UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	§	
	§	
HOUSTON LIGHTING & POWER COMPANY	§	Docket No. 50-466
	§	
(Allens Creek Nuclear Generating Station, Unit No. 1)	§	

APPLICANT'S MOTION FOR SUMMARY DISPOSITION ON INTERVENOR DOHERTY'S CONTENTION NO. 31 AND TEXPIRG'S CONTENTION NO. 11

Applicant moves the Board under 10 CFR § 2.749 to grant summary disposition with respect to Intervenors Doherty's Contention No. 31 and TexPirg's Contention No. 11 relating to flow-induced vibration on reactor components. As shown in the accompanying statement of material facts as to which there is no genuine issue to be heard, and affidavit of Martin R. Torres, there is no issue to try in this proceeding and Applicant is entitled under § 2.749 to have these contentions summarily dismissed as a matter of law.

The Contentions

Doherty's Contention No. 31 states:

Intervenor contends coolant flow-induced vibration of the fuel assemblies will lead to degradation of the Local Power Range Monitor's (LPRM's) signal due to wear or other damage, to the extent reactivity monitoring and control in several significant fuel rods will become unreliable, exceeding the + 5.4 percent error in Radiation Monitoring Systems and leading to administrative derating of the reactor. Intervenor contends Applicant should provide additional LPRMs to give additional information on the BWR core's power characteristics sufficient to prevent either administrative derating or accident hazards such as power excursions. Current plans for 33 LPRMs are not sufficient.

TexPirg's Contention No. 11 states:

Applicant has not adequately assessed the effects of flow-induced vibration on jet pumps, spargers, fuel pins, core instrumentation, and fuel rods. Feedwater spargers failures occurred at five BWR units from 1975 to 1976, all due apparently to flow-induced vibration. Petitioner asks that a license be denied until an adequate assessment is presented by the Applicant.

Argument

Intervenors' allegations that Applicant has not adequately assessed the effects of flow-induced vibration on certain reactor components is without factual basis. As the statement of material facts as to which there is no genuine issue to be heard and accompanying affidavit of Martin R. Torres demonstrate, General Electric has thoroughly analyzed the phenomenon of flow-induced vibration, its effect on reactor components and has factored the results of these analyses into the ACNGS design. Mr. Doherty's specific concern has been entirely eliminated since ACNGS will not have in its design by-pass flow holes which were the cause of vibration of the LPRM tubes at the Duane Arnold and Cooper nuclear plants.

A dynamic system analysis has been conducted by General Electric which analyzes flow-induced vibration during normal reactor operation. This analysis has been used in designing and testing of reactor components and for establishing pre-operational testing criteria. Individual component tests, such as flow tests and forced oscillation tests, have been conducted to verify the ACNGS design. In addition, extensive vibratory testing will be conducted on a prototype plant (now designated as Perry Unit 1) in accordance with the provisions of Regulatory Guide 1.20, which testing will precede the operation of ACNGS. Moreover, additional pre-operational testing for flow-induced vibration will be conducted at ACNGS in accordance with the testing provisions of Regulatory Guide 1.20.

These analyses and testing programs and the resulting design changes made at ACNGS clearly demonstrate that, contrary to Intervenors' assertions, Applicant has adequately considered flow-induced vibration and its effects on reactor components.

Finally, vibration of reactor internals has never in the past caused a reduction in plant safety, nor an inability to achieve safe plant shutdown. In the past, reactor monitoring systems, such as the loose parts monitoring system to be installed at ACNGS, have revealed vibration problems long before they are of concern.

Accordingly, there is no genuine issue of material fact to be tried in this proceeding and Applicant is entitled to summary disposition on these contentions as a matter of law.