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**Creation Date:** 4/22/02 7:02AM  
**From:** David Jaffe

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**From:** David Jaffe  
**To:** dbuschb1@txu.com  
**Date:** 4/22/02 7:02AM  
**Subject:** Slides for ZIRLO Meeting

Please review the attached and we'll get a date for the meeting.

DISCUSSION ITEMS  
FOR MAY MEETING WITH TXU  
RE: COMANCHE PEAK ZIRLO and IBFA FUEL

MEETING PURPOSE:

1. CLARIFYING DISCUSSION OF ERX-2001-005-P, AND OF SIMULATION OF ZIRLO PROPERTIES IN NON-LOCA EVENTS IN COMANCHE PEAK ACCIDENT AND TRANSIENT ANALYSES.
2. CLARIFYING DISCUSSION OF SIMULATION OF IFBA IN COMANCHE PEAK ACCIDENT AND TRANSIENT ANALYSES.

ZIRLO PROPERTIES

1. PROVIDE CHARTS OR TABLES SHOWING HOW ZIRLO IS SIMULATED IN COMANCHE PEAK ANALYSES (INCLUDING SRP 5.2.2 ANALYSES).
2. DISCUSS HOW FUEL CLADDING PROPERTIES ARE CONSERVATIVELY TREATED IN COMANCHE PEAK ANALYSIS MODELS (IT IS POSSIBLE THAT FOR SOME EVENT ANALYSES THE MODEL ASSUMPTIONS MAY MAKE THE CLADDING SIMULATION IRRELEVANT).
3. JUSTIFY THE CLADDING PROPERTY VALUES ASSUMED IN ANALYSES WHERE PREDICTED FUEL BEHAVIOR IS PREDICTED TO ENTER REGIMES (E.G. TEMPERATURES) OUTSIDE THE RANGE OF ZIRLO EXPERIMENTAL DATA (E.G. THERMAL CONDUCTIVITY).
4. JUSTIFY THE EMISSIVITY VALUE GIVEN ON PG. 2-21.
5. WHY DO RODEX2 AND ANF-RELAP USE DIFFERENT VALUES FOR POISSON 'S RATIO? (PG. 2-19)
6. SECTION 2.3.10.1 REFERENCES FIGURE B-1 FROM WCAP-12610 AS BASIS FOR THE ZIRLO/ZIRCALOY CREEPDOWN RATIO ASSUMED IN RODEX2. PLEASE GIVE JUSTIFICATION THAT THIS IS INDEED IS APPLICABLE RATHER THAN THE HIGHER VALUES SHOWN AT HIGHER ELEVATIONS (WHERE THERE SEEM TO BE MORE DATA POINTS OR MORE TIGHTLY DISTRIBUTED DATA.)
7. THE RANGE OF DATA FOR ZIRLO THERMAL CONDUCTIVITY REQUIRES EXTRAPOLATION FOR MANY ANALYTICAL CASES. JUSTIFY THAT THE TXU EXTRAPOLATION IS APPROPRIATE, SINCE THE REFERENCED MODELS ARE NOT NECESSARILY THE SAME AS TXU'S.
8. PLEASE FURTHER EXPLAIN THE WAY YOU IMPLEMENTED FIGURE 2.8 AND 2.9 (THERMAL EXPANSION).
9. PLEASE EXPLAIN YOU BURST (COMPOSITE) MODEL (FIGURES 2.14 AND 2.15).

IBFA

10. PLEASE DISCUSS THE IMPACT OF IBFA ON ACCIDENT AND TRANSIENT MODELS AND OPERATIONAL EXPERIENCE WITH IBFA. HOW MUCH EXPERIENCE IS THERE WITH IBFA/ZIRLO FUEL. DISCUSS HOW YOU PLAN TO PHASE IN THIS FUEL?