



Item 6.3: Real-Time Co-optimization (RTC) Task Force (RTCTF) Update

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ERCOT Compliance Director

Urgent Board of Directors Meeting

ERCOT Public
October 13, 2020

RTCTF Update

- RTCTF Stakeholder Update
- RTCRR Review Schedule & Progress to Date
- Next Steps
- Appendix
 - Review Processes

RTC Revision Requests

- Based on the Board approved RTC Key Principles from February 11, 2020, ERCOT filed the RTC Revision Requests (RTCRRs) and a single Impact Analysis (IA) for RTC implementation, in accordance with Section 21 of Protocols.

RTCRRs released March 25, 2020	Pages 549 total
NPRR1007- RTC NP3- Management Activities for the ERCOT System	62
NPRR1008- RTC NP4- Day-Ahead Operations	65
NPRR1009- RTC NP5- Transmission Security Analysis and Reliability Unit Commitment	39
NPRR1010- RTC NP6- Adjustment Period and Real-Time Operations	248
NPRR1011- RTC NP8- Performance Monitoring	49
NPRR1012- RTC NP9- Settlement and Billing	15
NPRR1013- RTC NP 1, 2, 16, 25- Overview, Definitions/Acronyms, Registration and Qualification of MPs, and Market Suspension and Restart	24
NOGRR211- RTC Nodal Operating Guides 2 and 9- System Operations and Control Requirements and Monitoring Programs	21
OBDRR020- RTC - Methodology for Setting Maximum Shadow Prices for Network and Power Balance Constraints	26

RTCRR Review Schedule & Progress to Date

- TAC recommended RTCTF serve as the clearinghouse to address RTCRR language changes and comments. ERCOT will submit all RTCRRs and related comments from RTCTF to PRS for consideration at its November 2020 meeting, with the goal to take them to TAC that month, and the Board on December 8, 2020.
 - Mar. 11 – RTCTF (Plan and logistics for RR review)
 - Apr. 8 – RTCTF (Review detailed plan, and begin review process)
 - Apr. 30 – RTCTF
 - May 11 – *Special RTCTF for Potential Design Flaw- AS Price Cap discussion*
 - May 20 – RTCTF
 - Jun. 10 – RTCTF
 - Jun. 22 – *Special RTCTF for Ancillary Service Deployments*
 - Jun. 29 – RTCTF
 - Jul. 15 – *Special RTCTF for AS Deployment Expectations & Durations*
 - Jul. 22 – RTCTF
 - Aug. 12 – RTCTF
 - Sep. 9 – RTCTF
 - Sep. 28 – RTCTF
 - Oct. 21 – RTCTF
 - **Nov. 5 – ROS , Nov. 11 – PRS**
 - Nov. 12 – *RTCTF (if needed)*
 - **Nov. 17 – CWG, Nov. 18 – TAC, Dec. 8 – ERCOT Board**



RTCRR Review Schedule & Progress to Date

- Detailed RTCTF schedule for reviewing the RTCRR language is posted on the [RTCTF](#) page, and excerpt below.
- Of the 197 total Protocol/OBD sections under review, RTCTF has reached consensus on 183 sections to date (92% complete).

Document Typ	Document Sect	Mapped KPs	Note	Topic for Scheduling	RTCTF Review Complete	9/9/2020	9/28/2020	10/21/2020
NPRR1010	6.4.4.1	KP 1.5(11)		RTM Offers	9/9/2020	c		
NPRR1010	6.4.4.2	KP 1.2(1,2,3)		RTM Offers	9/9/2020	c		
NPRR1010	6.4.5	KP 1.2(3)		RTM Offers	9/9/2020	c		
NPRR1010	6.4.7	KP 7(2)		RTM Offers	9/9/2020	c		
NPRR1010	6.4.9.1	KP 1.3(11), KP 7(2)		RTM Offers	9/9/2020	c		
NPRR1013	1.3.1.1	KP 1.4(1), KP 4, KP 6		Reporting Item	9/9/2020	c		
NPRR1007	3.2.3	KP1.4(3,4), KP 6		Reporting Item	9/28/2020	c	c	
NPRR1007	3.2.5	KP 1.4(1,2,3), KP 4, KP 5(7), KP 6		Reporting Item	9/28/2020	c	c	
NPRR1007	3.10.7.2.1	KP 1.5(1)		Reporting Item	9/28/2020	c	c	
NPRR1008	4.2.1.1	KP 5(1), KP 6		Reporting Item	9/9/2020	c		
NPRR1009	5.8	KP 4, KP 5(3)		Reporting Item	9/9/2020	c		
NPRR1010	6.5.7.5	KP 1.3(4), KP 1.4(1,3), KP 1.5(9), KP 6		Reporting Item	9/28/2020	c	c	
NPRR1011	8.1.1.3	KP 6, KP 7(2)		AS Performance Monitoring		c	x	x
NPRR1011	8.1.1.3.1	KKP 1.4(3,4), KP 7(2)		AS Performance Monitoring		c	x	x
NPRR1011	8.1.1.3.2	KP 1.4(3,4), KP 7(2,3)		AS Performance Monitoring		c	x	x
NPRR1011	8.1.1.3.3	KP 1.4(3,4), KP 7(2,3)		AS Performance Monitoring		c	x	x
NPRR1011	8.1.1.3.4	KP 1.4(3,4), KP 7(2,3)		AS Performance Monitoring		c	x	x
NPRR1011	8.1.1.4.1	KP 1.4(1,4), KP 1.5(3), KP 7(1)		AS Performance Monitoring		c	x	x
NPRR1011	8.1.1.4.2	KP 1.3(2,4), KP 1.4(1), KP 1.5(9), KP 7(3)		AS Performance Monitoring		c	x	x
NPRR1011	8.1.1.4.3	KP 1.3(8), KP 1.5(9), KP 7(3)		AS Performance Monitoring		c	x	x
NPRR1011	8.1.1.4.4	KP 1.3(2), KP 1.4(1), KP 1.5(9), KP 7(3)		AS Performance Monitoring		c	x	x
NPRR1011	8.1.2	KP 7(2)		AS Performance Monitoring		c	x	x
NPRR1011	8.5.1.1	KP 1.4(1)		AS Performance Monitoring		c	x	x
NOGRR211	9.1.10	KP 7(2)		AS Performance Monitoring		c	c	x
NPRR1013	2.1	All KPs		Defintions, Acronyms, Alignment		c	x	x
NPRR1013	2.2	All KPs		Defintions, Acronyms, Alignment		c	x	x

RTCRR Review Schedule & Progress to Date

- RTCTF Chair outreach in September to ROS, PRS, and CWG leadership in attending meetings and raising awareness of timing for anticipated review and approval of RTCRRs.
 - Oct. 21 – RTCTF (last expected meeting)
 - Nov. 5 – ROS voting item
 - RTC NOGRR211 - ERCOT will file comments for urgency & seek approval
 - Nov. 11 – PRS voting items
 - RTC NPRR1007-1013 - ERCOT will file comments for urgency & seek approval
 - BESTF NPRR1014 (single model) and NPRR1029 (DC Coupled) – ERCOT will file comments for urgency & seek approval.
 - Nov. 17 – CWG comments filing
 - CWG to complete RTC NPRR review and file comments on credit assessment
 - Nov. 18 – TAC voting items
 - Approve RTCTF 7 RTC NPRRs and RTC NOGRR211 (with urgency)
 - Approve RTC OBDRR020 (with urgency)
 - Approve BESTF NPRR1014 and NPRR1029 (with urgency)
 - Dec. 8 – ERCOT Board voting items above from TAC (with urgency)

Next Steps

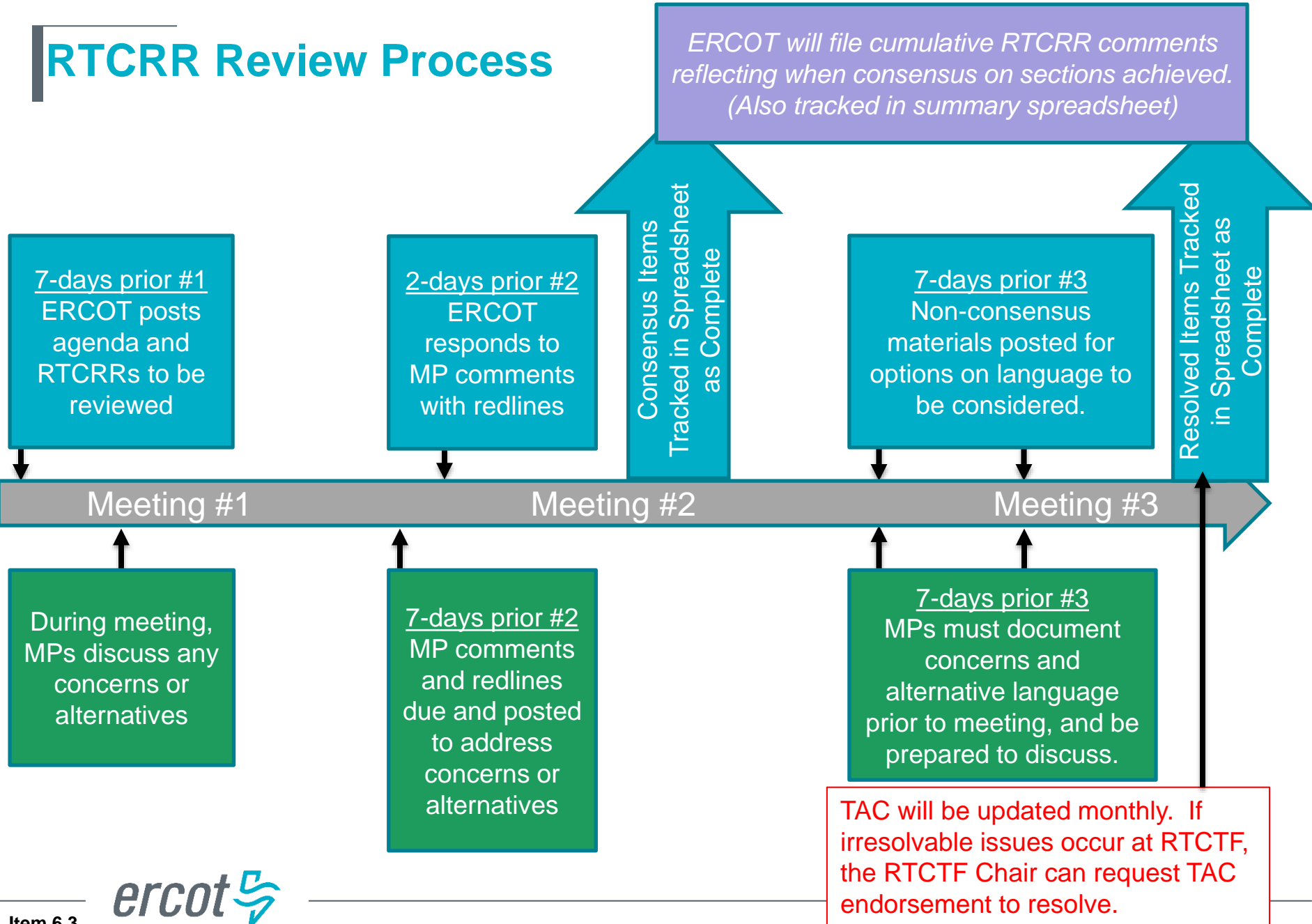
- Currently no items queued for TAC escalation of any RTC issues.
 - TAC escalation process in place to allow MPs to escalate any issues.
- The October/November stakeholder meetings will be critical to completing the approvals in time for Board consideration of the various Revision Requests.
- At the December 8, 2020 Board meeting, the Board of Directors will be requested to consider approval of the following Revision Requests needed for the 2024 Passport Program.
 - Approve RTC NPRRs (1007-1013) and RTC NOGRR211 (with urgency)
 - Approve RTC OBDRR020 (with urgency)
 - Approve BESTF NPRR1014 and NPRR1029 (with urgency)
- Special thanks for the market support and continuing to press forward.
- Any questions?



APPENDIX

Review Process

RTCRR Review Process



RTC Review Process (continued)

- At the May 2020 TAC meeting, there was no opposition to the following process (if needed) to potentially modify RTCRRs beyond the scope of the RTC KPs if a market design flaw or error was discovered following Board approval of the RTC KPs:
 - A. The modification complies with PUC directives;*
 - B. The modification will not incur additional RTC project costs or schedule delays; and*
 - C. The modification will not delay timely implementation of RTCRRs (i.e., will not prevent the Board from considering the NPRR at the December 8, 2020 Board meeting).*
- Next slide describes the review and escalation process from RTCTF to TAC.

RTC Review Process (continued)

- **Proposed process for modifying RTCRRs beyond scope of Board-approved KPs:**
 - A Market Participant has the right to express concerns with a RTCRR.
 - A Market Participant may file comments to modify a RTCRR beyond the scope of the Board-approved KPs.
 - In comments to modify an RTCRR, the submitting party shall explain how the revisions meet the criteria proposed on the previous slide.
 - RTCTF will provide:
 - The technical forum (e.g., an extra off-cycle meeting) for discussion of the proposed RTCRR changes with the understanding that RTCTF consensus is not practical and will not occur.
 - At TAC:
 - RTCTF Chair will advise TAC leadership of any RTCRR Comments that propose to modify the scope of the KPs beyond that which was approved by the Board, and
 - Request time for the MP to present to TAC for consideration, as well as another MP to present the counterpoints (if any) as to why the existing KP should continue to be maintained and aligned with RTCRRs.
 - TAC may take a straw poll to endorse the proposed NPRR comments; the vote would not be binding and therefore non-appealable, but would classify the modified/added concept as valid.
 - If TAC endorses the alternative, the RTCTF Chair would update the Board of the straw poll decision.
 - The RTCRR comments would subsequently be considered at PRS, TAC, and ultimately the ERCOT Board, consistent Protocol Section 21.