DN 50-320 NRC PUR Local PDR DCS TMI Site r/f TMI HO r/f May 25, 1984 BJSnyder NRC/TMI 84-035 LHBarrett TPoindexter MMasnik RWeller PGrant Mr. B. K. Kanga, Director AF as ano Three Mile Unit 2 RCook LChandler. GPU Nuclear Corporation P. O. Box 480 ACRS (16) Middletown, PA 17057 HRDenton I&E (3) M-Town Office Dear Mr. Kanga: Subject: Reactor Coolant Purification System Ion Exchanger Wastes I am responding to GPUNC letter 4410-84-L-0066, dated April 18, 1984, from E. Kintner to H. Denton requesting relief from the commitment to prepare the Reactor Coolant Purification System Ion Exchange resin for off-site shipment in late 1984. This commitment is contained in GPUNC letter 4410-82-L-0026 dated October 8, 1982. The bases for your request are that deferral of resin removal from the demineralizer vessels will not present a hazard to the public health and safety and that the deferral would allow additional resources to be devoted to the reactor defueling effort. Our review of your request and discussion of the technical issues with members of your staff in a meeting on May 15, 1984, concluded the following: Efforts already completed to characterize the contents of the demineralizer vessels indicate that there are no chemically corrosive species present and that the proposed elution process will be able to remove 90 percent of the activity from the resins. There are no hazards associated with combustible gas generation in the 2. demineralizer vessels because of the low gas generation rate and means exist for venting of the vessels to the waste gas system. 3. Deferral of resin removal and preparation for shipment will contribute significant resources to the defueling effort. 4. Delay of shipment of the purification demineralizer resins will not adversely impact future funding or planning for shipment of other abnormal wastes. 5. Delay of resin removal will not impact on any plans for future modifications to the spent resin tanks. We therefore approve your request for relief from your commitment contingent upon our approval of your Safety Evaluation Report (SER) for cesium elution. The SER will need to address the following technical issues related to storage of the eluted resin in the demineralizer vessels until later in the plant cleanup schedule. OFFICE 8406070359 840525 PDR ADOCK 05000320 OFFICIAL RECORD COPY NRC FORM 318 (10-80) NRCM 0240

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- You will proceed with plans to elute the cesium from the resin in the
  demineralizer vessels and process the eluent stream. The elution process
  will include acceptable means to quantitatively determine the
  effectiveness of the process. If the 90 percent activity removal goal is
  not met, you are requested to re-evaluate your purification demineralizer
  plans and report your conclusions to this office for our review.
- Upon completion of the elution, the resin will remain in the demineralizer vessels in water of such a quality to assure material compatibility and a non-corrosive environment commensurate with the planned length of the storage period.
- You will implement approved procedures for the monitoring and maintaining of the system integrity after elution.
- You will provide, operate and maintain present fire detection and protection equipment in the areas near the purification demineralizer cubicles.

If these issues are adequately addressed, deferral of the resin removal will not jeopardize the health and safety of the public, and the potential environmental effects from this action fall within the scope of conditions previously considered in the PEIS.

Lake H. Barrett Deputy Program Director TMI Program Office

cc: J. Barton

R. Rogan

E. Kintner

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