April 16, 2008

MEMORANDUM TO: William Burton, Chief
Environmental Projects Branch 1
Division of Site and Environmental Reviews
Office of New Reactors

FROM: H. Brent Clayton, Chief ***/RA/***
Environmental Technical Support Branch
Division of Site and Environmental Reviews
Office of New Reactors

SUBJECT: TRIP REPORT – NOVEMBER 6 - 8, 2007, READINESS ASSSESSMENT (C-2) VISIT FOR A COMBINED LICENSE APPPLICATION AT THE COMANCHE PEAK NUCLEAR PLANT SITE

This report summarizes the staff's November 6 - 8, 2007, pre-application/readiness assessment (C-2) visit related to the environmental portion of a future combined license (COL) application for the Comanche Peak Nuclear Plant site. Luminant has indicated its intent to submit a COL application for this site. Luminant has selected the U.S. Advanced Pressurized Water Reactor design for the proposed new nuclear station.

The purpose of this visit was to assess the applicant's alternative site selection process. The visit also allowed the staff to begin gathering information regarding the alternative site locations. The visit took place at the proposed alternative sites located in eastern, central, and southern Texas. Enclosure 1 provides a list of attendees, and Enclosure 2 provides a summary of the more significant issues that were discussed. In summary, the staff did not identify any issues related to the environmental report that would indicate it would not be ready by the planned date of application. However, this was not a formal or comprehensive staff review and additional issues could be identified during the staff's formal review after the application is submitted.

The next readiness assessment visit and public information meeting are tentatively scheduled for June 2008.

Project No.: 754

Enclosures: As stated

CONTACT: Robert Schaaf, NRO/DSER/RAP1
301-415-1312

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ADAMS ACCESSION NUMBER: ML080930403

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NAME	RSchaaf:hpm1	GHawkins /ARedden for/	BClayton
DATE	04/14/08	04/14/08	04/16/08

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LIST OF ATTENDEES
COMANCHE PEAK ALTERNATIVE SITES READINESS ASSESSMENT VISIT
NOVEMBER 6 - 8, 2007

NAME	AFFILIATION
Robert Schaaf	NRC
Harriet Nash	NRC
Barry Zalcman	NRC
Mary Ann Parkhurst	PNNL
Jeff Ward	PNNL
Rajiv Prasad	PNNL
Katie Cort	PNNL
Terry Kesterson	Luminant
Robert Weltman	Enercon

Additional Information Summarizing the Comanche Peak Alternative Sites
Environmental Staff Readiness Assessment Visit
November 6 - 8, 2007

Alternative Site Selection Process

As noted in the C-1 trip report, Luminant conducted a site selection process that appears to conform to the guidance contained in Regulatory Guide 4.2, Revision 2, Preparation of Environmental Reports for Nuclear Power Stations, and NUREG-1555, Revision 1, Standard Review Plans for Environmental Reviews for Nuclear Power Plants (ESRP). The applicant wishes to avoid disclosing alternative sites either by name, or by unique description due to concerns regarding business competition for sites. As a result, the summary that follows is very general.

Alternative Sites Reconnaissance Visits

The U.S. Nuclear Regulatory Commission and Pacific Northwest National Laboratory team members were accompanied by two applicant representatives who were very familiar with the general layout of the alternative sites, and were conversant particularly with socioeconomics and geotechnology. Discussions focused on the general attributes of each alternative site without detailed discussions of water use, water supply, or biota associated with the sites. No parts of the preliminary environmental report were provided for review during the course of this visit. Access to descriptive information supporting the evaluation of alternative sites would be expected to be available during the C-3 visit.

The team members also collected general information regarding the site areas via visits to local Chamber of Commerce and resource agency offices.

Summary of Issues

Based on the general information gathered during the visits, all of the sites appeared to be viable (i.e., capable of supporting nuclear power plant operations), with the potential of meeting environmental criteria in terms of water supply, available acreage, and access to key infrastructure.

Sufficient cooling water appeared to be available at all sites, although two of the sites may require access to more than one water source and would need authorization from the appropriate state water authorities for the use of river water. Further communication with hydrological experts familiar with the identified water bodies would be necessary to confirm the adequacy of the water sources to support the cooling system. Water availability did not appear to be an issue at the third site.

No information regarding aquatic ecology species, or potential threatened and endangered (T&E) species was provided by Luminant for any of the three sites. Judging from the proposed configuration of the cooling tower heat dissipation system at the proposed site and assuming the same type of configuration at all three alternative sites, similar aquatic impacts would be expected. These impacts would probably include temporary loss of benthic habitat during construction of water intake and discharge canal structures and impingement and entrainment associated with plant operation.

In terms of pre-existing infrastructure, one site is near roads and transmission lines and has nearby rail access. The second site has road access, but is close enough to a metropolitan area that postulated accident impacts may need to be more thoroughly evaluated. The third site would appear to require extensive infrastructure development.

No issues related to environmental justice were observed at any of the sites

Issues for Follow-up

The following items were identified as appropriate for follow-up at the C-3 stage.

- Consultation with the applicant's experts related to the depth of hydrology assessments at the alternative sites.

- Consultation with owners of water rights and state and local regulatory authorities to determine if sufficient surface water rights could be obtained.

- Consultation with state and federal resource agencies to determine if there are any T&E or rare but important aquatic species that could be adversely impacted from construction or operating activities.

- Determine whether the proximity of one of the sites to the closest large population center would pose an issue with regard to potential impacts from postulated accidents.