criteria of Specification 6.21.b.1 or 6.21.b.2 above shall be reviewed and approved by the NRC prior to implementation. Changes to the bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

Amendment No.: 69,78,84,117,134,203,210,

213,251,290, 295

OYSTER CREEK DO NOT REMOVE NUCLEAR GENERATING STATION TECHNICAL SPECIFICATIONS

APPENDIX "B"
TO
LICENSE NO. DPR-16

usued 6/6/79 by Amina, M.D. 37



APPENDIX B TO OPERATING LICENSE NO. DPR- 16 ENVIRONMENTAL TECHNICAL SPECIFICATIONS

<u>FOR</u>

OYSTER CREEK NUCLEAR GENERATING STATION DOCKET NO. 50-219 OCEAN COUNTY, NEW JERSEY

EXELON GENERATION COMPANY, LLC

NOVEMBER 1978*

^{*}Issued to the ASLB on this date; issued by License Amendment No. 37, June 6, 1979.

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INTRODUCTION

The bases, which provide technical support for the OCETS, are included for informational purposes in order to clarify the intent of the specification. These bases are not part of the OCETS nor do they constitute limitations or requirements on the licensee.

1.0 Environmental Monitoring

1.1 Non-Radiological Monitoring

1.1.1 Biotic - Aquatic

A. Fish Kill Monitoring Program

Objective

The objective of this program is to determine the species composition, abundance and distribution of station-induced fish kills due to winter shutdowns.

Specifications

After each Station shutdown, when the intake water temperature is below 8.5 degrees C (47.3 degrees F), visual inspections for fish shall be made along the shores of the discharge canal and the lower reaches of Oyster Creek within 24 hours of the initiation of the shutdown in accordance with the procedures prepared by the licensee per Section 3.4. A continuous temperature record shall be maintained through the 24-hour period after reaching cold shutdown.

Reporting Requirements

For planned shutdowns with the temperature of the intake water below 8.5 degrees C (47.3 degrees F), the NRC Region I office will be notified at least 24 hours in advance of such shutdown. This notification shall not be given for unplanned, automatic, or manual station trips.

If the shutdown results in greater than 100 fish killed and/or stressed, this event shall be reported to the NRC in accordance with Section 3.5.2.

1-1

Amendment No.: 56, 66, 107, 207, 257

1.0 Environmental Monitoring

Bases

The Final Environmental Statement for the Oyster Creek Nuclear Generating Station documents cold shock fish kills associated with rapid temperature decreases caused by plant shutdown during the winter.

Station shutdowns during winter months are, on occasion, unavoidable. Due to the physical configuration of the station and the discharge canal, some mortality to organisms may be experienced during winter shutdowns.

Mortality information associated with a winter shutdown will provide the empirical bases on which to judge the impact of these fishkills on Barnegat Bay, Oyster Creek, and Forked River.

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Amendment No.: 66, 107, 257

2.0 Special Monitoring And Study Activities

2.1 <u>Unusual or Important Environmental Events</u>

Environmental Monitoring Requirements

Unusual or important events are those that cause potentially significant environmental impact or that could be of public interest concerning environmental impact from station operation. The following are examples: on-site plant or animal disease outbreaks; unusual mortality of any species protected by the Endangered Species Act of 1973; fish kills in the vicinity of the site; unusually high impingement mortality episodes.

Action

Should an unusual or important event occur, the licensee shall make a non-routine prompt report to the NRC in accordance with the provisions of Subsection 3.5.2.

If an event is reportable under 10 CFR 50.72, then a duplicate immediate report is not required. However, a follow-up written report is required in accordance with Subsection 3.5.2.

2-1

Amendment No.: 66, 107, 207, 257

2.0 Special Monitoring And Study Activities

Bases

Prompt reporting to the NRC of unusual or important events as described above is necessary for responsible and orderly regulation of the nation's system of nuclear power reactors. The information provided may be useful or necessary to others concerned with the same environmental resources. Prompt knowledge and action may serve to alleviate the magnitude of the environmental impact.

3.0 ADMINISTRATIVE CONTROL

This section describes administrative and management controls established by the Applicant to provide continuing protection to the environment and to implement the environmental technical specifications.

3.1 Responsibility

Corporate responsibility for implementation of the Oyster Creek Environmental Technical Specifications and for assuring that plant operations are controlled in such a manner as to provide continuing protection of the environment has been assigned by the Chief Nuclear Officer to the Vice President - Oyster Creek.

The responsibility for conducting the studies as set forth in Section 1.1 (Non-Radiological Monitoring) and all of Section 2.0 (Special Monitoring and Study Activities) rests with the management position responsible for environmental programs, who reports to the Vice President - Oyster Creek.

Administrative measures are defined in Section 3.3 which provide that the individual or group responsible for auditing or otherwise verifying that an activity has been correctly performed is independent of the individual or group responsible for performing the activity.

3.2 Organization

Lines of authority, responsibility and communication shall be established and defined from the highest management levels through intermediate levels to and including operating organization positions. Organizational charts will be documented in the Updated FSAR and updated in accordance with 10 CFR 50.71e.

3.3 Review and Audit

The licensee shall provide for review and audit of compliance with the Environmental Technical Specifications. The audits shall be conducted independently of the individual or groups responsible for performing the specific activity. A description of the organization structure utilized to achieve the independent review and audit function and results of the audit activities shall be maintained and made available for inspection.

3.4 Procedures

3.4.1 Detailed written procedures, including applicable check lists and instructions, will be prepared and adhered to for all activities involved in carrying out OCETS.

3.5 Plant Reporting Requirements

3.5.1 DELETED

3.5.2 Non-Routine Environmental Operating Reports

A prompt report shall be submitted in the event that an Unusual or Important Environmental Event occurs (as specified in Section 2.1). Such an occurrence will be reported within 24 hours to the NRC and within 30 days by a written report in accordance with 10 CFR 50.4. If an event is reportable under 10 CFR 50.72, then a duplicate immediate report is not required. However, a follow-up written report is required. The written report and, to the extent possible, the preliminary report shall (a) describe, analyze, and evaluate the occurrence, including the extent and magnitude of the impact, (b) describe the cause of the occurrence, and (c) indicate the corrective action, if necessary, taken (including any significant changes made in the procedures) to preclude repetition of the occurrence should the occurrence be station related.

3.5.3 Change in Environmental Technical Specifications

- A. A report shall be made to the NRC prior to implementation of a change in plant design, in plant operation, or in procedures described in Section 3.4, only if the change would have a significant adverse effect on the environment or involves an environmental matter or question not previously reviewed and evaluated by the NRC. The report shall include a description and evaluation of the changes and a supporting justification.
- B. Request for changes in environmental technical specifications shall be submitted in accordance with 10 CFR 50.90.
- C. Changes or additions to required Federal, and State permits and certificates for the protection of the environment that pertain to the requirements of OCETS shall be reported to the NRC within 30 days of approval by the appropriate permitting authority. In the event that the licensee initiates or becomes aware of a request for changes to any of the water quality requirements, limits or values stipulated in any certification or permit issued pursuant to Section 401 or 402 of the Federal Water Pollution Control Act (PL 92-500) which is also the subject of an OCETS reporting requirement, NRC shall be notified following approval by the authorizing agency. The notification to the NRC shall include an evaluation of the environmental impact of the revised requirement, limit or value being sought.

3.6 Records Retention

- 3.6.1 Eighty (80%) percent data recovery annually for each environmental monitoring requirement is considered satisfactory for the purposes of the OCETS. The variability and uncertainty of environmental conditions demand allowance for some missed data in order to preclude an excessive reporting burden. This provision for missed data does <u>not</u> permit deliberate omission of sample collection or analyses but rather is meant to cover data missed due to circumstances beyond the control of the licensee, its representative or subcontractor. Records of the reasons for all missed data shall be retained with the data reports.
- 3.6.2 Records relative to the following areas will be retained until the date of termination of the Operating License.
 - A. Records and drawings detailing plant design changes made to systems and equipment as described in Section 3.5.3.
 - B. Records of all environmental surveillance data.
- 3.6.3 All other records relating to the environmental technical specifications will be retained for five years following recording.