

September 12, 2008

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

FROM: Brent Clayton, Branch Chief **/RA/**  
Environmental Technical Support Branch  
Division of Site and Environmental Reviews

SUBJECT: TRIP REPORT – JUNE 3 - 4, 2008, READINESS ASSESSMENT  
(C-3) VISIT FOR A FUTURE COMBINED LICENSE  
APPLICATION AT THE COMANCHE PEAK SITE

This report summarizes the staff's June 3 and 4, 2008, readiness assessment visit related to the environmental portion of a future combined license (COL) application at the Comanche Peak Steam Electric Station Site in Somervell County, Texas. Luminant has selected the U.S. Advanced Pressurized Water Reactor (US-APWR) design for the proposed new nuclear station. Luminant (formerly TXU) has indicated its intent to submit a COL application for this site on September 19, 2008.

The purpose of this visit was to allow the staff to assess the readiness of the applicant's environmental report (ER), a key component of the COL application. The visit took place at Enercon's offices in Dallas, Texas. Enclosure 1 provides a list of attendees. Enclosure 2 is the agenda used during the visit. Enclosure 3 is a summary of the more significant issues that were discussed.

This assessment was conducted several months prior to the applicant's planned COL application date and the staff did not expect the ER to be completed at this stage. Furthermore, the applicant was aware of, and informed the NRC staff of some of the issues described in Enclosure 3.

A public outreach meeting was held at the Somervell County Expo Center in Glen Rose, Texas on June 12, 2008.

Project No.: 754

Enclosures: As stated

CONTACT: Michael Willingham, NRO/DSER/RAP1  
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**ADAMS ACCESSION No.: ML082470401 \*See previous concurrence**

OFFICE	PM:RENV:DSER:NRO	LA:RAP1:DSER:NRO	BC:RENV:DSER:NRO
NAME	*HNash / <b>HN w/edits/</b>	GHawkins	HBClayton
DATE	09/ 12 /08	09/12/08	09/ 12 /08

**OFFICIAL RECORD COPY**

LIST OF ATTENDEES  
 COMANCHE PEAK READINESS ASSESSMENT VISIT (C-3)  
 JUNE 3 – 4, 2008

NAME	AFFILIATION
Harriet Nash	Nuclear Regulatory Commission (NRC)
Michael Willingham	NRC
Daniel Mussatti	NRC
Nebiyu Tiruneh	NRC
Don Palmrose	NRC
Mary Ann Parkhurst	Pacific Northwest National Laboratory (PNNL)
Lyle Hibler	PNNL
Roy Kropp	PNNL
Dave Anderson	PNNL
Don Woodlan	Luminant
John T. Conly	Luminant
Matt Weeks	Luminant
Robert Reible	Luminant
Gary Spicer	Luminant
Bruce Turner	Luminant
Bobby Bird	Luminant
Joe Logatto	Enercon
Ivan Zujovic	Enercon
Robert J. Schoenewe	Enercon
Darren Lovvorn	Enercon
Robert Walker	Enercon
Kim Shannon	Enercon
Chris Byerman	Enercon
Christy Batterson	Enercon
Stacy Burgess	Enercon
Bob Weltman	Enercon
Lori Evans	Enercon
Bill Atchison	Enercon
Marvin Morris	Enercon
Melissa Gayley	Enercon
Duke Wheeler	Enercon
Bill Wenstrom	Enercon
Jack Shivas	Enercon
Edwin Floyd	Enercon
Melinda Harris	Enercon
Mike Laggart	Enercon
Shinichi Kataoka	Mitsubishi Nuclear Energy Systems (MNES)
Sherry Bernhoft	MNES
Katsunori Kawai	MNES
Diane Yeager	Enercon MNES

# Meeting Agenda

## **Tuesday, June 3, 2008 at Enercon Office**

- 7:45 Coffee and Sign In
- 8:00 Welcome and Introductions – NRC and Luminant
- 8:15 Brief Project Overview – Luminant
- Site description
  - Project Update
  - Merchant Plant Overview
  - Site Selection Process/Alternatives
  - Transmission/Pipeline Corridors
- 9:30 Breakout to Technical Groups/Start ER Review
- 11:00 - 1:00 Flexible Lunch Time
- 1:00 Breakout to Technical Groups/Continue ER Review
- 4:45 End of Day Summary

## **Wednesday, June 4, 2008 at Enercon Office**

- 8:00 General Discussion and Follow Up from Day One
- 8:30 Continue Technical Group Breakouts
- 11:00 - 1:00 Flexible Lunch Time
- 3:00 Completion of Technical Breakouts, NRC Staff and Contractors report out to team lead
- 4:00 Technical Breakout Summary
- 4:45 End of Day Summary

SUMMARY OF ISSUES IDENTIFIED DURING  
THE NRC STAFF READINESS ASSESSMENT (C-3) VISIT  
AT ENERCON OFFICES IN DALLAS, TEXAS  
JUNE 3 – 4, 2008

Luminant and Enercon provided overview presentations of the proposal for two additional reactors at Comanche Peak and the environmental aspects of the COL application in progress. The breakout sessions that followed allowed the assessment team to review the draft environmental report (ER) to determine how ready it is for submission. The NRC and PNNL staff reviewed the site description, hydrology, ecology, socioeconomics and environmental justice, and alternatives. Issues and concerns that were identified during this review are presented in the following discussions.

Meteorology and Air Quality

It was noted in the C-1 trip report that the applicant did not provide ambient atmospheric moisture data onsite. During this visit, the applicant indicated that they will begin measuring the ambient atmospheric moisture onsite. The data collected from the site will be compared to data collected at area airports.

Hydrology/Water Use and Quality

During the C-1 readiness assessment it was noted that Luminant was developing plans to obtain water rights from Brazos River Authority (BRA). As of this visit, the negotiations with BRA were stated as nearing completion. A water volume balance between Comanche Peak, Units 1 & 2, Squaw Creek Reservoir, Lake Granbury, and other sources and sinks within the system was not demonstrated in the ER.

The outfall design is not yet completed. The final designs and locations of intake and discharge structures and the final route of the intake system pipeline were not described in the ER. Luminant plans to discharge blowdown from the proposed Comanche Peak, Units 3 & 4 into Lake Granbury. Lake Granbury has been identified by the Texas Commission on Environmental Quality as an impaired water body, in terms of chloride, in accordance with Section 303(d) of the Clean Water Act. The State of Texas has not scheduled a total maximum daily load (TMDL) for the lake. Total dissolved solids (TDS) is a water quality issue in Squaw Creek Reservoir, the current receiving water body for Comanche Peak, Units 1 & 2 blowdown, but not reported as the reason for the Lake Granbury 303(d) listing as impaired.

Ecology

The terrestrial ecology sections depend primarily on data from the 1970s for site characterization. Luminant conducted surveys in 2006 and 2007. However, the ER did not establish a link between the recent surveys and data from the 1970s.

The ER did not identify species that are essential to the maintenance and survival of other important species, species that are critical to the structure and function of the ecosystems, and species that are biological indicators in the site's terrestrial and aquatic ecosystems.

Supporting information is needed to verify assessed impacts to aquatic and terrestrial ecosystems. This includes dredging, wetlands, cumulative, and offsite impacts.

## Socioeconomics and Environmental Justice

More information is needed in the ER to provide context for the current economic environment, characterized by a period of significant natural gas exploration activities, and housing developments near the site or the significant hotel construction activities in Granbury and Glen Rose. In addition, the environmental justice sections need a more thorough discussion of the aggregate minority population census blocks bordering the site immediately to the west along the western shore of Squaw Creek Reservoir, identified through the census data analysis.

The method of determining the economic region to be affected and the associated impact multiplier analysis described in the ER include more than the counties likely to be affected through the employment of construction and operations workers and related suppliers of goods and services. The RIMS II multipliers need to be re-specified for the areas from which 90% of the workforce is expected. The ER needs to distinguish between the economic region, the 50-mile region, and the generic use of the term region, as all are used interchangeably.

More years of tax data are needed as are the distribution of revenue to budgets and the details of any tax agreements. The context of the Hood/Somervell County border/interface needs to be addressed. More information is needed in the ER to document the potential impacts of property tax revenue expected from the new units and whether a significant portion of the tax windfall expected from the new units would be remitted to the state as local school district excess funds.

The ER references a transportation study that was done at the peak of the original construction period and documents many improvements that were installed subsequent to the original construction. The road network is not rated by the level-of-service approach used in other states. Texas uses its own approach, which needs to be more fully described in the ER.

## Radiological and Accident Analyses

The Design Control Document (DCD) for the U.S. Advanced Pressurized Water Reactor (US APWR) design has been submitted. The ER needs to be updated to reflect the information provided in the DCD. Additionally, Luminant may need to update the ER to reflect changes on water usage along the Brazos River.

## Alternatives

The current alternative site analysis is based on the McCallum Turner study of site selection, which concentrates most heavily on safety issues outside the scope of the ER. The analysis is not organized to assist the evaluation of environmental issues and site characterizations are generally limited to the predicted level of impact. The ER needs a general discussion of site characterization and the specifics for land use, hydrology, ecology, socioeconomics, and cultural resources.

Also, the socioeconomics evaluation is based on the AP1000 worker population. This needs to be updated to include socioeconomics assumptions based on the US APWR design and the associated worker population.

Also, Luminant desires to exclude divulging the location of the alternative sites. The NRC staff needs to develop an approach to resolve any conflicts with the National Environmental Policy Act (NEPA) and the applicant's desires.

## Summary

Overall, Luminant appears to be on track to submit its ER by September of 2008. However, some concerns were noted in each area. Most notable concerns include the lack of cumulative impact analyses and the fact that several designs for equipment and procedures, such as those for intake and discharge, will not be complete by the expected application submittal date. Additionally, descriptions of preconstruction activities and impacts were not separate from construction activities and impacts in the ER.