May 11, 2001

Mr. C. Lance Terry
Senior Vice President &
Principal Nuclear Officer
TXU Electric
Attn: Regulatory Affairs Department
P. O. Box 1002
Glen Rose, TX 76043

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES), UNITS 1 AND 2 -

REQUEST FOR ADDITIONAL INFORMATION REGARDING POWER

INCREASE TO 3458 MWt (TAC NOS. MB1625 AND MB1626)

Dear Mr. Terry:

By letter dated April 5, 2001, you submitted proposed changes to the CPSES, Units 1 and 2 Facility Operating Licenses and technical specifications (TSs) to allow an increase in the maximum, licensed, thermal power output to 3458 MWt for each unit.

The Nuclear Regulatory Commission (NRC) staff has reviewed the information provided in the April 5, 2001, letter. In order for the NRC staff to complete its evaluation, a response to the enclosed request for additional information (RAI) is required.

The contents of this RAI have been discussed with Mr. D. Woodland of your staff on May 4, 2001, and a response time frame of ninety (90) days from receipt of this letter, was agreed to. If for any reason this date becomes unreasonable, please contact me at your earliest opportunity.

Sincerely,

/RA/

David H. Jaffe, Senior Project Manager, Section 1 Project Directorate IV & Decommissioning Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosure: Request for Additional Information

cc w/encl: See next page

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Docket Nos. 50-445 and 50-446

**DISTRIBUTION**:

Enclosure: Request for Additional Information

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ACCESSION NO: ML011340169

OFFICE	PDIV-1/PM	PDIV-1/LA	PDIV-2/SC
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DATE	5/10/01	5/10/01	5/11/01

## Comanche Peak Steam Electric Station

CC:

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Honorable Dale McPherson County Judge P. O. Box 851 Glen Rose, TX 76043 Office of the Governor ATTN: John Howard, Director Environmental and Natural Resources Policy P. O. Box 12428 Austin, TX 78711

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# REQUEST FOR ADDITIONAL INFORMATION

# **REGARDING POWER INCREASE TO 3458 MWt**

# TXU ELECTRIC, ET. AL.

## COMANCHE PEAK STEAM ELECTRIC STATION (CPSES), UNITS 1 AND 2

# DOCKET NOS. 50-445 AND 50-446

- DLPM1. The application indicates that an unspecified number of CPSES, Unit 1, balance of plant systems have not been fully analyzed. For each system, provide a description of the analyses to be completed, and a system-specific justification for the delay in the completion of the analyses.
- SPSB1. What design bases parameters, assumptions or methodologies were changed in the radiological design basis accident analyses because of the proposed changes? If there are many changes, it would be helpful to compare and contrast them in a table. Also, please provide justification for any changes.
- SPSB2. Please describe how the source terms utilized for your dose analyses were generated. Provide the methodology, codes, and databases utilized.
- SPSB3. Please provide the offsite and control room dose results from your accident analyses.
- Nuclear power plants are licensed to operate at a specified power, which, at operating power levels, is indicated in the control room by neutron flux instrumentation that has been calibrated to correspond to core thermal power. Core thermal power is determined by a calculation of the energy balance of the plant nuclear steam supply system. The accuracy of this calculation depends primarily upon the accuracy of measurement of flow, temperature, and pressure for feedwater, main steam, and various other systems that affect the secondary calorimetric calculations. Instrumentation for these measurements are not safety grade and their surveillance is not included in the plant technical specifications.

The proposed CPSES, Units 1 and 2, power uprates are, in part, based upon plant modifications that would result in improved accuracy of feedwater flow rate measurement, which is used to calculate reactor thermal power. Beside the feedwater flow rate input, the power calorimetric measurement uncertainty includes several other measured and calculated uncertainties, such as feedwater temperature and pressure, steam generator blowdown flow, steam enthalpy, and pump heat addition uncertainties. TXU Electric stated in Section 4A of Attachment 2 to the April 5, 2001, application that the Leading Edge Flow Meter (LEFM) provides measurement of feedwater flow and temperature yielding a ±0.6% Rated Thermal Power uncertainty in thermal power, and procedures for maintenance and surveillance of the LEFM are mentioned in Section 4F of the application.

Please submit a plant specific power calorimetric measurement uncertainty calculation, using an approved methodology, to establish the stated value of the uncertainty in thermal power measurement. In addition, please provide a description of the programs and procedures that will control calibration of the LEFM system and the pressure and temperature instrumentation whose measurement uncertainties affect the plant power calorimetric uncertainties. In this description, please include the procedures for:

- 1. Maintaining calibration,
- 2. Controlling software and hardware configuration,
- 3. Performing corrective actions,
- 4. Reporting deficiencies to the manufacturer, and
- 5. Receiving and addressing manufacturer deficiency reports.

DLPM = Division of Licensing Project Management

SPSB = Probabilistic Safety Assessment Branch

EEIB = Electrical and Instrumentation and Controls Branch