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Ref: #10CFR50.36

CPSES-200501532 Log # TXX-05131

July 20, 2005

U. S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES) DOCKET NOS. 50-445 AND 50-446 REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST (LAR) 05-002 REVISION TO TECHNICAL SPECIFICATION (TS) 5.6.5, "CORE OPERATING LIMITS REPORT (COLR)"

REF: Letter logged TXX-05087 dated April 27, 2005 from Mike Blevins to the NRC.

Gentlemen:

Per the above referenced letter, TXU Generation Company LP (TXU Power) requested an amendment to the CPSES Unit 1 and Unit 2 Operating Licenses to revise TS 5.6.5 entitled "Core Operating Limits Report (COLR)." The proposed request incorporates an additional reference into the list of analytical methods used to determine the core operating limits. On July 5, 2005, the NRC requested, via email, additional information regarding the referenced license amendment request. A conference call with the NRC Project Manager and technical reviewer was held on July 11, 2005, to ensure understanding of the requested information. The additional information requested by the NRC staff, as clarified during the July 11, 2005, conference call, is provided in the attachment to this letter.

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This communication contains no new licensing basis commitments regarding CPSES Units 1 and 2.

Should you have any questions, please contact Mr. J. D. Seawright at (254) 897-0140.

I state under penalty of perjury that the foregoing is true and correct.

Executed on July 20, 2005.

Sincerely,

TXU Generation Company LP

By: TXU Generation Management Company LLC Its General Partner

Mike Blevins

By: W. Madden

Director, Regulatory Affairs

JDS Attachment

c - B. S. Mallett, Region IV M. C. Thadani, NRR Resident Inspectors, CPSES Attachment to TXX-05131 Page 1 of 3

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION RE: CPSES LICENSE AMENDMENT REQUEST 05-002

NRC Question:

In its amendment request, TXU Power states the following: "[TXU Power's] nuclear design tools provide similar information as those tools referenced by Westinghouse in WCAP-13060-P-A." However, it is not clear from its submittal that TXU Power's nuclear design tools will evaluate all of the plant- and cycle-specific parameters that were considered in the staff's approval of the reconstitution methodology. Since a major component of the staff's approval of WCAP-13060-P-A was plant-specific reload analyses based on WCAP-9272-P-A, "Westinghouse Reload Safety Evaluation Methodology," the staff requests that TXU Power provide a summary of differences in the information provided between its NRC-approved nuclear design tools and WCAP-9272-P-A that are relevant to the analysis for reconstituted fuel assemblies operation in the reactor core.

TXU Power Response:

As described in WCAP-13060-P-A, the effects of reconstituted fuel assemblies are evaluated in four basic areas: 1) mechanical design, 2) nuclear design, 3) thermal-hydraulic (subchannel) design, and 4) transients and accident analyses. TXU Power will continue to use the fuel vendor (Westinghouse) to provide the evaluations of the acceptability of the mechanical design of any reconstituted fuel assemblies. The nuclear design tools used by TXU Power are described in the topical report RXE-89-003-P-A, "Steady State Reactor Physics Methodology." The effects of reconstituted fuel assemblies are explicitly considered and factored into the nuclear design parameters used as input to the safety analyses. These parameters encompass the parameters listed in Table 3-1 of WCAP-13060-P-A but are formatted for consistency with the TXU Power accident analysis methodologies. The thermal-hydraulic and transient and accident evaluations are then performed, using these nuclear design parameters as input, to ensure the relevant event acceptance limits are met. These evaluations are performed using the appropriate TXU Power analytical methodologies listed in Technical Specification 5.6.5.

NRC Question:

TXU Power stated that it performed a "demonstration exercise" to ensure that its nuclear design tools performed as expected by comparison with similar evaluations in WCAP-13060-P-A. The staff requests that TXU Power provide a description of the demonstration exercise performed and a summary of the results that supports its conclusion regarding the acceptability and performance of its nuclear design tools in analyzing reconstituted fuel assemblies.

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TXU Power Response:

The nuclear design tools used by TXU Power are described in the topical report RXE-89-003-P-A, "Steady State Reactor Physics Methodology." Included in the qualification of the methodology were analyses of small core critical experiments which contain a spectrum of geometries and materials. The results of the small core critical experiment qualification analyses provide assurance that the methodology can be reliably applied to the reconstituted fuel assembly configurations.

The nuclear design demonstration exercise described in the referenced License Amendment Request consisted of a review of the current configurations of the analytical tools used by TXU Power, as well as code error reports issued since the topical report was originally prepared. The basis for the application of TXU Power's Steady State Reactor Physics Methodology to reconstituted fuel assembly designs was confirmed to remain valid.

NRC Question:

With regard to its "demonstration exercise," TXU stated that it used the NRC-approved CPSES tools to demonstrate that, consistent with the sample results presented in WCAP-13060-P-A, the Departure from Nucleate Boiling Ratio (DNBR) for the reconstituted fuel assembly was calculated to be higher than the original assembly. The WCAP-13060-P-A sample results would have been performed in accordance with the Westinghouse reload methodology, WCAP-9272-P-A. The staff believes that for the comparison to be valid the analyses of the original and reconstituted fuel assemblies must be performed with the same analytical tool. The staff requests that TXU Power identify what analysis tools were used in the demonstration exercise for both the original and reconstituted fuel assemblies to demonstrate that the reconstituted assembly DNBR was limiting.

TXU Power Response:

The comparison of the DNBRs for the original and reconstituted fuel assemblies is based on analyses performed using TXU Power's approved subchannel analysis tool (described in Technical Specification 5.6.5.b, Item 12).

NRC Question:

In the staff's approval of WCAP-13060-P-A, it stated that the methodology is only applicable for those reconstituted assemblies with a mixing vane grid design. Although TXU Power's amendment request alludes to mixing vanes, it is not clear whether the licensee will only apply this methodology to those Westinghouse assemblies with a mixing vane grid design. Therefore, the staff requests that the licensee clearly identify whether the WCAP-13060-P-A methodology

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application will be restricted to reconstituted assemblies with a mixing vane grid design at CPSES.

TXU Power Response:

In accordance with the restrictions on the use of methodologies listed in Technical Specification 5.6.5, TXU Power will apply the reconstitution methodology described in WCAP-13060-P-A only to fuel assemblies with Westinghouse mixing vane grid designs.