EIR Transition Guide for 2019 Reliability Coordinator Changes

Purpose of Document

This document describes the changes required in the North American Energy Standards Board (NAESB) Electric Industry Registry (EIR) system to facilitate the Western Interconnection Reliability Coordinator changes occurring in 2019. Reliability Coordinators (RCs) and Balancing Authorities (BAs) must edit their records in the NAESB EIR to ensure all processes and systems related to transmission scheduling reflect the appropriate RC entity.

Background on Electric Industry Registry

The EIR is a web-based industry tool managed by NAESB for which Open Access Technology International, Inc. (OATI) serves as the NAESB chosen system administrator and manages the tool under the webRegistry platform. As described in the NAESB EIR webRegistry User Guide v3.1, the EIR "will serve as the central repository for information required to support commercial, scheduling, and transmission management operations in North America". The EIR provides for registration by entities who serve operations or merchant roles in scheduling and transmission management operations. The operations' roles include RCs, BAs, Market Operators (MOs), and Transmission Service Providers (TSPs). For the RC transition activities described in this guide, updates should only be required by entities serving the RC and BA functions.

EIR Publication Cycles

The normal NAESB EIR publication is at midnight Central Standard Time year-round. The following table shows the effective times for the NAESB EIR publication relative to Western RC time zones and time of year:

00:00 CST EIR Publication	Daylight Time (Mar – Nov)	Standard Time (Nov – Mar)		
Mountain Time	00:00	23:00		
Pacific Time	23:00	22:00		

The webRegistry system distributes a Pending publication on weekdays that will become the Active publication the following evening. The pending publication does not occur on weekends or NERC holidays without using the emergency publication process. The following table shows the relationship between the Pending and Active publications:

Pending Publication (00:00 CST)	Active Publication (00:00 CST)		
Monday	Tuesday		
Tuesday	Wednesday		
Wednesday	Thursday		
Thursday	Friday		
Friday	Saturday		

Outside of the normal publication cycle, the NAESB EIR offers an Emergency Publication process. The Emergency Publication can be requested anytime via the NAESB EIR interface and carries an associated \$1,000 fee. A completed Emergency Publication request results in the release of a new pending publication that is comprised of all pending data that the registry has accumulated since the previous publication was released. Questions regarding the timing of an emergency publication can be directed to the OATI Help Desk. At this time, none of the RCs are planning to use the emergency publication process for their NAESB EIR transition activities.

EIR Records Impacted by RC Transitions

The NAESB EIR is designed with hierarchical record sets. The top layer for records are Entities which serve as an organization's primary NAESB EIR registration. The Entity record lists the entity's name, URL, DUNS number, physical location, and listed contacts.

Entity Code-Roles are the second layer of records below an entity. Each entity can choose one or more code-roles for their entity within the NAESB EIR. Those code-roles include the ability to designate as a BA or RC within the NAESB EIR. The Entity Code-Role records are what are used by the e-Tag systems to understand the association between a BA and its RC.

Once an entity is set up with the proper code-roles, Object records are the next layer of records which belong to given entity code-roles. Object records include Source/Sink points, POR/POD Points, and Pseudo-Ties.

For the Western RC transitions, new RC entity code-roles will need to be created under an entity. Some RCs may have an existing entity record that can serve as the parent for the RC entity code-role, whereas some may have a business need to create an entirely new entity within the NAESB EIR. Once the RC entity code-roles are created and approved, BAs will need to modify their BA entity code-role record to associate to the new RC. This guide has subsequent sections on the specific steps RCs and BAs need to take in the NAESB EIR to facilitate the changes.

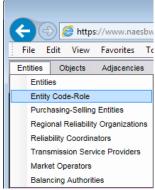
The last level of EIR records, Objects, do not require any manual changes. The only Object records which have a RC association are Pseudo Tie records. Those records will automatically update to the proper RC association based on the changes made in the RC and BA entity code-role records.

Before a new RC or BA is included in the registry publication, the registration process must be completed, including any necessary approvals. Any modifications to an existing RC or BA must also obtain the necessary approvals before inclusion in the NAESB EIR publication.

RC Actions for Transition

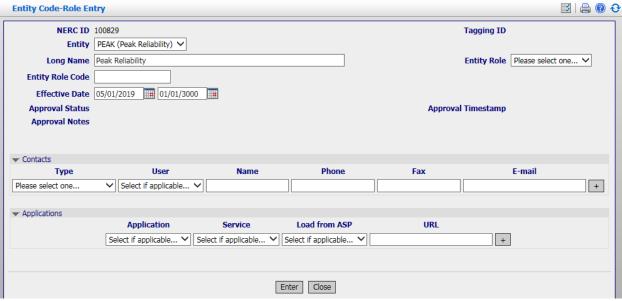
The following steps explain how a RC enters their RC entity code-role in the NAESB EIR. This guide does not cover if a RC needed to establish a new entity as the parent for the RC code-role; any RC needing that configuration can contact NAESB for assistance.

- 1. Log in to the NAESB EIR for your RC entity.
- 2. Navigate to the Entity Code-Role display (Entities > Entity Code-Role).



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3. The Entity Code-Role Entry display opens. The following steps outline which sections need to be entered.

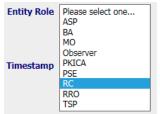


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- 4. The Entity and Long Name should prepopulate from the Entity record.
- 5. The RC will enter the Entity Code-Role for their RC. This code is a three or four letter identifier and should be coordinated with NAESB to ensure it does not conflict with other identifiers in the EIR.

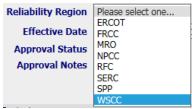
Entity Role Code	
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6. The RC will select the "RC" option from the Entity Role dropdown box.



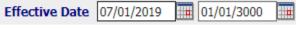
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7. The RC will select the "WSCC" option from the Reliability Region dropdown box.



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8. The RC will enter the Effective Date as the start date that coincides with the transition date they have chosen. The stop date can remain at the default of 01/01/3000.



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9. The Contacts section can be entered at the RC's discretion to identify NAESB EIR administrators, 24 hour contacts, and other contacts as identified. The Contacts section does require at least one record for 24 Hour contact to be entered. The User dropdown box can be used to prepopulate information for NAESB EIR users of a given entity.

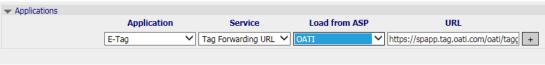


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10. The RC will enter a record in the Applications section for Tag Forwarding URL. The filters in this section can be used to prepopulate the URL. Use the dropdown boxes to make the following choices:

Application = E-Tag
Service = Tag Forwarding URL
Load from ASP = OATI

Those filters will automatically load the proper URL.



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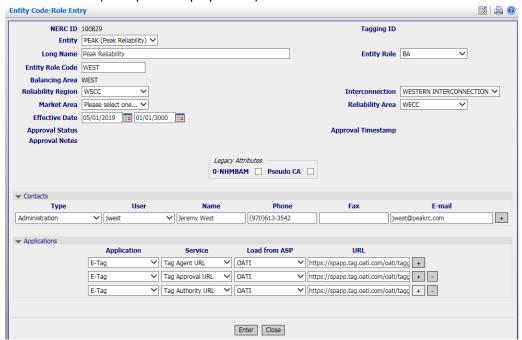
11. After the RC enters the changes described above, the RC entity code-role record is saved by clicking the "Enter" button.



NOTE: Each RC will be required to pay for the new RC code-role; contact the OATI Help Desk if you require assistance with the payment section of the NAESB EIR.

BA Actions for Transition

- 1. Log in to the NAESB EIR for your BA entity.
- 2. Navigate to the Entity Code-Role display (Entities > Entity Code-Role).
- 3. Find the proper BA entity code-role and open the record by clicking on the hyperlink in the "Code" column (example of display below).



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4. In order to see the new RC in this display, the BA must set the start time Effective Date equal to the effective date for their RC.



NOTE: The Effective Date for each RC transition as well as the date the RC record will be available for RCs to select are listed in a table in the subsequent "Summary of RC Transitions" section of the guide.

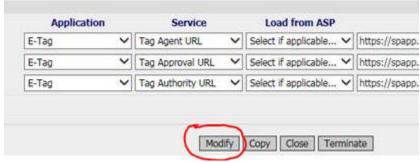
5. After setting the Effective Date, the Reliability Area dropdown box should list the future RC as a choice for the BA. The screen below shows an example from testing where both AESO and WECC are choices.



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NOTE: The new NAESB EIR RC codes are listed in a table in the subsequent "Summary of RC Transitions" section of the guide.

- 6. No changes should be required to any other sections of the BA entity code-role record.
- 7. After the BA enters the changes described above, the BA entity code-role record is saved by clicking the "Modify" button.



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Options for Transitioning RC and BA Records

As the RCs coordinate on the NAESB EIR transitions for 2019, the following objectives were considered in evaluating the best approach for the NAESB EIR changes:

- 1. Determine future structure of West RCs in EIR system.
- 2. Minimize impacts to ECC, WIT, and other downstream systems from NAESB EIR changes.
- 3. Minimize impacts to scheduling for each RC transition.

For objective #1, all future RCs in the Western Interconnection determined that they will register as a RC for their BA footprint within the NAESB EIR. For objective #2, the RCs coordinated with NAESB and OATI to determine what technical impacts exist from the changes to the NAESB EIR. RC affiliation to e-Tag records occur at e-Tag creation time, so there are no impacts to e-Tags as long as each BA has an effective RC affiliation in the NAESB EIR. Additionally, downstream systems such as ECC and WIT are configured so that all of the NAESB EIR transitions can be accommodated without a technical impact.

The final objective the RCs considered is how to minimize impacts to scheduling with four transitions occurring this year (tentatively July 1st, September 2nd, November 1st, and December 3rd). The RCs considered the following two options as viable approaches for NAESB EIR transition activities. Subsequent sections of this guide describe which option each RC plans to use for their specific transition.

Option 1 – Move RC of record to accommodate prescheduling period

The first option is setting the RC and BA effective dates in the NAESB EIR for a given RC transition to coincide with the prescheduling day prior to the RC effective date. The majority of prescheduling occurs the business day prior to an operating day. For example, prescheduling for Monday usually occurs on Friday so that a significant portion of e-Tags flowing on Monday are created on the prescheduling day.

The NAESB EIR effective date for a given RC transition can be set to coincide with the prescheduling day. The NAESB EIR records would become effective at midnight Central Standard Time under the normal NAESB EIR publication cycle, so all the Western Interconnection transitions would be up to two hours prior to this time (see table on page 1). This approach would allow new e-Tags created after the NAESB EIR publication to link to the new RC for a given sink BA. This approach allows normal e-Tag scheduling practices to be utilized and reduce the amount of e-Tags with an improper RC association. The normal NAESB EIR publication cycle also can be used to implement the effective dates under the prescheduling approach as they all occur on weekdays.

WECC coordinates with the industry on publishing a prescheduling calendar to better accommodate holidays and weekends. There are two RC transitions that would be impacted by this calendar, the RC West transition on July 1st and the BC Hydro transition on September 2nd. In those cases, the prescheduling will occur as follows:

New Month - Monday, July 1, 2019

Wednesday, June 26—Preschedule for Thursday-Friday June 27-28 (2)

Thursday, June 27—Preschedule for Saturday-Sunday, June 29-30 (2)

Friday, June 28—Preschedule Monday, July 1 (1)

New Month & Labor Day—Sunday, September 1; Monday, September 2, 2019

Thursday, August 29—Preschedule for Friday-Saturday, August 30-31 (2)

Friday, August 30—Preschedule for Sunday-Monday-Tuesday, September 1-3 (3)

The effective date for the RC West transition in the NAESB EIR under the prescheduling approach would be Friday, June 28th. Both prescheduling and real-time e-Tags created June 28th forward for BAs in RC West would have the new RC association. The effective date for the BC Hydro transition in the NAESB EIR would be Friday, August 30th. Both prescheduling and real-time e-Tags created August 30th forward for BAs in BC Hydro RC would have the new RC association. The other two proposed RC transition dates are November 1st for AESO to become a RC in the NAESB EIR and for RC West to take an expanded footprint and December 3rd for SPP and Gridforce to become RCs. Both of these transitions occur on a normal business day, so the NAESB EIR transition would occur the business day prior to actual RC effective date (October 31st and December 2nd).

Option 2 – Move RC on Date of Record as RC

The second option is setting the RC and BA effective dates in the NAESB EIR for a given RC transition to coincide with the actual RC of record date. Under this approach, the NAESB EIR transition would not take into account the prescheduling calendar. All e-Tags created prior to a given RC effective date would still be related to the Peak Reliability "WECC" entity code-role. The "WECC" entity code would remain until after all RC and EIR transitions have been fully completed.

Under this approach, all e-Tags created in the prescheduling window would be linked to Peak with the WECC code-role acronym. These e-Tags would maintain that link until the e-Tag reached its stop datetime or was set to an inactive status via termination. A subsequent section of this guide describes when Peak Reliability plans to sunset their RC code-role and any impacts to e-Tags.

RC West Transition 7/1/2019

RC West will use Option 1 and transition their RC to coincide with the prescheduling day. Since RC West becomes the RC of record on Monday, July 1st, that date coincides with the WECC prescheduling calendar where prescheduling for July 1st will occur on Friday, June 28th. Therefore, RC West will set the Effective Time for the RC NAESB EIR entry as June 28th. All BAs transitioning to RC West on July 1st also will set the Effective Time for RC West as their RC to begin on June 28th. Any e-Tags created with a source or sink BA in the RC West footprint after Thursday, June 27th 23:00 Pacific Daylight time will reflect the new RC West association. RC West will use their stakeholder communication process to alert BAs when the RC West NAESB EIR record is approved, but BAs should ensure this BA transition activity in the NAESB EIR system is completed no later than Friday, June 14th.

BC Hydro Transition 9/2/2019

BC Hydro RC will use Option 1 to transition their RC to coincide with the prescheduling day. Since BC Hydro becomes the RC of record on Monday, September 2nd, that date coincides with the WECC prescheduling calendar where prescheduling for September 2nd will occur on Friday, August 30th. Therefore, BC Hydro RC will set the Effective Time for the RC NAESB EIR entry as August 30th. The BC Hydro BA also will set the Effective Time for BC Hydro as their RC to begin on August 30th. Any e-Tags created with BC Hydro as the source or sink BA after Thursday, August 29th 23:00 Pacific Daylight time will reflect the new BC Hydro association.

RC West Transition 11/1/2019

RC West also will use Option 1 to transition the expansion of additional BAs which occurs on November 1st. The RC West NAESB EIR record already will be active from the July 1st activities, so no additional RC West actions are required in the NAESB EIR. All BAs transitioning to RC West on November 1st will need to set the Effective Time for RC West as their RC to begin on October 31st. Any e-Tags created for these BAs in the RC West footprint after Thursday, October 31st 23:00 Pacific Daylight time will reflect the new RC West association. RC West will use their stakeholder communication process to alert BAs when they should make the necessary EIR changes, but should ensure this BA transition activity in the NAESB EIR system is completed no later than Friday, October 18th.

AESO Transition 11/1/2019

AESO RC will use Option 2 to transition their RC. AESO RC is in a unique situation because they already serve as the RC for the AESO BA, but there is currently a single RC entry in the NAESB EIR for the Western Interconnection in the transition from WECC to Peak and then AESO becoming RC for their footprint. AESO chose a transition date which aligned with one of the existing RC transition dates. AESO RC will set the Effective Time for the RC NAESB EIR entry as November 1st. The AESO BA also will set the Effective Time for AESO as their RC to begin on November 1st. Any e-Tags created with AESO as the source or sink BA after Friday, November 1st 00:00 Mountain Daylight time will reflect the new AESO association.

Gridforce Transition 12/3/2019

Gridforce RC will use Option 1 to transition their RC to coincide with the prescheduling day. Gridforce RC will set the Effective Time for the RC NAESB EIR entry as December 2nd. The Gridforce BAs also will set the Effective Time for Gridforce RC as their RC to begin on December 2nd. Any e-Tags created with Gridforce BAs as the source or sink BA after Monday, December 2nd 23:00 Mountain Standard time will reflect the new Gridforce RC association.

SPP Transition 12/3/2019

SPP will use Option 2 to transition the on the date of record that they become a RC for Western Interconnection BAs. SPP will set the Effective Time for the RC NAESB EIR entry as December 3rd. All BAs transitioning to SPP on December 3rd also will set the Effective Time for SPP as their RC to begin on December 3rd. Any e-Tags created with a source or sink BA in the SPP footprint after Monday, December 2nd 23:00 Mountain Standard time will reflect the new SPP association. SPP will use their stakeholder communication process to alert BAs when the SPP NAESB EIR record is approved, but BAs should ensure this BA transition activity in the NAESB EIR system is completed no later than Friday, November 15th.

Summary of RC Transitions

The following table summarizes the choices for each RC transition as described in the prior sections. The NAESB EIR Effective Date lists the start date that RCs and BA should enter in their respective NAESB EIR entity code-role records.

	RC West	BC Hydro	RC West	AESO	Gridforce	SPP
	7/1/2019	9/2/2019	11/1/2019	11/1/2019	12/3/2019	12/3/2019
RC Code in NAESB EIR	RCW	BCRC	RCW	AESO	GFRC	SPPW
Option 1 Prescheduling	Х	Х	х		Х	
Option 2 RC Date of Record				Х		Х
NAESB EIR Effective Date	6/28/2019	8/30/2019	10/31/2019	11/1/2019	12/2/2019	12/3/2019
Time when new	Jun 27	Aug 29	Oct 30	Nov 1	Dec 2	Dec 2
e-Tags are linked to new RC	23:00 PDT	23:00 PDT	23:00 PDT	00:00 MDT	23:00 MST*	23:00 MST*
Date RC Record Available to BAs in NAESB EIR	5/23/2019	5/23/2019	5/23/2019	5/23/2019	10/1/2019	8/1/2019
Date BAs must have	6/21/2019	8/23/2019	10/24/2019	10/25/2019	11/25/2019	11/26/2019
RC Association						
Change Entered in						
NAESB EIR						

*Note: 2019 Fall DST transition to MST/PST occurs on November 3rd

Peak EIR Deregistration 3/1/2020

After all BAs are transitioned from Peak to new RCs in the Western Interconnection, the NAESB EIR record for Peak Reliability with WECC as the code-role acronym is no longer needed. Any new e-Tags created at this point will use the new RC affiliations. Any longer duration e-Tags created prior to a BA transitioning their RC affiliation will still reflect the Peak RC affiliation on the e-Tag. These e-Tags require that the Peak EIR record is active to allow curtailments from Step 4 Unscheduled Flow Mitigation Plan (UFMP) events to function properly. Outside of the UFMP dependency, OATI has identified no other downstream impacts from the NAESB EIR transitions for Western Interconnection RCs.

Peak will set the termination date for its RC record in the EIR to March 1, 2020. This date coincides with Peak effectively not renewing its RC record in the NAESB EIR. The RCs will review and identify the subset of e-Tags which are still associated to the Peak RC record and contact the impacted BAs to work on replacement of those e-Tags. This e-Tag replacement must be completed prior to the March 1, 2020 date.

Additional Information

If you have additional questions on EIR, there are two organizations who can provide assistance. NAESB serves as the tool owner of the EIR and can be contacted at (713) 356-0060. Additionally, OATI is the NAESB chosen system administrator for the tool and can provide assistance via their help desk at (763) 201-2020 or support@oati.net.