

April 27, 2011

ZS-2011-0325

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Zion Nuclear Power Station, Unit 1 and 2
Facility Operating License Nos. DPR-39 and DPR-48
NRC Docket Nos. 50-295 and 50-304

Subject: Radioactive Effluent Release Report for 2010 and
Offsite Dose Calculation Manual for 2010

In accordance with 10 CFR 50.36a, "Technical specifications on effluents from nuclear power plants," and pursuant to Technical Specification 5.7.3, "Radioactive Effluent Release Report," for Zion Nuclear Power Station, Units 1 and 2, this is the submittal of a Radioactive Effluent Release Report for the year 2010. The report is required to be submitted by April 30, 2011 and is provided as 1st Attachment to this letter. A listing of commitments contained in this submittal is provided as 2nd Attachment.

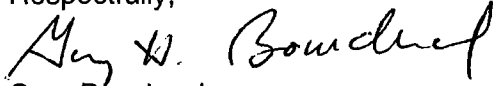
Pursuant to 10 CFR 50.4, there were changes made to the Zion Station Offsite Dose Calculation Manual (ODCM) during the period of January through December 2010. The 3rd Attachment provides the changes made to the ODCM during the calendar year of 2010.

Technical Specification 5.6.1 for the Zion Nuclear Power Station requires a copy of the entire ODCM be submitted to the NRC as part of, or concurrent with, the Radioactive Effluent Release Report. This must be submitted prior to May 1. A copy of the entire Zion Station ODCM, current as of December 31, 2010 is provided as an Attachment.

If you have any questions about this submittal please contact Mr. Ken Greenlee at 847-379-2700.

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Respectfully,



Gary Bouchard
Decommissioning Plant Manager
Zion Station

Attachments

1. Radioactive Effluent Release Report
2. List of Regulatory Commitments
3. Summary of Changes to the ODCM
4. Zion Station ODCM

Copy to: Regional Administrator- NRC Region III

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