

10CFR50.59(d)(2)

10CFR72.48(d)(2)

November 5, 2010

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

Limerick Generating Station, Units 1 and 2
Facility Operating License Nos. NPF-39 and NPF-85
NRC Docket Nos. 50-352, 50-353 and 07200065

Subject: 24-Month 10CFR50.59 and 10CFR72.48 Evaluation Summary
Report For the Period July 1, 2008 through June 30, 2010

Attached is the 24-Month 10CFR50.59 and 10CFR72.48 Evaluation Summary Report for Limerick Units 1 and 2 for the period of July 1, 2008 through June 30, 2010, forwarded pursuant to 10CFR50.59(d)(2) and 10CFR72.48(d)(2). The report includes brief descriptions of any changes, tests and experiments, including a summary of the evaluation of each. Five plant changes were implemented using 10CFR50.59 Evaluations during this 24-month period. There were no plant changes implemented using 10CFR72.48 Evaluations during this 24-month period. The summaries of these changes are included in this report.

There are no commitments contained in this letter.

If you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,

Original signed by

William F. Maguire
Vice President – Limerick Generating Station
Exelon Generation Company, LLC

Attachment: Limerick Generating Station 24-Month 10CFR50.59 and 10CFR72.48
Evaluation Summary Report, July 1, 2008 through June 30, 2010

cc: W.M. Dean, Administrator Region I, US NRC
E.M. DiPaolo, USNRC Senior Resident Inspector, LGS

**10 CFR 50.59 Evaluation and
10 CFR 72.48 Evaluation
24-Month Summary Report
Limerick Generating Station
2010**

Note: This report summarizes 10 CFR 50.59 and 10CFR72.48 Evaluations that were approved between July 1, 2008 and June 30, 2010.

Evaluation number: LG2007E005 Rev.1
 50.59 Reviewer approval date: 06/25/09
 PORC number: 09-017
 PORC approval date: 6/25/09
 Implementing document: ECR 06-00510 and 09-00347
 Evaluator: Ron Hess
 Reviewer: Mike McGill

	Unit 1	Unit 2	Units 1 & 2	Common
Unit applicability:	[]	[]	[x]	[]
Complete on:	[]	[]	[x]	[]

Title:

Revisions to LGS Turbine System Maintenance Program (TSM)

Description of Activity:

This activity will make the following changes to the LGS Turbine System Maintenance Program (TSM Program).

- Extend the overspeed protection system testing frequencies from weekly to monthly
- Extend the LP Turbine Rotor inspection interval beyond 10 years to allow for 6 operating cycles between inspections.
- Eliminate the requirements from the UFSAR and TRM to inspect at least one main steam stop valve, one main steam control valve, and one combined intermediate valve every 40 months.

Reason for Activity:

Turbine-generator systems include performance of on-line simulated mechanical and electrical overspeed testing to demonstrate turbine trip system operability. Operating experience across the industry has seen a number of spurious SCRAMS that have occurred during the overspeed tests. The test frequency extension is being pursued in order to reduce the potential for reactor SCRAMS that are associated with the online overspeed testing.

The current 10 year low pressure turbine rotor inspection interval defined in the UFSAR was commensurate with previous NEIL insurance requirements that the turbines should be inspected every 8 years and “shall” be inspected every 10 years. Recently NEIL insurance requirements for low pressure (LP) turbines were extended to 100,000 operating hours with provisions to continue to operate when a unit reaches 100,000 hours during an operating cycle. The Turbine Missile Probability analysis supports 100,000 hours of operation between rotor disk inspections, which is slightly less than 6 operating cycles (assuming a two year refueling cycle and capacity factor greater than 95%). The current analysis contains sufficient margin to allow this inspection interval to be extended

to 110,000 operating hours without significant impact to the missile probability analysis results. The extension of the inspection interval to 110,000 operating hours will allow LGS to levelize the inspection schedule for the LP turbine rotors.

The UFSAR and TRM commitment to inspect at least one main steam stop valve, one main steam control valve, and one combined intermediate valve every 40 months was established because it was part of the standard technical specifications for General Electric (GE) boiling water reactors. In 1983, GE submitted their “Probability of Missile Generation in General Electric Nuclear Turbines” analysis to the NRC. The GE analysis, as applied to Limerick, was approved by the NRC on November 3, 1987 for Unit 1 and on May 9, 1989 for Unit 2. The GE model assumes that the turbine valves are periodically tested to ensure their operability, but did not include any requirements for inspection of the valves. Because the valve inspection is not considered in the missile probability analysis for GE turbines the standard tech specs were revised to eliminate the valve inspection requirements. Turbine valve inspections are performed consistent with NEIL requirements and current industry practice.

Effect of Activity:

The extension of the overspeed protection system testing frequency from weekly to monthly and the extension of the LP turbine rotor inspection interval to allow for 6 cycles of operation between inspections will impact the Turbine Missile Probability analysis. The revision to the turbine valve inspection requirements does not have an impact on the Turbine Missile Probability analysis but may have an impact on the reliability of the turbine overspeed protection system.

NRC General Design Criterion 4, “Environmental and Missile Design Bases,” of Appendix A to 10CFR50 requires, in part that structures, systems and components important to safety be appropriately protected against the effects of missiles that might result from failures, such as high energy missiles resulting from a steam turbine failure. The NRC evaluation of the effects of turbine failure on the public health and safety has generally followed the guidance stipulated in Regulatory Guide (RG) 1.115, “Protection Against Low-Trajectory Turbine Missiles,” and the NRC Standard Review Plan (SRP), i.e. NUREG-0800, Sections 10.2, 10.2.3, and 3.5.1.3. As discussed in UFSAR Section 1.8, LGS does not utilize all of the guidelines of Reg. Guide 1.115 and does not determine the damage probability in the event of a turbine failure. Instead, LGS utilizes the methodologies and assumptions in the analyses prepared by the turbine manufacturers to determine missile generation probability and no analysis of turbine missile strike and damage probabilities is required as approved by the NRC.

According to NRC guidelines the probability of unacceptable damage from turbine missiles (P4) should be less than or equal to 1×10^{-7} per year for an individual plant. In order to maintain P4 less than 1×10^{-7} , the NRC requires licensees to ensure that the probability of generating a turbine missile (P1) satisfy turbine reliability requirements criteria. For an “unfavorably oriented turbine,” such as the LGS Units 1 and 2 main turbines, the probability of generating a turbine missile (P1) is required to be less than $1 \times$

10-5 per year as documented in NUREG-0991, "Safety Evaluation Report Related to the Operation of Limerick Generation Station Units 1 and 2."

In order to assure that the turbine missile generation probability (P1) follows the turbine reliability criteria, the NRC requires applicable licensees to maintain a Turbine System Maintenance Program (TSM Program). The Current LGS TSM Program was based on the GE Turbine Missile Generation Probability Analysis (January 1984) and the Siemens Missile Probability Analysis (June 18, 1997), which calculates P1 to be 3.0×10^{-6} per year. According to a recent analysis of the Impact Of Increasing Test Interval for Turbine Overspeed Protection System on Turbine Missile Probability and Limerick's evaluation of the impact of change to LP turbine rotor disk inspection interval on missile probability, the proposed change will increase P1 from 3.0×10^{-6} to 3.46×10^{-6} per year.

The elimination of the requirements from the UFSAR and TRM to inspect at least one main steam stop valve, one main steam control valve, and one combined intermediate valve every 40 months allows the valve inspections to be performed consistent with NEIL and current industry practice.

Summary of Conclusion for the Activity's 50.59 Review:

A 50.59 Evaluation is required for the changes to the test frequency for the turbine overspeed protection system and change to the low pressure turbine inspection frequency because they adversely affect the probability of generating a turbine missile, which is a UFSAR described regulatory requirement. The change to the turbine valve inspection requirements may adversely impact the turbine overspeed protection system reliability.

The NRC requires that the probability of generating a turbine missile external to the turbine casing be less than 1×10^{-5} per year for unfavorably oriented turbines. The probability of generating a turbine missile was determined to be 3.0×10^{-6} per year by GE report "Probability of Missile Generation in General Electric Nuclear Turbines" dated January 1984 and Siemens "Engineering Report ER-9605, Missile Probability Analysis Methodology for Limerick Generating Power Station, Units 1 & 2 with Siemens Retrofit Turbines" dated June 18, 1997. Evaluation of the impact to turbine missile probability due to the increased LP turbine inspection interval concluded the increase in the probability of generating a turbine missile was negligible. MPR report "Impact of Increasing Test Interval for Turbine Overspeed Protection System on Turbine Missile Probability, MPR-2892" (April 4, 2006) determined that the turbine overspeed protection system test interval extension would increase the probability to approximately 3.45×10^{-6} per year. The combined effects of these changes result in an increase in the probability of generating a turbine missile to 3.46×10^{-6} per year. Therefore the turbine missile probability calculated for LGS remains below the regulatory limit of 1×10^{-5} per year for unfavorably oriented turbines.

The revision to the turbine valve inspection requirements does not have an impact on the Turbine Missile Probability analysis. Extending the inspection interval and removing the requirement to inspect all valves of a given type, should an issue be identified, is not an

element of the turbine missile generation analysis methodology. Periodic valve testing continues to be performed to demonstrate the operability of the turbine valves. LGS experience indicates that valve degradation is not occurring and the impact on valve reliability is less than minimal. Turbine valve inspections are performed consistent with NEIL requirements and current industry practice.

Evaluation number: LG2009E001 Rev.0
 50.59 Reviewer approval date: 3/20/09
 PORC number: 09-009
 PORC approval date: 3/20/09
 Implementing document: ECR LG 08-00306
 Evaluator: Gary Becknell
 Reviewer: James Tusar
 Interface/Cross-discipline Reviewer: Andy Olson

	Unit 1	Unit 2	Units 1 & 2	Common
Unit applicability:	[]	[]	[x]	[]
Complete on:	[]	[]	[x]	[]

Title:

Application of TRACG04P for OPRM Setpoint Determination

Description of Activity:

This activity addresses the use of the GEH advanced multi-purpose NSSS thermal-hydraulic transient code TRACG04P for the purpose of determining the Oscillation Power Range Monitor (OPRM) setpoints for Limerick Generating Station. TRACG04P is a revised version of the NRC approved TRACG02 used previously to determine the OPRM setpoints. The TRACG04P code has not been generically approved by the NRC for OPRM setpoint determinations, therefore use of TRACG04P constitutes a change in methodology.

OPRM setpoints are determined for each operating cycle as part of the standard reload licensing process performed in accordance with General Electric Standard Application for Reactor Fuel (GESTAR II) methodology. The cycle specific OPRM setpoints are included in the Core Operating Limits Report (COLR).

Due to the similarities between the Limerick Unit 1 and 2 design/licensing bases, this change is applicable to both units.

Reason for Activity:

The TRACG code has recently been revised, by the vendor (GEH), to be compatible with the updated PANAC11 kinetics code and a transition to PC based computing platforms, this version is referred to as TRACG04P. This revision was performed under the GEH NRC-approved Quality Assurance Program. However, since GEH is not the licensee, the change needs to be evaluated under 10CFR50.59.

A previous 50.59 Evaluation (LG 2007 E002, approved 2/16/07- PORC Meeting #07-005) was performed for an earlier version of TRACG04, designated as TRACG04A.

Effect of Activity:

The determination of the OPRM setpoints is described in Technical Specification BASES 2.2.1, which states;

"There are four "sets" of OPRM related setpoints or adjustment parameters: a) OPRM trip auto-enable setpoints for APRM Simulated Thermal Power (30%) and recirculation drive flow (60%); b) period based detection algorithm (PBDA) confirmation count and amplitude setpoints; c) period based detection algorithm tuning parameters; and d) growth rate algorithm (GRA) and amplitude based algorithm (ABA) setpoints.

The first set, the OPRM auto-enable region setpoints, are treated as nominal setpoints with no additional margins added. The settings, 30% APRM Simulated Thermal Power and 60% recirculation drive flow, are defined (limit values) in a note to Table 2.2.1-1. The second set, the OPRM PBDA trip setpoints, are established in accordance with methodologies defined in Reference 4, and documented in the COLR. There are no allowable values for these setpoints. The third set, the OPRM PBDA "tuning" parameters, are established or adjusted in accordance with and controlled by station procedures. The fourth set, the GRA and ABA setpoints, are established as nominal values only, and controlled by station procedures."

The TRACG thermal-hydraulic code supports the determination of the second set of setpoints, PBDA trip setpoints. Reference 4 specified above is NEDO-32465-A, Licensing Topical Report Reactor Stability Detect and Suppress Solutions Licensing Basis Methodology for Reload Application, August 1996. The TRACG02 version of the TRACG thermal-hydraulic code was approved by the NRC and used to support NEDO-32465-A. The TRACG code has recently been revised, by the vendor (GEH), to be compatible with the updated PANAC11 kinetics code and a transition to PC based computing platforms. This version is referred to as TRACG04P. This revision was performed under the GEH NRC-approved Quality Assurance Program. However, since GEH is not the licensee, the change needs to be evaluated under 10CFR50.59.

The TRACG thermal-hydraulic code is used to develop a conservative relationship between the change in fuel bundle critical power ratio (CPR) and the hot bundle oscillation magnitude. This conservative relationship is used to determine the Delta CPR Over Initial MCPR Verses Oscillation Magnitude (DIVOM) curve. The DIVOM curve in conjunction with the initial maximum critical power ratio (IMCPR) and the hot bundle oscillation magnitude at 95% probability with 95% confidence level ($\Delta h(95/95)$) is used by Global Nuclear Fuels (GNF) to determine the OPRM PBDA setpoints.

The algorithms used to detect thermal-hydraulic instability related neutron flux oscillations, described in Technical Specification BASES 3/4.3.1, are not impacted by this activity. TRACG04P is only used in the setpoint determination.

The slope of the DIVOM curve represents the thermal-hydraulic responsiveness of the fuel to a given oscillation magnitude. Thus, a steeper slope is more adverse than a flatter slope (NEDO-32465-A). Benchmark testing between the TRACG02 code and the TRACG04P code determined that the DIVOM slope developed using TRACG04P is slightly more conservative than those using the NRC-approved TRACG02 version of the code. Therefore, the results produced by TRACG04P can be considered essentially the same as the results produced by the previously NRC approved TRACG02.

Summary of Conclusion for the Activity's 50.59 Review:

Based on the benchmarking performed, the results of TRACG04P are considered to be essentially the same as TRACG02, therefore TRACG04P can be used to support the determination of cycle specific OPRM setpoints without prior NRC approval. The version of TRACG is below the level of detail discussed in the UFSAR and Technical Specifications, therefore a change to the UFSAR and Technical Specification BASES is not considered necessary. Due to the similarities between the Limerick Unit 1 and 2 design/licensing bases, this change is applicable to both units. This 50.59 Evaluation is being processed as part of the Limerick Unit 2 Cycle 11 Reload Fuel Change Package, ECR LG 08-00306.

Evaluation number: LG2009E002 Rev.1
 50.59 Reviewer approval date: 3/26/09
 PORC number: WA-09-001
 PORC approval date: 3/26/09
 Implementing document: GP-2, 2GP-6.1, S53.3.B, S53.3.I, S53.0.A
 Evaluator: Ron Hess
 Reviewer: Robert Weingard

	Unit 1	Unit 2	Units 1 & 2	Common
Unit applicability:	[]	[x]	[]	[]
Complete on:	[]	[x]	[]	[]

Title:

Provide an Alternate Means of Monitoring a Reactor Well Seals Leak

Description of Activity:

As a pre-outage activity for 2R10, the reactor well seal rupture drain high flow alarm (FSH-053-201) is flushed and tested to ensure that the function of the alarm is adequately tested. ST-4-015-490-2 failed because foreign material did not allow the alarm to function properly. A series of flushes of the piping did not restore the alarm function. The step to verify the operation of the alarm (4.4.7) is a required step to pass the ST. ST-4-015-490-2 is required to start flood-up.

UFSAR Section 9.1.3.5 states that high leakage rates through the refueling bellows or reactor well seals are annunciated at the refueling floor control panel and by a common trouble alarm in the main control room. Due to blockage in the instrument line, this alarm function is no longer available. The description is not part of a method of evaluation and draws no conclusions as to its impact on design bases.

This activity will revise plant procedures to allow for alternate means of monitoring reactor well seal rupture drain flow. The alternate means of monitoring is a camera trained on the seal drainage trough. This camera will be monitored on a one hour frequency during filling operations and every four hours thereafter when normal reactor well level has been established. The loss of inventory through the seals is limited by the seal plate and is determined to provide sufficient time for operator action to be taken given the frequency of surveillance. Also, in addition to the camera surveillance, several other methods of detecting seal problems exist. These include operator monitoring of the pool level at the skimmer surge tank weir, seal pressure, fuel pool low level alarm, and level monitoring in the main control room.

Reason for Activity:

Procedure ST-4-015-490-2 is required to be completed satisfactorily to begin reactor cavity flood up. The reactor well seal rupture drain high flow alarm has been determined to not be necessary if alternate means of detecting seal leakage is available. Plant procedure changes will allow for alternate monitoring if FSH-053-201 is not available.

Effect of Activity:

The subject procedures are only used in preparation for a refueling outage. The ST procedure verifies the ability of the reactor well seals to effectively separate the reactor well from the reactor enclosure. The reactor well seals are designed for zero leakage. A failure in both of the redundant seals is required for leakage to enter the leakage trough. Seal leakage will drain into a trough below the seals and then drain into an 8-inch drain line. This drain line has a check valve and a 1-inch line that bypasses the check valve. The bypass line has a flow orifice and differential pressure switch with an alarm.

If the alarm is out of service before or during flood up conditions, alternate monitoring methods may be employed to ensure that there is not excessive leakage into the reactor well seal rupture drain. This activity does not remove the requirement to monitor the leakage, but provides an alternate means of monitoring the leakage.

Summary of Conclusion for the Activity's 50.59 Review:

An alternate means of monitoring the reactor well seal rupture drain may be used before and during flood up operations. A 50.59 evaluation was performed and all questions were answered "no". The procedure changes may be applied without the prior concurrence of the NRC.

Note: LG2009E002 Rev.0 was not implemented. It was superseded by LG2009E002 Rev.1.

Evaluation number: LG2010E001 Rev.0
 50.59 Reviewer approval date: 01/29/10
 PORC number: 10-002
 PORC approval date: 2/5/10
 Implementing documents: ECR 07-00413 and ECR 09-00253
 Evaluator: Ken Collier / Greg Curtin
 Reviewer: Ted Johnston

	Unit 1	Unit 2	Units 1 & 2	Common
Unit applicability:	[]	[]	[x]	[]
Complete on:	[x]	[]	[]	[]

Title:

Install Modified C SLCS Pump Control Switch in Support of License Amendment
 Request to Enable Inhibiting Automatic Start of the C SLCS Pump

Description of Activity:

This activity replaces the C Standby Liquid Control System (SLCS) pump control switch HS-048-1(2)04C in the Main Control Room (MCR) for both Units 1 & 2 with a similar switch modified to enable positioning the switch to indefinitely inhibit automatic starting of the pump. This will allow the switch to be positioned so that only the A and B SLCS pumps will automatically start. If the A or B SLCS pumps are not available, the C SLCS pump control switch can be repositioned to allow it to automatically start, satisfying the ATWS and Technical Specification system operability requirements. This modification has no impact on the manual start or stop capability of the C SLCS pump from the MCR. To supplement this modified switch, a new MCR alarm is being installed to notify the Operators when the modified switch is positioned to inhibit automatic start of the C SLCS pump.

Reason for Activity:

This activity is being performed in anticipation of NRC approval to allow the C SLCS pump to be available but not automatically start in the event of an ATWS. Limerick has three installed SLCS pumps for each unit. Only two pumps are required to satisfy the ATWS SLCS injection flow requirements. However, the current system configuration will automatically start all three pumps. Three pumps running concurrently to provide sodium pentaborate to the reactor creates a high pump back pressure condition due to the additional friction losses from the combined flow in the common piping to the reactor. This high back pressure currently provides little margin to the pump discharge relief valve setpoint and could cause the lifting of the relief valve(s), diverting flow from the reactor.

By inhibiting auto-start of the C SLCS pump and having only the two SLCS pumps auto-starting (A & B), the margin against lifting of the SLCS discharge relief valves will be restored near the original design value. Most of this margin was removed as a result of the Power Rerate Project and the MSRV setpoint tolerance increase from 1% to 3%. This margin will be further eroded by Power Uprate conditions.

Effect of Activity:

This change in operation of the SLCS as described in the UFSAR (2 vs. 3 SLCS pumps in auto) is pending NRC approval of a Licensing Amendment Request (LAR). This activity is limited to installation of the modified switch for the C SLCS pump. There will be no change in operation of the SLCS as a direct result of this activity, all three SLCS pumps will continue to auto-start upon receipt of the ATWS signal. Pending LAR approval, administrative controls will be enforced to prevent Operators from positioning the C SLCS control switch to inhibit the auto-start function when being used to satisfy TS requirements. In addition, a MCR alarm will be installed to notify the Operators when the modified switch is positioned to inhibit automatic start of the C SLCS pump. This alarm is installed to conform to Reg. Guide 1.47 and IEEE 279 (1971) for bypass and inoperable status indication for the modified C SLCS pump control switch.

Although this activity maintains the capacity of three SLCS pump operation consistent with the description in the UFSAR, the modified switch changes the way that the C SLCS pump can be operated. This change in the Human Machine Interface (HMI) for the C SLCS pump represents a change in the procedure for operating SLCS as described in the UFSAR. Thus, a 50.59 Evaluation is required to address this change.

Summary of Conclusion for the Activity's 50.59 Review:

A 50.59 Screening has been prepared with question #2 answered "Yes". The modified switch changes the Operator HMI and how the C SLCS pump can be operated. Three pumps will still be configured to automatically start in response to an ATWS, consistent with the UFSAR described design function and Technical Specifications for SLCS. However, the change in the Operator HMI, although administratively controlled to maintain operation of the SLCS as described in the UFSAR, represents a change in the way the C SLCS pump is controlled. Therefore, Screening Question #2 was answered "Yes".

Consequently, a 50.59 Evaluation was performed with all questions answered "No". It is concluded that the modified switch may be installed with the requisite enforcement of administrative controls without prior NRC approval. The change in Operator HMI for the SLCS does not represent an unreviewed question that requires prior NRC approval. No UFSAR described functions are adversely impacted by this change. No special analyses or testing/experiments are involved with this change.

Note: Implemented on Unit 1 only. Unit 2 will be modified in next refueling outage.

Evaluation number: LG2010E002 Rev.0
 50.59 Reviewer approval date: 4/9/10
 PORC number: 10-012
 PORC approval date: 4/10/10
 Implementing documents: RT-6-041-490-1 and RT-6-041-490-2
 Evaluator: Lynn Hemler / Ted Johnston
 Reviewer: Robert Weingard

	Unit 1	Unit 2	Units 1 & 2	Common
Unit applicability:	[]	[]	[x]	[]
Complete on:	[]	[]	[x]	[]

Title:

Suppression Pool Gross Input Leak Rate Determination

Description of Activity:

Revise the Suppression Pool Cooling (SPC) Run Time limit for a MSR/V main seat leak from a of 5%/Year rolling average to a 10%/Year rolling average.

Reason for Activity:

The 5% SPC run time limit has proven insufficient to allow enough time for RHR cooling of the suppression pool during hot summer months due to the smaller delta temperature with an elevated spray pond temperature. This may require a shutdown to replace an MSR/V with a main seat leak due as much to the timing of the leak as the size of the leak. A 10% limit would provide more flexibility necessary to provide pool cooling during the summer while still maintaining a low usage factor for the SPC alignment of RHR.

Effect of Activity:

There are no Technical Specification or SAR impacts of this change to the RHR SPC run time limit.

The LOCA/LOOP analyses assumed RHR to be in the standby condition. The RHR system alignment in the SPC mode was not addressed as a postulated event scenario since the likelihood of the LOCA signal coincident with a LOOP while in SPC mode was a combination of events that was below the threshold for design basis consideration. Reviews performed during plant licensing determined that 2 months per year of SPC usage (a 16.7% usage factor) would have been nearly an order of magnitude below the threshold for design consideration.

The new 10% SPC run time limit remains within the bounds of the initial consideration to exclude this combination of events from the design basis.

Summary of Conclusion for the Activity's 50.59 Review:

The procedure change to a 10% SPC run time limit requires a 50.59 Evaluation because the attached 50.59 Screening concludes that the change may create an adverse impact on the UFSAR evaluation of the RHR containment cooling and ECCS functions. However, since the new 10% SPC run time limit remains within the bounds of the initial consideration to exclude this combination of events from the design basis, the 50.59 Evaluation concluded that there is no NRC review required to implement the proposed change to the RHR SPC run time limit in RT-6-041-490-1 and RT-6-041-490-2.