

March 23, 2010

MEMORANDUM TO: Gregory P. Hatchett, Branch Chief
Environmental Projects Branch 1
Division of Site and Environmental Reviews
Office of New Reactors

FROM: Michael Willingham, Project Manager/*RA*/
Environmental Projects Branch 1
Division of Site and Environmental Reviews
Office of New Reactors

SUBJECT: SUMMARY OF JANUARY 27, 2010, PUBLIC MEETING HELD WITH
LUMINANT GENERATION COMPANY LLC TO DISCUSS TECHNICAL
ISSUES IN REGARDS TO THE COMANCHE PEAK NUCLEAR
POWER PLANT, UNITS 3 AND 4 COMBINED LICENSE
APPLICATION

On January 27, 2010, the U.S. Nuclear Regulatory Commission (NRC) held a public meeting with Luminant Generation Company LLC (Luminant) at NRC headquarters in Rockville, Maryland to discuss remaining technical gaps related to the environmental report (ER) submitted as part of Luminant's combined license application (COL) for the Comanche Peak Nuclear Power Plant (CPNPP), Units 3 and 4. The meeting notice (ML093510911) was made available to the public on the NRC public meeting schedule website on January 12, 2010. The objective of the meeting was for the Luminant and the NRC staff's to have a clear understanding of the necessary steps to close information gaps in the ER, a timeline for resolution to close those gaps and to determine if additional meetings would be necessary. This was a Category 1 public meeting. The public was invited to observe the meeting and was provided an opportunity to communicate with the NRC staff after the business portion of the meeting.

The following table details the agenda for the public meeting:

Time	Topic	Led By
12:00 p.m. – 12:05 p.m.	Opening Remarks	NRC
12:05 p.m. – 12:10 p.m.	Remarks	Luminant
12: 10 p.m. – 12:20 p.m.	Overview of NRC Technical Requirements for Environmental Reviews	NRC

12:20 p.m. – 12:40 p.m.	Overview of Comanche Peak Nuclear Power Plants, Units 3 and 4 COL application Environmental Report, Supplemental Information, and Responses to Request for Additional Information	Luminant
12:40 p.m. – 4:30 p.m.	Next Steps/Path Forward/Action Items	ALL
12:40 p.m. – 1:30 p.m.	GEN-03, GEN-07, GEN-08, GEN-09, GEN-10, GEN-11, GEN-12, GEN-13, GEN-14, and GEN-15.	Donald Palmrose, Nuclear Regulatory Commission (NRC); Michael Willingham, NRC; Lance McCold, Oak Ridge National Laboratory (ORNL); Greg Zimmerman, ORNL; Luminant Staff.
1:30 p.m. – 2:20 p.m.	HYD-11, HYD-13, HDY-15, HYD-23, HYD-25, HYD-26, HYD-27, HYD-28, and HYD-29.	Nebiyu Tiruneh, NRC; Dan Barnhurst, NRC; Brennan Smith, ORNL; Ellen Smith; ORNL; Luminant Staff.
2:20 p.m. – 3:00 p.m.	TE-11, TE-20, TE-21, and TE-04.	Peyton Doub, NRC; Harry Quarles, ORNL; Luminant Staff.
3:00 p.m. – 3:30 p.m.	SOC-32 and SOC-33	Dan Mussatti, NRC; James Saulsbury, ORNL; Luminant Staff.
3:30 p.m. – 3:40 p.m.	HP-04	Richard Emch, NRC; Greg Zimmerman, ORNL; Luminant Staff.
3:40 p.m. – 4:10 p.m.	ALT-03	Donald Palmrose, NRC; Michael Willingham, NRC; Lance McCold, ORNL; Greg Zimmerman, ORNL; Luminant Staff.
4:10 p.m. – 4:30 p.m.	AE-05	Harry Quarles, ORNL; David Madden, US Army Corps of Engineers.
4:30 p.m. – 5:00 p.m.	Questions and Comments	Public

The following table lists individuals who attended the public meeting:

Name	Affiliation
Gregory P. Hatchett, RAP1 Branch Chief	U.S. Nuclear Regulatory Commission (NRC)
Michael Willingham	NRC
Don Palmrose	NRC
Mike Magee	NRC
Stephen Monarque	NRC
Nebiyu Tiruneh	NRC
Dan Barnhurst	NRC
Peyton Doub	NRC
Mike Takacs	NRC
Barry Zalcman	NRC
Hossein Hamzehee	NRC
Susan Vrahoretis	NRC
James Biggins	NRC
Greg Zimmerman	Oak Ridge National Laboratory (ORNL)
Lance McCold	ORNL
James Saulsbury	ORNL
Ellen Smith	ORNL
Harry Quarles	ORNL
Brennan Smith	ORNL
David Madden	U.S. Army Corps of Engineers
Donald Woodlan	Luminant Generation Company, LLC (Luminant)
Matt Weeks	Luminant
Jeff Simmons	Luminant
Bruce Turner	Luminant
Bobby Bird	Luminant
John T. Conly	Luminant
Nicholas Kellenberges	Mitsubishi Nuclear Energy Systems (MNES)
Toyoaki Nogami	MNES
Masaya Hoshi	MNES
Frostie A White	MNES
Diane Yeager	MNES
Patti Gibson	MNES
Joseph Tapia	MNES
Mory Diane	MNES
Darren D Lovvorn	Enercon Services, Inc. (Enercon)
Joe Mancinelli	Enercon
Melinda Harris	Enercon
Rachel Turney-Work	Enercon
Stacey Burgess	Enercon
David Beshear	TBG
Louis Liberatore	URS
Richard Walp	URS
Tim Matthews	Morgan, Lewis & Backius LLP
Matt Phillips	Brazos River Authority (BRA)
David Wheelock	BRA
Shimichi Kataoka	Mitsubishi Heavy Industries (MHI)

The focus of the public meeting was on the following requests for additional information (RAIs): GEN-03, GEN-07, GEN-08, GEN-09, GEN-10, GEN-11, GEN-12, GEN-13, GEN-14, GEN-15, HYD-11, HYD-13, HYD-15, HYD-23, HYD-25, HYD-26, HYD-27, HYD-28, HYD-29, TE-11, TE-20, TE-21, AE-05, SOC-32, SOC-33, ALT-03, and HP-04.

GEN-03

The NRC staff stated that they need clarification of the conceptual design of the blowdown treatment facility (BDTF). Specifically, the staff needs additional information regarding the following:

- Area to be disturbed by building and operating the reverse osmosis and filter systems;
- Volume and surface area of the evaporation and storage ponds;
- Flow rates and concentrations of solids/salts discharged to the evaporation and storage ponds;
- Revised Figure 3.6-1, Sketch of Blowdown Water Treatment Facility Per Unit, showing flow rates and concentrations of solids/salts in each step of the treatment process;
- Revised Figure 3.6-1, Sketch of Blowdown Water Treatment Facility Per Unit, showing the combined flow from the cooling towers and the ultimate heat sink to the diversion point for discharge to Lake Granbury and the pre-filter/ultra-filter system;
- References and description of how evaporation rate and mister system efficiency was determined;
- Proposed quantities of solids/salts waste discharged to the evaporation and storage ponds;
- Estimated loads and transportation mechanism for transferring solids/salts waste from site to disposal facility;
- The basis and reference source for the total dissolved solids (TDS) concentration value of 3525 mg/L and chloride concentration value 1800 mg/L as the maximum Lake Granbury water quality conditions; and
- Provide a figure to include the footprint of both BDTF buildings (for each unit) housing the pre-filter/ultra-filter and the reverse osmosis systems and the location of the site boundary with respect to the evaporation and storage ponds.

Luminant stated that they understood the information needed by the NRC staff. However, Luminant indicated that the detail the NRC staff is requesting has not been developed. Luminant stated that an additional conference call maybe needed to clarify the NRC staff's information needs.

GEN-07

The NRC staff stated in RAI GEN-07 that they need an updated version of ER Figure 3.4-1 which shows a schematic representation of the proposed CPNPP cooling system water use during normal operation. The figure should include all cooling loads; cooling tower basin; BDTF and other cooling water treatment systems; any and all water uses, in addition to cooling water from the cooling water system.

Luminant indicated that they understood the needs of the NRC staff and that they would revise Figures 3.4-1, 3.1-1 and 3.3-1 to clarify the water uses. Luminant stated that they could provide a revision to the figures by February 22, 2010.

GEN-08

Luminant stated that the cumulative width of the DeCordova transmission lines would be approximately 300 feet. Additionally, Luminant stated that they understood the NRC staff's needs concerning GEN-08 and would provide a response by February 22, 2010.

GEN-09

Luminant stated that the sanitary wastewater systems would be similar to the current operating Units 1 and 2 systems and that the new system would replace the current system. Additionally, Luminant is using Allied Waste, who operates a Class 1 landfill, for their disposal service. Luminant stated that they would provide a complete response to GEN-09 by February 22, 2010.

GEN-10

NRC staff stated that estimates are necessary for the source and quantities of materials and waste to be disposed of or recycled supplied to the construction site for establishing the utility services and providing the services during construction. Additionally, the NRC staff needed information regarding the method of how these waste would be disposed.

Luminant stated that the subcontractors who would work on the proposed construction of Units 3 and 4 handle the construction of their own utilities. However, Luminant will research construction projects of similar size and provide an estimate in response to GEN-10. Luminant stated that they will provide a response to GEN-10 by February 22, 2010 but they may need a teleconference to clarify the NRC staff's request.

GEN-11

Luminant stated that they would not burn any vegetation. Instead, Luminant plans to chip and mulch vegetation removed from the construction areas. Luminant plans to utilize the mulch as part of best management practices for storm water pollution prevention. Luminant stated that they will provide a more detailed response to GEN-11 by February 22, 2010.

GEN-12

Luminant stated that they currently do not have complete construction details of the activities related to the construction of the intake/discharge pipes. They indicated that they were unsure whether dredging will be needed and no coffer dams will be used. Luminant stated that they will research the construction of the intake structure used for the current operating facility and provide additional detail in response to GEN-12. Luminant indicated that they may need an additional teleconference to clarify GEN-12.

GEN-13

Luminant indicated that they are communicating with ENCOR, a transmission system operator in Texas. Additionally, Luminant indicated that they understand the NRC staff's information need and will provide a response by February 22, 2010. Luminant also indicated that they would keep the NRC staff informed if additional time is needed to respond.

GEN-14

Luminant stated that they understood the NRC staff's information needs regarding GEN-14 and would provide a revised Table 3.6-6 in the environmental report (ER) by February 22, 2010.

GEN-15

Luminant stated that the Construction Environmental Controls Plan has not been developed. However, Luminant stated that all other documents requested in GEN-15 would be provided by February 22, 2010.

HYD-11

The NRC staff stated that they need information regarding mixing zone affects during low flow conditions in Lake Granbury.

Luminant stated that they would review HYD-11 to determine if there is additional information available. Additionally, Luminant indicated that a public teleconference maybe warranted to address HYD-11.

HYD-13

The NRC staff stated that some of the notes provided in figure CVL-12-11-101-001 implied that there maybe unresolved issues regarding facilities related to the storm water pollution prevention.

Luminant stated that they will review the figure and provide a response by February 22, 2010.

HYD-15

The NRC staff stated that they need information to clarify the interactions between the Texas Commission on Environmental Quality (TCEQ) Water Availability Modeling (WAM) and the RiverWare modeling provided by Luminant.

Luminant provided a presentation during the meeting regarding the RiverWare modeling and the TCEQ WAM and water rights. Additionally, Luminant stated that they will provide an additional response to HYD-15 by February 22, 2010.

HYD-23

The NRC staff stated that the remaining information needed to close HYD-23 is discussed in ALT-03 and will be addressed during that discussion.

HYD-25

Luminant provided a presentation regarding water availability. Additionally, Luminant stated that they understood the staff's information needs regarding water rights presented in HYD-25 and will provide a response by February 22, 2010.

HYD-26

Luminant stated that the USGS flows may be based on 7Q2 values instead of 7Q10 values. Luminant stated that they understood the NRC staff's information needs regarding the Wheeler Branch Reservoir and will provide a response to HYD-26 by February 22, 2010.

HYD-27

Luminant stated that much of the information requested in HYD-27 can be found in the Final Safety Analysis Report (FSAR) and will provide a response which indicates where in the FSAR this information is located. Additionally, Luminant stated that they will provide a response by February 22, 2010.

HYD-28

Luminant stated that they will review the text and revise the data. Luminant stated that they will provide a response to HYD 28 by February 22, 2010.

HYD-29

Luminant stated that they will provide the reference citations and basis for selecting the reference criteria. Additionally, Luminant stated that they will provide a response to HYD-29 by February 22, 2010.

TE-11

The NRC staff stated that TE-11 is related to the information presented in TE-21 and both NRC and Luminant agreed to address TE-21 and TE-11 together.

TE-20

Luminant stated that they understood the information being requested in TE-20 and will re-examine the surveys performed in the area of the BDTF. Additionally, Luminant stated that they will provide a response to TE-20 by February 22, 2010.

TE-21

The NRC staff stated that they need information regarding salt drift, as well as fogging and icing potentially caused by the BDTF. The NRC staff informed Luminant that this information would be used to address TE-11 as well.

Luminant indicated that the ambient conditions of the water discharged to the evaporation ponds and the storage ponds would not result in an increase in fogging or icing conditions. Luminant also indicated that they would be using salt fencing to reduce the affects of salt drift. Luminant stated that they will provide a response to the TE-21 and TE-11 by February 22, 2010.

TE-04

The NRC requested additional information about the types of surveys conducted by Luminant for the golden-cheeked warbler in the footprint area of the BDTF. Luminant stated that an additional public teleconference call may be needed to clarify the types of data needed.

SOC-32

Luminant indicated that fixed docks on Lake Granbury would not be affected by water use and most docks on Possum Kingdom Lake are floating and would be unaffected. Luminant stated that they will provide a response to SOC-32 by February 22, 2010.

SOC-33

Luminant stated that they will research data for known subsistence fishing along the Brazos River downstream of the proposed new units. However, Luminant indicated that affects to water quality and quantity would not be present further than 50 miles from the proposed new units. Luminant stated that they will provide a response to SOC-33 by February 22, 2010.

HP-04

Luminant stated that the water retained in the BDTF evaporation ponds would not become a heat source sufficient to create a favorable environment for the growth of etiological agents. Luminant stated that a response would be provided by February 22, 2010.

ALT-03

The NRC staff stated that they need the following information regarding ALT-03: future project and flexibility requirements that were considered when comparing the proposed BDTF system and alternative BDTF system designs and scenarios; details regarding the redundant features of the closed-cycle system and compare the redundant features to those that may be necessary for the proposed BDTF system; details of the impacts associated with the redundant features for the proposed BDTF and the closed-cycle system alternative; estimate of the volume of solid waste that would need to be disposed of in alternative option 5; size and expected volume of the proposed BDTF system treatment pond for comparison with alternative option 5c treatment pond; and discussion on how the deep well injection option would compare to the proposed BDTF system under the proposed 2.4 cycles of concentration.

Luminant stated that they will review the information used to develop the alternatives for the BDTF system and provide a response by February 22, 2010.

AE-05

Luminant indicated that mitigation measures and best management practices could be used to avoid, minimize, and mitigate environmental effects. Additionally, Luminant stated that they will provide a response to AE-05 by February 22, 2010.

Questions and Comments

At the end of the business portion of the meeting, the NRC staff asked if any members of the public had any questions or comments for the NRC staff. No members of the public responded.

HP-04

Luminant stated that the water retained in the BDTF evaporation ponds would not become a heat source sufficient to create a favorable environment for the growth of etiological agents. Luminant stated that a response would be provided by February 22, 2010.

ALT-03

The NRC staff stated that they needed the following information regarding ALT-03: future project and flexibility requirements that were considered when comparing the proposed BDTF system and alternative BDTF system designs and scenarios; details regarding the redundant features of the closed-cycle system and compare the redundant features to those that may be necessary for the proposed BDTF system; details of the impacts associated with the redundant features for the proposed BDTF and the closed-cycle system alternative; estimate of the volume of solid waste that would need to be disposed of in alternative option 5; size and expected volume of the proposed BDTF system treatment pond for comparison with alternative option 5c treatment pond; and discussion on how the deep well injection option would compare to the proposed BDTF system under the proposed 2.4 cycles of concentration.

Luminant stated that they will review the information used to develop the alternatives for the BDTF system and provide a response by February 22, 2010.

AE-05

Luminant indicated that mitigation measures and best management practices could be used to avoid, minimize, and mitigate environmental effects. Additionally, Luminant stated that they will provide a response to AE-05 by February 22, 2010.

Questions and Comments

At the end of the business portion of the meeting, the NRC staff asked if any members of the public had any questions or comments for the NRC staff. No members of the public responded.

Docket Nos. 52-034 and 52-035

Distribution:

PUBLIC RidsNroDser RAP1 R/F MWillingham, NRO DPalmrose, NRO
 SMonarque, NRO GHatchett, NRO JBiggins, OGC SVrahoretis, OGC
 VDricks, RIV SBurnell, OPA RidsNroDserRap1 RidsNroDserRenv
 RidsNroDserRap2 RidsNroDserRap3 SBalwant, NRR HHamzehee, NRO
 RidsOgcMailCenter
 GZimmerman, ORNL (zimmermangp@ornl.gov)
 LMcCold, ORNL (mccoldln@ornl.gov)
 TGitnick, ISL (tgitnick@islinc.com)

ADAMS ACCESSION NO.:ML100560019

OFFICE	PM:RAP1:DSER:NRO	LA:RAP1:DSER:NRO	PM:RAP1:DSER:NRO	BC:RAP1:DSER:NRO
NAME	MWillingham /dep for/	GHawkins /gdh/	DPalmrose /dep/	GHatchett
DATE	02/24/2010	02/24/2010	02/26/2010	3/ 22 /2010

OFFICIAL RECORD COPY