



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

May 12, 2017

Mr. Bryan C. Hanson  
Senior Vice President  
Exelon Generation Company, LLC  
President and Chief Nuclear Officer  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

**SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2 –  
CORRECTION TO TECHNICAL SPECIFICATION PAGES 1.1-2, 1.1-3, AND  
1.1-4 TO CORRECT ERRORS INTRODUCED DURING THE ISSUANCE OF  
AMENDMENT NOS. 286 AND 263 (CAC NOS. MD7315 AND MD7316)**

Dear Mr. Hanson:

On April 23, 2008 (Agencywide Documents Access and Management System Accession No. ML080840339), the U.S. Nuclear Regulatory Commission issued Amendment Nos. 286 and 263 to Renewed Facility Operating License Nos. DPR-53 and DPR-69 for the Calvert Cliffs Nuclear Power Plant (Calvert Cliffs), Units 1 and 2, respectively. During the issuance of the amendments, errors were inadvertently introduced on Technical Specification pages 1.1-2, 1.1-3, and 1.1-4. Specifically, the definitions of "DOSE EQUIVALENT I-131" and "L<sub>a</sub>" were inadvertently changed. These inadvertent changes were neither addressed in the notice for the amendments nor reviewed as part of the license amendment request.

Enclosed are the corrected pages. Please, replace Technical Specification pages 1.1-2, 1.1-3, and 1.1-4 of the Calvert Cliffs, Units 1 and 2, Renewed Facility Operating Licenses with the enclosed corrected pages.

B. Hanson

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If you have any questions, please contact me at (301) 415-2871 or [Michael.Marshall@nrc.gov](mailto:Michael.Marshall@nrc.gov).

Sincerely,

A handwritten signature in black ink that reads "Michael L. Marshall, Jr." in a cursive style.

Michael L. Marshall, Jr., Senior Project Manager  
Plant Licensing Branch I  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

Enclosure:  
Corrected Calvert Cliffs, Unit 1 and 2,  
Technical Specification Pages

cc w/encls: Distribution via Listserv

## ENCLOSURE

CORRECTED PAGES 11.1-2, 1.1-3, AND 1.1-4 OF RENEWED FACILITY  
OPERATING LICENSE NOS. DPR-53 AND DPR-69  
FOR AMENDMENT NOS. 286 AND 263

EXELON GENERATION COMPANY, LLC

CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2

DOCKET NOS. 50-317 AND 50-318

## 1.1 Definitions

indication and status to other indications or status derived from independent instrument channels measuring the same parameter.

## CHANNEL FUNCTIONAL TEST

A CHANNEL FUNCTIONAL TEST shall be:

Analog Channels - the injection of a simulated signal into the channel as close to the primary sensor as practicable to verify OPERABILITY of all devices in the channel required for channel OPERABILITY.

Bistable Channels - the injection of a simulated signal into the channel sensor to verify OPERABILITY of all devices in the channel required for channel OPERABILITY.

The CHANNEL FUNCTIONAL TEST may be performed by means of any series of sequential, overlapping or total channel steps.

## CORE OPERATING LIMITS REPORT (COLR)

The COLR is the unit specific document that provides cycle specific parameter limits for the current reload cycle. These cycle specific parameter limits shall be determined for each reload cycle in accordance with Specification 5.6.5. Plant operation within these limits is addressed in individual Specifications.

## DOSE EQUIVALENT I-131

DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microcuries/gram) that alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The TEDE (Total Effective Dose Equivalent) inhalation dose conversion factors used for this calculation shall be those listed in Table 2.1 in the column headed "effective" of Federal Guidance Report 11, ORNL, 1988, "Limiting Values of Radionuclide Intake and

1.1 Definitions

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Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion."

$\bar{E}$ -AVERAGE DISINTEGRATION ENERGY

$\bar{E}$  shall be the average (weighted in proportion to the concentration of each radionuclide in the reactor coolant at the time of sampling) of the sum of the average beta and gamma energies per disintegration (in MeV) for isotopes, other than iodines, with half lives > 15 minutes, making up at least 95% of the total non-iodine activity in the coolant.

ENGINEERED SAFETY FEATURE (ESF) RESPONSE TIME

The ESF RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ESF actuation setpoint at the channel sensor until the ESF equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays, where applicable. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured. In lieu of measurement, response time may be verified for selected components provided that the components and methodology for verification have been previously reviewed and approved by the NRC.

$L_a$

The maximum allowable containment leakage rate,  $L_a$ , shall be 0.16% of containment air weight per day at the calculated peak containment pressure ( $P_a$ ).

LEAKAGE

LEAKAGE shall be:

a. Identified LEAKAGE

1. LEAKAGE, such as that from pump seals or valve packing (except reactor coolant

1.1 Definitions

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pump (RCP) seal leakoff), that is captured and conducted to collection systems or a sump or collecting tank;

2. LEAKAGE into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be pressure boundary LEAKAGE; or
3. Reactor Coolant System (RCS) LEAKAGE through a steam generator to the Secondary System (primary to secondary LEAKAGE).

b. Unidentified LEAKAGE

All LEAKAGE (except RCP seal leakoff) that is not identified LEAKAGE;

c. Pressure Boundary LEAKAGE

LEAKAGE (except primary to secondary LEAKAGE) through a nonisolable fault in an RCS component body, pipe wall, or vessel wall.

MODE

A MODE shall correspond to any one inclusive combination of core reactivity condition, power level, average reactor coolant temperature, and reactor vessel head closure bolts specified in Table 1.1-1 with fuel in the reactor vessel.

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AMENDMENT NOS. 286 AND 263 (CAC NOS. MD7315 AND MD7316) DATED  
MAY 12, 2017

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