California Independent System Operator Corporation

Compliance Assessment Relating to Specified Control Room Operational Processes

Report of Independent Accountants December 1, 2015



Report of Independent Accountants

To the Board of Governors of the California Independent System Operator Corporation:

Pricewatuhouse Coopers LLP

We have examined the Management Assertion Regarding Compliance with Selected Operating Procedures (Management Assertion) for the periods of August 31, 2015 through September 4, 2015 and November 2, 2015 through November 6, 2015, in accordance with the criteria set forth in Attachment I of the Management Assertion. The California Independent System Operator Corporation's management is responsible for the assertion. Our responsibility is to express an opinion on the assertion based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants and, accordingly, included examining, on a test basis, evidence supporting the Management Assertion and performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

In our opinion, the Management Assertion referred to above is fairly stated, in all material respects, based on the criteria set forth in Attachment I.

December 1, 2015

Management Assertion Regarding Compliance with Selected Operating Procedures

December 1, 2015

To the Board of Governors of the California Independent System Operator Corporation:

The management of the California Independent System Operator Corporation ("the ISO") is responsible for the implementation of procedures necessary to comply with the real-time and other scheduling requirements of its Tariff. The procedural elements described in Attachment I ("Procedural Elements") to this Management Assertion represent a subset of the Operating Procedures placed into operation by management to meet the requirements of the ISO's Tariff and to carry out its real-time and other scheduling operational objectives. These Procedural Elements are not intended to represent the entire set of procedures placed into operation for management to meet its Tariff and real-time and other scheduling operational objectives.

Scope of Management Assertion and Limitations

The overall objective of this Management Assertion is to report on compliance of the actual operating practices of ISO staff with the primary guidance for certain of its real-time and other scheduling activities, the ISO's Operating Procedures. As referenced in Attachment I, the Procedural Elements relate to eight Operating Procedures, seven of which are publicly available at www.caiso.com, the ISO's website. The remaining Operating Procedure and four Desktop Procedures identified and described in Attachment I are not publicly available, as they have been determined to be System Security Sensitive, Proprietary, or Market Sensitive in accordance with Operating Procedure 5520C.

This Management Assertion provides a comparative assessment of actual practice occurring during the periods of August 31, 2015 through September 4, 2015 and November 2, 2015 through November 6, 2015 ("Assessment Period") and the procedural guidelines for such activities during the Assessment Period. It is limited to the specific Procedural Elements included in this report which comprise the real-time and other scheduling functions. The elements of the ISO's Operating Procedures included by management in this assertion were selected by management on the basis that they were integral to their real-time and other scheduling function and could be objectively compared against actual operating practice.

The specific scope of this Management Assertion is presented in Attachment I which contains the real-time and other scheduling Procedural Elements, criteria by which these Procedural Elements were assessed, and the ISO's self-assessment of compliance, whereby exception conditions, if present, are reported. Such exception conditions are identified when actual practice was not consistent with the Procedural Element's criteria. Attachment II is a narrative description of the real-time and other scheduling activities covered by this Management Assertion.

Summary Assertion

This Management Assertion encompasses the specific real-time and other scheduling activities described in Attachment I. The level of compliance of actual operating practices of ISO staff during the Assessment Period compared with the Procedural Element's criteria is set forth in Attachment I. The ISO was in compliance with the criteria set forth in Attachment I for all periods within the Assessment Period.

The scope of this Management Assertion is limited to the real-time scheduling compliance requirements described herein and does not extend to any other procedures or functions of the ISO.

Mr. Steve Berberich, President and Chief Executive Officer

Mr. Eric Schmitt, Vice President Operations

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
1	Procedure # 2520, Version No. 8.0, Effective Date 08/06/15	Before the Hourly Ramp	No Exceptions
	Real-Time and After the Fact Check Out	Interchange Scheduler uses The ITS (Interchange	
	3.2 RT Hourly Checkout	Transaction System) to confirm that the Interchange Schedules do not exceed market awards. Market award values are found in ITS.	
	3.2.1 Before Each Ramp		
	Step 1 – Interchange Scheduler Actions Verify Schedules with adjacent BAs and WIT prior to the start of the ramp.	Interchange Scheduler confirms that the arranged interchange values agree between the sending and receiving BA's in the WIT tool.	
	Prior to Implementing Interchange Schedules into the ACE equation using ITS	Interchange Scheduler confirms that an audit trail of electronic confirmation through the use of the WECC	
	Use ITS to:	WIT hourly check out boxes is completed.	
	Confirm that Arranged Interchange Schedules do not exceed market awards.	Interchange Scheduler confirms that NSI values do not exceed System Operating Limits in ITS.	
	Confirm Arranged Interchange Schedules between the sending and receiving BAs.	exceed System Operating Limits in 113.	
	Confirm that NSI is within System Operating Limits for each tie point.		
	Agree with the sending/receiving BA on the Arranged Interchange Schedules start and end times and the Energy profile.		
	Cross check ITS RT Arranged Interchange against the WIT to validate NSI.		
	• Use the electronic confirmation process provided by the Reliability Assurer WECC WIT as the primary means to confirm NSI for next hour checkout (from current operating hour).		
	• Provide an audit trail of electronic confirmation through the use of the WECC WIT hourly check out boxes.		

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
2	Procedure # 2520, Version No. 8.0, Effective Date 08/06/15	After the Close of Each Hour	No Exceptions
	Real-Time and After the Fact Check Out 3.2.2 After the Close of Each Hour	The Interchange Scheduler determines that the metered Net Actual Interchange (NAI) values for all adjacent BAs are documented in the WECC WIT after the close of each	
	Step 1 – Interchange Scheduler Actions Review/validate EMS and PI – NAI Interconnection data by accessing the	hour. For each hour, the NAI values reflected in WECC WIT agree with the values in ITS for each adjacent BA.	
	Interchange Schedule data and the telemetered actual Interchange for each tie point. Review to detect any obvious errors and correct as necessary using back-up EMS displays.	Interchange Scheduler utilizes EMS and PI data for cases when NAI values are not automatically inserted into ITS.	
	Checkout final NSI and NAI data with each adjacent Balancing Authority as soon as practical, for each respective tie point.	The Interchange Scheduler logs any unresolved NSI and NAI disagreements in SLIC, including Dynamic Schedules.	
	Check final integrated Dynamic Schedules.		
	Confirm actual RT Arranged Interchange using the WECC WIT to validate NSI and NAI.		
	Resolve any NAI discrepancies in the telemetered tie data, as necessary, by mutual agreement between the CAISO and the adjacent BAs.		
	Log any unresolved NSI and NAI disagreements in SLIC, including Dynamic Schedules.		
	Note: ATF Scheduler will continue to work towards resolution with the respective BA Area.		

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
3	Procedure # 2520, Version No. 8.0 Effective Date 08/06/15 Real-Time and After the Fact Check Out 3.2.2 After the Close of Each Hour	After the Close of Each Hour The Interchange Scheduler contacts the Scheduling Coordinator responsible for the Interchange transaction and resolves the disagreement.	Procedure Element did not occur during observation periods and was not observed
	Interchange Scheduler/ATF Scheduler Actions Step 2		
	IfThe disagreement cannot be resolved, Then Contact the involved Scheduling Coordinator (SC/PSE) responsible for the Interchange transaction. Verify the Schedule, And Implement any necessary ATF e-Tag or ITS changes.		

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
4	Procedure # 2520, Version No. 8.0 Effective Date 08/06/15	Daily schedules and NAI Totals comparison	No Exceptions
4	Real-Time and After the Fact Check Out 3.3 Final Daily Schedules and NAI Totals Comparison Interchange Scheduler Actions Step 1 Perform a comparative check of daily totals of Net Scheduled Interchange and daily totals of telemetered Net Actual Interchange, And Checkout with each of the 12 adjacent BAs using the electronic confirmation process provided by the Reliability Assurer (WECC) WIT as the primary means to confirm NSI and NAI. Step 2 Confirm actual daily Arranged Interchange with adjacent BAs using the WIT to verify final daily NSI and NAI using the electronic confirmation process provided by the Reliability Assurer (WECC) WIT as the primary means to confirm NSI and NAI. Provide an audit trail of electronic confirmation through the use of the WECC WIT hourly and daily check out boxes. Step 3 Log any unresolved NSI and NAI disagreements in SLIC, including Dynamic Schedules.	A comparative check of daily totals of NSI and telemetered NAI is conducted daily. The WECC WIT tool is used to checkout with each adjacent BA, confirming NSI and NAI values. The scheduler determines that NSI and NAI values, as reflected in WECC WIT, agree through the comparative check with ITS values.	No Exceptions

Procedure # 2520, Version No. 8.0, Effective Date 08/06/15 Real-Time and After the Fact Check Out 3.4 RT Scheduling or System Tagging Failure Interchange Scheduler Actions If The CAISO ITS system is not able to produce Net Scheduled Interchange Scheduler data for use in EMS AGC control. Then Use the WIT and agree with adjacent BAs on the total amount of implemented e-Tags in WIT. If Both ITS and WIT are unavailable to communicate NSI with Bas Then Use an NSI value, as agreed upon between the CAISO and each adjacent BA Area. Hold to the last NSI, unless changed by mutual agreement. Procedure Element did not occur The Interchange Scheduler determines that the CAISO ITS application is not able to produce Net Scheduled Interchange Schedulers use WIT to communicate NSI values with adjacent BA's, calls all adjacent BA's to confirm agreed upon values. Interchange Scheduler determines that both ITS and WIT are unable to communicate NSI values with adjacent BA's, calls all adjacent BA's to confirm agreed upon values. Interchange Scheduler utilized for agreement with adjacent BA's. Interchange Scheduler determines that both ITS and WIT are unable to communicate NSI values with adjacent BA's, calls all adjacent BA's to confirm agreed upon values. Interchange Scheduler utilizes last NSI value, unless change is agreed upon by all effected adjacent BA's.	Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
	5	Real-Time and After the Fact Check Out 3.4 RT Scheduling or System Tagging Failure Interchange Scheduler Actions If The CAISO ITS system is not able to produce Net Scheduled Interchange Schedule data for use in EMS AGC control. Then Use the WIT and agree with adjacent BAs on the total amount of implemented e-Tags in WIT. If Both ITS and WIT are unavailable to communicate NSI with Bas Then Use an NSI value, as agreed upon between the CAISO and each adjacent BA Area.	The Interchange Scheduler determines that the CAISO ITS application is not able to produce Net Scheduled Interchange data, WIT values are utilized for agreement with adjacent BA's. Interchange Schedulers use WIT to communicate NSI values with adjacent BA's, calls all adjacent BA's to confirm agreed upon values. Interchange Scheduler determines that both ITS and WIT are unable to communicate NSI values with adjacent BA's, calls all adjacent BA's to confirm agreed upon values. Interchange Scheduler utilizes last NSI value, unless	Procedure Element did not occur during observation periods and was

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
6	Procedure # 2520, Version No. 8.0, Effective Date 08/06/15 Real-Time and After the Fact Check Out 3.5 After the Fact Checkout ATF Recheck of Prior Operating Day's Totals ATF Scheduler Actions Step 1 Coordinate with other Balancing Authorities to re-check the prior day's NSI and telemetered NAI totals. Step 2 Confirm actual ATF Arranged Interchange with the IA using the WIT to validate NSI and NAI. • Use the electronic confirmation procedure provided by the Reliability Assurer (WECC WIT) as the primary means to confirm NSI and NAI for prior day's checkout. If necessary, phone calls may be used to resolve discrepancies. Provide an audit trail of electronic confirmation through the use of the WECC WIT daily check out boxes.	Final daily schedules, NSI, and NAI Totals comparison A comparative check of daily totals of NSI and telemetered NAI is conducted daily by the Interchange Scheduler. The WECC WIT tool is used to checkout with each adjacent BA, confirming NSI and NAI values. The scheduler determines that NSI and NAI values, as reflected in WECC WIT, agree through the comparative check with ITS values.	No Exceptions
7	Procedure # 2520, Version No. 8.0, Effective Date 08/06/15 Real-Time and After the Fact Check Out 3.5 After the Fact Checkout ATF Recheck of Prior Operating Day's Totals ATF Scheduler Actions Step 3 Log any disagreements with and any discrepancies to the electronic confirmation process and any abnormal After the Fact changes in SLIC (Scheduling Logging in California).	Review and Log Unique Scheduling Events Interchange Scheduler Confirms actual ATF Arranged Interchange using the WIT to validate NSI and NAI. If there are disagreements or discrepancies, a SLIC log is created.	Procedure Element did not occur during observation periods and was not observed

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
8	Procedure # 2520, Version No. 8.0, Effective Date 08/06/15	Interchange Scheduler	No Exceptions
	Real-Time and After the Fact Check Out	Final Monthly check of daily schedules and NAI Totals comparison	
	3.5.2 Monthly Checks	Although a comparative check of daily totals of NSI and telemetered NAI is conducted daily, a monthly	
	ATF Scheduler Actions	comparison check must be completed of NSI and NAI with Adjacent BA's. The WECC WIT tool is used to	
	Step 1 Desform final monthly Schodules NSI and NAI sheeks	checkout with each adjacent BA, confirming NSI and NAI values. The ATF scheduler determines that NSI and	
	Perform final monthly Schedules NSI and NAI checks.	NAI values. The ATF scheduler determines that NSI and NAI values, as reflected in WECC WIT, agree through the comparative check with ITS values.	
9	Procedure # 2520, Version No. 8.0, Effective Date 08/06/15	Discrepancies and Final Resolution	Procedure Element did not occur
	Real-Time and After the Fact Check Out	The Interchange Scheduler submits a report to the WIT	during observation
	3.6 Discrepancies and Final Resolution	Survey contact when NSI or NAI discrepancies are not resolved prior to the 15th calendar day of the following	periods and was not observed
	ATF Scheduler Actions	month, and logs the disagreements in SLIC.	
	Step 1		
	Coordinate final resolution, as appropriate, with Settlements and the adjacent Balancing Authorities.		
	If By the 15th calendar day of the following month NAI or NSI quantities have not been resolved Then Submit a report to the WIT Survey Contact.		
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	Step 2 Log any disagreements with and any discrepancies to the electronic confirmation process and any abnormal After the Fact changes made and the monthly End of the Month check out in SLIC (Scheduling Logging in		
	California).		

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
10	Procedure # 2530, Version No. 6.5, Effective Date 08/11/15	Manual Pre-Dispatch of Interchange Transactions	Procedure Element did not occur
	Manual Dispatch on Interties		during observation
	3.1 Manual Pre-Dispatch of Interchange Transactions	In the event the Generation Dispatcher determines a need for a manual dispatch on the ties, a dispatch order is given to the relevant RT Intertie Scheduler.	periods and was not observed
	Interchange Scheduler Actions	o o	
	Step 5 Establish clear verbal agreements with the entity.	Interchange Scheduler will establish clear verbal agreements with the entity.	
	Step 6 Agree upon and log the following information:	Dispatch instructions are recorded, either in SLIC or the RTN ED tool, with all of the following information;	
	• Market ID	• Market ID	
	Accepted GOTO MWs Hour-Ending	Accepted GoTo MW Value Hour-ending	
11	Procedure # 2720 Market Disruption - EIM	EIM Input Data Failures The Market Operator verifies all affected EIM Entity BAs	Procedure Element did not occur during observation
	3.1 Tier 1 - EIM Input Data Failures	have been notified via Everbridge and/or phone.	periods and was not observed
	CAISO Real Time Market Desk Actions	The Market Operator logs event details in SLIC.	not observed
	Step 1 - If input data for EIM is suspect or fails, then notify all affected EIM Entity BAs via Everbridge and/or phone.		
	Example message:		
	Attention EIM Entity BAs: The ISO is experiencing data input issues for HE xx. The ISO is investigating the cause of the input issues and requests EIM Entity BAs to review their market results to confirm that results are reasonable and acceptable, or follow their local procedure as necessary.		
	Step 2 - Monitor the EIM BAs to ensure that the market continues to function as expected and log event details.		

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
15	Procedure # 2540, Version No. 6.0, Effective Date 06/30/15 Interchange Schedule Curtailments	Interchange Schedule Curtailments	No Exceptions
		The Interchange Scheduler determines that	
	3.1.1. Before the Operating Hour	interconnection curtailments are necessary through	
		review of status in ITS. The scheduler executes	
	Take the following actions for a curtailment or adjustment resulting from a transfer	curtailments with affected BAs using the ITS Rapid	
	path limitation for BA-to-BA transfer on an Interconnection, which occurs before the	Curtailment Tool, for each interconnection curtailment.	
	start of an Operating Hour but after the close of the Hour-Ahead Scheduling Process	The approval of the curtailment request from the affected	
	(HASP) Market:	BA is recorded in WECC WIT. Determine that the	
	Interchange Scheduler Actions	revised NSI value is the same in both ITS and WECC	
		WIT following the dispatch of the curtailment order.	
	Step 1		
	Apply the necessary Interconnection curtailments to market schedules.		
	Use Interchange Schedules on a pro rata basis, per CAISO Tariff.		

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
16	Procedure # 2540, Version No. 5.5, Effective Date 03/09/15 Interchange Schedule Curtailments 3.1.2 Current Operating Hour	Interchange Schedule Curtailments for Current Operating Hour	No Exceptions
	Interchange Scheduler Actions Take the following actions for curtailments within the current Operating	Interchange Schedules that need to be curtailed to meet reduced transfer path capacity are determined by the scheduler.	
	Hour	The agreed upon NSI values are documented in ITS.	
	Determine which Interchange Schedules are required to be curtailed on the affected path to meet the reduced transfer path Capacity as determined by the CAISO and the adjacent Balancing Authority.	The Real Time Interchange Scheduler curtails tags affected by the Interchange Schedule changes using the ITS rapid curtailment tool.	
	Step 2: Apply the curtailments to market transmission. Use Interchange Schedules on a pro rata basis.	The Real Time Interchange Scheduler verifies that total market reservations are under the limit.	
	Evaluate Existing Transmission Contracts and TORs based on the instructions provided by the PTO, or Non-Participating Transmission Owners.	The Real Time Interchange Scheduler agrees the revised Interchange Schedule NSI matches the values reflected in the WECC WIT.	
	Note: In the event that notification prohibits reallocation of transmission on CAISO Tariff basis, the Interchange Scheduler takes whatever action necessary to maintain interconnected System Reliability based on prudent operating practices.	The Interchange Scheduler utilizes either WIT or phone call to confirm the schedule changes.	
	Step 3: Curtail tags, using the Interchange transaction scheduler curtailment mode.	After the Interchange Scheduler determines the hourly integrated value based on the time of the actual event, they confirm that the agreed upon value is communicated to the adjacent BA. This communication is performed by phone call or tag.	
	Step 4: Confirm the individual Interchange Schedule changes with adjacent Balancing Authority operators via WIT and/or phone,		
	And Agree upon new Net Scheduled Interchange values. Note: The SC/PSEs are responsible for notifications associated with all commercial aspects of the adjusted Interchange transactions.		
	Step 5: When: Mid-hour transfer capability changes or other Contingencies requiring mid-hour Schedule changes are made,		
	Then: Determine the hourly integrated value based on the time of the actual event. Communicate the integrated values to the affected SCs after confirming them with the adjacent Balancing Authority operators. (May be done via the tag.)		
	Step 6: Do not change the associated market award Schedules in the Interchange transaction scheduler application to agree with the tagging adjustments.		

Ref. No. Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
17 Procedure # 1510, Version No. 5.4, Effective Date 10/15/14 Pre-Schedule and Check-Out Validation 3.1. Pre-Schedule and Check-Out Validation Interchange Scheduler Actions Step 1: Work with Market Participant SCs/PSE's to "tag up" the final Day-Ahead Market (DAM) Interchange transactions every day, after final DAM has published. Step 2: • Use the electronic confirmation process provided by the Reliability Assurer (WECC) WIT as the primary means to confirm NSI for preschedule day checkout. • Produce evidence that the electronic confirmation process provided by the Reliability Assurer (WECC) was used as the primary means to confirm NSI of preschedule day checkout by use of respective check box for each BA's confirmation. Step 3: Agree upon ("check out") Daily Schedule totals with each adjacent BA through use of the WECC WIT using the WECC WIT electronic confirmation process and the respective corresponding check box for that BA. Step 4: If: The CAISO Schedules disagree with those of an adjacent Balancing Authority, Then: Find the mismatched Schedule(s) through a review of individual Interchange e-Tag transactions, as needed. If: The disagreement is identified, Then: Notify the responsible SC/PSE to resolve the discrepancy. Reconfirm NSI with the respective BA using the WIT and produce evidence that the electronic confirmation process provided by the Reliability Assurer (WECC) was used as the primary means to confirm NSI of preschedule day checkout by use of respective check box upon each BA's confirmation. Note: Log any disagreements with and any discrepancies to the electronic confirmation process or any unique pre-scheduling events in SLIC (Scheduling Logging in California)	A daily electronic confirmation is completed for all Net Scheduled Interchange (NSI) preschedule Day-Ahead checkouts, for all adjacent Balancing Authority's (BA) in the Western Electric Coordinating Council (WECC) as evidenced by check marks indicating agreement with each BA in the WECC Interchange Tool (WIT). For each selected hour the scheduled megawatt hour values in WIT agree with the NSI values in ITS.	No Exceptions

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
18	Procedure # 1520, Version No. 3.2, Effective Date 12/16/13 Contract Reference Number (CRN) Transfer – Day-Ahead 3.4. Real-Time TOR Curtailments CAISO Interchange Scheduler Actions Step 1: If: The transmission path Capacity is reduced ("de-rated"), Then: Advise the third party transmission purchaser's Certified SC directly.	TOR Curtailment process Interchange Scheduler verifies that the third party transmission purchaser's Certified SC has been advised of the transmission path capacity reduction.	Procedure Element did not occur during observation periods and was not observed
19	Procedure # 2550, Version No. 5.3, Effective Date 02/05/15 Inadvertent Interchange ATEC Payback 3.1. Inadvertent Interchange ATEC Payback Process Interchange Scheduler Actions Step 1: Monitor the raw CAISO Inadvertent Interchange quantity (NAI – NSI) as calculated and recorded by Interchange transaction scheduler hourly, for each hour, to determine if there are any large inadvertent Interchange accumulations. Note: "Large" is defined as an amount equal to or greater than the largest current dynamic schedule. Step 2: If: The hourly inadvertent accumulation is equal to or greater than the MW value of the largest dynamic schedule or the accumulation for the last few hours is not decreasing Then: •Verify the WIT and EMS accumulation numbers, and do the following: • Verify actuals with adjacent BA, • Determine if there is a metering problem by consulting with the Gen Dispatcher and Shift Supervisor, • Adjust accumulation in the EMS, • Notify EMS staff. • Log the event	Inadvertent Interchange The Interchange Scheduler determines that all NSI (Net Scheduled Interchange) and all the metered (NAI) Net Actual Interchange values for all adjacent BAs are recorded in the WECC WIT after the close of each operating hour and determines if there are any large inadvertent Interchange accumulations. If large inadvertent Interchange accumulations exist, the Interchange Scheduler performs the following actions: • Verify the WIT and EMS accumulation numbers, and do the following: • Verify actuals with adjacent BA, • Determine if there is a metering problem by consulting with the Gen Dispatcher and Shift Supervisor, • Adjust accumulation in the EMS daily, based on accumulated daily values. • Notify EMS staff. • Log the event in SLIC.	Procedure Element did not occur during observation periods and was not observed

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
20	Procedure # 2510, Version No. 7.7, Effective Date 10/15/14 NERC Tagging Requirements 3.1.5 Tag Approval Prior to Knowledge of Final Market Schedules Process CAISO Interchange Scheduler Actions Note: NERC tagging timelines allow submittal of tags prior to the CAISO publishing of final DAM and the Hour Ahead Scheduling Process (HASP) awards or Real-Time Pre-Dispatch (RTPD). Step 1: Approve tags within the allowed evaluation period. Note: This may require the CAISO to approve or deny a NERC e-Tag prior to knowing the final market results.	NERC Tagging The Interchange Scheduler reviews submitted e-tags and manually approves or denies any e-Tags not automatically approved in ITS. When ITS denies a tag, the tag will appear denied. If the Interchange Scheduler reviews and confirms the tag is acceptable, they will override the Denial and manually Approve the tag.	No Exceptions
21	Desktop Procedure WebOMS Guide for NRS-RA Outage Management 1.1 Responsibilities Step 1: Monitor the outage requests for incoming inter-tie resource outages: o Review and Accept the outage o Notify Gen Desk (if they didn't see it already) Based on the outage, verify that the SC has curtailed the tag. Step 2: Assist SC with questions about filling out an outage. Step 3: If requested from SC, update an outage if their WebOMS is unavailable. Step 4: If requested from SC, end an outage if their WebOMS is unavailable. Step 5: Create an outage for the SC if their WebOMS is unavailable.	Outages on Intertie Resources The Interchange Scheduler reviews outages for intertie resources and confirms that outages have been reviewed and accepted from the Outage Management (OMS) application. The Interchange Scheduler will notify The Generation Dispatcher if there is an outage and verify that the SC has curtailed the tag to the required new value.	Procedure Element did not occur during observation periods and was not observed

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
22	Desktop Procedure	Creating Manual Market Reservations in ITS	No Exceptions
	Creating Manual Market Reservations in ITS Detail	The Interchange Scheduler should verify ITS Market reservations values match e-Tags submitted by the SC/PSE. Verify the tags include the following;	
	Step 1: Navigate to the Market Award Summary window. Do this by either entering Market Award Summary in the entry field in ITS or via the drop-down navigation window as illustrated below: Scheduling -> Award Data -> Market Award Summary	 Contract No. if any Product Name Resource ID The Interchange Scheduler should verify that the reason for the non-market Manual Dispatch is logged in SLIC. 	
	Step 2: Add New Market Award in the Market Award Summary window. 1. Click New button 2. Check "Is Resource" box 3. Market ID— use valid Resource ID. (e.g. Resource ID from FIT INC/DEC Tool, or Stranded Load Resource ID found in OP 3530, or Emergency Assistance Resource ID found in OP 4410D, etc.) 4. Cleared MW amount (tag MW amount) 5. Award type - "RTPD Binding" for Real-time 6. Market Product — "EN" for Energy 7. Pass Indicator - "RTPD" for Real-time		
	8. Effective Time – start date/time of tag 9. Termination Time – hour ending date/time of tag 10. Click "Submit"		

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
24.1	Desktop Procedure Real Time Market Desk Operations 1.0 SE Failure/Maintenance SE failure or system maintenance requiring source change from SE to telemetry. • Upon indication or notification from Generation Dispatcher of invalid SE solution, the Real Time Market Desk Operator will determine if the failure will impact Market results. If so, then locate the execution screen and change the Disp Int Source value to EMS. • Notify affected EIM entities. • Upon notification of valid SE solution from Generation Dispatcher, change the Disp Int Source value to SE. • Notify affected EIM entities, and log as appropriate	The Market Operator will perform the following actions when there is a State Estimator Failure or Maintenance outage. Verify, after locating the execution and that the Disp Int Source value has been changed in EMS. Verify affected EIM entities have been notified. Verify upon notification of valid SE solution from Generation Dispatcher that the Disp Int Source value to SE has been changed. Verify notification of all affected EIM entities and that they have been logged appropriately.	Procedure Element did not occur during observation periods and was not observed
24.2	 2.0 RTD Power Flow System topology change that requires RTMO to perform power flow. At the request of an EIM entity perform RTD power flow by locating execution screen. Notify affected entities. Upon notification from EIM entity that running with power flow is no longer needed, resume normal operations. Notify affected entities and log as appropriate. 	RTD Power Flow – Topology Change At the request of an EIM entity perform RTD power flow by locating execution screen Market Operator will perform the following. • Notify affected entities. • Upon notification from EIM entity that running with power flow is no longer needed, resume normal operations. • Notify affected entities and log as appropriate.	No Exceptions

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
24.3	3.0 Market Maintenance: Planned and Unplanned Coordinate planned and unplanned market maintenance with EIM entities. Planned Send out advance notice of planned market maintenance to impacted EIM entities. Change execution status in RTM as directed. Upon completion of market maintenance return RTM to normal market operations. Unplanned Notify affected EIM entities of forced or unplanned market maintenance. Change execution status in RTM as directed. Upon completion of market maintenance return RTM to normal market operations.	 Market Maintenance: Planned and Unplanned For Planned market maintenance, the Market Operator performs the following: Send out advance notice of planned market maintenance to impacted EIM entities. Change execution status in RTM as directed. Upon completion of market maintenance return RTM to normal market operations. For Unplanned market maintenance, the Market Operator performs the following: Notify affected EIM entities of forced or unplanned market maintenance. Change execution status in RTM as directed. Upon completion of market maintenance return RTM to normal market operations. 	No Exceptions
24.4	4.0 RTD/RTPD Failure Communicate with EIM entities about RTD/RTPD failures. • Verify EIM entities and MES desk are aware of RTD/RTDP failure. • Request MES investigate. • Notify affected entities and log as appropriate	For RTD/RTPD failures, the Market Operator performs the following: • Verify EIM entities and MES desk are aware of RTD/RTDP failure. • Request MES investigate. • Notify affected entities and log as appropriate in SLIC.	Procedure Element did not occur during observation periods and was not observed

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
24.5	 5.0 BA performs Contingency Dispatch CAISO Contingency Dispatch Upon indication or notification of CAISO RTCD notify affected EIM entities. Verify that EIM Transfer dispatches are advisory solutions from the last good RTD. Verify that affected EIM entities are receiving RTD advisory dispatches. Upon completion of RTCD CAISO BA will notify RTMD of return to normal RTM dispatch. Notify EIM entities of returning to normal RTM dispatch. Complete required logging. 	 CAISO Contingency Dispatch When the Market Operator is informed by the Generation Dispatcher that a CAISO Contingency Dispatch has been run, the following actions are taken. Upon indication or notification of CAISO RTCD notify affected EIM entities. Verify that EIM Transfer dispatches are advisory solutions from the last good RTD. Verify that affected EIM entities are receiving RTD advisory dispatches. Upon completion of RTCD CAISO BA will notify RTMD of return to normal RTM dispatch. Notify EIM entities of returning to normal RTM dispatch. Complete required logging in SLIC. 	Procedure Element did not occur during observation periods and was not observed
24.5A	 Upon indication or notification of EIM entity deploying reserves. Verify that EIM Transfer dispatches are advisory solutions from the last good RTD and notify affected entities. Upon completion of reserve deployment, verify EIM Transfer returned to normal. Complete required logging 	 EIM Entity Dispatch When the Market Operator detects or is informed by the EIM Entity that they have deployed reserves, the following actions are taken. Verify that EIM Transfer dispatches are advisory solutions from the last good RTD and notify affected entities. Upon completion of reserve deployment, verify EIM Transfer returned to normal. Complete required logging in SLIC. 	Procedure Element did not occur during observation periods and was not observed

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
24.6	Coordinate use of Abort/Use Previous Solution/Send DA Results with EIM entities Coordinate use of Abort function • Upon request of EIM entity or MES, implement Abort function in RTPD/RTD/STUC by locating the Execution function. • Rerun RTM if required. • Notify EIM entities of cause and ETR if known. • Complete logging as required. Coordinate Use Previous Solution function • Upon request of EIM entity or MES, implement Use Previous Solution function in RTPD/RTD/STUC by locating the Execution function. • Notify EIM entities. • Complete logging as required.	Abort/Use Previous Solutions/Send DACoordinate use of Abort function • Upon request of EIM entity or MES, the Market Operator performs the following actions: Implement Abort function in RTPD/RTD/STUC by locating the Execution function • Rerun RTM if required. • Notify EIM entities of cause and ETR if known. • Complete logging as required in SLIC Coordinate Use Previous Solution function Upon request of EIM entity or MES, the Market Operator performs the following actions: • Implement Use Previous Solution function in RTPD/RTD/STUC by locating the Execution function • Notify EIM entities. • Complete logging as required in SLIC. Send DA Results Upon request of EIM entity or MES, the Market Operator performs the following actions: • Implement Send function in RTPD/RTD/STUC by locating the Execution • Notify EIM entities. • Complete logging as required.	Procedure Element did not occur during observation periods and was not observed

Ref. No.	Operating Procedure Element	Criteria to Test Operating Procedure Element	Management's Compliance Assessment
24.7	7.0 ALFS5 Auto Publish Manage Auto-Publish function of ALFS5 This process describes how to manage ALFS5 alerts and warnings in real-time. Login If FDS is performing a patch (like re-estimation of the models), Auto Publish will have to be turned off in both the RTD and RTPD monitors.	 ALFS5 Auto Publish When the ALFS application is not available, the Market Operator will manage the Auto-Publish function by performing the following: Login If FDS (Short Term Forecasting group) is performing a patch (like re-estimation of the models), Auto Publish will have to be turned off in both the RTD and RTPD monitors. 	Procedure Element did not occur during observation periods and was not observed
25	Desktop Procedure EIM Market Suspension and Administrative Price RT Market Suspension of Intervention CAISO Real-Time Market Desk (RTMD) Actions Step 1 If: The Shift Supervisor or the Director of System Operations has determined that Administrative Prices will be in effect for the Real Time Market. Then: Notify EIM Entities and indicate the extent and expected duration for which the Administrative Prices apply. Log Accordingly Note: The Administrative Price for Imbalance Energy and Ancillary Services is the applicable price for the Settlement period immediately preceding the Settlement period in which the intervention takes place. Step 2 When: The Shift Supervisor or the Director of System Operations discontinues the EIM Market Suspension and Administrative Price. Then: Notify EIM Entities and Log Accordingly.	EIM Market Suspension and Administrative Price The Market Operator will verify the notification of EIM Entities and confirm the extent and expected duration for which the Administrative Prices apply. The Market Operator will verify that a SLIC log entry is made for the above actions.	Procedure Element did not occur during observation periods and was not observed

Other Information Provided by Management

Narrative Description of the Interchange Scheduling and Real-time Market Operation processes.

Overview

This narrative description of the Interchange Scheduling and Real-time Market Operation processes is presented as supplemental information to aid in understanding the operational areas covered by the Management Assertion. This information is summarized from the same Operating and Desktop Procedures that are the subject of the Management Assertion, and as specified below. As such, this Attachment is presented as unaudited supplemental information and is not a part of the Management Assertion that is reported on in the Report of Independent Accountants.

The processes are set forth in Pre-Schedule and Check-Out Validation, Operating Procedure #1510, Contract Reference Number (CRN) Transfer — Day-Ahead, Operating Procedure #1520, NERC Tagging Requirements, Operating Procedure #2510, Real-Time and After the Fact Check Out, Operating Procedure #2520, Manual Dispatch on Interties, Operating Procedure #2530, Interchange Schedule Curtailments, Operating Procedure #2540, Inadvertent Interchange ATEC Payback, Operating Procedure #2550, Operating Procedure #2720 Market Disruption-EIM, Desk Top Procedure INT-004 WebOMS Guide for NRS-RA Outage Management, Desktop Procedure INT-010 Creating Manual Market Reservations in ITS, Desktop Procedure RTM-001 Real Time Market Desk Operations, and RTM-002 EIM Market Suspension and Administrative Price Real-Time Market Desk actions.

Interchange Scheduling Processes

Pre-Schedule and Check-Out Validation

The ISO manages the reliability of the interconnected system by verifying interchange schedules with each adjacent Balancing Authority Area on a Day-Ahead pre-scheduling timeline basis and by confirming arranged interchange with the Western Electricity Coordinating Council (WECC) Interchange Tool (WIT) which serves as the electronic confirmation process. The Interchange Scheduler performing the pre-scheduling function is responsible for the following:

- Performing the Balancing Area Schedule pre-checks with other Balancing Authorities (BA).
- Validating Net Scheduled Interchange (NSI) with adjacent BAs via the WIT.
- Using the electronic confirmation process provided by the WIT as the primary means to confirm NSI for preschedule day checkout.
- Producing evidence that the electronic confirmation process provided by WECC was used as the primary means to confirm NSI for the Pre-Schedule day checkout, by use of respective check boxes.

Before the Hourly Ramp

The Interchange Scheduler uses the ITS (Interchange Transaction System) to confirm that the interchange schedules do not exceed Market Awards found in ITS. The Interchange Scheduler confirms that NSI values do not exceed System Operating Limits in ITS.

After the Close of Each Hour

The Interchange Scheduler confirms that the metered Net Actual Interchange (NAI) values for all adjacent BAs are documented in the WIT after the close of each hour. The Interchange Scheduler also checks to see the NAI values reflected in the WIT agree with values in ITS for each adjacent BA. If the interchange values do not automatically populate in ITS, the Interchange Scheduler utilizes EMS and PI data. The Interchange Scheduler logs any NSI/NAI disagreements in the SLIC (Scheduling and **Logging** for ISO California) application, including Dynamic Schedules. The Interchange Scheduler contacts the Scheduling Coordinator responsible for the interchange transaction and resolves the disagreement.

Daily Schedules and NAI Totals Comparison

A daily a comparative check is made between totals of NSI and telemetered NAI. The WIT is used to checkout with each adjacent BA, confirming NSI and NAI values. The Interchange Scheduler verifies that the NSI and NAI daily totals agree with ITS through a comparative check.

RT Scheduling or System Tagging Failure

If the Interchange Scheduler determines that the CAISO ITS application is not able to produce NSI data, WIT values are utilized for agreement with adjacent BA's. The Interchange Scheduler would use WIT to communicate NSI's with adjacent BA's and call adjacent BA's to confirm agreed upon values. If the Interchange Scheduler determines both ITS and WIT are unable to communicate NSI values with adjacent BA's, a call is made to adjacent BA's to agree on a value. The Interchange Scheduler utilizes the last NSI value received unless a change is agreed upon by all effected BA's.

Final daily schedules, NSI, and NAI Totals comparison

A comparative check of daily totals of NSI and telemetered NAI is conducted daily by the Interchange Scheduler. The WIT tool is used to checkout with each adjacent BA, confirming NSI and NAI values. The Interchange Scheduler determines that NSI and NAI values, as reflected in the WIT agree, through the comparative check with ITS values.

Review and Log Unique Scheduling Events

The Interchange Scheduler confirms actual After-the-fact (ATF) Arranged Interchange using the WIT to validate NSI and NAI. If there are any differences they are noted by the Interchange Scheduler in a SLIC log.

Final Monthly check of daily schedules and NAI Totals comparison

Although a comparative check of daily totals of NSI and telemetered NAI is conducted daily by the Interchange Scheduler, a monthly comparison check must be completed of NSI and NAI with Adjacent BA's. The WIT tool is used to checkout with each adjacent BA, confirming NSI and NAI values. The Interchange Scheduler determines that NSI and NAI values, as reflected in WIT, agree through the comparative check with ITS values.

Discrepancies and Final Resolution

The Interchange Scheduler submits a report to the WECC Regional Reliability Organization Survey Contact when NSI or NAI discrepancies are not resolved by the 15th calendar day of the following month, and logs the disagreements in SLIC.

Manual Pre-Dispatch of Interchange Transactions

In the event the Generation Dispatcher determines a need for a manual dispatch on the ties, a dispatch order is given to the relevant Interchange Scheduler. The Interchange Scheduler will establish verbal agreements with three part communication. Dispatch instructions will be recorded either in SLIC or the RTN ED tool, with all the following information: Market Reservation I.D., Accepted Go-to MW value, and Hour Ending.

Interchange Schedule Curtailments for Current Operating Hour

Interchange schedules that need to be curtailed to meet reduced transfer path capacity are determined by the Interchange Scheduler. The agreed upon values are documented in ITS. The Interchange Scheduler curtails tags affected by the interchange schedule changes using the ITS rapid curtailment too. The Interchange Scheduler verifies that total market reservations are under the limit. The Interchange Scheduler agrees the revised interchange schedule NSI matches the values reflected in the WIT. The Interchange Scheduler utilizes either the WIT or a phone call to confirm the schedule changes. After the Interchange Scheduler determines the hourly integrated value based on the time of the actual event, they confirm that the agreed upon value is communicated to the adjacent BA. This communication is performed by phone call or e-Tag.

TOR Curtailment Process

The Interchange Scheduler verifies that the third party transmission purchaser certified SC has been advised of the transmission path capacity reduction.

Inadvertent Interchange

The Interchange Scheduler determines that all NSI and all the metered NAI values for all adjacent BA's are recorded in the WIT after the close of each operating hour and determines if there are any large inadvertent Interchange accumulations.

If any large inadvertent Interchange accumulations exist, the Interchange Scheduler verifies the WIT and EMS accumulation numbers and verifies the actuals with the with the adjacent BA's. The Interchange Scheduler then determines if there is a metering problem by consulting with the Generation Dispatcher and Shift Supervisor. If the root-cause of the large inadvertent interchange is determined to be a metering problem, the scheduler then notifies the EMS staff. A SLIC Log is created for tracking purposes.

NERC Tagging Requirements

Interchange Schedules are Energy Schedules where Energy is transferred between Balancing Authority Areas and they require coordination between multiple entities. The primary method for providing this Coordination is the e-Tag. Various entities can communicate important information pertaining to the Interchange transaction to each other via the internet using computer applications, which are based on the e-Tag specifications and schema maintained by the North American Energy Standards Board (NAESB). A Purchasing Selling Entity (PSE) can communicate Interchange transaction information to reliability entities using e-Tags, including Balancing Authorities such as the ISO. Similarly, a reliability entity can communicate reliability limits on Interchange transactions to PSEs and other reliability entities using e-Tags.

E-Tags should be prepared by PSE's in accordance with North American Electricity Reliability Corporation (NERC), NAESB, WECC, and CAISO requirements to facilitate effective operations between Balancing Authority Areas within the Western Interconnection. Interchange Schedulers may curtail e-Tags due to reliability reasons or for violation of NERC, NAESB, WECC, or CAISO e-Tag requirements. CAISO Interchange Scheduler logs all instances of curtailments due to reliability reasons in SLIC.

Real-Time and After the Fact Check Out

CAISO checks the NSI and telemetered NAI for each Intertie point, each hour, with the respective adjacent BAs, such that NSI does not exceed tie point System Operating Limit prior to implementation of Arranged Interchange for the next hour. The CAISO validates Arranged Interchange against the WIT Checkouts with the WIT and each adjacent BA are conducted in the Real-Time (RT) and ATF timeframes per NERC Interchange Standards and WECC Criteria. Any Scheduled or Actual Interchange related discrepancies are resolved with the respective BAs prior to the Operating Hour. If significant deviations in NAI are detected during RT, the deviations are investigated and corrective actions are taken.

Manual Dispatch on Interties

CAISO has the responsibility to maintain System Reliability and take immediate action to maintain or reestablish required or necessary Operating Reserves. A Manual Dispatch on an Interconnection is used for procuring additional Energy or reducing excess Energy that was not awarded by the ISO market. A Manual Dispatch can be used either in the event of a CAISO Supply deficiency event, a CAISO Overgeneration event, or in response to a HASP/RTM failure or other critical application failure that causes Imbalance Energy to affect reliability. CAISO can buy from or sell to entities other than CAISO Market Participants during periods when the CAISO determines that it may not be able to maintain the Reserve Margin in future hours or resources are insufficient as indicated in the CAISO Bid List in the Scheduling Infrastructure and Business Rules (SIBR)/Fully Integrated Transactions (FIT) tools.

Interchange Schedule Curtailments

Due to Outages, path limitations and interruption of Energy Schedules from adjoining Balancing Authorities, it is frequently necessary to eliminate or adjust imports and exports to CAISO after the close of the active CAISO markets. Interchange Schedule curtailments are implemented in accordance with the CAISO Tariff on a pro rata basis. Interchange Schedule curtailments for Existing Transmission Contracts (ETC's) and Transmission Ownership Rights are performed based on the instructions given to CAISO by the responsible Participating Transmission Owners (PTO's) and Non-Participating Transmission Owners (NPTO's), respectively. However, in order to maintain interconnected System Reliability, the CAISO

Interchange Scheduler may be required to take actions that conflict with the instructions provided by the PTO and NPTO Owners.

Real-time Market Operations Processes

Market Disruption EIM

EIM Input Data Failures

The Market Operator verifies all affected EIM Entity BAs have been notified via the Everbridge communications system and/or by phone. The Market Operator would then log event details in SLIC.

State Estimator (SE) Failure/Maintenance

After a State Estimator Failure or Maintenance Outage, the Market Operator will locate the execution screen and verify that the 'Disp Int Source' value has been changed in EMS. The Market Operator will verify (upon notification of the Generation Dispatcher) that there is a valid SE solution and the 'Disp Int Source' value to the SE has been changed. The operator then verifies that all affected EIM entities have been notified and that that notification is logged in SLIC.

RTD Power Flow-Topology Change

At the request of an EIM entity the Market Operator will perform an RTD power flow and notify affected entities. Upon notification from an EIM entity that running with the power flow is no longer needed the Market Operator will resume normal operations. Notification of affected entities and SLIC logging will follow as appropriate.

Planned Market Maintenance

The Market Operator will send out advance notice of planned market maintenance to impacted EIM entities, The Market Operator will change execution status in the RTM as directed. Upon completion of the market maintenance the RTM will return to normal market operations.

Unplanned Market Maintenance

The Market Operator will notify the affected Energy Imbalance Market (EIM) entities of forced or unplanned market maintenance. The Market Operator will then change the execution status in RTM as directed. Upon completion of the market maintenance the Market Operator will return RTM to normal market operations.

RTD/RPTD Failures

The Market Operator will verify that EIM entities and Market Engineering Support (MES) desk are aware of RTD/RTDP failure and request MES to investigate. The Market Operator will then notify affected entities and log as appropriate in SLIC.

CAISO Contingency Dispatch

When the Market Operator is informed by the Generation Dispatcher that a CAISO contingency dispatch has been run, the Market Operator will notify the affected EIM entities of indication or notification of a CAISO RTCD. The Market Operator will verify the EIM transfer dispatches and advisory solutions the last RTD are good. The Market Operator verifies affected EIM entities are receiving RTD advisory dispatches. Upon completion of the RTCD the CAISO BA will notify the RTMD of a return to normal RTM dispatch. The Market Operator will notify EIM entities of returning to normal RTM dispatch and complete required logging in SLIC.

EIM Entity Dispatch

When the Market Operator detects or has been informed by the EIM entity that it has deployed reserves, the Market Operator will verify EIM Transfer dispatches are advisory solutions from the last good RTD and notify affected entities. Upon completion of reserve deployment the Market Operator verifies EIM transfer has returned to normal and complete required logging in SLIC.

Abort/Use Previous Solutions/Send 'DACoordinate' use of Abort function

Upon request of EIM entity or MES, the Market Operator will implement Abort Function in EIM Execution Control and rerun RTM if required. If the cause and ETR is known the Market Operator will notify EIM entities and log information in SLIC.

Coordinate Use Previous Solution function

Upon request of EIM entity or MES, the Market Operator will implement the Previous Solution function, notify EIM entities and complete logging as required in SLIC.

Send DA Results

Upon request of EIM entity or MES, the Market Operator will implement the send function in RTPD/RTD/STUC and notify EIM entities and log as appropriate.

ALFS5 Auto Publish

When the ALFS application is not available, the Market Operator will manage the Auto-publish function by logging in as Real-time dispatch. If a patch is being deployed, Auto-publish will need to be turned off in both the RTD and RTPD monitors.

EIM Market Suspension and Administrative Price

The Market Operator will verify notification the notification of EIM entities and confirm the extent and expected duration for which Administrative Prices will apply. Market Operator will verify a SLIC log entry is made for these actions.