

DOCKET NUMBER

PETITION RULE PRM 50-40 (23)  
(51 FR 5086)



KANSAS GAS AND ELECTRIC COMPANY

DOCKETED  
USNRC

GLENN L KOESTER  
VICE PRESIDENT - NUCLEAR

April 19, 1986  
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OFFICE OF  
DOCKETING & SERVICES  
BRANCH

Secretary of the Commission  
Docketing and Services Branch  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

KMLNRC 86-066  
Re: Docket No. STN 50-482  
Subj: Comments on Petition for Rulemaking on ATWS

Dear Sir:

In the February 11, 1986 Federal Register, comments were requested on a petition for rulemaking on Anticipated Transient Without Scram (ATWS). The petitioner contends that the proposed rule would lessen any of a number of possible accidents that may occur if reactor is restarted after a reactor trip before ascertaining what caused the trip.

Kansas Gas and Electric Company (KG&E) has the following general comments:

Unnecessary thermal cycling of the plant creates a negative impact on safety. The proposed wording, "Following a power reactor trip, the licensee, if unable to determine that cause . . . in eight hours, shall be required to place the reactor in cold shutdown . . ." Placing the reactor in cold shutdown does not improve the reactor's situation with respect to an ATWS, as the reactor is already in a tripped condition. The real concern is determining the cause prior to restart. Forcing a licensee to a cold shutdown condition causes unnecessary thermal cycling of the primary and secondary plant.

An eight hour time limit to determine the cause of a trip imposes unnecessary pressures on the licensee to determine the cause. For trips occurring during the backshift hours or on weekends, this restriction is extremely harsh due to the time lost in contacting appropriate management and technical personnel to aid in the cause determination. This time limit may increase the potential for accepting a preliminary determination as the actual cause without adequate detailed verification of the root cause being

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William Lake, 11305 S

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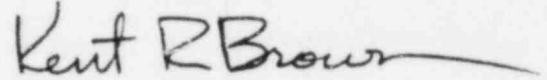
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April 18, 1986

performed. The proposed rulemaking will also prohibit low-power restarts to collect physics data for verification in the event dropped rods were the cause.

If you have any questions concerning this matter please contact me or Mr. O.L. Maynard of my staff.

Very truly yours,



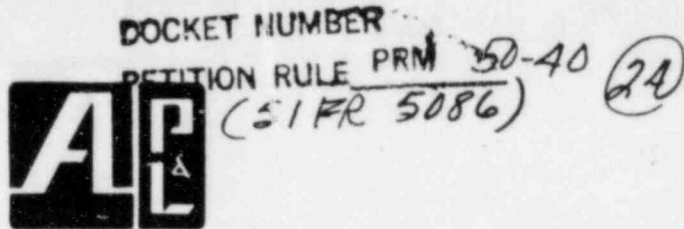
for

Glenn L. Koester  
Vice President - Nuclear

GLK:see

Attachment

cc: PO'Connor (2)  
JCummins



ARKANSAS POWER & LIGHT COMPANY

FIRST COMMERCIAL BUILDING/P.O. BOX 551/LITTLE ROCK, ARKANSAS 72203/(501) 371-7901

April 14, 1986

T. GENE CAMPBELL  
Vice President  
Nuclear Operations

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OFFICE OF SECRETARY  
DOCKETING & SERVICE  
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Mr. Samuel J. Chilk  
Secretary of the Commission  
Attention: Docketing and Service Branch  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

SUBJECT: Arkansas Nuclear One - Units 1 & 2  
Docket Nos. 50-313 and 50-368  
License Nos. DPR-51 and NPF-6  
Comments on Petition for Rulemaking Filed  
By John F. Doherty (51 Fed. Reg. 5086 Feb. 11, 1986)

Dear Mr. Chilk:

On Tuesday, February 11, 1986 the Nuclear Regulatory Commission published in the Federal Register a notice inviting public comments on a petition for rulemaking filed by John F. Doherty. This petition requests the NRC to adopt a rule that would state: "Following a power reactor trip, the licensee, if unable to determine the cause of the reactor (trip) in eight hours, shall be required to place the reactor in cold shutdown pending further study of the event." AP&L wishes to submit the following comments on this proposal.

The proposed rule is based upon an item in NUREG-1000, "Generic Implications of ATWS Events at the Salem Nuclear Power Plant." Section 2.2.3 of NUREG-1000 mentions that at one utility if the cause of a reactor trip cannot be determined within eight hours the plant is placed in cold shutdown. The point of this section of the NUREG is that the example utility's post trip policy "exhibits the intuitively questioning attitude that NRC encourages in its licensees" not that an eight hour time limit for determining the cause of a trip is desirable or necessary.

The imposition of an eight hour time limit would not assist the NRC to encourage an "intuitively questioning attitude." Instead it may encourage licensees to perform a rushed and less thorough evaluation to avoid being forced to cold shutdown. Under current regulations there are no time constraints for the licensee's review. This flexibility allows the licensee to conduct an orderly and comprehensive post trip review.

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add John Philips, 4000 M.H.B.S.  
William Lake, 113055

/o

APR 21 1986  
Acknowledged by NRC.

Being unnecessarily forced to cold shutdown condition in an arbitrarily specified time frame, also has several negative safety implications. First, plant personnel would likely receive increased occupational exposure due to the need to enter radiation areas to prepare systems for cold shutdown. Additionally, the combined activities of attempting to evaluate a trip in eight hours, placing the plant in cold shutdown, and then returning the plant to operation would place additional and unnecessary pressures on reactor operators and other plant personnel. The increased amount of radioactive waste generated during an unnecessary cold shutdown and return to power would penalize the licensee in terms of personnel exposure and the expense of disposing of the additional radioactive waste. The additional time required to return to operation from cold shutdown would result in an unnecessary expense to be borne by the licensee. Unnecessarily placing the plant in cold shutdown would also have many other less obvious negative effects. For example, unnecessary cyclic stresses on equipment such as the reactor coolant pump seals and the reactor vessel will result. Also, placing the plant in cold shutdown may require the unnecessary use of safety equipment such as low pressure injection. Any evaluation of this proposed rule should take all these potential results into consideration.

Additionally, the proposed rule provides insufficient justification for requiring that the particular cause or causes of the trip be specifically identified prior to restart. The possible causes of the scram could be narrowed down to two or more specific malfunctions, each of which can be compensated for so as to allow restart with no compromise to plant safety. The proposed rule would not allow restart under these circumstances until the exact cause was determined. There are also situations, due to the sophisticated electronic equipment used to protect the reactor core, where a spurious electrical signal may cause a reactor trip. These spurious signals may be generated by a lightning strike in the vicinity of the plant. Under these circumstances the licensee may be unable, no matter how long he is given, to definitely determine the cause of the trip. The inability of the licensee to determine the exact cause of the trip under these circumstances would not degrade the safe operation of the facility in any way. However, per the proposed rule, a root cause would be required to be determined within eight hours or the licensee would be penalized by unnecessarily going to cold shutdown. The proposed rule does not appear to provide any flexibility for this or any other unusual situation.

Although reactor trips are economically undesirable and challenge safety systems, the facility is specifically designed to safely recover from the ensuing transient. Of utmost importance is the proper response of safety systems to reactor trips. This is evident from an examination of the reporting requirements of 10CFR50.73 which require that a malfunction of a safety system be reported. However, a plant trip is not reportable unless a safety system is actuated or malfunctions. Also, the facilities license precludes the licensee from returning to power following a trip unless the necessary safety systems are functional. Thus, the proposed requirement to determine the exact cause of each trip restricts operation without providing additional protection to the public health and safety.

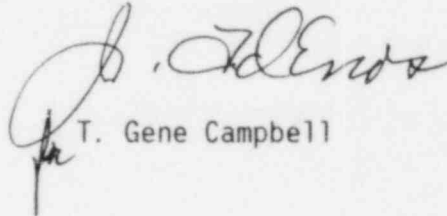
Mr. Samuel J. Chilk

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April 14, 1986

AP&L does agree that the determination of the root cause of a transient is very important. We are always striving to improve our own root cause determination. However, the arbitrary eight hour limit proposed in this rule would not result in a more comprehensive root cause determination. Therefore, this rule would not serve the stated purpose to "lessen any of a number of possible accidents that may occur if a reactor is restarted after a reactor trip before ascertaining what caused the trip" and should not be approved.

Very truly yours,



T. Gene Campbell

TGC/MCS/sg