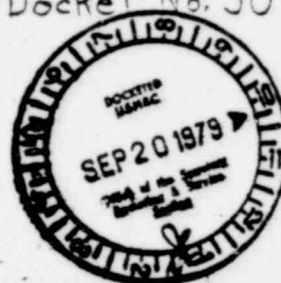


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United States of America
Nuclear Regulatory Commission
Before The Atomic Safety And
Licensing Board

In the Matter of
Houston Lighting & Power Co.
(Allens Creek Nuclear Gener-
ating Station, Unit 1)

Docket No. 50-466



Contention

I, Charles Andrew Pérez contend that a structural integrity test of the drywell at design pressure is insufficient because a loss of coolant accident in even the small or intermediate range can result in a temperature transient inside the containment of such a magnitude that the thermal shock received by the concrete reactor pedestal could result in cracking of the foundation and drywell to the point where its strength would be seriously affected, particularly for future seismic or LOCA transients, thus jeopardizing future public safety.

This accident type and its accumulated damages from heat and pressure shock are not sufficiently dealt with by structural integrity testing

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of the drywell area at design pressure.

This accident may already have occurred in 1971 at the Commonwealth Edison Dresden 2 and 3 Plants, where an accidental pressurization of the dry well created a temperature transient which destroyed most of the core monitoring cables, and may well have damaged the foundations and dry well area of these reactor vessels.

Because this design was a departure from past technology, General Electric built a $1/3$ scale Mark III mock-up to test this concept. In analyzing the resulting Mark III test data, it was discovered that the rapid discharge of air through the horizontal vents into the water resulted in a high vertical swell of the pool surface creating large hydrodynamic forces on structures and components above the suppression pool.

The dry well area is also subject to substantial load effects when safety-relief valves discharge into the suppression pool. This is not an abnormal event, but occurs on most load transients. At a number of plants relief valves have stuck open generating great heat pressure.