

**Nuclear**

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August 5, 1982  
4400-82-L-0114

TMI Program Office  
Attn: Dr. B. J. Snyder, Program Director  
US Nuclear Regulatory Commission  
Washington, DC 20555

Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)  
Operating License No. DPR-73  
Docket No. 50-320  
Emergency Procedures and Training for Station Blackout Events

Reference: NRC Generic Letter D. G. Eisenhut (NRC) to all Licensees  
of Operating Nuclear Power Reactors and Applicants for  
Operating Licenses, dated February 25, 1981

The above referenced letter requested licensees to evaluate emergency  
procedures and training for station blackout events. GPU Nuclear has  
done so, and the following describes the evaluation performed.

A station blackout event at TMI-2 in its present post-accident condition  
would not result in a significant reduction in the ability to maintain  
the reactor coolant inventory or the ability to remove decay heat from  
the core. The only system that would be affected by the loss of AC power,  
and is currently being used in conjunction with the Reactor Coolant System,  
is the Standby Pressure Control (SPC) System. A station blackout event  
would result in a loss of instrument air to the SPC System as a result  
of the loss of AC power to the compressors that supply air to the  
instrument air system.

However, the SPC System itself is essentially passive in that the only  
function that is served by the instrument air system is the control of  
the pressure regulators. The loss of instrument air to the pressure  
regulators would eventually result in the decay of pressure in the  
Reactor Coolant System and the loss of the Reactor Coolant Inventory  
Makeup.

Currently, there is a small amount of leakage from the Reactor Coolant  
System (less than 0.1 gpm). Loss of the ability to make up inventory  
lost through this leakage will not result in any threat to core coverage.  
Since the quantity of leakage is small, a significant time period is  
available to recover AC power and consequently recover inventory (makeup)  
control. For example, a 0.1 gpm leakage for four (4) hours would result  
in a loss of twenty-four (24) gallons of RCS inventory which is very  
small when compared to the total RCS inventory of approximately 88,000  
gallons. Since the core decay heat generation rate is so low (less than

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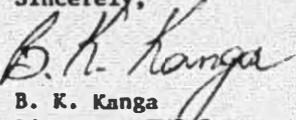
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40 kw) and the loss to ambient cooling mode has been proven effective, core and RCS cooling is not jeopardized.

Since the consequences of a station blackout at TMI-2 are minor because of the unique shutdown status of the unit, and because the time available for recovery is substantial, no specific instructions to cope with this event have been instituted at TMI-2 beyond those instructions available in existing emergency procedures for station blackout.

Sincerely,



B. K. Kanga  
Director, TMI-2

BKK/SWS/jep

CC: L. H. Barrett, Deputy Program Director, TMI Program Office