

Duquesne Light Company

Beaver Valley Power Station
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November 27, 1991

JOHN D. SIEBER
Vice President - Nuclear Group

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

**Subject: Beaver Valley Power Station, Unit No. 1
Docket No. 50-334, License No. DPR-66
Request for Temporary Waiver of Compliance**

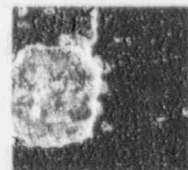
The purpose of this letter is to request NRC approval of a temporary waiver of compliance in meeting the Beaver Valley Unit No. 1 technical specifications. Unit No. 1 is currently in the restart phase following a plant shutdown of approximately 37 days. The Limiting Condition for Operation (LCO) for the auxiliary feedwater system requires at least three steam generator auxiliary feedwater pumps (two motor-driven, one steam turbine-driven) to be operable in modes 1, 2, and 3. Surveillance requirement 4.7.1.2.a.2 directs the plant to demonstrate operability of the steam turbine-driven auxiliary feedwater pump when the secondary steam pressure is greater than 600 psig. Therefore, entry into mode 3 is required to achieve test conditions. However, the action statement places a 72 hour restriction on the time allowed to declare an inoperable pump operable, otherwise, the plant must return to mode 4.

During testing of the turbine-driven auxiliary feedwater pump the pump demonstrated unstable performance necessitating repairs and retesting. At the time of failure there was approximately 50 hours remaining in the technical specification action statement for declaring this pump operable. It has been determined that repairs and retesting may take longer than the LCO action time. However, the work is expected to be completed within the following 48 hours.

This request is for a 48 hour extension of an action statement time limit to allow maintenance and testing to be completed to declare the pump operable. Prompt action is needed to avoid a short duration mode change back to mode 4, which would place an unnecessary thermal cycle on the reactor plant. Since the plant is in a restart sequence following an outage, it is anticipated that entry into mode 1 would occur within the next 40 hours.

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To <i>Paul Kaufman</i>	From <i>Steve Sovick</i>		
Co. <i>NRC</i>	Co. <i>DL</i>		
Dept. <i>Region 1</i>	Phone # <i>412-393-5211</i>		
Fax # <i>315-337-5349</i>	Fax # <i>412-643-4671</i>		

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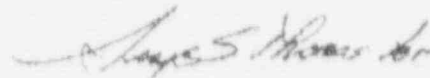
This request is characterized as a regional waiver of compliance since the relief is temporary and non-recurring such that a permanent license amendment is not appropriate. Plant safety is promoted by avoiding an unnecessary reactor plant thermal cycle and reactor start-up is supported by remaining in mode 3. Approval of this request precludes changing to mode 4 and delaying the present restart schedule.

Our evaluation of this request concludes there is no reduction of safety margin or changes to offsite dose assumptions since two motor driven auxiliary feedwater pumps are operable and capable of removing decay heat.

Additional details supporting this request are located in the enclosure which addresses the current understanding of the level of detail required with respect to requesting a temporary waiver of compliance. This request has been reviewed by our onsite safety committee.

If you have any questions regarding this submittal, please call Steve Sovick on (412) 393-5211.

Sincerely,



J. D. Sieber

- cc: Mr. J. Beall, Sr. Resident Inspector
- Mr. T. T. Martin, NRC Region I Administrator
- Mr. A. W. DeAgazio, Project Manager
- Mr. M. L. Bowling (VEPCO)

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To	Paul Kaufman	From	Steve Sovick
Co.	NRC	Co.	DLC
Dept.	Region 1	Phone #	412-393-5211
Fax #	215-337-5349	Fax #	412-643-4671

ATTACHMENT

Evaluation Supporting a Temporary Waiver of Compliance
(Re: Inoperable Steam Turbine-Driven Auxiliary Feedwater Pump)
Beaver Valley Power Station - Unit No. 1

1. Discuss the requirements for which a waiver is requested:

This waiver addresses Technical Specification Limiting Condition of Operation (LCO) 3.7.1.2.b "Auxiliary Feedwater System." The LCO requires the steam turbine-driven auxiliary feedwater pump be operable in modes 1, 2, and 3.

Surveillance requirement 4.7.1.2.a.2 directs the plant to demonstrate operability of the steam turbine-driven auxiliary feedwater pump when the secondary steam pressure is greater than 600 psia. Therefore, entry into mode 3 is required to achieve test conditions. The reason for this is that the plant has to heat up sufficiently to provide a steam source to operate the turbine-driven pump. While in this configuration, action statement "a" of LCO 3.7.1.2 is in effect, which requires restoring the inoperable pump to operable status within 72 hours or be in hot shutdown within the next 12 hours. Therefore, plant conditions and testing must be completed within this time period, otherwise, it is required that the plant return to mode 4.

We are unable to satisfactorily complete the required testing to declare the pump operable within the time constraints specified in the LCO action statement. Maintenance activities are in progress and testing is expected to be completed within 48 hours after the 72 hour action time expires. We, therefore, request a temporary waiver of compliance from meeting technical specification LCO action statement 3.7.1.2.a for a short duration of 48 hours so the plant may remain in mode 3 to complete the maintenance and testing on the steam turbine-driven auxiliary feedwater pump.

2. Discuss the circumstances surrounding the situation including the need for prompt action, and why the situation could not have been avoided:

Beaver Valley Unit No. 1 is performing the actions necessary to support restart following a 37 day outage. The plant is in mode 3 and it is anticipated that entry into mode 1 will occur within the next 40 hours.

The plant entered mode 3 at 2230 hours on November 25, 1991, and had to demonstrate operability of the steam turbine-driven auxiliary feedwater pump as stated in item 1 above. Testing to demonstrate operability began at approximately 2100 hours on November 26, however, the pump demonstrated unstable performance and the acceptance criteria of surveillance requirement 4.7.1.2.a.2 could not be satisfied.

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Maintenance activities were immediately initiated to replace the governor and assess other potential causes of the unstable performance, however, approximately 50 hours remained as the time required to declare this pump operable. It has been concluded that the maintenance and test activities cannot be completed within current time constraints. However, if a 48 hour extension to the action statement is granted, we will be able to complete the current maintenance and testing activities and avoid a thermal cycle back to mode 4.

3. Discuss compensatory actions (if any):

The plant will remain in mode 3 for the duration of the approved temporary waiver of compliance. We will open the reactor trip breakers and place them on clearance to remove the potential for plant heatup due to reactor criticality. Upon expiration of the temporary waiver we will adhere to the existing technical specifications.

4. Provide a preliminary evaluation of the safety significance and potential consequences of the proposed request:

The function of the auxiliary feedwater system is to provide a heat sink for the reactor coolant system. This is accomplished by providing 350 gpm flow to the steam generators while assuming a loss of offsite power and a single failure (ie: one emergency diesel generator fails to start). Both motor-driven auxiliary feedwater pumps are capable of providing 350 gpm flow and both are operable. Should one of these become inoperable, the plant would be placed in mode 4 as required by LCO 3.7.1.2. The turbine-driven auxiliary feedwater pump is designed to provide 700 gpm flow to the steam generators upon loss of offsite power or low-low steam generator level.

With the plant on a restart schedule following this outage, the potential radioactivity releases, due to an uncontrolled heatup of the reactor coolant system, are enveloped by the releases postulated in the DBA LOCA analysis in the UFSAR. This analysis assumes 102 percent power operation prior to the event and assumes that a core melt occurs. Therefore, there is no increase in radiological consequences.

One motor-driven auxiliary feedwater pump is all that is required to satisfy accident conditions. Current plant conditions (ie: available equipment, heat load, source term) all result in margin to assumed accident conditions. Maintaining the reactor trip breakers open assures the reactor will not go critical and add reactor heat or change the source term during this requested temporary waiver.

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Therefore, the extension of time in mode 3 with the steam-driven auxiliary feedwater pump inoperable will not impact the offsite radiological consequences of loss of offsite power or loss of feedwater events. There are no changes to the results of our safety analyses and, therefore, no increase in the potential consequences of any postulated accident.

By avoiding a thermal cycle on the reactor plant we are not imposing unnecessary actions on the plant and are maintaining the reactor start-up schedule, which would otherwise, be precluded by technical specifications. This proposed course of action involves no reduction in the plant's safety posture.

5. Discuss justification for the duration of the request:

This additional time is needed to avoid a short duration mode change back to mode 4. It is anticipated that the maintenance on the governor, the adjustments necessary to provide acceptable test results and the satisfactory completion of the operability test will be completed within the time requested in this temporary waiver of compliance (barring unforeseen additional problems). Approval of this short duration extension of the action statement will allow us to avoid an unnecessary thermal cycle on the reactor plant.

6. Provide a basis for the conclusion that the request does not involve a significant hazards consideration:

The change in the action statement time limit will not increase the probability of an accident previously evaluated. The auxiliary feedwater system will remain capable of removing decay heat from the reactor core. There is no safety analyses impact or change in offsite dose consequences as a result of remaining in mode 3 for an additional 48 hours. On this basis it is concluded that this request does not involve a significant hazards consideration.

7. Provide a basis for the conclusion that the request does not involve irreversible environmental consequences:

The offsite dose analyses and accident analyses are not affected. There is no planned release to the environment as a result of this request. Therefore, based on the continued ability of the auxiliary feedwater system to remove decay heat, and no postulated release to the environment, this change does not involve irreversible environmental consequences.