

November 20, 2013

MEMORANDUM TO: Gregory Suber, Chief
Low-Level Waste Branch
Environmental Protection
and Performance Assessment Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

FROM: Donald Lowman, Project Manager /RA/
Low-Level Waste Branch
Environmental Protection
and Performance Assessment Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
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SUBJECT: OCTOBER 21-25, 2013, TRIP REPORT: SURRY POWER STATION

On October 21-25, 2013, I shadowed the U.S. Nuclear Regulatory Commission's (NRC) Region II inspectors Ruben Hamilton and Robert Kellner during their inspection of Surry Power Station's Health Physics and Radioactive Waste Management Programs. The purpose of the trip was to: (1) gain insight on use of scaling factors in radioactive waste processing to support revisions to NUREG/BR-0204 "Instructions for Completing NRC's Uniform Low-Level Radioactive Waste Manifest"; (2) determine the effect of revisions to the Branch Technical Position (BTP) on Concentration Averaging and Encapsulation on nuclear plants; and (3) to complete one of my On-the-Job Activities (OJT-4) per the Low-Level Waste Project Manager Qualification Journal. Below are several activities which I observed:

- Entrance interview with plant management
- Meeting with plant Health Physics and Radwaste management
- Tour of Auxiliary Building
- Tour of Radwaste Facility
- Tour of Independent Spent Fuel Storage Installation (ISFSI)
- Review of radioactive waste shipping manifests
- Discussions on classifying radioactive waste with Radioactive Material Control technical staff

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Below are my observations:

- Inspection Procedure IP-71124.08 was used during the inspection of Surry's radioactive waste management program. Section 02.04a states:

Verify that the licensee's use of scaling factors and calculations to account for difficult-to-measure radionuclides is technically sound and based on current 10 CFR Part 61 analysis.

My observations led me to believe that inspectors may not grasp the concepts of scaling factors used in waste classification. I met with Steve Garry, Senior Health Physicist, who is in the branch that manages the inspection procedures. Steve provided me a copy of the Training and Qualification Journal to review to verify whether training in scaling factors/waste classification was adequately covered. Steve also suggested I speak with Ron Nimitz in Region I as he is very familiar with scaling factors/waste classification and inspection of these programs.

ACTION ITEM: I will review the training manual and talk with Mr. Nimitz; if the inspection procedure and training is found to be deficient, I will recommend appropriate changes.

- Almost all utilities use WMG, Inc.'s RADMAN computer software to classify their waste. In 1983, the NRC approved a Topical Report for use of the software. There is also HPPOS-288 "Acceptance for Referencing, RADMAN Topical Report" which states that approval of the Topical Report is based on the condition that if NRC criteria or regulation change, WMG, Inc. will be expected to revise or resubmit their respective documentation or submit justification that RADMAN continues to meet NRC conclusions found in the Topical Report. There have been many updates to RADMAN since it received NRC approval and it will need to be revised again based on changes to the BTP, Part 61, and NUREG/BR-0204.

ACTION ITEM: I will contact vendor auditing to ensure they are aware that revisions to the BTP, Part 61, and NUREG/BR-0204 will require changes to RADMAN.

Please let me know if you have any questions.

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