

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

May 31, 2012

Mr. Peter T. Dietrich Senior Vice President and Chief Nuclear Officer Southern California Edison Company San Onofre Nuclear Generating Station P.O. Box 128 San Clemente, CA 92674-0128

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3 - AUDIT OF THE LICENSEE'S MANAGEMENT OF REGULATORY COMMITMENTS (TAC NOS. ME7572 AND ME7573)

Dear Mr. Dietrich:

In U.S. Nuclear Regulatory Commission (NRC) Regulatory Issue Summary 2000-17, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff," dated September 21, 2000, the NRC informed licensees that the Nuclear Energy Institute (NEI) document NEI 99-04, "Guidelines for Managing NRC Commitment Changes," contains acceptable guidance for controlling regulatory commitments and encouraged licensees to use the NEI guidance or similar administrative controls to ensure that regulatory commitments are implemented and that changes to the regulatory commitments are evaluated and, when appropriate, reported to the NRC.

The NRC Office of Nuclear Reactor Regulation has instructed its staff to perform an audit of licensees' commitment management programs once every 3 years to determine whether the licensees' programs are consistent with the industry guidance in NEI 99-04, and that the regulatory commitments are being implemented effectively.

An audit of the San Onofre Nuclear Generating Station (SONGS), Units 2 and 3 commitment management program was performed at the plant site on December 14, 2011. Based on the results of the on-site audit of SONGS, Units 2 and 3 procedures, processes, and records for managing regulatory commitments, and review of the identified sample of regulatory commitments and regulatory commitments change report, the NRC staff concludes that the licensee has implemented the regulatory commitments management program effectively, and implemented regulatory commitment changes appropriately in accordance with NRC accepted industry guidance in NEI 99-04. No programmatic inconsistencies and deficiencies were noted. Details of the audit and the NRC staff's conclusions are set forth in the enclosed audit report.

P. Dietrich

The NRC staff appreciates the assistance of your staff, both before and during the audit. If there are any questions, I can be contacted at (301) 415-1476 or by electronic mail at <u>mohan.thadani@nrc.gov</u>.

Sincerely,

Mohan Phadain

Mohan C. Thabani, Senior Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosure: As stated

cc w/encl: Distribution via Listserv



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

AUDIT REPORT BY THE OFFICE OF NUCLEAR REACTOR REGULATION

LICENSEE'S MANAGEMENT OF REGULATORY COMMITMENTS

SOUTHERN CALIFORNIA EDISON COMPANY

SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3

DOCKET NOS 50-361 AND 50-362

1.0 INTRODUCTION AND BACKGROUND

In U.S. Nuclear Regulatory Commission (NRC) Regulatory Issue Summary 2000-17, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff," dated September 21, 2000 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML003741774), the NRC informed licensees that the Nuclear Energy Institute (NEI) document NEI 99-04, "Guidelines for Managing NRC Commitment Changes," contains acceptable guidance for controlling regulatory commitments and encouraged licensees to use the NEI guidance or similar administrative controls to ensure that regulatory commitments are implemented and that changes to the regulatory commitments are evaluated and, when appropriate, reported to the NRC.

The NRC Office of Nuclear Reactor Regulation (NRR) has instructed its staff to perform an audit of licensees' commitment management programs once every 3 years to determine whether the licensees' programs are consistent with the industry guidance in NEI 99-04, and that the regulatory commitments are being implemented effectively.

NEI 99-04 defines a "regulatory commitment" as an explicit statement to take a specific action agreed to, or volunteered by, a licensee and submitted in writing on the docket to the NRC. NRR guidelines direct the NRR Project Manager to audit the licensee's commitment management program by assessing the adequacy of the licensee's implementation of a sample of commitments made to the NRC and changes made to the NRC commitments in past licensing actions (amendments. relief requests, exemptions, etc.) and activities (bulletins, generic letters, etc.). The audit is to be performed every 3 years.

2.0 AUDIT PROCEDURE AND RESULTS

On December 14, 2011, the NRC staff performed an audit of the San Onofre Nuclear Generating Station (SONGS), Units 2 and 3, regulatory commitments program and regulatory commitments change process. The audit reviewed commitments made by the Southern California Edison Company (the licensee) since the previous audit on July 28, 2008, which was documented in an audit report dated August 12, 2008 (ADAMS Accession No. ML082200447). The audit consisted of two major parts: (1) verification of the licensee's program for implementation of NRC commitments, and (2) verification of the licensee's program for managing changes to NRC commitments.

2.1 Verification of Licensee's Implementation of NRC Commitments

The primary focus of this part of the audit is to confirm that the licensee has implemented commitments made to the NRC as part of past licensing actions/activities. For commitments not yet implemented, the NRC staff determines whether they have been captured in an effective program for future implementation.

2.1.1 Audit Scope

The audit addressed a sample of commitments made during the review period. The audit focused on regulatory commitments (as defined above) made in writing to the NRC as a result of past licensing actions (amendments, relief requests, exemptions, etc.) or licensing activities (bulletins, generic letters, etc.). Before the audit, the NRC staff performed a search in ADAMS for the licensee's submittals since the last audit, obtained records of the commitments from the licensee, and selected a representative sample for verification licensee's records of commitments tracking, and commitments change report submitted to the NRC staff.

The audit excluded the following types of commitments that are internal to licensee processes:

- (1) Commitments made on the licensee's own initiative among internal organizational components.
- (2) Commitments that pertain to milestones of licensing actions/activities (e.g., respond to an NRC request for additional information by a certain date). Fulfillment of these commitments was indicated by the fact that the subject licensing action/activity was completed.
- (3) Commitments made as an internal reminder to take actions to comply with existing regulatory requirements such as regulations, Technical Specifications, and Updated Final Safety Analysis Reports. Fulfillment of these commitments was indicated by the licensee having taken timely action in accordance with the commitments requirements.

2.1.2 Audit Results

The licensee has implemented Procedure SO123-X39, "Regulatory Commitments Tracking (RCT) Program," which establishes its methods for identifying, documenting, tracking, and dispositioning regulatory commitments and for justifying changes to regulatory commitments. The procedure specifies the objectives, procedures, definition of terms, responsibilities and tracking procedure, authorities and responsibilities, requirements for effective management of regulatory commitments, tracking of commitments, and procedures for implementing changes to regulatory commitments. From the collected information, the NRC staff developed a

representative sample of regulatory commitments that met the selection criteria identified in NRR's guidance.

The documents furnished by the licensee included summary sheets providing the status of the regulatory commitments, source documents, and appropriate backup documentation as needed (i.e., plant procedures, regulatory commitment tracking forms, actions, regulatory commitment change forms, biennial commitments changes reported to the NRC staff, and other plant documentation). The NRC staff reviewed the database and documents and summarized the selected commitments information in Attachment 12 to this audit report.

The NRC staff audit was intended to confirm that the licensee has documented its implementation of its regulatory commitments made to the NRC staff as part of past licensing communications, and the commitments that had not yet been implemented or incorporated in design bases documents are captured in an effective manner for future implementation.

The process described in Procedure S0123-XV-39 provides acceptable tools for the licensee to capture the NRC regulatory guidance on commitment management programs. The licensee enters the regulatory commitments made to the NRC into regulatory commitments identification, tracking, and change forms. Each commitment is numbered and described by a commitment title and brief description. These commitment forms are reviewed and approved by dedicated staff. The licensee's staff was knowledgeable of procedures for entering and updating the regulatory commitments status. The regulatory commitments program procedure SO123-XV-39 followed in documenting, tracking, implementing, and changing the regulatory commitments. The sources of the commitments are clearly documented and retained. The status of the commitments was found to be well documented. No deficiencies were noted.

In general, documents or procedures that are used to fulfill a commitment are changed to reference the commitment. This provides a means to ensure that commitments are neither removed nor changed without management approval in accordance with the plant procedures. No deficiencies were noted.

Based on the results of the on-site audit, the NRC staff concludes that the licensee has implemented the regulatory commitments management program adequately and consistent with NEI99-04. The attachment to this audit report contains references to the licensee's commitments selected for review and a summary of the audit results.

2.2 <u>Verification of Licensee's Program for Managing Changes to Licensee's</u> <u>Commitments to NRC</u>

The primary focus of this part of the audit is to verify that the licensee has established administrative controls for modifying or deleting commitments made to the NRC. For the period covered by the audit, the NRC staff reviewed both a sample of commitment changes determined to be reportable to the NRC, and a sample of changes determined to be not reportable. The NRC staff also reviewed the licensee's report of commitment changes reported to the NRC for the period December 19, 2008, to March 17, 2011 (ADAMS Accession No. ML110871482). Commitment changes were appropriately justified and reported to the NRC in accordance with the licensee's process. No deficiencies were noted.

Based on the results of the on-site audit, the NRC staff concludes that the licensee has implemented regulatory commitment changes appropriately, consistent with NEI 99-04.

3.0 <u>CONCLUSION</u>

Based on the results of the audit, the NRC staff concludes that the licensee has implemented the regulatory commitments management program satisfactorily, and implemented regulatory commitment changes appropriately, consistent with NEI 99-04.

4.0 LICENSEE PERSONNEL CONTACTED FOR THIS AUDIT

Ryan Treadwell Allison James Lee Kelly

Principal Contributor: Mohan Thadani

Date: May 31, 2012

Attachments

- 1. Summary of Audit Results Regulatory Commitments
- 2. Summary of Audit Results Reference to Regulatory Commitments Changes Report.

-

SUMMARY OF AUDIT RESULTS FOR REGULATORY COMMITMENTS

Audit Performed December 14, 2011

San Onofre Nuclear Generating Station, Units 2 and 3

Letter	Subject_	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
		Ope	n Commitments from August 2008 Audit	t Report	
Letter from Southern California Edison (SCE) to Nuclear Regulatory Commission	SouthernEmergency PlanCalifornia(EP) Change –Edison (SCE) toincrease inNuclearEmergencyRegulatoryResponse	NRCT 2006-08-001 Action Request (AR) 060701155-02]	Following NRC approval of the proposed EP Change, enhance operator training to demonstrate and evaluate crew's ability to perform key emergency response functions.	The referenced letter has three commitments within the document. The licensee has expanded the three commitments to eight	Cancelled. AR 060701155-02 was cancelled 6/13/2007. No changes were necessary to demonstrate and evaluate crew's ability to perform emergency response functions for an additional 30 minutes. Commitment was "withdrawn" via 6/18/2007 submittal.
(NRC) dated 6/18/2007 (ADAMS Accession No. ML071700672- not publicly available). [Note: The 6/18/2007 letter superseded a letter dated 8/28/2006 (ADAMS Accession No. ML062420187- not publicly available)	Augmentation Time from 60 to 90 minutes.	NRCT 2006-08-002 [Previously AR 060701155-03; transferred to SAP 800072367-0010]	Following approval of this proposed change, the Shift Manager/Emergency Coordinator will be responsible for assigning an on-shift Units 2/3 licensed operator to notify the NRC following notification of offsite agencies and within 1 hour of the event declaration. This individual will serve as the Control Room Emergency Notification System (ENS) Communicator to provide additional information as necessary or maintain communication with the NRC if requested until the Technical Support Center (TSC) Red Phone Communicator arrives in the TSC and assumes that responsibility. The Control Room ENS Communicator will fulfill the responsibility of the 30-minute responder as designated in NUREG- 0654, Table B-1 for communications and shown in Attachment 2.	specific commitments for tracking the individual items. The application is under review by the NRC staff. The ARs are accorded the "OPEN" status.	Transferred to SAP Order 800072367- 0010, which was closed 8/29/2009. No procedure change was necessary to ensure the ENS Communicator function is implemented per the Safety Evaluation Report for changing to 90 minutes and no additional training is needed.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
		NRCT 2006-08-003 [Previously AR 0607001155-07; transferred to SAP 800072370]	Primary equipment operators (PEOs) will be trained on the use of handheld survey instruments providing the capability of self-monitoring during accident conditions. The self-monitoring capability, along with the use of the computerized radiological emergency preparedness (REP) process and personal electronic dosimeters (PEDs), will provide these responders adequate radiological protection to support emergency response activities.		Cancelled. Transferred to SAP Order 800072370, which cancelled the commitment based on commitment change evaluation performed under NN 200434603. Regulatory Burden Reduction (RBR) log indicated no report to NRC required. NRCT 2008-09-002 from 9/24/2008 letter (ADAMS Accession No. ML082740060) rendered this commitment unnecessary.
		NRCT 2007-06-001 [Previously AR 060701155-11; transferred to Order 800072366]	Implement a new calibration protocol for the Pressurized Ion Chamber (PIC) prior to implementation of the approved EP change.		The intent of this commitment included development of a schedule for calibrating each PIC, but not necessarily completing all the calibrations prior to implementation of the EP change. Calibrations were completed 9/23/2009.
License amendment request (LAR), Proposed Change Notice (PCN) 555, dated 12/27/2004 (ADAMS Accession No.	The LAR revises the SONGS 2 and 3 accident source term (AST) used in the design basis radiological consequences analyses.	NRCT 2004-12-004 [AR 041201316-06]	Following approval of LAR PCN 555, future revisions to Updated Final Safety Analysis Report (UFSAR) Chapter 15 design basis accident control room and offsite radiological consequence analyses will be performed using AST methodology.	The referenced letter has five commitments within the document. The licensee has expanded the three to twelve specific commitments for tracking individual items. Closed.	041201316-06 closed on 6/25/2007 with issuance of DBD-SO23-TR-AA, Rev. 9.
ML043650403) from SCE to NRC		NRCT 2004-12-008 [AR 041201316-03; moved to NN 200000532]	Following approval of this LAR, SCE will provide the revised UFSAR sections to the NRC as part of its normal UFSAR update required by 10 CFR 50.71(e).	Open	UFSAR change submitted 6/10/2009.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
			New Commitments Since 7/28/2008 Au	dit	
Letter from SCE to NRC dated 9/24/2008 (ADAMS Accession No. Regarding Request	request for additional information (RAI) Regarding Request	2008-09-002 / SAP Operation 800173618-0020	Prior to implementation of SONGS' proposed EP change, SCE will: 1) add nine qualified Health Physics (HP) Technicians to the automatic recall system.	N/A	Commitments closed as of 5/22/2009. Requirements were incorporated into the EP; therefore, these actions do not need to be tracked further in the commitment data base.
ML082740060)	IL082740060) for EP Change – Increase in ERO Augmentation Time from 60 to 90	2008-09-003 / SAP Operation 800173618-0030	Prior to implementation of SONGS' proposed EP change, SCE will: 2) add one Electrical Maintenance Technician, to the automatic recall system.	N/A	
	minutes	2008-09-004 / SAP Operation 800173618-0040	Prior to implementation of SONGS' proposed EP change, SCE will: 3) add one Instrument and Control (I&C) Technician to the automatic recall system.	N/A	
		2008-09-005 / SAP Operation 800173618-0050	Prior to implementation of SONGS' proposed EP change, SCE will: 4) ensure that either an I&C Technician or a Shift Rotating General Foreman (SRGF) is on-shift at all times.	N/A	
		2008-09-006 SAP Operation 800173618-0060	Prior to implementation of SONGS' proposed EP change, SCE will: 5) change the facility activation requirements for the Operations Support Center to include the additional 90 minute responders described in the above items 1, 2, and 3.	N/A	

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
to NRC dated to G 5/15/2008 (GL (ADAMS "Ma Accession No. Acc ML081430019) Eme Coc Rer	3-Month Response to Generic Letter (GL) 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray	2008-05-001 [080101157 -10, 200004023-0001]	An assessment of the system piping to confirm adequate vent capability will be performed in order to assure successful management of gas accumulation volumes. Potential gas accumulation volumes will be determined by conservatively applying construction tolerances to the plant isometric drawings.	N/A	Closed. Provided in 9-month response dated 10/14/2008 (ADAMS Accession No. ML082950468).
	Systems"	2008-05-002 [200004023-0001]	Where additional vent valves are deemed to be required, confirmatory walkdowns will be conducted to verify the need for additional vents.	N/A	Closed. Provided in 9-month response dated 10/14/2008 (ADAMS Accession No. ML082950468)
		2008-05-003 [Previously 080101157-10; moved to Task 200004023-0001]	SCE will submit a response within nine months of the date of the generic letter providing the results of the evaluation, identifying required confirmatory walkdowns that have not been completed, and providing the schedule for their completion.	N/A	Closed. 9-month response submitted in letter dated 10/14/2008 (ADAMS Accession No. ML082950468).
Letter from SCE to NRC dated 10/14/2008 (ADAMS Accession No. ML082950468)	9-Month Response to GL 2008-01	2008-10-001 [800179610 -0020]	1) Technical Specification (TS) Bases for Surveillance Requirement (SR) 3.5.2.4 will be revised to read "Maintaining the piping from the RWST [refueling water storage tank) to the RCS [reactor coolant system] full of water" 90 days after completion of the Unit 3 (U3) Cycle 15 refueling outage (RFO) (scheduled for October 2008).	N/A	Closed. Changed pages B 3.5-19 and B 3.5-20a as noted by revision bars. TS Bases for SR 3.5.2.4 changed.
		2008-10-002 [800179610 -0030]	2) Procedure SO23-3-2.7.2, "Safety Injection System Removal/Return to Service Operation" (Reference 15), will be revised to include sweeping of the inverted "U" sections in the high pressure safety injection (HPSI) Train "A" discharge piping during plant restart until new vents are installed. Prior to restart of the unit for the U3 Cycle 15 RFO (scheduled for October 2008).	N/A	Closed. Procedure revision 17 issued 11/21/2008.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
		2008-10-003 [800179610 -0040]	3) Procedure SO23-3-3.8, "Safety Injection Monthly Tests" (Reference 17) specifies that one of the objectives is to vent accessible valves on the discharge side. The procedure vents valves on both the suction and discharge sides and vents valves deemed necessary to ensure that the system is sufficiently full without limitations imposed by accessibility. The procedure objective will be revised for clarification only. Due prior to restart of the unit for the U3 Cycle 15 RFO (scheduled for October 2008).	N/A	Closed. Procedure SO23-3-3.8, Rev. 21, was issued 11/21/2008.
		2008-10-004 [800194395-0010 (Unit 2); 800229823 (Unit 3)]	4) A vent valve will be added to the Train "A" discharge piping of the high pressure safety injection pumps in each unit. Due: Unit 2 (U2) Cycle 16 and U3 Cycle 16 RFOs scheduled for the fall of 2009 and 2010, respectively.	N/A	Closed. Unit 2 completed 4/27/2009. Unit 3 completed 3/6/2011.
		2008-10-005 [800179610 -0060]	5) An Engineering procedure will be developed to formalize safety injection tank (SIT) monitoring to provide a formal process of quantifying leakage into the low pressure side of the Safety Injection system. Due: 90 days after completion of the U3 Cycle 15 RFO (scheduled for October 2008).	N/A	Closed. SO23-V-16, Emergency Core Cooling System Piping Gas Void Calculation was issued on 2/23/2009.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
		2008-10-006 [800179610-0070]	6) SCE is continuing to support the industry and Nuclear Energy Institute (NEI) Gas Accumulation Management Team activities regarding the resolution of generic TS changes via the Technical Specification Task Force (TSTF) traveler process. Following NRC approval of this TSTF, SCE will evaluate adopting the TSTF to either supplement or replace current TS and leakage control system (LCS) requirements. Due 1 year after NRC approval of TSTF.	N/A	Open. The TSTF is meeting with the NRC on January 12, [2011], to discuss the appropriate regulatory method to capture the on-going requirements from Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems." The NRC has not yet accepted the approach proposed by the TSTF in TSTF-523, Rev. 0, "Generic Letter 2008-01, Managing Gas Accumulation." TSTF-523 is applicable to all plant types. Due date for operation moved to 1/13/2012.
		2008-10-007 [800179610-0080]	7) SCE will conduct confirmatory walkdowns as identified in Item 6 of the Design Evaluation for U2 accessible and inaccessible piping and submit a 9-month supplemental response with the results of these walkdowns and any resulting corrective actions. Due: 60 days after completion of the U2 outage (scheduled for January 2009).	N/A	Closed. Letter to NRC dated 6/17/2009 (ADAMS Accession No. ML091690343), 9-month Supplemental (Post-Outage) Response to GL 2008-01, Unit 2. (Due date for final analysis was changed to 120 days after outage (6/18/2009) per NN 200385859 and as documented in letter to NRC dated 4/17/2009 (ADAMS Accession No. ML091070587).)
		2008-10-008	8) SCE will conduct confirmatory walkdowns as identified in Item 6 of the Design Evaluation for U3 accessible and inaccessible piping and submit a 9-month supplemental response with the results of these walkdowns and any resulting corrective actions. Due date: 60 days after completion of the U3 Cycle 15 RFO. U3 breakers closed 12/18/2008; therefore, due date is 2/16/2009.	N/A	Closed. Letter to NRC dated 6/17/2009 (ADAMS Accession No. ML091690343), 9-month Supplemental (Post-Outage) Response to GL 2008-01.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
Letter from SCE to NRC dated 6/27/2008 (ADAMS Accession No. ML081830421)	Amendment Application Nos. 252 and 238, Replacement Steam Generators	2008-06-001 [200092517-0001]	The proposed steam generator plugging criterion is a preliminary value and SCE will provide a confirmation or a corrected value when the calculation is approved.	N/A	Closed. Letter to NRC dated 8/13/2008 (ADAMS Accession No. ML082280080) notified the NRC that the original proposed SG tube plugging criterion is unchanged.
Letter from SCE to NRC dated 10/30/2008 (ADAMS Accession No. ML083080295)	Extension Request Related to GL 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents At Pressurized Water Reactors," Test Protocol used in Testing at VUEZ	2008-10-009 [Order 800168679]	SCE is committing in this submittal to completing a chemical effects retest program, and identifying any additional required plant modifications, by 11/20/2009.	N/A	Closed. This commitment closed with submittal of letter to NRC dated 11/12/2009 (ADAMS Accession No. ML093210174). Two new commitments were made in this letter. See NRCTS 2009-11-001 through -003.
Letter from SCE to NRC dated 11/12/2009 (ADAMS Accession No. ML093210174)	NRC GL 2004-02 Supplemental Response	2009-11-001 [800168679-70]	As discussed in the SCE to NRC supplemental response dated 11/12/2009 submittal letter Attachment 1, Section 3.n.i; Attachment 2, Open Item 20; and Attachment 3, Item B.1, SCE plans to perform the necessary evaluations prescribed by Westinghouse topical report WCAP-16793-NP relative to potential fuel debris blockage, once the associated NRC safety evaluation (SE) is issued.	N/A	Open. NRC SE not yet issued.
		2009-11-002 [200230225-0004]	Reference 3 and this supplemental response credit the U2 and U3 replacement steam generators (RSGs). The U2 RSGs were installed during the cycle 16 refueling outage	N/A	Closed. U2 steam generators replaced and action closed 4/16/2010.
		2009-11-003 [200230225-0005]	Reference 3 and this supplemental response credit the U2 and U3 RSGs. The U3 RSGs were installed during the fall 2010 refueling outage.	N/A	Closed. U3 steam generators replaced and action closed.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)	
Letter from SCE to NRC dated 1/30/2009 (ADAMS Accession No. ML090360738)	Request to Revise TS 5.7.1.5 Core Operating Limits Report (COLR) and Request for Temporary Exemption from	2009-01-011 [200297246 -0004]	1) Prior to use of AREVA Lead Fuel Assemblies (LFAs) for a second fuel cycle of irradiation, poolside LFA examinations will be performed to evaluate assembly and cladding performance, and acceptability for continued use.	N/A	Closed. This commitment has been captured into Revision 11 of SO23- XXXVI-2.6, Section 6.4.1, issued 2/8/2010.	
	10 CFR 50.46 and 10 CFR 50 Appendix K	2009-01-012 [200297246 -0005]	2) Prior to use of AREVA LFAs for a third fuel cycle of irradiation, poolside LFA examinations will be performed to evaluate assembly and cladding performance, and acceptability for continued use.	N/A	Closed. This commitment has been captured into Revision 11 of SO23- XXXVI-2.6, Section 6.4.1, issued 2/8/2010.	
		2009-01-013 [200297246 -0006]	3) If the AREVA LFAs are inserted for a third fuel cycle of irradiation, then poolside LFA examinations will be performed after completion of the third fuel cycle of irradiation to evaluate assembly and cladding performance.	N/A	Closed. For U2 Cycle 16, this regulatory commitment is implemented in U2 Cycle 16 reload process as documented in U2C16 Reload ECP (Order 800247870). For future cycles, this regulatory commitment is implemented in the NFM reload checklist procedure SO23-XXXVI- 2.10 section 6.1.14.1.	
			2009-01-014 [200297246 -0007]	4) The AREVA LFAs will be placed in core locations where the peak integrated radial power peaking factor in the LFAs will be 0.95 or less of the core maximum integrated radial power peaking factor at all times in life.	N/A	For U2 Cycle 16, this regulatory commitment is implemented in U2 Cycle 16 reload process as documented in U2C16 Reload ECP (Order 800247870). For future cycles, this regulatory commitment is implemented in the NFM reload checklist procedure SO23-XXXVI- 2.10 section 6.1.14.2.
		2009-01-015 [200297246 -0008]	5) The AREVA LFAs will be modeled in the SONGS core physics models and their impact will be analyzed in the cycle-specific core physics calculations that support the reload analyses.	N/A	Closed. For U2 Cycle 16, this regulatory commitment is implemented in U2 Cycle 16 reload process as documented in U2C16 Reload ECP (Order 800247870). For future cycles, this regulatory commitment is implemented in the NFM reload checklist procedure SO23-XXXVI- 2.10 section 6.1.14.2.	

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
		2009-01-016 [200297246 -0009]	6) Analyses will be performed to verify the performance of the AREVA LFAs. These analyses include thermal- hydraulic compatibility, loss-of-coolant accident (LOCA) and non-LOCA criteria, mechanical design, thermal hydraulic, seismic, core physics, and neutronics compatibility of the AREVA LFAs in the SONGS reactor core. The analyses will make use of the fact that the LFAs will be operated in non-limiting core regions and will verify the reload analyses are not adversely impacted.	N/A	Closed. AREVA has performed the analyses mentioned above. Results and conclusions were summarized in the following reports: ANP-2839(P), Revision 1, "San Onofre Nuclear Generating Station Lead Fuel Assembly Fuel Design Criteria Review," September 2009. ANP-2840(P), Revision 1, "San Onofre Nuclear Generating Station Lead Fuel Assembly Thermal-Hydraulic Compatibility Report," September 2009. These reports were issued and transmitted to Corporate Documentation Management (CDM) on 10/14/2009.
		2009-01-017 [200297246 -010]	7) A compatibility analysis will be performed to ensure that insertion of the AREVA LFAs will not cause the remaining Westinghouse fuel to exceed its operating limits and ensure there is no adverse impact on the fuel performance or mechanical integrity.	N/A	Closed. Westinghouse has performed the compatibility analyses mentioned above. Results and conclusions are summarized in the compatibility study report. This report has been issued and transmitted to Corporate Documentation Management (CDM) on 12/24/2009. Therefore, regulatory commitment #7 has been fulfilled.

		Commitment No./		Implementation	
Letter	Subject	Tracking No.	Description of Commitment	Status (7/28/2008)	Implementation Status (12/2011)
Letter from SCE to NRC dated 4/24/2009 (ADAMS Accession No. ML091180592)	Notification of Intent to Extend Removal of the Containment Hydrogen Recombiners	2009-04-066 [Order 800280074/ NN 200380809]	In letter dated 7/19/1999 (ADAMS Legacy Accession No. 9907210221), SCE clarified our intentions regarding the hydrogen recombiners and other hydrogen control systems, upon NRC approval of our exemption request, as follows: "it is currently Southern California Edison's intention to continue to maintain these systems to the extent that it remains prudent and practical." "If at some future time equipment becomes inoperable and Southern California Edison decides to permanently cease repair efforts, Southern California Edison will then inform the NRC of that decision." In letter dated 2/5/2007 (ADAMS Accession No. ML070380096), SCE provided notification of its intention to remove one of the two hydrogen recombiners (E146) per containment for the duration of the Cycle 15 operating cycle of each unit. SCE has completed planning for the U2 Cycle 16 outage and it is now SCE's intention to leave the U2 and U3 E146 hydrogen recombiners removed from containment through the end of operating cycle 16. The opposite train hydrogen recombiner (E145) for each unit remains functional at this time and SONGS intends to continue to maintain the second hydrogen recombiner in each unit consistent with its original commitment.	N/A	Closed. Letter dated 12/31/2009 (ADAMS Accession No. ML100060791) stated SCE will permanently leave the U2 and U3 Train B hydrogen recombiners removed from containment. The opposite train hydrogen recombiner (Train A) for each unit remains functional at this time and is being maintained on a frequency determined by SCE to be appropriate. SCE is maintaining the Train A hydrogen recombiner in each unit consistent with its original commitment.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
Letter from SCE to NRC dated 12/31/2009 (ADAMS Accession No. ML100060791)	Notification of Intent to Permanently Remove Containment Hydrogen Recombiners – Train B	2009-12-008 [800434133 and 800127366]	SCE is installing a Class 1E 480 V Load Center on U2 and intends to make similar changes to U3. This Class 1E 480 V Load Center provides a safety benefit of increased margin for the affected system. As a result, SCE will permanently leave the U2 and U3 Train B hydrogen recombiners removed from containment. The opposite train hydrogen recombiner (Train A) for each unit remains functional at this time and is being maintained on a frequency determined by SCE to be appropriate.	N/A	Open. Installation of 480 V Load Center in U3 is planned for U3 C17 outage at end of 2012.
Letter from SCE to NRC dated 6/10/2009 (ADAMS Accession No. ML091630061)	LAR for TSTF-511, Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR 26	2009-06-001 [NN 200005253-35]	Removal of the plant-specific TS requirements will be performed concurrently or subsequent to implementation of 10 CFR Part 26, Subpart I requirements. This commitment will be completed no later than 10/1/2009 or within 60 days of TS approval, whichever is later.	N/A	Closed. NRC Letter of 10/20/2009 (ADAMS Accession No. ML092880169) has been received and assessed. The necessary changes to implement Unit 2/3 amendments 221/214 (PCN-591)for TSTF-511, Revision 0, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26" were incorporated by CDM into the SONGS 2/3 TSs today (11/19/2009).
Letter from SCE to NRC dated 11/23/2009 (ADAMS Accession No. ML093410251)	License Amendment Application Nos. 257 and 243, Cyber Security Plan		Implement Cyber Security Plan in accordance with the implementation schedule submitted to the NRC as part of PCN 595. Due: SCE requests an implementation period of 90 days following NRC approval of this license amendment.	N/A	Working. Milestones due 12/31/2012 and 12/31/2015.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
Letter from SCE to NRC dated 12/7/2009 (ADAMS Accession No. ML093430116)	Inspection of Divider Plate Weld Joint in the RSGs	2009-12-007 [800414457-0020, 200599777-0004 through -0007]	As discussed in the public meeting, SCE commits to perform additional confirmatory examinations of the divider plate welds following the installation of the RSGs for both U2 and U3. The examinations will consist of remote visual examinations of the accessible areas of the divider plate to channel head and tubesheet welds and repeat baseline straight beam ultrasonic examinations from the accessible locations outside the channel head. Examinations will be performed during the first steam generator inspection outage and in a steam generator inspection outage near the end of the first 10-year inspection interval for the RSGs for each unit."	N/A	Working. Incorporated inspection requirements in site order SO23SG-1, Revision 17. U2C17 will be first inspection - estimate 1/1/2013 until outage date is known.
Letters from SCE to NRC dated 1/14/2010 (ADAMS Accession No. ML100210200) and 9/2/2011 (ADAMS Accession No. ML112528110)	Amendment Applications 258 and 244, TSs Applicable to Movement of Fuel Assemblies [Resubmitted on 9/2/2011 with same commitment]	2010-01-001 [800440164, 200741690]	SONGS will continue to implement revised applicability of TSs that are pertinent to the movement of fuel assemblies using administrative controls in accordance with NRC Administrative Letter 98-10. Due: Until NRC completes its review and issues revised TS pages.	N/A	Working. References: 2-EDMR-2008-0004 3-EDMR-2008-0044 ACE 800168808

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
Letters from SCE to NRC dated 6/14/2010 (ADAMS Accession No. ML101670162), 4/26/2010 (ADAMS Accession No. ML101170163), 2/3/2006, and 4/14/1988.	Change to Commitments for Shift Technical Advisor Program	2010-06-002 [Order 800498507]	From July 1, 2010 forward, individuals filling the STA position at SONGS will comply with Option 2 of the Commission Policy Statement on Engineering Expertise on Shift, 50 FR 43621, published on October 28, 1985. Option 2 states: "This option is satisfied by placing on each shift a dedicated Shift Technical Advisor (STA) who meets the STA criteria of NUREG-0737, Item I.A.1.1. The STA should assume an active role in shift activities. For example, the STA should review plant logs, participate in shift turnover activities, and maintain an awareness of plant configuration and status."	N/A	Closed. Sustainability for this action is carried in Procedure SO23-XXI-1.11.12 Rev 17 "Shift Technical Advisor Training Program Description" and is anchored by the commitment 2.1.5 (Attachment 3, pages 2 and 3). UFSAR Section 13.1 Revision 31 issued 6/10/2011 (ADAMS Accession No. ML11173A141) incorporated the STA commitment.
Letters from SCE to NRC dated 6/17/2010 (ADAMS Accession No. ML101690069), 7/22/2010 (ADAMS Accession No. ML102080039), and 8/16/2010 (ADAMS Accession No. ML102290073)	One-Time TS Changes Applicable to TS 3.8.1, "AC Sources – Operating"	2010-08-010 thru 029 [200839078-0013 thru 0032; NN 201191021]	 Online Unit Compensatory Measures – SCE will: Protect the available offsite source: via switchyard barriers and 4.16 kiloVolt (kV) cross-tie breaker barriers. Protect both onsite sources – Perform Surveillances on the operating unit emergency diesel generators (EDGs) prior to entering Action Statement, and protect the available switchgear room. Ensure the protected train is the train with the Operable 4.16 kV cross-tie. Ensure affected train common equipment (1E 480 VAC buses, emergency coiling units) are aligned to the on-line unit. Protect all 3 auxiliary feedwater (AFW) pumps Protect switchgear room normal heating, ventilation and air conditioning (HVAC) cooling unit and exhaust fan. Do not allow any switchyard work, or train work on the protected train. 	N/A	Closed. Amendment with commitments was withdrawn in 7/22/2010 letter, resubmitted in 8/16/2010 letter. Commitment prohibiting switchyard work was revised in commitment change letter dated 3/25/2011 (ADAMS Accession No. ML110871482) from "Do not allow any switchyard work during" to: "Establish Switchyard Restricted Access during" NN 201191021 documented the change evaluation. Bases change is being tracked under NN 201236592. These commitments were incorporated into Tech Spec and Basis 3.8.1; therefore, the commitments were closed, since they are controlled by a licensing basis document.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
Letters from SCE to NRC dated 6/17/2010 (ADAMS Accession No. ML101690069), 7/22/2010 (ADAMS Accession No. ML102080039), and 8/16/2010 (ADAMS Accession No. ML102290073)	One-Time TS Changes Applicable to TS 3.8.1, "AC Sources – Operating"	2010-08-010 thru 029 [200839078-0013 thru 0032]	 Outage Unit Compensatory Measures SCE will Protect the available train offsite source: via switchyard barriers and 4.16 kV cross-tie breaker barriers. Protect the available train onsite source, EDG and 4.16 kV bus. Protect all available train safety function equipment CCW (component cooling water), SWC (saltwater cooling), SDC (shutdown cooling), and SFP (Spent Fuel Pool) cooling. Do not allow any work in the switchyard or on the protected electric power buses that are providing safety function fulfillment. Scheduling: Work the supply cubicles and cross-tie cubicle bottle replacements first, allowing for a quicker "emergency" return to service. Develop a plan to effect an emergency return to service, if required to support the operating unit. Bus outages are to be performed during the core offload window, when all fuel is removed from the reactor vessel. 	N/A	Closed. Amendment with commitments was withdrawn in 7/22/2010 letter, resubmitted in 8/16/2010 letter. These commitments were incorporated into Tech Spec and Basis 3.8.1; therefore, the commitments were closed, since they are controlled by a licensing basis document.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
Letters from SCE to NRC dated 6/17/2010 (ADAMS Accession No. ML101690069), 7/22/2010 (ADAMS Accession No. ML102080039), and 8/16/2010 (ADAMS Accession No. ML102290073)	One-Time TS Changes Applicable to TS 3.8.1, "AC Sources – Operating"	2010-08-010 thru 029 [200839078-0013 thru 0032]	The following compensatory measures apply to the U3 Cycle 16 refueling only since U3 steam generator replacement is planned for this outage: • Rigging activities to be limited to one end of the steam generator replacement outside lift system (OLS) to limit potential impact to U3 Train A diesel generator cables located underground near the containment equipment hatch. • OLS construction, use, and removal to be limited to specific outage windows to reduce risk to the U3 Train A diesel generator cables. • SONGS NUREG-0612 heavy loads procedural requirements are to be implemented for both the OLS and the service crane to ensure safe load paths are followed, or safe shutdown equipment is taken out of service, during the rigging activity. • A U3 Cycle 16 shutdown qualitative risk assessment to be performed to provide qualitative risk management actions to demonstrate acceptable outage risk during construction, use, and deconstruction or the OLS. • Work controls to be in place to lay the service crane boom down prior to severe weather • No load movements by the service crane over the switchyard		Closed. Amendment with commitments was withdrawn in 7/22/2010 letter, resubmitted in 8/16/2010 letter. These commitments were incorporated into Tech Spec and Basis 3.8.1; therefore, the commitments were closed, since they are controlled by a licensing basis document.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
Letters from SCE to NRC dated 9/29/2010 (ADAMS Accession No. ML102730183), 11/30/2010 (ADAMS Accession No. ML103350155), and 3/31/2011 (ADAMS Accession No. ML1112A028)	Notification Letter designating SONGS Station Balance of Plant Systems within the Cyber Security Rule Scope	2010-09-001 [NN 201129568, Order 800585909, NN 201386754]	In the Reference (2) letter, NRC is also requiring that each nuclear power plant submit a revised cyber security plan to the NRC for its review and approval. On or before 11/30/2010, SCE will supplement its Cyber Security Plan to clarify the scope of systems described in Section 2.1, Scope and Purpose. Section 2.1 will be amended to clarify the balance of plant systems, structures, and components (SSCs) that will be included in the scope of the Cyber Security Program.	N/A	Closed. Because of changing regulatory direction, SCE submitted a letter on 11/30/2010 indicating that SCE would provide a supplement to the SONGS Cyber Security Plan in accordance with a schedule to be provided by the NRC. The NRC sent an RAI on 3/1/2011 (ADAMS Accession No. ML110600635). SCE sent letter to NRC dated 3/31/2011 that fulfilled this commitment.
Letter from SCE to NRC dated 10/29/2010 (ADAMS Accession No. ML103020527)	Response to Notice of Violation in NRC Triennial Fire Protection Inspection Report 05000361/2010007	2010-10-175 [800601127-0020]	SCE commits to transition to and implement National Fire Protection Agency Standards NFPA 805 for its SONGS fire protection program.	N/A	Working. Letter to NRC dated 6/24/2011 (ADAMS Accession No. ML111780512) committed to an LAR submittal date of 3/31/2013, and requested enforcement discretion through that date. Letter dated 7/28/2011 (ADAMS Accession No. ML112020559), to P. T. Dietrich (SCE) from J. G. Giitter (NRC) granted the extension of enforcement discretion to 3/31/2013. Therefore, SCE must now submit the NFPA 805 LAR no later than 3/31/2013.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
) 1	LAR 260 and 246 for TS Conversion to NUREG-1432	2011-07-001 [800745502-0020]	1. SCE will establish the TS for Limiting Condition for Operation (LCO) 3.0.4, as modified with the applicable license amendment. Due upon implementation.	N/A	Pending NRC approval of LAR.
ML112510214)		2011-07-002 [800745502-0030]	2. SCE will ensure that if LCO 3.0.4.b is used, the risk assessments will be conducted using the procedures and guidance endorsed by Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants." Regulatory Guide 1.182 endorses the guidance in Section 11 of NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants."	N/A	Pending NRC approval of LAR.
		2011-07-003 [800745502-0040]	3. SCE will establish the TS Bases for LCO 3.0.8, as adopted, with the applicable license amendment.	N/A	Pending NRC approval of LAR.
		2011-07-004 [800745502-0050]	 4. SCE will ensure that when LCO 3.0.8a is used, appropriate plant procedures and administrative controls are revised to implement the following Tier 2 Restriction: At least one AFW train (including a minimum set of supporting equipment required for its successful operation) not associated with the inoperable snubber(s), must be available. 	N/A	Pending NRC approval of LAR.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
		[2011-07-005 [800745502-0060]	 5. SCE will ensure that when LCO 3.0.8b is used, appropriate plant procedures and administrative controls are revised to implement the following Tier 2 Restriction: At least one AFW train (including a minimum set of supporting equipment required for its successful operation) not associated with the inoperable snubber(s), or some alternative means of core cooling (e.g., feed and bleed (F&B), firewater system or "aggressive secondary cooldown" using the steam generators) must be available. 	N/A	Pending NRC approval of LAR.
		2011-07-006 [800745502-0070]	 6. SCE will ensure that when LCO 3.0.8 is used appropriate plant procedures and administrative controls are revised to implement the following Tier 2 Restriction: Every time the provisions of LCO 3.0.8 are used SCE will confirm that at least one train (or subsystem) of systems supported by the inoperable snubbers would remain capable of performing their required safety or support functions for postulated design loads other than seismic loads. LCO 3.0.8 does not apply to non-seismic snubbers. In addition, a record of the design function of the inoperable snubber (i.e., seismic vs. non-seismic), implementation of any applicable Tier 2 restrictions, and the associated plant configuration shall be available on a recoverable basis. 	N/A	Pending NRC approval of LAR.
		2011-07-007 [800745502-0080]	7. SCE will revise the UFSAR or TS Bases to describe the restrictions in commitments 4 and 5.	N/A	Pending NRC approval of LAR.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
		2011-07-008 [800745502-0090]	SCE will ensure that when using end state changes being adopted as part of TSTF-422 incorporation, appropriate plant procedures and administrative controls are revised to perform a risk assessment in accordance with 10 CFR 50.65(a)(4), regardless of whether maintenance is being performed. The risk assessment will follow Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants," which endorses NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Section 11 guidance for implementation of 10 CFR 50.65(a)(4). SCE will also follow the industry-developed implementation guidance, WCAP- 16364-NP, Rev. 0, "Implementation Guidance for Risk Informed Modification to Selected Required Action End States at Combustion Engineering NSSS Plants (TSTF-422)," November 2004.	N/A	Pending NRC approval of LAR.
		2011-07-009 [800745502-0100]	For all Frequencies being moved to the Surveillance Frequency Control Program, SCE will ensure both the current Frequencies and the basis for the Frequencies are included in the Program. SCE will also ensure that any changes to the Frequencies will be in accordance with NEI 04-01, "Risk- Informed Method for Control of Surveillance Frequencies," Rev. 1.	N/A	Pending NRC approval of LAR.

Letter	Subject	Commitment No./ Tracking No.	Description of Commitment	Implementation Status (7/28/2008)	Implementation Status (12/2011)
	[800745502-0110] administrativ when using t allows penet direct access atmosphere to be unisola controls. Th will ensure th refueling acc penetration(s		SCE will ensure that appropriate administrative procedures are in place when using the LCO 3.9.3 Note that allows penetration flow path(s) providing direct access from the containment atmosphere to the outside atmosphere to be unisolated under administrative controls. The administrative procedures will ensure that in the event of a refueling accident, the open penetration(s) can and will be promptly closed.	N/A	Pending NRC approval of LAR.
		2011-07-0011 [800745502-0120]	SCE will ensure procedures are in place to require the continuing performance of the Hazardous Cargo Traffic Report in accordance with Regulatory Guide 1.78, "Evaluating the Habitability of Nuclear Power Plant Control Room During a Postulated Hazardous Chemical Release." The report will include hazardous cargo traffic on Interstate 5 and the Atchison, Topeka, and Santa Fe Railway and be submitted to the NRC regional administrator every 3 years.		Pending NRC approval of LAR.

.

SUMMARY OF AUDIT RESULTS FOR REGULATORY COMMITMENTS CHANGE

Audit Performed December 14, 2011

San Onofre Nuclear Generating Station, Units 2 and 3

Report is available in ADAMS at Accession No. ML110871482

P. Dietrich

The NRC staff appreciates the assistance of your staff, both before and during the audit. If there are any questions, I can be contacted at (301) 415-1476 or by electronic mail at <u>mohan.thadani@nrc.gov</u>.

Sincerely,

/RA/

Mohan C. Thadani, Senior Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosure: As stated

cc w/encl: Distribution via Listserv

DISTRIBUTION: PUBLIC LPLIV Reading RidsAcrsAcnw_MailCTR Resource RidsNrrDorlLpl4 Resource RidsNrrPMSanOnofre Resource RidsNrrLAJBurkhardt Resource RidsOgcRp Resource RidsRgn4MailCenter Resource

ADAMS Accession No. ML121030472

OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	NRR/LPL4/BC	NRR/LPL4/PM
NAME	MThadani	JBurkhardt	MMarkley	MThadani
DATE	4/17/12	4/16/12	5/31/12	5/31/12

OFFICIAL RECORD COPY