

Gallagher, Carol

Subject: FW: Dominion Comments Re: Draft Regulatory Guide DG-4025
Attachments: GL15-034_DraftRGDG-4025Response_Ltr&AttOnly.pdf

From: Bladey, Cindy
Sent: Monday, February 22, 2016 8:14 AM
To: Mendiola, Doris <Doris.Mendiola@nrc.gov>; Gallagher, Carol <Carol.Gallagher@nrc.gov>
Subject: FW: Dominion Comments Re: Draft Regulatory Guide DG-4025

From: Vicki Hull (Generation - 6) [mailto:vicki.hull@dom.com]
Sent: Monday, February 22, 2016 8:11 AM
To: Bladey, Cindy <Cindy.Bladey@nrc.gov>
Subject: [External_Sender] Dominion Comments Re: Draft Regulatory Guide DG-4025

Cindy –

These comments were due to the NRC by 2/9/16. Even though they are late, hopefully they can still be considered by the NRC.

Thanx,

vlh

12/11/2015
80FR 77228

14

RECEIVED

2016 FEB 22 AM 9:03

RULES AND DIRECTIVES
DIVISION
OFFICE

SUNSI Review Complete
Template = ADM – 013
E-RIDS= ADM -03
Add= T. Nicholson (TSN)
E. O'Donnell (exo)

Dominion Resources Services, Inc.
Innsbrook Technical Center
5000 Dominion Boulevard, 2SE, Glen Allen, VA 23060



February 17, 2016

Ms. Cindy Bladey
Office of Administration
Mail Stop: OWFN-12H08
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

GL15-034

COMMENTS ON DRAFT REGULATORY GUIDE DG-4025
FEDERAL REGISTER, VOL. 80, NO. 238,
PAGES 77028-77029, FRIDAY, DECEMBER 11, 2015
DOCKET ID NRC-2015-0272

Dominion Resources Services, Inc. (Dominion) appreciates the opportunity to comment on the above referenced Federal Register Notice.

Dominion's corporate and station personnel have reviewed the notice and offer the attached comments for your consideration.

If you would like further information on our comments, please contact:

Carl Tarantino

Carl.Tarantino@dom.com or (804) 273-3068

Respectfully,

A handwritten signature in black ink, appearing to read "T. R. Huber", written in a cursive style.

T. R. Huber, Director
Nuclear Licensing & Operations Support
Dominion Resources Services, Inc. for
Virginia Electric and Power Company,
Dominion Nuclear Connecticut, Inc. and
Dominion Energy Kewaunee, Inc.

Attachment

Comments - Draft Regulatory Guide DG-4025
Assessment of Radioactive Discharges in Ground Water to the Unrestricted
Area at Nuclear Power Plant Sites

Dominion has reviewed draft Regulatory Guide DG-4025 and provides the following comments.

- DG-4025 provides a simple ground water flow and transport model for estimating offsite tritium from site releases. Initial review indicates the four Dominion nuclear sites, Surry, Millstone, Kewaunee, and North Anna, would not likely fit this simple model, and further adjustments to these sites' models would have to be made in accordance with guidance set forth in ANSI/ANS-2.17-2010. This proposed model does not provide the flexibility to accommodate site variables. This model should be expanded to include variables such as non-homogeneous sand layers, underground piping, etc. to accommodate more licensee sites.
- Section C states that this guide is intended for use in a steady state flow in homogeneous sand layers. That is difficult to find in the restricted area of a site, based on the building and piping disturbances, unless the site has significant acreage. Unrestricted areas of a site or near the site may also be highly variable, depending on the distance from the plant, canal/lake locations, etc. Based on this, the model may apply to only specific areas of a site.
- Tidal flux for two Dominion sites, Surry and Millstone, would complicate the proposed simple model, as it is not clear how the model accounts for the impact of tidal flux.
- DG-4025 states the site conceptual site model should be developed as specified in ANSI/ANS-2.17-10. Dominion sites have developed conceptual site models in conjunction with independent hydro geological studies/evaluations. It is recommended that an option or alternative to ANSI/ANS-2.17-10 be included in DG-4025 to accommodate individual site evaluations.
- The spreadsheet referenced in DG-4025 that describes a ground water flow and transport model for estimating offsite tritium activity flux is not available in the guide or from the NRC website. A valid review of this model is not possible without the spreadsheet, as it would provide the applied equations, assumptions, and relationships used to assess a discharge to the unrestricted area. The spreadsheet should be made available for a more thorough and meaningful evaluation of the model.
- This model addresses total Curies released. A dose assessment to the maximally exposed individual, as performed for radiological effluents in accordance with licensees' Offsite Dose Calculation Manual following guidance such as R.G. 1.109, would be more meaningful in assessing the impact of releases to the unrestricted area. The effluent dose assessment should also be applied in the final Regulatory Guide.

Comments - Draft Regulatory Guide DG-4025
Assessment of Radioactive Discharges in Ground Water to the Unrestricted
Area at Nuclear Power Plant Sites

- DG-4025 should be considered in the context of NRC's Project AIM. The benefits of this DG in the context of improving regulatory efficiency and streamlining NRC processes to use resources more wisely should be evaluated. An alternative method for achieving the same goal is revising R.G. 1.21 to provide the guidance for assessing releases and groundwater discharges, including the modeling. Section 3.6 of RG 1.21 already addresses spills and leaks to ground water. The following question could be asked "Is creation of DG-4025 really necessary?"
- The purpose statement in DG-4025 uses the term "abnormal" with inadvertent radioactive releases. It is suggested the term "abnormal" be defined or at least some boundaries/parameters be used to indicate when the model described in DG-4025 would be implemented. Is the intent of the Reg. Guide to apply to all radioisotopes in groundwater outside the Protected Area? It is not clear if it also applies to the licensee's final monitoring point, e.g. at the end of a discharge canal.
- Reg. Guide 1.21 should be listed in the Related Guidance section as it is a primary reference most licensees are bound to for purposes of performing effluent dose calculations and evaluating various radiological effluent pathways. R.G. 1.21 is also one of the key references cited in the glossary of DG-4025.
- While it appears from the applicability statement that DG-4025 applies to plants in decommissioning/Safestor status, as 10CFR20 and 10CFR50 licensed sites, clarification of this would be beneficial.
- Recognizing DG-4025 supports the NEI 07-07 program using existing guidance for performing liquid effluent dose pathway assessments, it is recommended DG-4025 include definitions of "inadvertent," "unplanned," and "controlled."