



3. Applicants have filed 16 motions for summary disposition on pipe support and pipe support design QA issues as part of their response to the Atomic Safety and Licensing Board's ("Board") "Memorandum and Order (Quality Assurance for Design)" (December 28, 1984). Eight of the 16 summary disposition motions explicitly reference specific pipe supports on one or more of the three piping systems listed in Mr. Vega's affidavit, viz., the Chemical Volume Control System ("CVCS"), the Reactor Coolant System ("RCS"), and the Residual Heat Removal System ("RHR"). Attachment A identifies the systems listed in Attachment B of Mr. Vega's affidavit which were explicitly referenced in eight of the Applicants' summary disposition motions.
  
4. I have also reviewed the Affidavit of Walton L. Jensen, Jr., and find that ten of the Applicants' summary disposition motions reference pipe supports on four backup systems listed in Paragraph 9 of Mr. Jensen's affidavit, viz., the Main Steam System ("MS"), the Component Cooling Water System ("CCWS"), the Service Water System ("SWS"), and the Auxiliary Feedwater System ("AFW"). Attachment A also identifies the specific backup systems listed by Mr. Jensen which were referenced in ten of the summary disposition motions.
  
5. I have reviewed the final draft of the proposed CPSES Technical Specifications to assess their impact on the Initial Startup Procedures ("ISUs") that are listed in the Applicants' Motion. Several

of the ISU procedures require the plant to attain Operational Mode 3 or "Hot Standby". The thermal expansion test proposed by the Applicants would attain temperatures and pressures of 557°F and 2236 psig, respectively. Mode 3 is defined in the proposed CPSES Technical Specifications as  $K_{eff} \leq 0.99$ ; percent thermal power = 0, and average coolant temperature equal to or greater than 350°F. (the operational Modes for CPSES are identified and described in Attachment B). However, the Applicants propose to limit  $K_{eff}$  to .950 or less for fuel load and precriticality testing. The Staff will impose a limitation in any fuel load and precriticality testing license to the more restrictive of .950  $K_{eff}$  or 2000 ppm boron in lieu of the proposed Technical Specification for CPSES (limiting  $K_{eff}$  to .990 or less).

6. The Staff also notes that Mr. Deviney states that "appropriate Technical Specification requirements must be met for applicable plant operational mode." The current draft of the Technical Specifications requires a larger number of systems than those identified by Messrs. Vega and Jensen to be operable during Mode 3, the Mode which would govern the details of operation during the proposed hot precritical testing. (The draft Technical Specifications referred to above are those transmitted from the NRC Staff to the Applicant by letter from B.J.Youngblood to M.D.Spence dated September 4, 1984. They may be modified by the Applicant before they are formally resubmitted by the Applicant for use in connection with any operating

license that may be issued including any low power or fuel loading license).

The above statements are true and correct to the best of my knowledge and belief.

Spottswood B. Burwell  
Spottswood B. Burwell

Subscribed and sworn to before me  
this 2nd day of November, 1984

Malinda A. McDonald  
Notary Public

My commission expires 7/1/86

SYSTEMS REFERENCED IN APPLICANTS' MOTIONS  
FOR SUMMARY DISPOSITION

<u>Motion for Summary Disposition**</u>	<u>Systems</u>							
	<u>Mr. Vega</u>			<u>Mr. Jensen</u>				
	<u>CVCS</u>	<u>RCS</u>	<u>RHR</u>	<u>MS</u>	<u>AFW</u>	<u>CCWS</u>	<u>SWS</u>	
QA Program for design of piping and pipe efforts	X	X	X	X		X		
U-Bolt Cinching	X	X	X	X			X	
U-Bolt as Two-way Restraints	X		X		X	X	X	
Generic Stiffness for Piping Design	X		X	X		X		
Richmond Inserts	X	X	X	X	X	X		
Stability					X	X	X	
Wall-to-Wall	X				X	X	X	
Force Distribution of Axial Restraint				X		X	X	
Damping Factors	X							
Fraction Factors							X	
Local Stresses and Displacements	X				X		X	

\*\*The summary disposition motions on ASME and AWS Codes for Welding, Upper Lateral Restraint, Safety Factors, Section Property Values, and Effects of Gaps on Seismic Response did not explicitly reference any systems mentioned by either Messrs. Vega or Jensen.

ATTACHMENT BCPSSES OPERATIONAL MODES

<u>MODE</u>	<u>DESIGNATION</u>	<u>REACTIVITY CONDITION, <math>k_{eff}</math></u>	<u>RATED THERMAL POWER</u>	<u>AVERAGE COOLANT TEMPERATURE</u>
1	Power Operation	$\geq 0.99$	5%	$\geq 350^{\circ}\text{F}$
2	Startup	$\geq 0.99$	5%	$\geq 350^{\circ}\text{F}$
3	Hot Standby	$< 0.99$	0%	$\geq 350^{\circ}\text{F}$
4	Hot Shutdown	$< 0.99$	0%	$200^{\circ}\text{F} < T_{avg} < 350^{\circ}\text{F}$
5	Cold Shutdown	$< 0.99$	0%	$\leq 200^{\circ}\text{F}$
6	Refueling	$\leq 0.95$	0%	$\leq 140^{\circ}\text{F}$

SPOTTSWOOD B. BURWELL  
PROFESSIONAL QUALIFICATIONS  
LICENSING BRANCH NO. 1  
DIVISION OF LICENSING  
OFFICE OF NUCLEAR REACTOR REGULATION  
U.S. NUCLEAR REGULATORY COMMISSION

I am a senior project manager assigned to Licensing Branch No. 1, Division of Licensing, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. I have been employed as a project manager since 1969 by the Nuclear Regulatory Commission and its predecessor the Atomic Energy Commission.

In this position I am responsible for managing and participating in the safety and environmental reviews, analyses, and evaluations associated with licensing actions regarding the design and operation of assigned nuclear power reactors. The plants for which I have this responsibility include the Comanche Peak Steam Electric Station.

I graduated from North Carolina State College with a Bachelor of Mechanical Engineering degree in 1948 and received a Master of Science degree in Mechanical Engineering from the same school in 1949. Following college I accepted employment with the Newport News Shipbuilding and Drydock Company and worked on piping analysis and process system design for two years. In 1951, I joined the David Taylor Model Basin (currently U.S. Naval Ship Research and Development Center) where I performed vibration tests on ships and shipboard machinery. In November 1952, I joined John I. Thompson and Company, consulting

engineers, where I was responsible for the preparation of instructions for the acceptance inspection and field assembly of naval ordinance.

In 1956, I joined the Nuclear Energy Products Division of ACF Industries, Incorporated. In May 1959, that division was sold to Allis-Chalmers. I remained with the Atomic Energy Division of Allis-Chalmers until 1967. While employed by ACF Industries and Allis-Chalmers, I served as project engineer, project manager and section leader for a series of design studies on research, military and commercial power reactors. In 1967, I joined NUS Corporation where I performed safety reviews of commercial power plants and equipment standards. I joined the Commission in June 1969.

Since joining the Commission I have attended courses on Nuclear Power Reactor Safety, Fire Protection for Nuclear Power Plants, and Pressurized Water Reactor (PWR) Systems.

I am a Registered Professional Engineer (1963, No. 4936) in the District of Columbia.