Consumers Power Company

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The following are responses to your questions on SEP Topic IX-3 Station Service and Cooling Water Systems for the Palisades Plant. The questions were telecopied to GSCashell on 6/21/79 and telephoned to DPHoffman (no date).

Question: What is the effect of loss of charging pump seal lubrication cooling system?

Answer: Loss of the seal cooling system will cause loss of the pumping capacity. The packing will soon deteriorate without the coolant due to frictional heat. If the packing fails completely, leakage to outside of the cylinder block may be great enough that all pumping ability is lost.

Question: Is the information regarding loss of CCW to reactor coolant pumps provided in FSAR Amendment 14, Question 4.2 still correct?

Answer: Yes, except that a pump seal failure may not result in pump seizure. The reactor coolant pump seal failure mode would be rupture of the seal, which may or may not lead to seizure of the pump, depending on the size of the rupture.

Question: What is the minimum lake level at which the service water pumps are still operable?

Answer: For a minimum expected lake level of 577' elev. (USGS) the calculated minimum intake bay level was 570' 3". The intake bay level was considered with the condenser circulating pumps in operation. These pumps have been removed with the addition of the cooling towers. The resultant down draft with replacement of the circulating water pumps with the dilution water pumps is considered much less. The minimum pump submergence is 39" above the suction bell, thiselevation is approximately 556.6'. The required NPSH is also available at this point.

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Question: Regarding the service water system (non-critical), what is the effect of loss of flow to:

a) Room 128 cooler
b) Auxiliary building addition air conditioning, and
c) ventilation equipment room air conditioning

Answer: a) Room 128 is an office
b,c) There would be no detrimental effects upon loss of either the auxiliary building air condition unit or ventilation equipment room air conditioning unit.

Question: Is the reactor shield cooling system considered to be a Class 3 system?

Answer: Yes.

Question: What procedure discusses the loss of the shield cooling system, and how significant is the loss of this system?

Answer: Procedures SOP-29 and D.1.8 are the operating and alarm procedures that inform the operator to begin an orderly shutdown if the concrete temperatures exceed 165^{o}F, i.e. if the system is lost.

Question: Do we letdown to perform cooldown? What is the procedure for cooldown? And is letdown necessary?

Answer: Letdown is normally done, the cooldown procedures are A5.8 and A5.9. Letdown is considered necessary for a normal cooldown but not necessary for an emergency cooldown.

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cc: SEP File Topic IX-3
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