Florida Power
CORPORATION

October 4, 1984
3F1084-08

Director of Nuclear Reactor Regulation
Attention: Mr. Darrell G. Eisenhut, Director
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
NUREG-0737, Item II.K.2.16
Reactor Coolant Pump (RCP) Seal Damage

Dear Sir:

In accordance with your letter dated August 29, 1984, Florida Power Corporation hereby submits the requested information identified in your Safety Evaluation to demonstrate that the reactor coolant pump seal cooling system provides adequate cooling upon loss of offsite power.

At Crystal River Unit 3, reactor coolant pumps seals are provided with cooling water by the Nuclear Services Closed Cycle Cooling System (SW). This system consists of one normal service cooling water pump, two redundant emergency service pumps, heat exchangers and associated piping. The heat sink for this system is water from the Gulf of Mexico, pumped through the heat exchangers by the Nuclear Services Sea Water System (RW). The RW system also has one normal service and two redundant emergency service pumps. For both systems, the normal service pump is supplied with power from a non-emergency power supply system. The emergency pumps are supplied with power from the Engineered Safeguards power supplies which include redundant connections to the offsite power distribution system and diesel generators.

Following loss of offsite power, the diesel generators will automatically start and energize the Engineered Safeguards power supplies. The normal service RW and SW pumps will trip. This will result in a low discharge header pressure in both RW and SW systems which will cause an automatic starting of an emergency pump in both RW and SW systems.

A046
1/0

Automatic starting of emergency RW and SW pumps returns the RW and SW systems to full function. Nuclear Services Closed Cycle Cooling System (SW) water is circulated through the reactor coolant pump integral heat exchanger and thermal barrier heat exchanger, thus restoring cooling to the RCP seals.

Sincerely,

G. R. Westafer
Manager, Nuclear Operations
Licensing and Fuel Management

EMG/feb

STATE OF FLORIDA

COUNTY OF PINELLAS

G. R. Westafer states that he is the Manager, Nuclear Operations Licensing and Fuel Management for Florida Power Corporation; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission the information attached hereto; and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information, and belief.

G. R. Westafer
Manager, Nuclear Operations
Licensing and Fuel Management

Subscribed and sworn to before me, a Notary Public in and for the State and County above named, this 4th day of October, 1984.

Notary Public

Notary Public, State of Florida at Large,

My Commission Expires: November 19, 1986