Florida
Power
CORPORATION
Crystal River Unit 3
Docket No. 50-302

December 29, 1995
3F1295-28

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Subject: Licensee Event Report (LER) 94-006-04

Dear Sir:

Enclosed is Licensee Event Report (LER) 94-006-04 which is submitted in accordance with 10 CFR 50.73. This supplement provides a revised corrective action completion schedule. Some of the activity scheduled dates previously provided were overly optimistic as discussed in our meeting in Atlanta on November 11, 1995. We have now completed approximately 70% of these corrective actions with an overall completion date of August 26, 1996.

Sincerely,

Ron Davis FOR B J. HICKLE

B. J. Hickle, Director
Nuclear Plant Operations

BJH/JAF

Attachment

xc: Regional Administrator, Region II
Project Manager, NRR
Senior Resident Inspector

IE22
1/1

NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 5/31/95

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HOURS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON DC 20503.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
CRYSTAL RIVER UNIT 3 (CR-3	0 5 0 0 0 3 0 2	1 OF 1 7

TITLE (4)

Deficiency in Understanding of Technical Requirements Leads to Nonconservative Safety Systems Setpoints and Violation of Improved Technical Specifications

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
0 1	1 8	9 5	9 4	— 0 0 6	— 0 4	1 2	2 9	9 5	N/A	0 5 0 0 0
									N/A	0 5 0 0 0

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (CHECK ONE OR MORE OF THE FOLLOWING) (11)			
POWER LEVEL (10)	1 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
J. A. Frijouf, Nuclear Regulatory Specialist	9 0 4 5 6 3 - 4 7 5 4

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines (16)

On October 6, 1994, Florida Power Corporation's (FPC) Crystal River Unit 3 (CR-3) was in MODE ONE (POWER OPERATION), operating at 100% power. It was determined that the potential existed for CR-3 to have operated outside plant Improved Technical Specifications (ITS) relative to the Reactor Protection System (RPS) setpoints. FPC personnel were reviewing a revised calculation when it was discovered that RPS setpoints may not be conservative relative to ITS. A further review of RPS setpoints determined that the Variable Low Pressure Trip (VLPT) setpoint was set at the ITS limit without provision for instrument error. The Shutdown Bypass trip setpoint was also found to be set at its ITS limit. This condition is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B). The remainder of the RPS trip setpoints were determined to be in compliance with ITS requirements. Subsequent evaluations determined that one Emergency Feedwater Initiation and Control System setpoint (EFIC) and two Engineered Safeguards Actuation System Bypass bistable setpoints were also potentially nonconservative relative to ITS. The cause of these events was personnel error. Corrective actions include: implementation of a setpoint action plan encompassing recalibration, procedure changes, and assuring adequate setpoints for other actuation systems.

EVENT DESCRIPTION

On October 6, 1994, Florida Power Corporation's (FPC) Crystal River Unit 3 (CR-3) was in MODE ONE (POWER OPERATION), operating at 100% reactor power and generating 880 megawatts. At that time it was determined that the potential existed for CR-3 to have operated outside plant Improved Technical Specifications (ITS) relative to the Reactor Protection System (RPS) setpoints.

RPS Description

Some functions of the RPS are designed to assure that specified acceptable fuel design limits are not exceeded during conditions of normal operation and anticipated transients. Other functions provide operator support under steady-state conditions. Still others anticipate or help mitigate various anticipated operational occurrences. The RPS initiates a reactor trip signal whenever preset RPS setpoints are exceeded.

The RPS consists of the following eleven separate trip functions:

1. Nuclear Overpower;
2. RCS High Outlet Temperature;
3. RCS High Pressure;
4. RCS Low Pressure;
5. RCS Variable Low Pressure;
6. Reactor Building High Pressure;
7. Reactor Coolant Pump Power Monitor;
8. Nuclear Overpower Based on RCS Flow And Measured Axial Power Imbalance;
9. Main Turbine Trip;
10. Loss Of Main Feedwater Pumps; and
11. Shutdown Bypass RCS High Pressure.

Figure 1 illustrates the reactor protection trips which define the normal operating envelope. Also included is a portion of the ITS Safety Limit Curve for Reactor Coolant System Departure From Nucleate Boiling (ITS Figure 2.1.1-1), and the Shutdown Bypass Pressure trip setpoint. The plant typically operates within the "normal operating box." Any change in parameters which results in an excursion outside the trip envelope will result in a reactor trip. The trip envelope comprises the area bounded by the low pressure limit of 1800 pounds per square inch-gauge (psig), the high pressure limit of 2355 psig, the high temperature limit of 618 degrees Fahrenheit, and the Variable Low Pressure Trip (VLPT) setpoint boundary (the lower right corner of trip envelope) determined by the equation [11.59 (Loop T_{hot}) - 5037.8] psig. The Shutdown Bypass trip setpoint is provided for periods of plant heatup, cooldown, or testing when it is desirable to maintain some control rods withdrawn with the reactor subcritical. This provides plant operators with a ready means to add negative reactivity to the core should shutdown margin be reduced inadvertently. In order to achieve this operational condition,

the reactor trip functions associated with RCS low pressure trip, nuclear overpower RCS flow and measured axial power imbalance trip, RCP overpower/underpower trip, and RCS variable low pressure trip are bypassed. A new high RCS pressure trip of 1720 psig is established. The Shutdown Bypass feature of the RPS is used for this purpose as permitted by ITS.

RPS Review

On September 14, 1994, FPC engineering personnel were reviewing a revised calculation for RPS string errors to determine how component drift had been accounted for. This was being done in anticipation of converting from an 18 month to a 24 month surveillance interval. The calculation (produced by the Nuclear Steam Supply System (NSSS) vendor) titled "Calculation for Statistical Errors - Crystal River 3 RPS" was a revision to a previous calculation. Factored into the revised calculation were the effects of increased temperatures resulting from main steam line break conditions. This enhancement was necessary to determine if the RPS instrument string trip setpoints were adequate under these conditions. The Summary of Results for the revised calculation stated that increased errors in the high temperature trip, VLPT temperature loops, and an increased pressure trip time response were established. These errors had been evaluated with respect to ITS Allowable Values and the analytical limits, and had been found to be acceptable. Figure 2 illustrates the relationship and effects of the analytical limits, ITS Allowable Value, and trip setpoint.

During the review it was determined that the RCS VLPT setpoint was established at the ITS Allowable Value (plus or minus as-left tolerance). No instrument error was used to offset the setpoint in a conservative direction. Therefore, the potential existed to exceed the ITS RCS VLPT Allowable Value due to previous "as-left" tolerance and/or instrument drift. An action plan was developed to evaluate the RPS VLPT trip setpoint, and further, to similarly evaluate all other RPS setpoints.

An analysis of the "as-left" data from a recent RPS calibration (March 15, 1994) and the "as-found" data for the VLPT, recorded via the September 30, 1994 work instructions, was conducted. The analysis determined that the VLPT setpoint for RPS channels B & D were found to be slightly outside the ITS curve. Based on this analysis, the two RPS VLPT channels would have tripped slightly outside ITS Allowable Values.

Additionally, the Shutdown Bypass trip setpoint was also found to be established at its ITS Allowable Value. With no error conservatively offsetting the RPS trip setpoint from the ITS Allowable Value, the Shutdown Bypass trip setpoint may have permitted operation outside the ITS Allowable Value. The remainder of the RPS trip setpoints were determined to be in compliance with ITS requirements.

EFIC Description

The Emergency Feedwater Initiation and Control (EFIC) system is designed to initiate Emergency Feedwater (EFW) flow based on plant conditions. It initiates EFW by starting pumps and opening block valves to provide a flow path to the steam generators. It then controls flow rate in order to maintain water level in the steam generators. The system is designed to provide the following functions:

1. Initiation of EFW,
2. Main steam line isolation,
3. Main feedwater isolation,
4. Provide EFW flow path to at least one Once Through Steam Generator (OTSG),
5. Prevent overheating,
6. Control OTSG level to the proper pre-selected setpoint, and
7. Minimize overcooling while increasing level to the natural circulation setpoint.

The EFIC system consists of four channels. Each channel receives analog input signals from dedicated level and pressure instruments associated with each OTSG. The system will actuate upon detection of any of the following conditions:

1. Loss of both main feedwater pumps,
2. Low level in either OTSG,
3. Loss of all reactor coolant pumps (RCP),
4. Low pressure in either OTSG,
5. Anticipated Transient Without Scram Mitigation System Actuation Circuitry (ATWS/AMSAC) actuation, and
6. High pressure injection (HPI) on both A and B Engineered Safeguards Actuation System (ESAS) channels.

EFIC Review

During a subsequent evaluation of the EFIC system in November 1994, it was determined that the EFW vector valve control, OTSG differential high pressure setpoint was potentially nonconservative relative to the ITS Allowable Value. The ITS Allowable Value for this function is 125 pounds per square inch differential (psid). The EFIC Monthly Functional Test (SP-146A), calibrates the setpoint to 126 psid with an as-left tolerance of approximately ±6 psid. The procedure's setpoint should have been less than 125 psid to include instrument error such that the ITS Allowable Value of 125 psid would not be exceeded. All other EFIC setpoints were determined to be appropriate.

ESAS Description

The Engineered Safeguard Actuation System (ESAS) is designed to detect conditions and actuate equipment required to mitigate accidents discussed in Chapter 14 of the Final Safety Analysis Report (FSAR). These accidents include:

1. Steam line failure accident,
2. OTSG tube rupture accident,
3. Loss of Coolant Accident (LOCA), and
4. Letdown line failure accident.

The ESAS functions to protect fuel cladding, ensure the integrity of the reactor building (RB), limit the maximum value of energy released by an accident, remove fission products from RB atmosphere in the event of a serious LOCA, and provide automatic loading of the standby diesel generators (EGDG) in the event of loss of offsite power. The ESAS performs these functions by detecting an accident and providing automatic actuation of the ESAS components required to obtain:

1. Emergency core cooling via HPI and Low pressure injection (LPI),
2. RB cooling and isolation,
3. EFW actuation, and
4. RB spray.

The ESAS actuates whenever two out of three channels indicate that a predetermined process parameter setpoint value is outside normal operating limits.

ESAS Review

On January 18, 1995, FPC personnel determined that the ESAS bypass and automatic reset bistable setpoints were nonconservative with respect to the ITS values. Two ESAS bypass bistables, consisting of HPI and LPI, were identified as having setpoints which allowed the auto-reset to occur above the ITS nominal values. The ESAS bypass bistables permit an operator to manually bypass the appropriate channel prior to actuation as the reactor is being shut down.

The ITS specified condition (nominal value) for the HPI bypass permit is 1700 psig and the existing setpoint was nonconservative relative to that setpoint. The ITS Bases erroneously referred to this setpoint as an Allowable Value, requiring error correction, rather than listing it as a nominal specified condition. An operations procedure administratively limits the reset level by requiring an operator to manually reset the bypass during startup at a pressure between 1550 and 1650 psig. Therefore, the 1700 psig value has never been exceeded with the HPI channels in bypass.

The ITS specified condition (nominal value) for the LPI bypass permit is 900 psig. The existing setpoint was nonconservative relative to the 900 psig setpoint. The

ITS Bases erroneously referred to this setpoint as an Allowable Value requiring error correction, rather than listing it as a nominal specified condition. An operations procedure administratively limits the reset level by requiring an operator to manually reset the bypass during startup at a pressure between 650 and 700 psig. Therefore, the 900 psig value has never been exceeded with the LPI channels in bypass.

For the HPI system, the ITS Allowable Value for actuation is 1500 psig, and the HPI actuation setpoint is 1540 psig, to account for a 40 psig instrument string error. A suspected nonconservatism relative to the 40 psig instrument string error value was recently identified; but subsequently dispositioned. The 40 psig instrument string error value did not consider a ±12.5 psig calibration "as-left" tolerance. When added to the 40 psig value for string error, this could potentially result in a worst case error of as much as 52.5 psig. This could have caused the setpoint to become non-conservative with respect to the ITS Allowable Value (lower limit) of 1500 psig. A calculation revision was performed which removed unnecessary conservatism, resulting in an instrument string error of less than 27 psig. When added to the "as-left" tolerance, the ITS Allowable Value is not exceeded. Therefore, the HPI actuation setpoint remained conservative relative to the ITS Allowable Value.

For the LPI system, the ITS Allowable Value for actuation is 500 psig, and the LPI actuation setpoint is 540 psig, to account for a 40 psig instrument string error. The concern previously addressed under HPI, relative to the 40 psig instrument string error, also applies to the LPI instrument error, and was dispositioned in the same manner as the HPI issue. Therefore, the LPI actuation setpoint remained conservative, relative to the ITS Allowable Value.

Reportability

Existence of these conditions allowed the potential for operation outside plant ITS which is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B).

EVENT EVALUATION

RPS Setpoints

By initiating a reactor trip when required, the RPS will limit the severity of the transient for each analyzed accident. The RPS consists of four identical channels. The system logic requires at least two of the four channels to trip before initiating a reactor trip. Although two of the four RPS VLPT channels had drifted slightly nonconservative relative to the ITS Allowable Value, the remaining two channels were set to trip the reactor prior to reaching the ITS Allowable Value. The conservatism between the trip setpoint and the analytical and safety limits would ensure that the reactor would trip prior to exceeding any analyzed safety

limits. Additionally, none of the FSAR Chapter 14 Design Bases Accidents credit the VLPT for accident mitigation.

The Shutdown Bypass trip setpoint is not applicable for MODE 1 plant operations, but becomes an operational aid at RCS pressures less than 1720 psig. The trip provides overpower and overpressure protection during plant heatup and cooldown. It should have been characterized as a nominal value in the ITS since no explicit technical basis exists for the 1720 psig trip setpoint. It is a compromise between the RPS low pressure trip setpoint (1800 psig) and the low end of the of the narrow range pressure instrumentation (1700 psig).

EFIC Setpoints

The EFIC OTSG Differential High Pressure setpoint is not taken credit for in any applicable safety analysis. The design verification study for Vector/FOGG Logic utilized a 150 psid setpoint, including a 25 psi margin for string error. Postulating a worst case as-left (prior to November 22, 1994) setpoint of 132 psid plus 12.38 psi string error, the maximum OTSG differential pressure actuation would occur at 144.38 psid, 5.62 psid below the verification study. Actual as-left data determined that the maximum as-left trip setpoint was 126.4 psid and the design basis was not exceeded. The ITS Allowable Value (provided by FPC) is in error.

ESAS Setpoints

The ESAS bypass bistables permit manually bypassing the appropriate channel prior to actuation of HPI and LPI as the reactor is being shut down. No credit is taken for automatic reset of ESAS Bypass functions in any design basis accident mitigation. Since accident mitigation is not a concern, higher reset values do not comprise a safety issue. Additionally, alarms are provided to annunciate below required pressures (1700 and 900 psig) if channels remain bypassed, and operating procedures have always ensured the functions were manually reset prior to reaching the ITS specified conditions (nominal values).

Therefore, these setpoint discrepancies did not have a significant effect on the margin of safety provided to the general public.

CAUSE

The primary cause of these events was an error by FPC personnel who developed the RPS calibration procedure in that they failed to recognize the fundamental difference between an equipment setpoint and a Technical Specification Allowable Value.

The cause for the human error resulting in the EFIC calibration value of 126 psid rather than the ITS Allowable Value of 125 psid was due to an oversight in the development and review of the ITS and the procedural changes done to support ITS conversion.

The ESAS Bypass bistable set-point discrepancy resulted from confusion relating to ITS setpoints, nominal values, and Allowable Values. The original FPC Technical Specification Improvement submittal was correct. Later changes made by the NRC staff were not correct, and were not detected nor corrected by FPC.

CORRECTIVE ACTION

Corrective actions for this event include the following.

1. The VLPT RPS, EFIC OTSG Differential High Pressure, and Shutdown Bypass setpoints have been adjusted/recalibrated to be conservative relative to the ITS Allowable Values and nominal values.

2. Engineering personnel will be required to review these events in order to ensure that future actions addressing setpoints will include proper consideration of instrument error.

3. The applicable procedures and Calibration Data Sheets will be revised to reflect the new RPS, EFIC OTSG Differential High Pressure, and ESAS Bypass Bistable setpoints.

4. An ITS Bases change has been completed to correct references to the ESAS Bypass Bistable reset functions from "Allowable Value" to "nominal setpoint."

5. ESAS Bypass Bistable reset setpoints have been moved to be conservative relative to the FSAR and ITS specified conditions.

6. A comprehensive setpoint action plan has been implemented to assure all ITS limits are appropriately incorporated into implementing documents. This action plan is described in detail in Attachment 1 to this LER. Any additional setpoints determined to be nonconservative relative to ITS limits will be reported via a supplement to this LER.

PREVIOUS SIMILAR EVENTS

There have been three previous reportable events involving RPS calibration issues (LERs 83-39, 87-16, and 88-25). There have been two previous reportable events involving EFIC calibration issues (LERs 83-39, and 88-08). There have been no previous reportable events involving ESAS calibration issues.

ATTACHMENTS

Attachment 1 Technical Specification Setpoint Action Plan provides a description of the program to assure all ITS limits are appropriately incorporated into implementing documents.

Figure 1 illustrates the reactor protection trip envelope, including a portion of the ITS Reactor Coolant System Departure From Nucleate Boiling (DNB) Safety Limit curve, and the Shutdown Bypass low pressure limit level.

Figure 2 illustrates the relationship of the safety limit, analytical limit, calibration setpoint, ITS limits, and instrument string error tolerance.

ATTACHMENT 1
TECHNICAL SPECIFICATION SETPOINT ACTION PLAN

Introduction

As a result of inconsistencies in the way trip setpoints were selected and verified by certain Surveillance Procedures, Florida Power Corporation (FPC) has put together a Action Plan to assure appropriate Improved Technical Specification (ITS) limits are protected. The plan consists of two major phases. The first phase is to review all Technical Specification limits and ensure they are properly applied in plant equipment and procedures.

During the second phase, FPC will compare appropriate Technical Specification limits with the applicable safety analysis to verify the most appropriate limit is in the Technical Specifications. FPC remains confident that the existing Technical Specification values are conservative. Technical Specification changes will be proposed where appropriate. These changes will propose less conservative limits in cases where it is determined that the setpoint is unnecessarily conservative or will correct the semantics used to describe certain other limits.

Phase 1

As part of Phase 1, plant equipment and procedural calibration setpoints are compared to the ITS values to ensure they are properly applied. The first step in this process is to assure that all limits designated as "Allowable Value" in the ITS are maintained in a conservative manner in plant equipment and procedures. An assessment of appropriate errors is performed and a comparison is then made between the Allowable Value in the ITS and the calibration setpoint used in the applicable surveillance procedure. If the setpoint in the procedure is not conservative with respect to the Allowable Value, the calibration setpoint in the plant is changed as quickly as can reasonably be done. In addition, the procedure is changed to make it conservative.

The second step is to determine which additional values must be error corrected in order to protect assumptions made in safety analyses. This is done by initially placing all Technical Specification values into one of four categories.

Category 1

Category 1 limits are Allowable Values. These are values that are correctly designated as "Allowable Value" in the specification. This does not include those that are referred to as such in the BASES only. Generally, these are limits established in safety analyses and design bases, and must be protected with conservative settings in the plant. These Allowable Values must be corrected such that it can be assured that, except on rare occasions, the "as-found" value during periodic surveillances will be conservative with

respect to the ITS Allowable Value. For values that are not correctly designated as an Allowable Value, Technical Specification changes will be proposed which will include justification for removal or modification. Examples already identified in the Reactor Protection System (RPS) include the Shutdown Bypass, Reactor Coolant Pump Power, Main Turbine Control Oil, and Main Feedwater Pump Control Oil Trip setpoints.

Category 2

Category 2 limits are limits that are relied upon in safety analyses or key design bases, and therefore should also be protected with conservative settings, but are not specifically designated as Allowable Values in the Technical Specifications. These limits are treated the same as Allowable Values in plant procedures. Most of these are not automatic actuations and therefore the adjustment occurs in the acceptance criteria for periodic surveillance and operating procedures, rather than the hardware. Any accident induced error will be considered in EOP development, not routine procedures.

Category 3

Category 3 limits are limits that are considered in the safety analyses or design bases but which are most appropriately treated as nominal setpoints that do not need to be protected with conservative settings. The justification for this treatment is most typically: while the function is an appropriate design feature, there is a wide range of acceptable values that can suffice to meet the need.

These limits are still treated as absolute limits and discovery of the setpoint outside the Technical Specification limit will still be considered a violation of the specification; however, set-back from the limit for setpoints may be based simply on historical equipment performance and engineering judgement rather than an explicit calculation. For limits checked by instrumentation, the instrument indication will be considered to accurately represent the value of the measured parameter.

Category 4

Category 4 limits are limits that are not considered in the design analysis. These limits are based on engineering judgement or industry guidance and can be treated as nominal setpoints. Error correcting these values would not be consistent with the original intent of their selection. These limits will be treated the same as Category 3 limits.

After this process is complete, Categories 1 and 2, and Categories 3 and 4 are merged, so that only two conditions (error adjusted or not) will exist. These conditions will be explicitly addressed in the ITS Bases.

Phase 2

In Phase 2 of the setpoint program, the existing trip setpoints will be re-evaluated for the purpose of extending the surveillance interval from 18 to 24 months. This evaluation will be performed using the guidelines established by Generic Letter 91-04 and adjusted to reflect only the appropriate instrumentation errors consistent with the methodology established by Part 2 of ISA-S67.04.

In the future, a more rigorous review of the bases for the current ITS values will be performed. The purpose of this effort would be to determine whether unnecessary conservatism was included in the development of the ITS values. A good example of this is Allowable Values which include drift and test equipment errors. These errors must also be included in the margin between the Allowable Value and the setting used in the plant in order to protect the Allowable Value as described above. This type of "double dipping" erodes plant operating margins without any enhancement in safety. In fact, spurious trips are counter-productive to safety.

Schedule

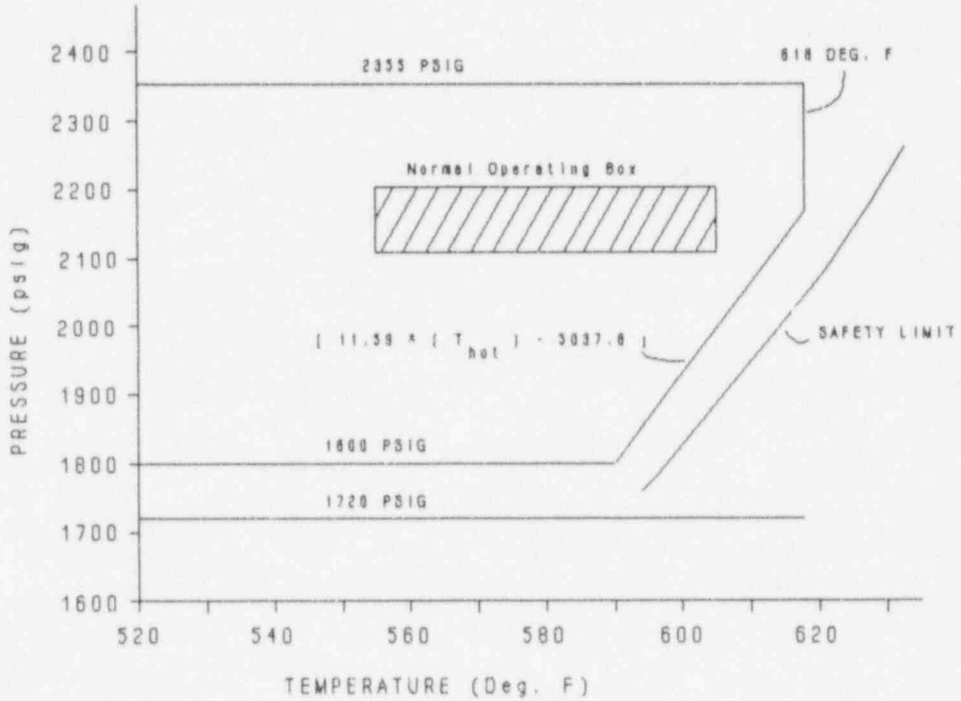
Setpoint Program Activity	Status	Completion Date
1. Revise the following setpoints to be conservative with ITS Allowable Values and nominal values: A. Variable Low Pressure Temperature (VLPT) for the Reactor Protection System (RPS) B. Emergency Feedwater Initiation & Control (EFIC) Once Through Steam Generator (OTSG) Differential Pressure High C. Shutdown Bypass for the RPS	COMPLETE	

2.	Revise ITS Bases to correct references to the Engineered Safeguards Actuation System (ESAS) Bypass Bistable reset functions from "Allowable Value" to "nominal setpoint".	COMPLETE	
3.	Revise ESAS Bypass Bistable reset setpoints to be conservative relative to the Final Safety Analysis Report (FSAR) and ITS specified conditions.	COMPLETE	
4.	Review plant setpoints to assure that they are conservative to ITS values (RPS, ESFAS and EFIC).	COMPLETE	
5.	Review ITS values and group according to category 1, 2, 3 or 4 as shown below: Category 1 - Limits that are specifically designated as Allowable Value in Technical Specifications. Category 2 - Limits that are the same as values used in a safety analysis (the analysis limit) and which have an impact on the performance of the safety function. Category 3 - Limits which are used in the safety analysis but which already contain sufficient margin to the analysis limit or which have negligible impact on the performance of the safety function. Category 4 - Limits which are not used in the safety analysis and which are based on engineering judgement and/or generic regulatory guidance.	COMPLETE	

6.	Identify Category 2 ITS values that need to be reviewed with respect to plant equipment and procedures.	COMPLETE	
7.	Issue programmatic guidance for design control of plant setpoints.	COMPLETE	
8.	ITS change request submitted to the NRC for the purpose of correcting references to Allowable Values.	COMPLETE	
9.	Engineering Personnel will be required to review these events in order to ensure that future actions addressing setpoints will include proper consideration of instrument error.	COMPLETE	
10.	Complete setpoint calculations for Category 1 ITS Allowable Values.	COMPLETE	
11.	Identify any procedures or plant setpoints that require immediate revision based on the results of the calculations for Category 1 ITS Allowable Values.	COMPLETE	
12.	Revise applicable procedures and Calibration Data Sheets to reflect the new RPS, EFIC OTSG Differential Pressure High and ESAS Bypass Bistable setpoints. Revisions will be completed prior to next scheduled performance.	IN PROGRESS	02/29/96
13.	Update the I&C Design Criteria Manual for handling setpoints.	IN PROGRESS	07/01/96
14.	Complete analysis of Category 2 ITS values that will be used in the development of procedural limits.	IN PROGRESS	07/29/96

15.	Identify plant procedures that will require revision based on the results of analysis of Category 2 ITS values.	SCHEDULED	08/12/96
16.	Complete procedure revisions to assure conservatism is applied to Category 1 and 2 ITS values.	SCHEDULED	08/26/96
17.	Revise the ITS bases to depict which values should be error corrected, which are nominal values and the bases for this determination.	SCHEDULED	08/26/96

FIGURE 1



REACTOR PROTECTION TRIP ENVELOPE

APPROVED OMB NO. 3150-0104

EXPIRES 5/31/95

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HOURS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
CRYSTAL RIVER UNIT 3 (CR-3)	0 5 0 0 0 3 0 2	9 4	--- 0 0 6	--- 0 4	1 7 OF 1 7

TEXT *(If more space is required, Use additional NRC Form 366A's (17)*

FIGURE 2

CR-3 Reactor Protection System		ISA-dRP67.04
Accident Analysis Setpoint/ Safety Limit	_____	Safety Limit
Analytical Limit (Found in B&W Safety Analysis	_____	Analytical Limit
(No Comparable Value)	_____	Allowable Value
Allowable Value/ Technical Specification Limit	_____	Trip Setpoint
As-found Tolerance	____	
As-left Tolerance	_____	
Actuation/Trip Setpoint	_____	(No Comparable Value)
As-left Tolerance	_____	
As-found Tolerance	____	
Operating Point Point	_____	Normal Operating