

## PMComanchePeakPEm Resource

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**From:** Monarque, Stephen  
**Sent:** Thursday, August 02, 2012 8:04 AM  
**To:** Woodlan, Don; John.Only@luminant.com; Evans, Todd  
**Cc:** Roy, Tarun; ComanchePeakCOL Resource  
**Subject:** FW: CPNNP Software audit plan  
**Attachments:** CPNNP Final Audit plan 9-25--12 (2).docx

Don,

Since there have been significant changes from the draft software audit plan that I previously sent you, I am sending you a new version of the software audit plan.

Thanks,

Stephen Monarque  
Lead Project Manager  
Comanche Peak COL  
NRO/DNRL/LB2  
301-415-1544

**Hearing Identifier:** ComanchePeak\_COL\_Public  
**Email Number:** 1717

**Mail Envelope Properties** (9C2386A0C0BC584684916F7A0482B6CA7BC83BF42A)

**Subject:** FW: CPNNP Software audit plan  
**Sent Date:** 8/2/2012 8:03:45 AM  
**Received Date:** 8/2/2012 8:03:46 AM  
**From:** Monarque, Stephen

**Created By:** Stephen.Monarque@nrc.gov

**Recipients:**

"Roy, Tarun" <Tarun.Roy@nrc.gov>

Tracking Status: None

"ComanchePeakCOL Resource" <ComanchePeakCOL.Resource@nrc.gov>

Tracking Status: None

"Woodlan, Don" <Donald.Woodlan@luminant.com>

Tracking Status: None

"John.Only@luminant.com" <John.Only@luminant.com>

Tracking Status: None

"Evans, Todd" <Eric.Evans@luminant.com>

Tracking Status: None

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**Priority:** Standard

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**COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 3 AND 4  
COMBINED LICENSE APPLICATION  
NRC Audit of Seismic Hazard Software for  
the New Central and Eastern United States (CEUS), Seismic Source  
Characterization (SSC) model implementation**

**September 25 - 26, 2012**

**DOCKET NOS. 52-034 AND 52-035**

**Location :**

Mitsubishi Nuclear Energy Systems (MNES)  
1001, 19th Street North, Arlington,  
VA 22209  
MNES's Phone: 703-908-8040.

**Purpose:**

The NRC staff is preparing to audit distinct seismic hazard calculation software being used by the industry to respond to the near- term task force (NTTF) Recommendation 2.1, seismic request for additional information (RAIs) issued to all Combined License (COL) and Early Site Permit (ESP) applicants. The purpose of these planned audits is to review seismic hazard software and examine the implementation of the new seismic source models described in NUREG 2115, "Central and Eastern United States Seismic Source Characterization for Nuclear Facilities". The objective is to gain in-depth understanding of the seismic software being used and the implementation of the new seismic source model into the existing codes. Performing this audit will help the staff to conduct its reviews more efficiently when the full responses are submitted.

**Regulatory Audit Basis**

The basis for the audit is found in the following regulations:

- 10 CFR 100.23, "Geologic and seismic siting criteria"
- 10 CFR 52.79, "Contents of applications; technical information in final safety analysis report"

**Regulatory Audit Scope or Methodology**

1. Review seismic hazard software.
2. Review details of the implementation of the new Central and Eastern United States (CEUS) seismic source model in hazard calculations.

3. Review the CEUS Seismic Source Characterization (SSC) model input parameters.
4. Review new model implementation by comparing seismic hazard calculations conducted at the seven test sites presented in NUREG-2115.
5. Review any additional test run calculations and conduct test runs.
6. Review application of the new cumulative absolute velocity (CAV) filter settings for removing effect of non-damaging earthquakes in seismic hazard calculations.

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#### **Information and Other Material Necessary for Audit:**

Luminant is requested to provide the following information and logistical support for the duration of the audit.

- All documents, such as calculation reports, sources of data and methods, and computer codes and Q/A documentation for the computer codes that are relevant for the discussion.
- Audiovisual equipment that might be necessary for the discussion, including a computer display projector.
- Subject matter experts responsible for the technical analysis are requested to be available for the duration of the audit.

#### **Audit Team:**

The NRC staff attending the audit will include the NRC technical reviewer, in addition to the project management personnel. The following personnel will participate in the audit:

Tarun Roy, NRC  
Dogan Seber, NRC

**Logistics:**

The NRC staff expects the audit to last for about one and a half days. The audit is scheduled to start on Tuesday, September 25, 2012, and end on Wednesday, September 26, 2012. The audit will occur at Mitsubishi Nuclear Energy Systems office, located at  
1001, 19th Street North,  
Arlington,  
VA 22209  
MNES 's Phone: 703-908-8040.

The NRC staff will conduct an entrance meeting scheduled for Tuesday, September 25, 2012, starting at 9:00 a.m. The audit will conclude with an exit briefing scheduled for Wednesday, September 26, 2012

**Deliverables:**

An audit report will be generated after the completion of the audit. The audit outcome will be used to identify any additional information which may need to be submitted for making regulatory decisions. The audit will assist the NRC staff in the preparation and issuance of RAIs for the licensing review of the Comanche Peak Nuclear Power Plant Combined License Application Unit 3 and 4.

Docket Nos. 52-034 and 52-035

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Docket Nos. 52-034 and 52-035

Enclosure:  
Audit Agenda

cc w/encl: See next page

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**ADAMS Accession No.: MLXXXXXXXXXX**

**NRC-001**

<b>OFFICE</b>	DNRL/LB2: PM	DNRL/LB2: LA	DSER/RGS1: BC
<b>NAME</b>	TRoy	CMurphy	RKaras
<b>DATE</b>	08/XX/2012	08/XX/2012	08/XX/2012
<b>OFFICE</b>	DNRL/LB2: PM	DNRL/LB2: BC	
<b>NAME</b>	SMonarque	ASnyder	
<b>DATE</b>	08/XX/2012	08/XX/2012	

## **Audit Agenda**

### **September 25, 2012**

9:00 am– 12:00 pm: Introduction and overview of the seismic hazard software, hazard calculation procedures, Q/A process and implementation, discussion on input model preparations, and hazard comparisons with the seven test sites.

1:000pm – 5:00pm: Q/A documentations review and discussions.

### **September 26, 2012**

9:00am- 1:00pm: Software test runs, confirmation of the new CEUS Source model input parameters, CAV implementation process, and audit closure.

Enclosure