August 24, 1998

Mr. Nathan L. Haskell
Director, Licensing
Palisades Plant
27780 Blue Star Memorial Highway
Covert, MI 49043

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING THE TECHNICAL SPECIFICATIONS CHANGE REQUEST TO CONVERT TO THE IMPROVED TECHNICAL SPECIFICATIONS FOR THE PALISADES PLANT (TAC NO. MA0805)

Dear Mr. Haskell:

On January 26, 1998, Consumers Energy submitted its request to convert the Palisades Nuclear Plant current technical specifications (CTS) to improved technical specifications (ITS). We have determined that we require additional information to complete our evaluation of ITS Sections 3.4 and 3.9. Please provide your response to the staff comments in the enclosure within 60 days of your receipt of this letter. The staff requests that you provide your response using the enclosed comment format, adding your responses where indicated in the enclosure. Should you have any questions, please do not hesitate to contact me at (301) 415-1312 or Mary Lynn Reardon of the Technical Specifications Branch at (301) 415-1177.

Sincerely,

ORIGINAL SIGNED BY

Robert G. Schaaf, Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-255
Enclosure: As stated
cc w/encl: See next page

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PALISADES IMPROVED TS REVIEW COMMENTS
SECTION 3.4, PRIMARY COOLANT SYSTEM

3.4-1

ITS 3.4.1
CTS 1.1
CTS 3.1.1
CTS 4.15
DOC A.2

CTS 3.1.1.c does not specify an applicability. DOC A.2 concludes that the applicability was intended to be for Power Operations, based on wording in CTS 4.15. CTS 1.1 Definitions defines Power Operations as the reactor critical above 2% power. DOC A.2 acknowledges that this definition is more restrictive than the ITS definition of Mode 1 (above 5% power), but still calls it an administrative change.

Comment: The DOC A.2 results in a less restrictive change to the CTS because the requirement no longer exists between 2% and 5% power. Provide additional discussion and justification for the less restrictive change.

Consumers Energy Response:

3.4-2

ITS 3.4.1.c
CTS 3.1.1.c
STS 3.4.1.c

ITS 3.4.1.c includes the words "when corrected to 532° F" for the total RCS flowrate. Although consistent with CTS 3.1.1.c, this is a deviation from STS 3.4.1.c.

Comment: No justification for this STS deviation is provided. Provide additional discussion and justification for the STS deviation based on current licensing basis.

Consumers Energy Response:

PALISADES IMPROVED TS REVIEW COMMENTS
SECTION 3.4, PRIMARY COOLANT SYSTEM

3.4-3

ITS 3.4.1.b
ITS 1.1
CTS 3.1.1.g
CTS 1.1
DOC A.3

CTS 3.1.1.g specifies an applicability for reactor inlet temperature as "during steady state power operation." ITS 3.4.1.b is applicable in Mode 1. CTS Definitions defines Power Operations as the reactor critical above 2% power. DOC A.3 acknowledges that this definition is more restrictive than the ITS definition of Mode 1 (above 5% power), but still calls it an administrative change. This results in a less restrictive change to the CTS because the requirement no longer exists between 2% and 5% power. It is also a more restrictive change because the CTS requirement only applied to steady state conditions. The ITS requirement exists during power changes since no allowance is specified.

Comment: Provide additional discussion and justification for the less restrictive change. Provide additional discussion and justification for the more restrictive change.

Consumers Energy Response:

3.4-4

ITS 3.4.1
STS 3.4.1
JFD 12

STS 3.4.1 Applicability includes an allowance for pressurizer pressure during power changes. ITS 3.4.1 Applicability deletes this allowance. JFD 12 states that the system design accommodates power changes within the limits of the Applicability allowance without causing a reactor trip. The JFD further states that power changes greater than these limits are not typically performed, and that Condition A would be entered in the event that changes greater than the limits occur.

Comment: This does not explain why the allowance is not needed. Elimination of the allowance would cause excessive and unnecessary entries into Condition A. Provide additional discussion and justification for deleting the allowance.

Consumers Energy Response:

PALISADES IMPROVED TS REVIEW COMMENTS
SECTION 3.4, PRIMARY COOLANT SYSTEM

3.4-5 ITS SR 3.4.3.1
STS SR 3.4.3.1
JFD 8

STS SR 3.4.3.1 contains a note which requires performance only during heatup/cooldown operations, or during inservice leak or hydrostatic testing. ITS SR 3.4.3.1 deletes the requirement for performance during the inservice leak or hydrostatic testing. JFD 8 states that the requirements are the same for inservice leak or hydrostatic pressure as during normal operation, so the note is not necessary.

Comment: This assumes that the licensee would consider the plant to be in a heatup/cooldown operation during such testing. This would not necessarily be the case, in which event the surveillance requirement does not apply. Provide additional discussion and justification for deleting the allowance.

Consumers Energy Response:

3.4-6 ITS 3.4.4
STS 3.4.4
DOC A.2
JFD 7

STS 3.4.4 requires two RCS loops "OPERABLE" and in operation. ITS 3.4.4 deletes the "OPERABLE" reference. JFD 7 provided a reasonable justification which the reviewer accepted. However, DOC A.2 (which relates to a different change) placed reliance on ITS 3.4.4 requiring two PCS loops "OPERABLE" and in operation.

Comment: This is in conflict with JFD 7. Provide additional discussion and justification to resolve the inconsistency.

Consumers Energy Response:

3.4-7 ITS 3.4.5
CTS 3.1.1.a
DOC A.3

CTS 3.1.1.a applies when the reactor is in cold shutdown or above. ITS 3.4.5 Applicability is Mode 3 (Hot Standby). DOC A.3 states that the ITS Mode 3 is included in the CTS requirement.

Comment: DOC A.3 does not explain the ITS relaxation of the requirement in Modes 4 and 5, which was included in the CTS. The relaxation of the Modes 4 and 5 requirement in the ITS is a less restrictive change. Provide additional discussion and justification for the relaxation in the ITS.

Consumers Energy Response:

3.4-8 ITS 3.4.5
CTS 3.1.1.a

CTS 3.1.1.a applies when a change is being made in the boron concentration. This could be either an increase or decrease in the concentration. An exception is provided for boron concentration increases during an emergency loss of flow condition only. ITS 3.4.5 provides an allowance for any reason up to an hour, and further allows increases in the boron concentration during a non-emergency suspension of RCS flow.

Comment: This results in a less restrictive change. Provide additional discussion and justification for the less restrictive change.

Consumers Energy Response:

3.4-9 ITS 3.4.5
CTS 3.1.1.a
DOC LA.1

CTS 3.1.1.a provides an exception to the RCS flow requirement, which was removed in ITS 3.4.5. An exception to a requirement is essentially an allowance. Removal of an allowance constitutes a more restrictive change. This deletion was considered a less restrictive change as described in DOC LA.1. Furthermore, such an allowance is already provided in ITS 3.4.5, as was described in Comment 3.4-8 above.

Comment: The reason for the classification of this change as less restrictive is not clear. Provide additional discussion and justification for this change.

Consumers Energy Response:

PALISADES IMPROVED TS REVIEW COMMENTS
SECTION 3.4, PRIMARY COOLANT SYSTEM

3.4-10 ITS 3.4.5 Action C
CTS 3.0.3
CTS 3.1.1.a and 3.1.1.d
DOCs M.1 and M.2

ITS 3.4.5 Action C requires immediate action when no RCS loop is Operable or in operation. CTS 3.1.1.a and 3.1.1.d provided no Action statement, thereby requiring entry in CTS 3.0.3. Once ITS 3.4.5 Action C is entered, no further action is required. This is less restrictive than the provisions of CTS 3.0.3, which requires placing the plant in a lower Mode. DOC M.1 and M.2 do not address this less restrictive change.

Comment: Provide additional discussion and justification for the less restrictive change.

Consumers Energy Response:

3.4-11 ITS 3.4.6
CTS 3.1.1.a
CTS 3.1.9.1
DOC A.2

The provisions of CTS 3.1.1.a when in Mode 4 are being deleted. ITS 3.4.6, which is intended to provide essentially the same requirements, was patterned after the provisions of CTS 3.1.9.1 as described in DOC A.2. While some provisions of CTS 3.1.9.1 are broader and more encompassing than those in CTS 3.1.1.a, two less restrictive changes result. CTS 3.1.9.1 does not preclude changes in boron concentration under no RCS flow conditions, and the overall Actions required under no RCS flow conditions in CTS 3.1.9.1 are less restrictive than those invoked by CTS 3.1.1.a (entry into CTS 3.0.3).

Comment: These less restrictive changes require appropriate discussion and justification. Provide additional discussion and justification for the less restrictive changes.

Consumers Energy Response:

3.4-12 ITS 3.4.6 Action A and Action B
CTS 3.1.9.1 Action 1.a

CTS 3.1.9.1 Action 1.a requires immediate action to restore a second PCS or SDC loop to operation when only one of the four (combined PCS and SDC) loops are operable. Two conditions could exist to result in this situation: (a) One PCS and both SDC loops inoperable; (b) Both PCS and one SDC loop inoperable. ITS 3.4.6 Action A requires the immediate restoration requirement for condition (a). However, ITS 3.4.6 Action B, which covers condition (b), does not include the immediate restoration requirement.

Comment: This is a less restrictive change. Provide additional discussion and justification for the less restrictive change.

Consumers Energy Response:

3.4-13 ITS 3.4.6 Actions
CTS 3.1.9.1
CTS 3.10.1.c
DOC A.5

The Actions required by CTS 3.10.1.c when RCS flowrate is less than the limit require specific actions associated with charging pumps and/or shutdown margin. These actions are deleted in ITS 3.4.6. DOC A.5 states that ITS 3.4.6 Actions (which are carried forward from CTS 3.1.9.1) are more restrictive because the time limit is shorter and they include suspension of all operations that can reduce boron concentration (vice just charging pumps). The specific shutdown margin requirements and the charging pump disabling/monitoring actions are not included in, or encompassed by, ITS 3.4.6 Actions.

Comment: This is a less restrictive change. Provide additional discussion and justification for the less restrictive change.

Consumers Energy Response:

PALISADES IMPROVED TS REVIEW COMMENTS
SECTION 3.4, PRIMARY COOLANT SYSTEM

3.4-14 ITS 3.4.7
CTS 3.1.1.a
CTS 3.1.9.2
DOC A.2

The provisions of CTS 3.1.1.a when in Mode 5 are being deleted. ITS 3.4.7, which is intended to provide essentially the same requirements, was patterned after the provisions of CTS 3.1.9.2 as described in DOC A.2. While some provisions of CTS 3.1.9.2 are broader and more encompassing than those in CTS 3.1.1.a, one less restrictive change results. CTS 3.1.9.2 does not preclude changes in boron concentration under no RCS flow conditions.

Comment: This less restrictive change requires appropriate discussion and justification. Provide additional discussion and justification for the less restrictive change.

Consumers Energy Response:

3.4-15 ITS 3.4.7
CTS 3.1.9.2 Exception 1.c
DOC L.1
DOC M.1

CTS 3.1.9.2 Exception 1.c requires both SDC loops operable for suspension of all core flow. ITS 3.4.7 deletes this requirement for a no flow condition. DOC L.1 states that this is acceptable because the steam generators would act as a heat sink due to their large quantity of secondary water. However, DOC M.1 (which relates to another change) states that the steam generators can not be considered a valid heat removal source because no steam is generated in Mode 5.

Comment: While it is acknowledged that these two DOCs are referring to different situations, DOC L.1 does not adequately address and explain these differences. Provide additional discussion and justification for the less restrictive change.

Consumers Energy Response:

3.4-16 ITS 3.4.7 Note 5

ITS 3.4.7 Note 5 provides an allowance for removing both SDC trains from operation during planned heatup to Mode 4. This allowance was not provided in the CTS. No discussion or justification is provided for this less restrictive change from the CTS.

Comment: Provide discussion and justification for the less restrictive change.

Consumers Energy Response:

PALISADES IMPROVED TS REVIEW COMMENTS
SECTION 3.4, PRIMARY COOLANT SYSTEM

3.4-17 ITS 3.4.7 Actions
CTS 3.1.9.2
CTS 3.10.1.c
DOC A.6

The Actions required by CTS 3.10.1.c when RCS flowrate is less than the limit require specific actions associated with charging pumps and/or shutdown margin. These actions are deleted in ITS 3.4.7. DOC A.6 states that ITS 3.4.7 Actions (which are carried forward from CTS 3.1.9.2) are more restrictive because the time limit is shorter and they include suspension of all operations that can reduce boron concentration (vice just charging pumps).

Comment: The specific shutdown margin requirements and the charging pump disabling/monitoring actions are not included in, or encompassed by, ITS 3.4.7 Actions. This is a less restrictive change. Provide additional discussion and justification for the less restrictive change.

Consumers Energy Response:

3.4-18 ITS 3.4.8 and ITS 3.4.8 Actions
CTS 3.10.1.c.2
DOC M.1

The Actions required by CTS 3.10.1.c.2 when RCS flowrate is less than the limit require specific actions associated with verifying charging pumps not operating and shutdown margin. These actions are deleted in ITS 3.4.8. DOC M.1 states that ITS 3.4.8 is more restrictive because RCS flow limits are carried forward from CTS 3.10.1.c and the Actions time limit for a flow limit violation is shorter.

Comment: The specific shutdown margin requirements and the charging pump monitoring actions are not included in, or encompassed by, ITS 3.4.8 Actions. This is a less restrictive change. Provide additional discussion and justification for the less restrictive change.

Consumers Energy Response:

PALISADES IMPROVED TS REVIEW COMMENTS
SECTION 3.4, PRIMARY COOLANT SYSTEM

3.4-19 ITS SR 3.4.9.2
CTS SR 3.4.9.2
JFD 16
TSTF-93

CTS SR 3.4.9.2 specifies a 92 day surveillance frequency for verifying the capacity of the pressurizer heaters. ITS SR 3.4.9.2 changes this frequency to 18 months. JFD 16 placed reliance on the content of TSTF-93.

Comment: Assure that modifications made to the TSTF following submittal of the Palisades ITS conversion request are included.

Consumers Energy Response:

3.4-20 ITS SR 3.4.14.1
CTS 3.3.3
DOC A.2

CTS 3.3.3 requires all PIVs to be tested prior to returning to power operations every time the plant has been in a refueling shutdown. ITS SR 3.4.14.1 deletes the frequency of post-refueling shutdown, and instead relies upon the frequency of after having been in Mode 5 for more than 7 days. DOC A.2 justifies this change as an administrative change based on a history of "generally" being in Mode 5 for at least 7 days during the transition from Mode 6 to Mode 4.

Comment: This appears to be based on historical data. It is not stated that it is impossible to transition through Mode 5 in less than 7 days, and the licensee did not provide technical justification for the length of delay. Furthermore, the qualification of "generally" indicates that this may have occurred in the past. Therefore, this change may be less restrictive, particularly in light of the industry trend to reduce the total length of refueling outages. Provide additional discussion and justification for the potentially less restrictive change.

Consumers Energy Response:

3.4-21 ITS 3.4.14.1
STS SR 3.4.14.1
JFD 19

STS SR 3.4.14.1 requires verification of PIV leakage within 24 hours following PIV actuation. ITS 3.4.14.1 deletes this requirement. JFD 19 places reliance on NRC's Order for Modification of License for Event V concerns.

Comment: Provide clarification regarding how the NRC Order, dated April 20, 1980, supports the proposed deviation from the STS.

PALISADES IMPROVED TS REVIEW COMMENTS
SECTION 3.4, PRIMARY COOLANT SYSTEM

Consumers Energy Response:

3.4-22 STS 3.4.15 Actions A through D
STS LCO 3.0.4 Actions A and B
JFD 6 and JFD 7
TSTF-60

STS 3.4.15 Actions A through D provide some differences depending on which of the leakage detection instruments are inoperable. One of these differences is an exemption from LCO 3.0.4, which only applies to Actions A and B. JFD 6 and JFD 7 explain these deviations to the STS, which comply with the CTS. However, JFD 7 places partial reliance on the provisions of TSTF-60.

Comment: Explain any of these changes that are not based on TSTF-60.

Consumers Energy Response:

3.4-23 ITS 3.4.15 Actions B.1 and B.2
STS 3.4.15 Actions E.1 and E.2
JFD 2

STS 3.4.15 Actions E.1 and E.2 specify completion times of 6 days and 36 days respectively. ITS 3.4.15 Actions B.1 and B.2 (changed from E.1 and E.2 due to deletion of previous actions) changed the completion times to 6 hours and 36 hours respectively. Although this appears to be a correction of typographical errors in the STS, this is not explicitly stated in the JFDs. JFD 2 generically refers to these deviations as editorial in nature.

Comment: Provide discussion and justification for the deviation from the STS. If the STS is in error, has a generic TSTF been submitted?

Consumers Energy Response:

3.3-24 STS 3.4.16 Action C.1
STS SR 3.4.16.2
ITS 3.4.16
CTS 3.1.4.e
JFD 7
TSTF-28

STS 3.4.16 Action C.1 requires the performance of STS SR 3.4.16.2 within 4 hours whenever gross specific activity is above the limits. CTS 3.1.4.e contains a similar requirement. ITS 3.4.16 deletes this requirement. JFD 7 states that this is due to conflicts within STS 3.4.16, and the fact that the sampling requirements of STS SR 3.4.16.2 will be performed anyway to verify restoration.

Comment: While the first argument appears to have some validity, the second argument leaves some questions. An example may be when the plant intends to shut down anyway, and therefore does not perform the sampling because of no desire or intention to immediately resume power operations. Furthermore, JFD 7 places reliance on the provisions of TSTF-28. Applicability and acceptance of this deviation from the STS is dependent upon TSTF-28, which has been approved, but some of the other discussion seems to differ from the TSTF and its correlation with the licensee's other arguments.

Consumers Energy Response:

PALISADES IMPROVED TS REVIEW COMMENTS
SECTION 3.9, REFUELING OPERATIONS

3.9-1 ITS 3.9.2
CTS 3.17.6.1.c
STS 3.9.2, ACTION B
TSTF-96

CTS 3.17.6.1.c requires verifying SHUTDOWN MARGIN within 4 hours and once each 12 hours thereafter when one or two Neutron Flux Monitoring channels are inoperable. STS 3.9.2, ACTION B, requires verifying the boron concentration within 4 hours and once per 12 hours thereafter when 2 required SRM's are inoperable. ITS 3.9.2 does not include verifying the boron concentration within 4 hours. The justification for the removal of the CTS requirement and deviation from the STS is based on TSTF-96.

Comment: Acceptance of this change is contingent on the NRC acceptance of TSTF-96.

Consumers Energy Response:

3.9-2 ITS 3.9.4
CTS 3.1.9.3 Action 1.b

CTS 3.1.9.3, Action 1.b, requires maintaining PCS temperature as low as practical with available equipment. ITS 3.9.4 does not include this requirement. The requirement is moved to unidentified plant procedures.

Comment: Identify appropriate document, e.g., bases, FSAR (TRM by reference), etc., to which the subject requirement will be relocated.

Consumers Energy Response: