

**SUMMARY OF THE AUGUST 31, 2004, MEETING BETWEEN U.S.
NUCLEAR REGULATORY COMMISSION STAFF AND XCEL ENERGY
TO DISCUSS PLANNED DECOMMISSIONING OF THE PATHFINDER FACILITY IN
SIOUX FALLS, SOUTH DAKOTA**

On August 31, 2004, the U.S. Nuclear Regulatory Commission (NRC) staff met with representatives of Excel Energy at its Pathfinder facility in Sioux Falls, South Dakota. This meeting was open to the public and was preceded by a tour of the facility. An agenda for the tour and meeting is attached.

The NRC staff is presently conducting a technical review of Xcel Energy's decommissioning plan (DP). This meeting provided an opportunity for Xcel Energy and NRC staff to exchange information and address questions related to the staff's ongoing review of the DP. The topics discussed included performance assessment, hydrology, and health physics.

In the discussion of performance assessment, NRC staff made the following points: (1) Xcel Energy should derive area factors for each radionuclide in developing Derived Concentration Guideline Levels for residual radioactivity for building surfaces and soil; (2) the DP should address all the qualifications to justify the use of the screening analysis approach as described in Appendix H of NUREG-1757, Vol. 2; (3) the DP should address the dose contribution from previously decommissioned parts of the site in order to demonstrate that the whole site meets the decommissioning criteria for unrestricted release of the site (10 CFR 20.1402). In response to these points, Xcel Energy stated that the DP would be revised to address these points.

In the discussion of site hydrology, NRC expressed the view that additional justification is needed to support the statement in the DP that both the deep and shallow aquifers do not contain residual radiologic contamination. NRC staff explained that one option for providing this justification could involve the collection of split-samples (NRC and Xcel Energy would split a portion of each sample) from both aquifers down gradient from the Pathfinder facility. In response to this point, Xcel Energy stated that it would consider the idea of collecting split-samples as a means to provide additional justification for this position.

In the discussion on health physics related to the DP, NRC staff explained that (1) NRC staff views the Pathfinder site as a Group 4 decommissioning site given the presence of Silver-108m, and as a Group 4 site, the DP must demonstrate the site meets the decommissioning criteria and that planned decommissioning activities are conducted to maintain exposures to radiologic exposures As Low As is Reasonably Achievable (ALARA); (2) the DP Final Status Survey Plan should include a discussion of contractor qualifications related to the collection and analysis of data, along with a discussion of general quality control procedures for site decommissioning. In response to this discussion, Xcel Energy acknowledged the presence of Silver-108m and indicated that they will proceed in developing a site-specific dose assessment as a Group 4 decommissioning site to demonstrate compliance with the decommissioning criteria and that planned decommissioning activities are ALARA.

During this meeting, NRC Region IV staff also provided an overview of its confirmatory measurement program. Region IV staff explained how in-process radiation surveys and split-sampling by NRC inspectors can provide a means to confirm the results of licensee's surveys. This program provides confidence that the licensee's final status survey results will meet the release criteria. Region IV requested that Xcel Energy keep the region informed of its schedule for conducting surveys so that timely decisions can be made concerning the scheduling of NRC inspectors to perform confirmatory surveys.