

TECHNICAL SPECIFICATIONS:

3/4.4.4 RELIEF VALVES

3/4.4.9.3 OVERPRESSURE MITIGATING SYSTEMS

INTRODUCTION

Florida Power & Light Company has determined that these amendments involve a "no significant hazards consideration" determination by application of regulatory standards contained in 10 CFR 50.92. This determination ensures that operation of the facility in accordance with the proposed amendment would not

- (1) involve a significant increase in the probability or consequences of an accident previously evaluated,
- (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or
- (3) involve a significant reduction in a margin of safety.

The Nuclear Regulatory Commission has provided guidance concerning the application of these criteria by publishing examples (51 FR 7751) of amendments which are considered not likely to involve a Significant Hazard. Example (ii) relates to a change which constitutes an additional limitation, restriction or control not presently included in the Technical Specifications.

DESCRIPTION OF PROPOSED CHANGES

Technical Specification 3/4.4.4 RELIEF VALVES

Action statement a. includes the requirement to maintain power to block valves closed to isolate PORVs with excessive seat leakage because removal of power would render the block valves inoperable, and the requirements of action statement c. would apply. Power is maintained to the block valve(s) so that it is operable and may be opened subsequently to allow use of the PORV for reactor pressure control or decay heat removal. Closure of the block valve(s) establishes reactor coolant pressure boundary integrity in the case of a PORV with excess leakage. (Reactor coolant pressure boundary integrity takes priority over the capability of the PORV to mitigate an overpressure event.) This is a new action statement which constitutes an additional restriction not presently included in the Technical Specifications.

Action statements b. and c. include removal of power from a closed block valve to preclude inadvertent opening of the block valve isolating inoperable PORVs. (In contrast, action

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statement a. is intended to permit continued plant operation for a limited period with the block valves closed, i.e., continued operation is not dependent on maintenance at power to eliminate excessive PORV leakage. Therefore, action statement a. does not require removal of power from the block valve.) These are new action statements which constitute additional restrictions not presently included in the Technical Specifications.

Action statement d. establishes remedial measures consistent with the function of block valves. The most important reason for the capability to close the block valve is to isolate a stuck-open PORV. Therefore, if the block valve(s) cannot be either closed or restored to operable status within 1 hour, the remedial action is to place the PORV in manual control within the next hour to preclude its automatic opening, and thus avoid the potential for a stuck-open PORV at a time when the block valve is inoperable. The time allowed to restore the block valve(s) to operable status is consistent with the existing action statement and is based upon the remedial action time limits for inoperable PORVs per action statements b. and c. This action statement is revised to add additional restrictions not presently included in the Technical Specifications.

Additional editorial changes are proposed to clarify the intent of the Limiting Condition for Operation consistent with the Generic Letter 90-06 guidance and to maintain administrative consistency within the Turkey Point Technical Specifications.

Technical Specification 3/4.4.9.3 OVERPRESSURE MITIGATING SYSTEMS

With one PORV inoperable, the allowable outage time (AOT) is 7 days only in Mode 4, with an additional 8 hours provided for depressurization and venting of the RCS. In Mode 5, or in Mode 6 with the reactor head on, the AOT of a single inoperable PORV is reduced to 24 hours with an additional 8 hours (for a total of 32 hours) provided for depressurization and venting of the RCS. These action statements are revised to add additional restrictions not presently included in the Technical Specifications.

Additional editorial changes are proposed to clarify the intent of the action statements consistent with the Generic Letter 90-06 guidance and to maintain administrative consistency within the Turkey Point Technical Specifications.

Bases

FPL proposes to make changes to the Bases for Technical Specifications 3/4.4.4 consistent with the proposed Technical Specifications changes. The revision to the Bases provides additional clarification to the proposed Technical Specifications changes.

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Technical Specification 3/4.4.4 Relief Valves

Limiting Condition for Operation

- (1) Does operation of the facility in accordance with the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

The FPL proposed changes include changing the word "each" to "both" in reference to the two PORVs, and adding "and their associated" to expand the Technical Specifications to include both the PORVs and the block valves. These proposed changes are in accordance with the GL recommendations. This proposed change is editorial in nature and does not present an increase in the probability or consequences of an accident previously evaluated.

- (2) Does operation of the facility in accordance with the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change is editorial in nature and is in accordance with the GL recommendations. The proposed change does not impact plant equipment or change the operation of the facility. Therefore, it does not create the possibility of a new or different kind of accident from any accident previously evaluated.

- (3) Does operation of the facility in accordance with the proposed amendment involve a significant reduction in a margin of safety?

The proposed change is editorial in nature and is in accordance with the GL recommendations. The proposed change does not impact the safety analysis results as presented in the FSAR or the Technical Specifications, therefore, operation of the facility in accordance with the proposed amendment does not involve a reduction in a margin of safety.

Action Statements

Action Statements a, b, c, and d:

Action statement a. proposed by FPL is consistent with the GL recommendations and results in additional restrictions not presently included in the Technical Specifications. Action statements b, c, and d proposed by FPL differ from the suggested action statements in GL 90-06. The

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been previously evaluated and is not a new or different kind of accident. The proposed changes will not result in the PORVs or block valves being operated or used in a new or different manner. Therefore, the possibility of a new or different kind of accident is not created.

- (3) Does operation of the facility in accordance with the proposed amendment involve a significant reduction in a margin of safety?

Operation of the facility in accordance with the proposed amendment does not involve a significant reduction in a margin of safety. Overall plant safety would be enhanced as a result of the additional restrictions placed on PORVs and block valves.

Technical Specification 3/4.9.3 - Overpressure Mitigating Systems

Limiting Condition for Operation

- (1) Does operation of the facility in accordance with the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

The FPL proposed change adds the statement "(below an RCS average coolant temperature of 275°F)" defining more specifically the applicability statement for Mode 4. The proposed change is editorial in nature and is consistent with the current Turkey Point Technical Specifications. Therefore, operation of the facility with the proposed amendment does not present an increase in the probability or consequences of an accident previously evaluated.

- (2) Does operation of the facility in accordance with the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change is editorial in nature and is consistent with the current Turkey Point Technical Specifications. The proposed change does not impact plant equipment or change the operation of the facility. Therefore, it does not create the possibility of a new or different kind of accident from any accident previously evaluated.

- (3) Does operation of the facility in accordance with the proposed amendment involve a significant reduction in a margin of safety?

The proposed change is editorial in nature and is consistent with the current Turkey Point Technical

Specifications. The proposed change does not impact the safety analysis results as presented in the FSAR or the Technical Specifications, therefore, operation of the facility in accordance with the proposed amendment does not involve a reduction in a margin of safety.

Action Statements

Action Statement 3.4.9.3.b

- (1) Does operation of the facility in accordance with the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

FPL proposes to revise this action statement consistent with the GL recommendations. The FPL proposed change also adds the statement "(below an RCS average coolant temperature of 275°F)" defining more specifically the applicability statement for Mode 4. The proposed change is editorial in nature and is consistent with the current Turkey Point Technical Specifications. Therefore, as previously determined by the NRC in GL 90-06, this proposed change does not present an increase in the probability or consequences of an accident previously evaluated.

- (2) Does operation of the facility in accordance with the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change is in accordance with the GL recommendations. The proposed change does not impact plant equipment or change the operation of the facility. Therefore, as previously determined by the NRC in GL 90-06, it does not create the possibility of a new or different kind of accident from any accident previously evaluated.

- (3) Does operation of the facility in accordance with the proposed amendment involve a significant reduction in a margin of safety?

The proposed change is in accordance with the GL recommendations. The proposed change does not impact the safety analysis results as presented in the FSAR or the Technical Specifications, therefore, operation of the facility in accordance with the proposed amendment does not involve a reduction in a margin of safety.

Action Statement 3.4.9.3.c

- (1) Does operation of the facility in accordance with the proposed amendment involve a significant increase in the probability or consequences of an accident

differences are that the action statement time limits for 3.4.4.b, 3.4.4.c and 3.4.4.d are different in that they permit operation with one inoperable PORV or block valve as long as the associated block valve is closed with power removed from the block valve. Also, with both PORVs or block valves inoperable, it allows 1 hour to restore at least one PORV or block valve to OPERABLE status or to close the associated block valve with power removed from the block valve, and allows 30 days to restore at least one PORV or block valve to operable status.

- (1) Does operation of the facility in accordance with the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

FPL has performed plant specific analyses for feed and bleed using the MAAP 3.0B Computer Code, Rev. 16, for Turkey Point using a combination of best estimate and conservative analysis assumptions. These analyses show that feed and bleed is achievable using a single PORV, provided that it is opened within a certain time frame. Availability of the PORVs and block valves for feed and bleed does not represent a high sensitivity in reference to the total core melt frequency. This is primarily due to the diverse sources of feedwater available, including three steam driven auxiliary feedwater pumps and two electric driven feedwater pumps. Brief periods of unavailability of feed and bleed will have little impact on the plant's total core melt frequency. Therefore, a 30 day action statement for a single inoperable PORV is considered acceptable. These same arguments apply to the block valves.

Operation of the facility in accordance with the proposed amendments does not involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed amendments place more stringent Limiting Conditions for Operation on the facility. These include new and/or shorter allowable outage times for PORVs and associated block valves.

- (2) Does operation of the facility in accordance with the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Operation of the facility in accordance with the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. With the exception of a failed-open PORV, resulting in the equivalent of a small-break LOCA, the PORVs and block valves cannot initiate accident sequences. The case of a failed-open PORV has



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previously evaluated?

FPL proposes to include this action statement consistent with the GL recommendations. Addition of the words "with the reactor vessel head on," clarifies the MODES 5 or 6 condition of applicability consistent with the current Turkey Point Technical Specifications and in accordance with the GL recommendations. This action statement is revised to add additional restrictions not presently included in the Technical Specifications. Therefore, operation of the facility in accordance with the proposed change does not present an increase in the probability or consequences of an accident previously evaluated.

- (2) Does operation of the facility in accordance with the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change is in accordance with the GL recommendations. The proposed change does not impact plant equipment or change the operation of the facility. Therefore, it does not create the possibility of a new or different kind of accident from any accident previously evaluated.

- (3) Does operation of the facility in accordance with the proposed amendment involve a significant reduction in a margin of safety?

The proposed change is in accordance with the GL recommendations. The proposed change does not impact the safety analysis results as presented in the FSAR or the Technical Specifications, therefore, operation of the facility in accordance with the proposed amendment does not involve a reduction in a margin of safety.

Action Statement 3.4.9.3.d

- (1) Does operation of the facility in accordance with the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change is editorial in nature to maintain consistency with the GL recommendations and the Turkey Point Technical Specifications format. The time to complete depressurization and venting of the RCS with both PORVs inoperable has been maintained at 24 hours to allow for an orderly depressurization. This is consistent with the current Turkey Point Technical Specifications. FPL also proposes to add the words "either restore one PORV to operable status or" to provide additional clarification and consistency in format with the other action statements. This proposed

change is editorial in nature, therefore, operation of the facility in accordance with the proposed amendment does not present an increase in the probability or consequences of an accident previously evaluated.

- (2) Does operation of the facility in accordance with the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

This proposed change is editorial in nature, therefore, operation of the facility in accordance with the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed changes will not result in the PORVs or block valves being operated or used in a new or different manner. Therefore, the possibility of a new or different kind of accident is not created.

- (3) Does operation of the facility in accordance with the proposed amendment involve a significant reduction in a margin of safety?

This proposed change is editorial in nature, therefore, operation of the facility in accordance with the proposed amendment does not involve a reduction in a margin of safety.

Action Statement 3.4.9.3.e

- (1) Does operation of the facility in accordance with the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

This proposed change provides additional clarification to the requirements for the submittal of a Special Report. The proposed change is editorial in nature and does not present an increase in the probability or consequences of an accident previously evaluated.

- (2) Does operation of the facility in accordance with the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change is editorial in nature and does not impact plant equipment or change the operation of the facility. Therefore, it does not create the possibility of a new or different kind of accident from any accident previously evaluated.

- (3) Does operation of the facility in accordance with the proposed amendment involve a significant reduction in a margin of safety?

The proposed change is editorial in nature and does not impact the safety analysis results as presented in the FSAR or the Technical Specifications, therefore, operation of the facility in accordance with the proposed amendment does not involve a reduction in a margin of safety.

Based on the above, and on supporting technical justifications, Florida Power & Light Company has concluded that there are no significant hazards considerations involved in this amendment request.

**ATTACHMENT 3
TO L-92-285**

**Proposed Changes to
Turkey Point Units 3 and 4
Operating Licenses
DPR-31 and DPR-41**

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Page 3/4 4-36

Page 3/4 4-36a (New)

Page B 3/4 4-3

Page B 3/4 4-3a (New)

Page B 3/4 4-3b (New)

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REACTOR COOLANT SYSTEM

3/4.4.4 RELIEF VALVES

LIMITING CONDITION FOR OPERATION

3.4.4 Both power-operated relief valves (PORVs) and their associated block valves shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

- a. With one or both PORVs inoperable because of excessive leakage, within 1 hour either restore the PORV(s) to OPERABLE status or close the associated block valve(s) with power maintained to the block valve(s); otherwise be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With one PORV inoperable due to causes other than excessive leakage, within 1 hour either restore the PORV to OPERABLE status or close its associated block valve and remove power from the block valve; otherwise, be in HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- c. With both PORVs inoperable due to causes other than excessive leakage, within 1 hour either restore at least one PORV to OPERABLE status or close each PORV's associated block valve and remove power from the block valve; with both block valves closed with power removed, restore at least one PORV to OPERABLE status within 30 days and restore power to its associated block valve; otherwise, be in at least HOT STANDBY within the next 6 hours and HOT SHUTDOWN within the following 6 hours.
- d. With one or both block valve(s) inoperable, within 1 hour either restore the block valve(s) to OPERABLE status or close the block valve(s) and remove power from the block valve(s); otherwise, place its associated PORV in manual control within the next hour and be in at least HOT STANDBY within the next 6 hours and HOT SHUTDOWN within the following 6 hours. Restore at least one block valve to OPERABLE status within 30 days if both block valves are inoperable; otherwise, be in at least HOT STANDBY within the next 6 hours and HOT SHUTDOWN within the following 6 hours.
- e. The provisions of Specification 3.0.4 are not applicable.

REACTOR COOLANT SYSTEM

OVERPRESSURE MITIGATING SYSTEMS

LIMITING CONDITION FOR OPERATION

3.4.9.3 The high pressure safety injection flow paths to the Reactor Coolant System (RCS) shall be isolated, and below an RCS average coolant temperature of 275°F at least one of the following Overpressure Mitigating Systems shall be OPERABLE:

- a) Two power-operated relief valves (PORVs) with a lift setting of 415 ± 15 psig, or
- b) The RCS depressurized with a RCS vent of greater than or equal to 2.20 square inches.

APPLICABILITY: MODES 4 (below an RCS average coolant temperature of 275°F), 5, and 6 with the reactor vessel head on.

ACTION:

- a. With the high pressure safety injection flow paths to the RCS unisolated, restore isolation of these flow paths within 4 hours.
- b. With one PORV inoperable in MODE 4 (below an RCS average coolant temperature of 275°F), restore the inoperable PORV to OPERABLE status within 7 days or depressurize and vent the RCS through at least a 2.20 square inch vent within the next 8 hours.
- c. With one PORV inoperable in MODES 5 or 6 with the reactor vessel head on, either (1) restore the inoperable PORV to OPERABLE status within 24 hours, or (2) complete depressurization and venting of the RCS through at least a 2.20 square inch vent within a total of 32 hours, or (3) complete depressurization and venting of the RCS through at least one open PORV and associated block valve within a total of 32 hours.
- d. With both PORVs inoperable, either restore one PORV to OPERABLE status or complete depressurization and venting of the RCS through at least a 2.20 square inch vent within 24 hours.
- e. In the event either the PORVs or a 2.20 square inch vent is used to mitigate an RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days. The report shall

REACTOR COOLANT SYSTEM

OVERPRESSURE MITIGATING SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

describe the circumstances initiating the transient, the effect of the PORVs or RCS vent(s) on the transient, and any corrective action necessary to prevent recurrence. A Special Report is not required when such a transient is the result of water injection into the RCS for test purposes with an open vent path.

- f. The provisions of Specification 3.0.4 are not applicable.

REACTOR COOLANT SYSTEM

BASES

3/4.4.4 RELIEF VALVES

The opening of the power-operated relief valves (PORVs) fulfills no safety-related function and no credit is taken for their operation in the safety analysis for MODE 1, 2 or 3. Equipment necessary to establish PORV operability in Modes 1 and 2 is limited to Vital DC power and the Instrument Air system. Equipment necessary to establish block valve operability is limited to an AC power source. Each PORV has a remotely operated block valve to provide a positive shutoff capability should a PORV fail in the open position.

The OPERABILITY of the PORVs and block valves is determined on the basis of their being capable of performing the following functions:

- A. Manual control of PORVs to control reactor coolant system pressure. This is a function that is used as a back-up for the steam generator tube rupture and to support plant shutdown in the event of an Appendix R fire. These functions are considered to be important-to-safety, or Quality Related per the FPL Quality Assurance program.
- B. Maintaining the integrity of the reactor coolant pressure boundary. This is a function that is related to controlling identified leakage and ensuring the ability to detect unidentified reactor coolant pressure boundary leakage.
- C. Manual control of the block valve to: (1) unblock an isolated PORV to allow it to be used for manual control of reactor coolant system pressure, and (2) isolate a PORV with excessive leakage.
- D. Manual control of a block valve to isolate a stuck-open PORV.
- E. Ability to open or close the valve(s), consistent with the required function of the valve(s).

The PORVs are also used to provide automatic pressure control in order to reduce the challenges to the RCS code safety valves for overpressurization events. (The PORVs are not credited in the overpressure accident analyses as noted above.)

Surveillance Requirements provide the assurance that the PORVs and block valves can perform their functions. Specification 4.4.4.1 addresses PORVs, and 4.4.4.2 the block valves. The block valves are exempt from the surveillance requirements to cycle the valves when they have been closed to comply with the ACTION requirements.

REACTOR COOLANT SYSTEM

BASES

RELIEF VALVES (Continued)

This precludes the need to cycle the valves with full system differential pressure, or when maintenance is being performed to restore an inoperable PORV to operable status.

ACTION statement a. includes the requirement to maintain power to closed block valves because removal of power would render block valves inoperable, with respect to their ability to be reopened in a timely manner to support decay heat removal or depressurization through the PORVs, and the requirements of ACTION statement c. would apply. Power is maintained to the block valve(s) so that it is operable and may be opened subsequently to allow use of the PORV for reactor pressure control or decay heat removal by using feed and bleed. Closure of the block valve(s) establishes reactor coolant pressure boundary integrity in the case of a PORV with excess leakage or for bonnet or stem leakage on the PORV or block valve which is isolable. (Reactor coolant pressure boundary integrity takes priority over the capability of the PORV to mitigate an overpressure event.) However, the APPLICABILITY requirements of the Limiting Condition for Operation (LCO) to operate with the block valve(s) closed with power maintained to the block valve(s) are intended only to permit operation of the plant for a limited period of time not to exceed the next refueling outage (MODE 6) so that maintenance can be performed to eliminate the leakage condition.

ACTION statements b. and c. include removal of power from a closed block valve as additional assurance against inadvertent opening of the block valve at a time in which the PORV is inoperable for causes other than excessive seat leakage. (In contrast, ACTION statement a. is intended to permit continued plant operation for a limited period with the block valves closed, i.e., continued operation is not dependent on maintenance at power to eliminate excessive PORV leakage. Therefore, ACTION statement a. does not require removal of power from the block valve.)

ACTION statement d. establishes remedial measures consistent with the function of block valves. The most important reason for the capability to close the block valve is to isolate a stuck-open PORV. Therefore, if the block valve(s) cannot be restored to operable status within 1 hour, the remedial action is to place the PORV in manual control to preclude its automatic opening for an overpressure event, and thus avoid the potential for a stuck-open PORV at a time when the block valve is inoperable. The time allowed to restore the block valve(s) to operable status is based upon the remedial action time limits for inoperable

REACTOR COOLANT SYSTEM

BASES

RELIEF VALVES (Continued)

PORVs per ACTION statements b. and c. These actions are also consistent with the use of the PORVs to control reactor coolant system pressure if the block valves are inoperable at a time when they have been closed to isolate PORVs with excessive leakage.

