



Business Requirements Specification

Transmission Service and Market Scheduling Priorities - Phase 2 (TSMSP2)

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Revision History

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01/30/2024	1.0	Document Created. External BRS subject to change, changes shall be reflected in future External BRS.

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1 Introduction

1.1 Purpose

This document describes high level business requirements to support the Transmission Service and Market Scheduling Priorities Phase 2 initiative.

Overview of this project:

This project aims to present a long-term, durable framework to establish wheeling-through scheduling priorities in the ISO markets that can further evolve with operational experience. The project does not focus on, nor does it change, the processes for wheeling out or exporting from the ISO BAA.

Supply shortfalls across the Western Interconnection are contributing to increased dependence on import generation to serve load reliably. A workable framework for establishing market scheduling priority for wheeling-through the ISO system is a critical issue for external and internal load serving entities.


This project introduces a design to identify Available Transfer Capability (ATC) that can be allocated to Priority-Wheeling-Through (PWT) schedules across the ISO system. This BRS focuses on monthly and daily PWT schedules.

Scope of this project:

For the “Transmission Service and Market Scheduling Priorities - Phase 2 (TSMSP2)” project, the following are the key design elements for Priority-Wheeling-Through (PWT):

1. Calculating PWT ATC

- The purpose is to derive PWT ATC, which is an amount of transmission capacity that external entities seek to wheel through the ISO system. According to the PWT ATC, external entities can reserve wheeling-throughs in advance to establish a high scheduling priority equal to the ISO load.
- Data requirements are calculated PWT ATC on ISO interties:
 - Calculate a short-term PWT ATC daily in a rolling forward way on a 7-days horizon;
 - Calculate a mid-term PWT ATC monthly in a rolling forward way on a 12-months horizon.

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- In calculating the PWT ATC, need to set aside the amount of transmission capacity for existing commitments, including anticipated native load needs, and load growth, and transmission reliability margins:
 - The native load needs, including load growth, would be estimated based on historical volumes of import supply contracted by ISO LSEs as represented by historical resource adequacy imports and contracted import supply that may not have been shown on resource adequacy plans.
 - Set aside of transmission capacity for uncertainty that may materialize across the different horizons as a Transmission Reliability Margin (TRM).

2. Awarding PWT ATC to PWT requests

- PWT ATC on the interties is accessed through a request window process through which parties submit requests to reserve PWT ATC on an intertie to establish wheeling-through scheduling priority.
- Entities requesting the PWT ATC must demonstrate they have a firm power supply contract in place to serve external load (or a power supply contract conditioned upon securing of wheeling-through scheduling priority across the ISO system). At a minimum, PWT ATC requests for a month(s) must be supported by a six day by four hours firm power supply contract for each full week during the month plus the relevant days in any partial week during the month. At a minimum, PWT ATC requests in the day-ahead horizon must be supported by a firm power supply contract of at least four hours for each day during the seven day horizon for which the Scheduling Coordinator seeks PWT ATC or LSE ATC.
- Parties would compete to the extent there are more requests than there is PWT ATC.
- Requests would be submitted during a specified window period, and parties can request PWT ATC across the horizon for which PWT ATC is calculated, both in the monthly horizon and daily horizons.
- If there is not sufficient PWT ATC to accommodate all the requests, the requests will compete with each other based upon the number of hours for which they seek a priority across the horizon for which PWT ATC is calculated.
- Entities securing PWT ATC following this process will receive certainty that they have secured the ATC, and such PWT ATC cannot be taken back or be preempted later (in a future request window).

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- Once the PWT ATC is obtained, the design allows the wheeling-through customer the ability to resell the wheeling-through scheduling priority.

3. Using PWT awards in market operations

- No change to current post-HASP curtailment trigger process. Only in the input data, some interchange schedules will identified with wheeling-through priorities.
- Retain application of a post-HASP process that effectuates adjustments or curtailments of priority wheeling through transactions and ISO load in specified conditions.
- These curtailments are triggered only in corner case stressed system conditions if:
 - There is a transmission limitation on the intertie, and
 - A power balance infeasibility is triggered due to an inability to serve load.
- In those instances, consistent with current practice, the post-HASP process will curtail, on a pro-rata basis to obtain the necessary relief, scheduled Priority Wheeling-Through transactions and scheduled ISO load transactions.
- To ensure a mere overload on an intertie that is not de-rated does not result in an inappropriate curtailment of high priority transactions, a rule will be adopted whereby the amount of awarded PWT transactions plus the amount of capacity represented as ISO load for the hour (set aside transmission for historical contracted imports, contracted imports securing daily PWT ATC, imports under TRM, and CPM imports to the extent they are supported by PWT ATC or otherwise TRM) cannot exceed the TTC of the intertie for purposes of conducting a post-HASP process.

4. Settling PWT awards and schedules

- Entities obtaining PWT pay the Wheeling Access Charges (WAC) for the day(s) or month(s) across which PWT ATC is reserved based upon the energy delivery timeframes of the underlying power supply contract.

For example, an entity seeking wheeling through priority to support delivery of a 6x16 supply contract would pay the WAC on that same basis, whether or not the transaction is actually scheduled on a given day.

- This approach recognizes the value of establishing a wheeling-through scheduling priority equal to load.

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5. Other items in addition to the scope of this project

In addition to the above scope for the TSMSP2 project, this project also includes the following enhancement related to the prior TSMSP1 project:

- This is an open enhancement from TSMSP1. It only impacts the reporting functionality for transparency purposes.
- Current Implementation: TSMSP1 measures HASP schedule adjustments with respect to those from RUC.
- Proposed Enhancement: HASP schedule adjustments shall be measured with respect to the schedules submitted to HASP, HASP schedule adjustments are reported even though they were not made by HASP, and that created false alarms to participants checking the TSMSP1 reports.

2 Details of Business Need/Problem


2.1 Description

Business needs are listed as follows:

Business Opportunity/Problem Statement:	
What:	This project entails the following: <ol style="list-style-type: none"> 1. Calculating PWT ATC 2. Awarding PWT ATC to PWT requests; 3. Using PWT awards in market operations; and 4. Settling PWT award and schedules;
Why do we have this opportunity/problem:	The issue arises from the following reasons: <ul style="list-style-type: none"> • Evolving conditions across the western grid necessitate developing a durable framework for establishing wheeling-through priority across the ISO BAA. • Supply shortfalls across the Western Interconnection are contributing to increased dependence on import generation to serve load reliably. • For both external and internal LSEs, it is an important issue to establish market scheduling priority for wheeling-through schedules.

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Business Opportunity/Problem Statement:	
	<ul style="list-style-type: none"> • A durable wheeling priority framework will support robust inter-regional trades that benefit everyone in the Western Interconnection.

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3 Business Impacts

3.1 Business Practice Manuals (BPM)


BPM	Description of Impact(s)
BPM Change Management	N/A
Candidate CRR Holder Registration	N/A
Compliance Monitoring	N/A
Congestion Revenue Rights	N/A
Credit Management and Market Clearing	N/A
Definitions and Acronyms	N/A
Demand Response	N/A
Direct Telemetry	N/A
Distributed Generation for Deliverability	N/A
Energy Imbalance Market	Not Impacted
Generator Interconnection and Deliverability Allocation Procedures	<u>N/A</u>
Generator Interconnection Procedures	N/A
Generator Management	N/A
Managing Full Network Model	N/A
Market Instruments	<u>BPM impact:</u> <ul style="list-style-type: none"> • MF Changes. • SIBR Changes
Market Operations	<u>BPM impact:</u> <ul style="list-style-type: none"> • ITS Changes • DAM Changes • RTM Changes • Request Window Process
Metering	N/A
Outage Management	N/A
Reliability Coordinator Services	N/A
Reliability Requirements	<u>BPM impact:</u> <ul style="list-style-type: none"> • Internal System Changes
Rules of Conduct Administration	N/A
Scheduling Coordinator Certification and Termination	N/A
Settlements and Billing	<u>BPM impact:</u>

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BPM	Description of Impact(s)
	<ul style="list-style-type: none"> • Settlements Changes
Transmission Planning Process	Not Impacted

3.2 Tariff Business Ownership

Tariff Section
Section §23 – Transmission Capacity: <ul style="list-style-type: none"> • §23.1 Categories of Transmission Capacity • §23.2 Accessing Available Transmission Capacity <ul style="list-style-type: none"> ○ §23.2.1 General Requirements to For Wheeling Through Priority Requests ○ §23.2.2 Nature of a Wheeling Through Priority ○ §23.2.3 Termination or Modification of Firm Power Supply Agreement Underlying a Priority Wheeling Through ○ §23.2.4 Applicability to CAISO LSEs • §23.3 Miscellaneous ATC Requirements <ul style="list-style-type: none"> ○ §23.3.1 Historical Contract Information Regarding Non-Resource Adequacy Resource Import Supply ○ §23.3.2 New Contract Information ○ §23.3.3 Monthly Non-Resource Adequacy Contract Showings ○ §23.3.4 CPM Access to ATC ○ §23.3.5 Annual Summer ATC and TRM Assessment Meeting with Stakeholders • §23.4 Annual Summer ATC and TRM Assessment Meeting with Stakeholders • §23.5 Obtaining a Daily Wheeling Through Priority • §23.7 Sale or Assignment of a Wheeling Through Priority <ul style="list-style-type: none"> ○ §23.7.1 Procedures for Reselling a Long-Term or Monthly Wheeling through Priority ○ §23.7.2 Information on Assignment or Transfer of a Wheeling Through Priority
Section §26 – Transmission Rates And Charges: <ul style="list-style-type: none"> • §26.1.4.5 Priority Wheeling Through <ul style="list-style-type: none"> ○ (subset of §26.1 Access Charge / §26.1 Access Charge / §26.1.4 Wheeling)
Section §30 – Bid And Self-Schedule Submission For All California ISO Markets: <ul style="list-style-type: none"> • §30.5.1 General Bidding Rules (subset of 30.5 Bidding Rules) [delete item (z)]
Section §34 – Real-Time Market: <ul style="list-style-type: none"> • §34.12.3 Post-HASP Process
Section §Appendix A – Master Definition Supplement: <ul style="list-style-type: none"> • Priority Wheeling Through
Section §Appendix L – Method To Assess Available Transfer Capability: <ul style="list-style-type: none"> • §L.1.1 Available Transfer Capability (ATC) • §L.1.3 Existing Transmission Commitments (ETComm) <ul style="list-style-type: none"> • §L.1.3.1 Transmission Capacity for ETC and TOR • §L.1.3.1 Transmission Capacity for ETC and TOR (just section numbering change) • §L.1.3.2 High-Priority Wheeling Through • §L.1.3.3 Native Load Needs

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Tariff Section

- §L.1.3.3.1 Native Load Growth
- §L.1.3.3.2 Adjustments to Native Load Needs Based on New Contract Information
- §L.1.3.3.3 Monthly Update of Native Load Needs
- §L.1.5 Transmission Reliability Margin (TRM)
- §L.1.6 Capacity Benefit Margin (CBM)
- §L.3 ATC Process Flowchart and Calculation Periods
- §L.4.4 The CAISO may update the determination of TTC

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3.3 Other

Impact	Description (optional)		
Market Simulation	Yes		
Market Participant Impact	<u>Other impact:</u>		
	External Participant Type	Impacted ?	Notes
	Demand Response Entity	No	
	Financial Entity	No	
	Forecast Service Provider (FSP)	No	
	Government/Regulatory Agency	No	
	Reliability Coordination (RC) Customer	No	
	Scheduling Coordinator (SC)	Yes	Access, reserve and settle ATC, including Long Term ATC.
	Transmission Owner (TO)	Yes	For long term ATC transmission upgrades.
	WEIM Entity	No	
	Adjacent BA	TBD	There may be overlapping with SCs.
	Other	Yes	Annual stakeholder meeting
External Bid Publication	No		
User Acceptance Testing (UAT)	Yes		
Customer Readiness Impact	See below.		
<ul style="list-style-type: none"> External Communication Needed 	Yes, External BRS.		

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Impact	Description (optional)
<ul style="list-style-type: none"> • External Onboarding and Maintenance 	Yes
<ul style="list-style-type: none"> • External Training 	Yes
<ul style="list-style-type: none"> • External Computer Based Training 	TBD, shall be disclosed during training if necessary.
Policy Initiative	Yes

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4 Business Requirements

The sections below describe the business processes and the associated business requirements involved in the project. These may represent high-level functional, non-functional, reporting, and/or infrastructure requirements. These business requirements directly relate to the high-level scope items determined for the project.

4.1 Business Requirements: Manage Operations Planning – Calculating PWT ATC

This section describes business requirements for calculating PWT Available Transmission Capability (PWT ATC). The calculated PWT ATC is intended for use by PWT requests only.

4.1.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ100	System to retrieve the Resource to Scheduling point Mapping from Masterfile For every registered resource, the system shall retrieve the scheduling point (Pnode) associated with that resource. This information will be used for the historic Native Load Calculation on the intertie.	Core	CIRA
TSMSP2-BRQ101	System to retrieve the Resource to tie Mapping from Masterfile For every registered resource, the system shall retrieve the tie that the resource is associated with, this information will be used to translate the impact of the resource RA holding to the ISL. Note: tie associated with resource is only valid for tieGen, iTie, eTie, for all other resource this value is null.	Core	CIRA
TSMSP2-BRQ102	System to retrieve all ITC and ISL to Tie mapping definition from Masterfile The system shall retrieve the defined ISL and ITC for CAISO BA.	Core	CIRA
TSMSP2-BRQ103	System to retrieve all Scheduling point to ITC mapping from Masterfile. This will create a mapping between the resource to scheduling point and scheduling point to ITC, to be used for the NLN impact to ITC.	Core	CIRA
TSMSP2-BRQ104	For all resource classified as Native Load Needs (NLN) resources, the system shall identify the ITC or ISL that the resource impact. Note: NLN is broken up by 2 types	Core	CIRA

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ID#	Business Feature	Requirement Type	Potential Apps Impacted
	<p>NLN1: This is known as “shown RA contracts”. The data is currently maintained in CIRA</p> <p>NLN0: This is known as “firm non-Resource Adequacy import supply contract”. The data will be implemented in CIRA – reference SMSP2-BRQ112z</p> <p>The NLN is identified through the scheduling point for ITC, and Tie associated to the resource for the ISL</p>		
TSMSP2-BRQ112z	<p>System shall be enhanced to collect two type of NLN1 (shown RA contracts) and NLN0 data (firm non-Resource Adequacy import supply contract):</p> <p>LSEs shall submit non-RA contract data into CIRA, This data is noted as NLN0.</p> <p>The firm non-Resource Adequacy import supply contract data, noted as NLN0, shall be managed as follows:</p> <ul style="list-style-type: none"> • Store NLN0 data (not-shown or non-RA data) in a similar format as the NLN1 data (shown RA contracts). Both NLN0 and NLN1 are used by the Internal System application to calculate ATC. • Where possible, store the NLN0 data in a way that has no impact to existing applications that read NLN1 data. <p><u>Tariff:</u> §23.3 (Miscellaneous ATC Requirements)</p>	Core Tariff	CIRA
TSMSP2-BRQ105	<p>Non RA Native Load Need Submission Window</p> <p>System shall have the capability to configure when LSEs can submit Non RA NLN data and for what period they may submit for:</p> <p>Implementation Note: During the submission window, participants shall have the ability to submit non RA contracts for M+1 and M+13.</p> <p>Example: the submission windows of non RA contracts (NLN0) for November 2024 are two windows as follows:</p> <ul style="list-style-type: none"> • M+13: During the request window 13 months in advance of the target month: 9/18/2023 to 10/2/2023 • M+1: And then again during the month ahead request window: 9/18/2024 to 10/2/2024 	Core	CIRA
TSMSP2-BRQ106	<p>Submit Non RA Native Load Need Data</p> <p>LSEs with Non RA contracts to serve load shall have the ability to submit NLN data and provide the following information.</p> <ul style="list-style-type: none"> • Attestation of a power contract to serve load • Contract Month • Contract Hours • Intertie 	Core	CIRA

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ID#	Business Feature	Requirement Type	Potential Apps Impacted
	<ul style="list-style-type: none"> • Contracted MW <p>When submitting Non RA NLN Data, participants shall identify the following:</p> <ol style="list-style-type: none"> 1) Brand new contract 2) Replace existing RA contract 		
TSMSP2-BRQ107	<p>Update Historical RA data for NLN calculation</p> <p>When a non-RA native load need submission is a replacement of an existing RA contract, they must provide the following:</p> <ul style="list-style-type: none"> • Replacement Intertie • Replacement MW <p>System shall reduce the NLN 1 value at the specified intertie for the previous 2 years.</p>	Core	CIRA
TSMSP2-BRQ108	<p>Calculate Monthly Native Load Need (NLN) Data</p> <p>System shall have the ability to automatically or on demand calculate a monthly Native Load Need (NLN) value at each intertie constraint and for the 13 month horizon.</p> <p>The monthly NLN value shall be the sum of all intertie resources that have RA and non-RA contracts at the intertie constraint, plus applicable load growth amount.</p> <p>For the next month (M+1) the system shall use RA resources submitted during the Monthly RA process to calculate NLN1 and use submitted non-RA contracts to calculate NLN0.</p> <p>For the subsequent 11 months (M+2 thru M+12) the NLN value shall be the sum of NLN1 and NLN0 where:</p> <p>NLN1 = Historical NLN1 plus growth factor NLN0 = submitted non RA contract values</p> <p>Implementation note: CIRA UI must show all NLN calculation details.</p> <p>Implementation note: See Appendix C for timeline example.</p> <p>Implementation Note: By default, the system will be scheduled to calculate the NLN values once a month. *- An intertie constraint can be a ITC or ISL.</p>	Core	CIRA
TSMSP2-BRQ109	<p>Determine Historical NLN1</p> <p>System shall calculate historical NLN1 using the following logic:</p> <ol style="list-style-type: none"> 1. For the calculated month, compare the total NLN1 value for the past two years, and select the year with the highest amount. 2. For each tie, use the NLN1 value from the year selected in the previous step. 	Core	CIRA
TSMSP2-BRQ110	<p>Growth Factor Amount</p> <p>System shall calculate the growth factor amount at each intertie for the relevant month:</p>	Core, Business Process	CIRA

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ID#	Business Feature	Requirement Type	Potential Apps Impacted
	a) Calculate forecasted growth amount For the calculated month, take the largest difference comparing the load forecast for the previous two years, and the future period load forecast. b) Determine Import RA ratio: For each forecasted month, calculate the import ratio as the proportion of RA imports over load forecast. c) RA import growth amount For the relevant month, multiply the highest RA import ratio with the forecasted growth amount. d) Intertie growth amount For each tie multiply the pro-rata share of RA import at the tie with the RA import growth amount. Implementation note: Monthly Load Growth calculation shall be utilized for the daily calculation.		
TSMSP2-BRQ116	Once a month, on the first day of the month, the system shall calculate the total NLN impact for each ITC and ISL, provided as a single value per month.	Core	CIRA
TSMSP2-BRQ117	Once a month, after the total NLN impact for each ITC and ISL is calculated the system shall broadcast/report this value to downstream systems.	Core	CIRA
TSMSP2-BRQ118	Scheduling coordinator of supplier & Load Serving entity, and internal ISO user must have the capability to submit NLN0 & NLN1 data for historic RA Replacement.	Core	CIRA
TSMSP2-BRQ119	System (CIRA) must have a monitor/log to detect any failure in automated NLN Calculation & Monthly Publish it to Internal System.	Core	CIRA
TSMSP2-BRQ120	System to receive and process monthly NLN impact to tie constraint data.	Core	INTERNAL SYSTEM
TSMSP2-BRQ121	System to receive and process daily NLN impact to tie constraint data.	Core	INTERNAL SYSTEM
TSMSP2-BRQ111a	For every defined ITC and ISL System must calculate Monthly PWT ATC and ETComm calculation: <ol style="list-style-type: none"> 1. <u>WT ATC calculated for the next 12 months</u> <ul style="list-style-type: none"> • Timeline: <ul style="list-style-type: none"> - <u>Execution frequency:</u> Daily - <u>Start time:</u> The first day in the month; - <u>End time:</u> By COB of same day For example, MPs shall submit PWT requests for monthly process between T-45 and T-30. Once the submission window closes then PWT ATC calculation is completed on 	Core Tariff	INTERNAL SYSTEM

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	<p>the first day of the month prior to the target month. See PWTA BRQ212c for technical details.</p> <ul style="list-style-type: none"> Data: <ul style="list-style-type: none"> - <u>Data horizon</u>: Next 12 months; - <u>Data resolution</u>: Monthly <p>For each month's data, this monthly PWT ATC is calculated as the minimum of 30 to 31 daily PWT ATC values in each month.</p> <p>Note: In PWT_ATC calculated for the next 12 months, outage information is not available, making TTC a constant value over the months. However, RA contract data is of daily resolution, making NLN of daily variant. Thus, naturally-calculated PWT ATC (without aggregation) has 30 to 31 values in each month.</p> <p><u>Tariff</u>: §23.2 (Accessing Available Transfer Capability) <u>Doc</u>: Update Reliability Standard MOD-001-1a (Available Transfer Capability Implementation Document)</p>		
TSMSP2-BRQ122	<p>System to receive the monthly PWT awards</p> <p>Note: The monthly PWT awards are used to adjust /calculate any future PWT-ATC</p>	Core	INTERNAL SYSTEM
TSMSP2-BRQ111b	<p>For every defined ITC and ISL System must calculate Daily PWT ATC:</p> <p>For the purpose of PWT requests, calculate PWT ATC in two new processes as follows:</p> <p>1. <u>PWT ATC calculated for the current day + next 7 days:</u></p> <ul style="list-style-type: none"> Timeline: <ul style="list-style-type: none"> - <u>Execution frequency</u>: Every day; - <u>Start time</u>: Early morning; - <u>End time</u>: Early morning, by 6am <p>For example, MPs must submit daily PWT requests between 6am and 8am. See BRQ212c for technical details.</p> <ul style="list-style-type: none"> Data: <ul style="list-style-type: none"> - <u>Data horizon</u>: Current day + next 7 days - <u>Data resolution</u>: Daily <p>For each day's data, this daily PWT ATC is calculated as the minimum of the hourly PWT ATC values from 6am to 10pm.</p> <p><u>Tariff</u>: §23.2 (Accessing Available Transfer Capability) <u>Doc</u>: Update Reliability Standard MOD-001-1a (Available Transfer Capability Implementation Document)</p>	Core Tariff	INTERNAL SYSTEM

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ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ113a	<p>Output calculated Monthly PWT ATC values:</p> <p>Output PWT ATC results at the end of both processes:</p> <ol style="list-style-type: none"> 1. <u>PWT ATC calculated for the next 12 months.</u> Outputting calculated ATC shall be done on COB of the first day in the month. <p>In outputting ATC results, broadcast the following data payload to the integration bus:</p> <ul style="list-style-type: none"> • PWT ATC as well as its components: TTC, ETC, NLN, PWT, and TRM. This data payload is intended for OASIS to receive (see BRQ114) • PWT ATC only: This data payload is intended for the new application to receive (see BRQ214). 	Core	INTERNAL SYSTEM
TSMSP2-BRQ113b	<p>Output calculated daily PWT ATC values:</p> <p><u>System (INTERNAL SYSTEM) must broadcast calculated PWT ATC to downstream systems.</u></p> <p>Implementation note: See BRQ111 for calculation of PWT ATC. Calculated and broadcasted prior to DAM process.</p> <p>Implementation note: If market participant submits after 6am, then PWT requests shall be calculated the next day.</p> <p>In outputting ATC results, broadcast the following data payload to the integration bus:</p> <ul style="list-style-type: none"> • PWT ATC as well as its components: TTC, ETC, NLN, PWT, and TRM. This data payload is intended for OASIS to receive (see BRQ114) • PWT ATC only: This data payload is intended for the new application to receive (see BRQ214). 	Core	INTERNAL SYSTEM
TSMSP2-BRQ122	<p>System must receive the Monthly PWT ATC value.</p> <p>Implementation note: This is one value for the entire month. One value for the start to the end of the month.</p> <p>Implementation note: Retention for this report must be consistent with existing OASIS data retention period.</p>	Core	OASIS

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ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ123	<p>System must receive the Daily PWT ATC value.</p> <p>Implementation note: This is one value for the day. One value for the start to the end of the day.</p> <p>Implementation note: Retention for this report must be consistent with existing OASIS data retention period.</p>	Core	OASIS
TSMSP2-BRQ114	<p>Publishing PWT ATC data on OASIS for market participants to access</p> <p>From the output of the INTERNAL SYSTEM application (BRQ113), receive calculated PWT ATC and its components TTC, ETC, NLN, PWT and TRM.</p> <p>Publish the PWT ATC data onto OASIS, where the display shall show the ATC data as follows:</p> <ol style="list-style-type: none"> 1. <u>PWT ATC calculated for the next 7 days:</u> Add a new display titled "ATC in the next 7 days for PWT requests". 2. <u>PWT ATC calculated for the next 12 months:</u> Add a new display titled "ATC in the next 12 months for PWT requests". 	Core	OASIS

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4.1.2 Process Requirements

ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ121	<p>Stakeholder process to discuss PWT ATC data</p> <p>Shall run an annual stakeholder process before summer (May-October) to discuss and preview of calculated PWT ATC and its components.</p> <p>The stakeholder process shall hold at least one stakeholder meeting annually.</p> <p><u>Tariff:</u> §23.3.5 (Annual Summer ATC and TRM Assessment Meeting with Stakeholders)</p>	Process Tariff	N/A

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4.2 Business Requirements: Manage Day Ahead Market – Awarding PWT ATC to PWT Requests

This section describes business requirements regarding how calculated PWT ATC is allocated to Priority-Wheeling-Through (PWT) requests by market participants (MPs), i.e. scheduling coordinators (SCs). At the core, a new application, named Priority-Wheeling-Through Allocator (PWTA), conducts award and release of the PWT ATC.

4.2.1 Business Requirements

ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ210a	<p>PWT registration (Part 1 of 2): Register resource ID</p> <p>Market Participants shall register their PWT resource IDs in the Master File with the following data items:</p> <ol style="list-style-type: none"> 1. Resource Name (ID); 2. Direction 3. Tie-point 4. Scheduling Point <p>Note:</p> <ul style="list-style-type: none"> • Such a registration required 11 days in advance to start, pursuant to the current process with Master File. <p><u>Tariff</u>: §23.2 (Accessing Available Transfer Capability)</p>	Core Tariff	Master File
TSMSP2-BRQ204	<p>Security will be expanded to create new role to allow Scheduling Coordinators access to the PWTA rule</p> <p>This role will be used to register contract obligation to serve external load, ability to request PWT reservation, ability to update PWT sale information to reflect out of system sales</p>	Business Process	Internal System
TSMSP2-BRQ223	<p>System shall receive and process Masterfile resource definition.</p>	Core	PWTA (new application)

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ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ224	System shall receive and process Masterfile scheduling coordinator definition.	Core	PWTA
TSMSP2-BRQ225	System shall receive and process Masterfile ITC to scheduling point definition	Core	PWTA
TSMSP2-BRQ226	System shall receive and process Masterfile ISL to tie mapping definition	Core	PWTA
TSMSP2-BRQ227	System to receive and process user identity and user role information.	Core	PWTA
TSMSP2-BRQ228	System shall receive and process INTERNAL SYSTEM PWT-ATC data.	Core	PWTA

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ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ210b	<p>PWT registration (Part 2 of 2): Register contract information</p> <p>Market Participants shall register their contract-related information in PWTA with the following data items:</p> <ol style="list-style-type: none"> 1. Import Resource name (ID); 2. Export Resource Name (ID) 3. Contract start-dates (yyyy-mm-dd) and capacities (MW); 4. Contract end-date; 5. Contract service days (start-day and number-of-days); 6. Contract service hours (start-hour and number-of-hours in each day); 7. Attestation check (as affirmation). <p>After the contract information is registered by market participant, if a contractual occurs later on, the market participant is allowed to update the contract information. Examples:</p> <ul style="list-style-type: none"> • If the contract is terminated, the market participant shall change the <i>Contract period</i> by updating the <i>end-date</i> via entering the contract's termination date. • If the contract capacity is reduced, e.g. from 300 MW to 200 MW, the market participant shall update the <i>Contract period</i> by setting the <i>end-date</i> to the end date of 300 MW. Then, enter a new contract record with the <i>start-date</i> set to the beginning date of 200 MW. <p>Such a registration process, newly introduced in this TSMSP2 project, allows market participant to self-register contract information via a user interface in PWTA (BRQ211a).</p> <p>Note:</p> <ul style="list-style-type: none"> • For data item 2 (<i>Contract start-dates and capacities</i>) and data item 3 (<i>Contract end-date</i>), market participant can specify a profiled MW for the contract validity period. • For data item 4 (<i>Contract service days</i>), market participant can specify start-day and numbers-of-hours (aka. blocks). For example, (Mon, 5) means Monday-to-Friday; and (Mon, 7) means Monday-to-Sunday • For data item 5 (<i>Contract hours</i>), registered PWT contract hours can be any period in the 24 hours during the day. • For data item 6 (<i>Attestation check</i>), the attestation check serves as an affirmation that the market participant's the submitted contract information is true. • For user interface requirement, see BRQ211a. 	Core Tariff	PWTA




ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ229	<p>After the contract is registered the system shall generate a PWTContractID.</p> <p>This contract ID will be used when publishing the PWT allocated MW to downstream systems</p> <p>Note: this ID will be used when scheduling against the PWT contract</p> <p><u>Tariff:</u> §23.4 (Obtaining a Monthly Wheeling Through Priority) and §23.5 (Obtaining a Daily Wheeling Through Priority)</p>	Core Tariff	PWTA
TSMSP2-BRQ211a	<p>External user interface for market participants (Part 1 of 3): PWT registration for contract information</p> <p>System (PWTA) must have an interface for the Market Participant to self-register their contract information.</p> <ul style="list-style-type: none"> • See BRQ210b and BRQ210c for required data fields. • In addition to the required data, the interface shall have an exclamation language asking the market participant to attest that the entered contract data is true and legally binding. <p><u>Tariff:</u> §23.4 (Obtaining a Monthly Wheeling Through Priority) and §23.5 (Obtaining a Daily Wheeling Through Priority)</p> <p>Note: The external interface used to provide Market Participant the ability view registered information, will be able to view the generated contractID</p>	Core Tariff	PWTA
TSMSP2-BRQ211b	<p>External user interface for market participants (Part 2 of 3): For submitting PWT requests</p> <p>System (PWTA) must have an interface for the Market Participant to submit their PWT requests and receive PWT awards. See BRQ214 for descriptions of data.</p> <p><u>Tariff:</u> §23.4 (Obtaining a Monthly Wheeling Through Priority) and §23.5 (Obtaining a Daily Wheeling Through Priority)</p> <p>Note: the request will consist of</p> <ul style="list-style-type: none"> • Import and export resource ID Set • PWT Request start-dates (yyyy-mm-dd) and capacities (MW); • PWT Request end-date; • PWT Request service days (start-day and number-of-days); • PWT Request service hours (start-hour and number-of-hours in each day); <p>Note the request date and time must be within the contract date time</p>	Core Tariff	PWTA

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ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ211c	External user interface for market participants (Part 3 of 3): For viewing PWT awards Provide an interface for the Market Participant to receive PWT awards. <u>Tariff: §23.4 (Obtaining a Monthly Wheeling Through Priority) and §23.5 (Obtaining a Daily Wheeling Through Priority)</u>	Core Tariff	PWTA
TSMSP2-BRQ212a	Internal user interface for the operator (Part 1 of 3): For the yearly process Provide an interface for the operator to manually enter the PWT awards produced by the transmission planning study in the “Long-Term Wheeling Through Priority” process as described in Section Error! Reference source not found. (Error! Reference source not found.) .	Core	PWTA
TSMSP2-BRQ212b	Internal user interface for the operator (Part 2 of 3): For viewing PWT request and awards Provide an interface for the operator to view received PWT requests and produced PWT awards.	Core	PWTA
TSMSP2-BRQ212c	Internal user interface for the operator (Part 3 of 3): For running and monitoring the PWTA application Shall allow the operator (internal user) to define submission windows for monthly and daily PWT requests. Shall allow the operator (internal user) to configure the time to run the PWTA automatically to make PWT awards following the PWT request windows.	Core	PWTA

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TSMSP2- BRQ214	<p>Receive and validate PWT requests</p> <p>The PWTA application receives PWT requests to acquire additional PWT ATC. (The requests are submitted by market participants via PWTA user interface described in BRQ211b.) A PWT request shall include but not be limited to the following data items:</p> <ol style="list-style-type: none"> 1. Import Resource name (ID); 2. Export Resource name (ID) 3. PWT MW to increase (position to add); 4. Service hours (start-hour and number-of-hours in each day); 5. Process ID (“M” for Monthly process and “D” for Daily process); 6. Option if pro-rata is allowed; 7. Option if partial award is allowed. <p>Note: The Process ID, being either “M” (Monthly process) or “D” (Daily process), can be assigned by the ISO automatically depending on which request window is used. Such details will be determined during the implementation stage.</p> <p>For data item 2 (<i>PWT MW</i>) and data item 3 (<i>Service hours</i>), the market participant can specify a profile of MW values and service hours over the requested time horizon:</p> <ul style="list-style-type: none"> • In the daily process, for the request horizon (D+1, D+2, ..., D+7), the market participant can specify different MW and different service hours for different days. • In the monthly process, for the request horizon (M+1, M+2, ..., M+12), the market participant can specify different MW and different service hours for different months. <p>The PWTA application shall validate each PWT request against the registered PWT resource name in the Master File (see BRQ210a) and registered PWT contract data in PWTA(see BRQ210b):</p> <ol style="list-style-type: none"> 1. For data item 1 (<i>Resource name</i>), make sure the resource name is a registered in the PWTA (same as registered in the Master File). 2. For data item 2 (<i>PWT MW</i>), make sure the requested PWT MW plus prior-awarded PWT MW do not exceed the registered contracted PWT MW. 3. For data item 3 (<i>Service hours</i>), make sure the requested PWT service hours does not exceed the registered service hours. Also, make sure the service hours is at least four (4) hours for each day, according to the tariff specified in the TSMSP2 project. 4. For data item 2 (<i>PWT MW</i>) and data item 3 (<i>Service hours</i>), in the daily process, make sure the requested days are within the contracted service days. <p>If the PWT request meets the above criteria, accept the request; otherwise reject it.</p> <p><u>Tariff:</u> §23.4 (Obtaining a Monthly Wheeling Through Priority) and §23.5 (Obtaining a Daily Wheeling Through Priority), §23.2.3 (Termination or Modification of a Firm Power Supply Agreement Underlying a Monthly or Daily Wheeling Through Priority)</p>	Core Tariff BPM	PWTA
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ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ215	<p>Award PWT ATC to PWT requests</p> <p>This functionality can be called “PWTA awarder”.</p> <p>In awarding PWT ATC to PWT requests (i.e. increasing PWT positions), the following rules apply:</p> <ol style="list-style-type: none"> 1. Award the maximum possible PWT ATC to PWT requests. 2. Make sure the volume of PWT requests does not exceed PWT ATC at every tie-point. If a PWT ATC value is negative, use zero as the limit. 3. Make for PWT position (total awarded capacity) shall not exceed the resource’s contract capacity. 4. At a same priority level, curtailment of PWT requests shall be done on a pro-rata basis. <p>In addition, the following special rules also apply:</p> <ol style="list-style-type: none"> 5. At every ITC (Intertie Transmission Constraint), do not consider counter-flows. That is, at an import ITC, the sum of PWT request for imports (not including exports) shall not exceed the import PWT ATC. Likewise, at an export ITC, the sum of PWT request for export (not including imports) shall not exceed the export PWT ATC. 6. PWT ATC shall be first awarded to those PWT requests who have longer service hours (higher priority) before those who have shorter service hours (lower priority). <p>The PWTA shall output the following results:</p> <ol style="list-style-type: none"> 8. Resource name; 9. MW quantity awarded. <p>The PWTA application runs at the following time:</p> <ol style="list-style-type: none"> 1. In the monthly process to award PWT ATC for M+1, M+2, ..., M+12, PWTA runs no later than three (3) Business Days after the request window closes. 2. In the daily process to award PWT ATC for D+1, D+2, ..., D+7), PWTA runs no later than two (2) hours after the daily request window closes and at least one (1) hour before the Day-Ahead Market runs. <p><u>Tariff:</u> §23.4 (Obtaining a Monthly Wheeling Through Priority), §23.5 (Obtaining a Daily Wheeling Through Priority).</p>	Core Tariff	PWTA

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ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ217	<p>Release certain amount of PWT ATC caused by contract reduction</p> <p>This functionality can be called as a “forced releaser” due to contract reduction.</p> <p>In releasing PWT ATC back to the market (i.e. decreasing PWT positions), the following rules apply:</p> <ol style="list-style-type: none"> 1. If it found that the contracted MW becomes less than the awarded PWT MW positions, then forcefully reduce the awarded PWT MW positions to the contracted MW. 2. If it is found that the contracted service hours become shorter than the awarded PWT service hours, then forcefully cut short the PWT positions to fit the new contracted service hours. 3. If it found that the contracted duration (from start-date to end-date) becomes shorter than the awarded PWT, then forcefully cut short the PWT positions to fit the new contract period. <p>Note that releasing PWT ATC only applies to PWT awards for the future time horizon, i.e. not-yet-executed market timeline. It is not applicable to release PWT ATC for the already-executed PWT awards, i.e. in the market time that has already passed.</p> <p>For forced release due to reduction or termination of contract, market participant, i.e. SC, must notify ISO no later than 11 days before the start of the changed contract. Once contract updated, PWTA shall check PWT positions and re-adjust them any violations.</p> <p>Such a release of PWT ATC shall be processed by PWTA immediately or as soon as possible when contract reduction is detected in PWT contract registry within PWTA (see BRQ210b). This will make sure in the next round of PWT ATC calculation, the remaining PWT ATC can be communicated to the market participant timely and accurately.</p>	Core	PWTA



ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ218	<p>Publish data payload of PWT positions for market operations to use</p> <p>Every day, when PWTa completes its allocation of PWT ATC to market participants' requests, the PWTa shall publish PWT positions (i.e. total PWT awards) in a data payload for the downstream market operations system to use. The data payload shall include the following items per hourly record:</p> <ol style="list-style-type: none"> 1. Resource name (High-Priority Export); 2. Import Resource name (counter resource) 3. SC name; 4. PWT position (MW). 5. ContractID <p>The data payload shall be hourly data for the next seven days (D+1, D+2, ..., D+7).</p>	Core	PWTa
TSMSP2-BRQ230	<p>Publish PWT awards impact to limits after monthly process</p> <ol style="list-style-type: none"> 1. Startdate 2. End date 3. Limit Name (ITC/ISL) 4. Total impact by Monthly awarded PWT 		PWTa
TSMSP2-BRQ231	<p>Publish PWT awards impact to limits after daily process</p> <ol style="list-style-type: none"> 1. Startdate 2. End date 3. Limit Name (ITC/ISL) 4. Total impact by daily awarded PWT 		PWTa
TSMSP2-BRQ220	<p>PWT registration: Contract registration no longer required in the Master File.</p> <p>In the TSMSP2 design, PWT registration is split into two parts:</p> <ul style="list-style-type: none"> • Register resource ID (BRQ210a); and • Register resource contract (BRQ210b and BRQ210c). <p>Therefore, the process needs to be updated where PWT contract registration is no longer required in the Master File.</p>	Core, Business Process	Master File
TSMSP2-BRQ233	<p>System (PWTa) must retain all data and reports for at least 2 years.</p> <p>Implementation note: Daily, Monthly, Yearly Reports.</p>	Core	PWTa

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ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ221	<p>Manually enter the PWT award produced in the yearly process</p> <p>If the yearly LTWTP process produces any PWT award (see BRQ521):</p> <ul style="list-style-type: none"> • Register the PWT resource (see BRQ210a and BRQ210b); and • Manually enter the PWT award into the PWTA application, facilitated by the user interface 	Business Process	PWTA
TSMSP2-BRQ232	<p>PWTA must support resale of PWT awards and validation of resources.</p> <p>Note: Additional BRQs shall be added in a future External BRS in relation to resale scope.</p>	Core	PWTA

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4.3 Business Requirements: Manage Real Time Operations – Using PWT Awards in Market Operations

This section describes business requirements how accepted Priority-Wheeling-Through (PWT) requests are used in market operations.

4.3.1 Business Requirements


New requirements for system development are specified as follows.

ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ311a	<p>Inputting PWT awards from the PWTA (Priority-Wheeling-Through Awarder) system The System shall receive PWT Awards from the upstream PWTA system. See details in BRQ218 for the PWTA-published data to be used by the market operations system (specifically SIBR and Settlement).</p> <p>The data shall include:</p> <ul style="list-style-type: none"> • Resource name (ID); (High-Priority Export) • Import Resource name (ID); (counter resource) • SC name; • PWT position (MW). <p>The data should be received minimum once daily and include 7 days' worth of data starting with the next trading day. <i>(i.e. data sent at 1am on 8/3 will include data for 8/4 – 8/10 for each hour)</i> <i>(Can be one payload for all 7 days or 7 payloads - 1 for each day) depends on size.</i> <i>Need to confirm there is no need for new data to come in for a Real Time change meaning we could get new data for the current date. This could be incremental if desired, still depends on the need.</i></p> <p>PWT resources must be valid registered imports and export resources already existing in the Master File.</p> <p>PWT export resources do not name a supporting resource when submitting a PT Self-Schedule.</p> <p>PWT resources PT Self-Schedules must not exceed the PWT MW identified with the resource for specified hour.</p> <p>Tariff: §23.2.2 (Nature of a Wheeling Through Priority)</p>	Core Tariff	SIBR

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ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ311b	Inputting PWT awards from the PWTA (Priority-Wheeling-Through Awarder) system PWT resources must be valid registered imports and export resources already existing in the Master File. Tariff: §23.2.2 (Nature of a Wheeling Through Priority)	Core Tariff	SIBR
TSMSP2-BRQ311c	Inputting PWT awards from the PWTA (Priority-Wheeling-Through Awarder) system PWT export resources do not name a supporting resource when submitting a PT Self-Schedule. Tariff: §23.2.2 (Nature of a Wheeling Through Priority)	Core Tariff	SIBR
TSMSP2-BRQ311d	PWT Exports must use the PWT Import named for the PWT Position associated with that hour as the Counter Resource in the Wheeling Transaction. <i>There can be a one to many association for Export to Import with a PWT position MW. The Export and Import together per hour in the record are unique.</i> <i>ExportA with ImportB for 45MW</i> <i>ExportA with ImportC for 25MW</i> <i>ExportB with ImportA for 30MW</i> <i>ExportC with ImportB for 10MW</i> <i>There can only be one counter resource per Wheeling Transaction for the trading hour.</i> <i>ExportA can use either ImportB or ImportC but not both for a trade hour.</i> Tariff: §23.2.2 (Nature of a Wheeling Through Priority)	Core Tariff	SIBR
TSMSP2-BRQ311e	Inputting PWT awards from the PWTA (Priority-Wheeling-Through Awarder) system PWT resources PT Self-Schedules must not exceed the PWT Position MW identified with the export resource and counter import resource for specified hour. Tariff: §23.2.2 (Nature of a Wheeling Through Priority)	Core Tariff	SIBR
TSMSP2-BRQ312	Clearing PWT schedules in HASP No impact. Clearing PWT schedules are conducted with existing practice, where all schedules are cleared together based on their assigned priorities. Here, the only difference is that in the input data of HASP, Priority-Wheeling-Through (PWT) schedules are assigned with a same priority as the ISO load.	Core	HASP

4.4 Business Requirements: Manage Market Clearing – Settling PWT Awards and Schedules

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This section describes business requirements how awarded Priority-Wheeling-Through (PWT) capacity are compensated in the settlement system.

4.4.1 Business Requirements

New requirements for system development are specified as follows.


ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ411	Consume awarded PWT positions from upstream PWTA system.	Core	Settlements
TSMSP2-BRQ412	<p>Settle for PWT</p> <p>Entities obtaining PWT pay the Wheeling Access Charges (WAC) for period across which PWT ATC is reserved, i.e. awarded.</p> <p>Same as any other wheeling-through, a PWT has an import (at POD tie-point) and an export (at POR tie-point). The WAC is charged at the export as usual by following the current practice.</p> <p>For an entity with a PWT:</p> <ul style="list-style-type: none"> • If the entity's actual schedule (aka "usage") is less than the awarded PWT capacity, then the entity would pay WAC on the awarded <u>capacity</u>, rather than its actual schedule. This is a new requirement that WAC is charged against wheeling-through <u>capacity</u>, if its schedule is less. • If the entity's actual schedule (aka "usage") is greater than the awarded PWT capacity, then the entity would pay WAC on actual schedule. It is a current practice that WAC is charged against wheeling-through schedules. <p>In combination of the new requirement and the current practice, the entity should pay the maximum of the two: (1) PWT's awarded capacity, and (2) the PWT's actual schedule.</p> <p><u>Tariff:</u> §26.1.4.5 (Priority Wheeling Throughs)</p>	Core Tariff	Settlements

4.5 Business Requirements: General - Other Work

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This section describes business requirements of some other enhancements that are not in the TSMSP2 scope. However, for these enhancements, their implementations are bundled with the TSMSP2 project.

ID#	Business Feature	Requirement Type	Potential Apps Impacted
TSMSP2-BRQ601	<p>Reporting HASP schedules</p> <p>This is not a TSMSP2 requirement. Rather, this is an enhancement to the prior TSMSP1 project.</p> <p>Currently, TSMSP1 measures HASP schedule adjustments with respect to those from RUC. HASP schedule adjustments are reported even though they were not made by HASP. This created false alarms to participants checking the TSMSP1 reports. In this change requirement, HASP schedule adjustments shall be measured with respect to the schedules submitted to HASP.</p>	Core	HASP

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4.6 Business Requirements: Market/Business Simulation

This section shall provide a basis for the development of the Market/Business Simulation Scenarios. These requirements will provide guidance on the market participant impacts, inputs into the Scenarios, endpoints to the Scenarios and reasons for potential Scenarios. The guidance on market participant impacts shall be gathered from the requirements that impact rules, interfaces, applications/reports, new system processes, new/modified data models, and new user roles. The source and sink systems shall be determined through the development of the system context diagram and the web service requirements. The *Reason for the Potential Scenario* column will be to offer guidance regarding what potential scenarios, and their context, may be needed for this project. This section applies to all policy development projects, market enhancements, technology enhancements, operation enhancements, Energy Imbalance Market (EIM) implementations, and Reliability Coordination (RC) service implementations. If the project team has deemed that no structured testing is needed, an end-to-end test case must be specified.

In the Reason for Potential Scenario column, select one or more of the following reasons:

1. **Rule Impacts:** Generalized changes in market rules, bidding rules, settlements rules, market design changes, or other business rules.
2. **Interface changes:** Changes that impact templates (e.g., the Resource Adequacy (RA) supply plan), user interface (UI), and application programming interface (API) (e.g., retrievals of new shadow settlement data).
3. **New application/report:** Changes that cause addition/modification of market software or reports, especially when market data input is required by the market participant.
4. **New system process:** Modification of data flow in systems, especially if the new process requires the market participant to demonstrate proficiency prior to production.
5. **New/Modified model data:** Addition or substantial modification of model data as a market solution or export provided by the ISO.
6. **New user role:** The addition or modification of access permissions for a user role applied to specific business units within an EIM entity or market participant organization (e.g., Load Serving Entity (LSE) as a Local Regulatory Authority (LRA) role). Scenarios are beneficial for market participants taking on a new function or process within their organization.

4.6.1 Business Requirements

ID#	Guidance on Market Participant Impacts	Source System	Sink System	Reason for Potential Scenario
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MSIM - 001	<p>Unstructured Market Sim</p> <p>LSEs with Non RA contracts to serve load shall have the ability to submit NLN data.</p> <p>Note: See BRQ106.</p>	N/A	CIRA	Modified Data
MSIM - 002	<p>Unstructured Market Sim</p> <p>When a non-RA native load need submission is a replacement of an existing RA contract, SCs of supplier and LSEs.</p> <p>Note: See BRQ107, BRQ118.</p>	N/A	CIRA	Modified Data
MSIM – 003	<p>End-to-End</p> <p>Market Participants shall register their PWT resource IDs in the Master File.</p> <p>Note: See BRQ210a.</p>	N/A	MF	Modified Data, New Process
MSIM – 004	<p>End-to-End</p> <p>Security will be expanded to create new role to allow Scheduling Coordinators access to the PWTA rule.</p> <p>Note: See BRQ204.</p>	N/A	Internal System	New Process



MSIM – 005	<p>Unstructured Market Sim, End-to-End Market Participants shall register their contract-related information in PWTA.</p> <p>Note: See BRQ210b, BRQ211a.</p>	N/A	PWTA	New Process, New Data
MSIM – 006	<p>Unstructured Market Sim, End-to-End Market Participant to submit their PWT requests, view and receive PWT awards for daily process.</p> <p>Note: See BRQ211b, BRQ211c, 214, 215, 217, 218, 230.</p>	N/A	PWTA	New Process, New Data
MSIM – 007	<p>Unstructured Market Sim, End-to-End Market Participant to submit their PWT requests, view and receive PWT awards for monthly process.</p> <p>Note: See BRQ211b, BRQ211c, 214, 215, 217, 218, 231.</p>	N/A	PWTA	New Process, New Data
MSIM – 008	<p>Unstructured Market Sim, End-to-End Market Participant to view their PWT ATC awards for daily process.</p> <p>Note: See BRQ121, BRQ114.</p>	INTERNAL SYSTEM	OASIS	New Process, New Data, New User Interface



MSIM – 009	<p>Unstructured Market Sim, End-to-End Market Participant to view their PWT ATC awards for monthly process.</p> <p>Note: See BRQ122, BRQ114.</p>	INTERNAL SYSTEM	OASIS	New Process, New Data, New User Interface
MSIM – 010	<p>Unstructured Market Sim, End-to-End PWT Awards sent from PWTA to SIBR.</p> <p>Note: See 218, BRQ311.</p>	PWTA	SIBR	New Process, New Data
MSIM – 011	<p>Unstructured Market Sim, End-to-End PWT Awards sent from PWTA to Settlements.</p> <p>Note: See 218, BRQ411.</p>	PWTA	Settlements	New Process, New Data
MSIM – 012	<p>Unstructured Market Sim, End-to-End</p> <p>Entities obtaining PWT pay the Wheeling Access Charges (WAC) for period across which PWT ATC is reserved</p>	N/A	Settlements	New Process, New Data

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MSIM – 014	<p>End-to-End Internal ISO operator to view received PWT requests and produced PWT awards.</p> <p>Note: See BRQ212b.</p>	N/A	PWTA	New Process, New Data
MSIM – 015	<p>End-to-End Internal ISO operator to define submission windows for monthly and daily PWT requests. Shall allow the operator (internal user) to configure the time to run the PWTA automatically to make PWT awards following the PWT request windows.</p> <p>Note: See BRQ212c.</p>	N/A	PWTA	New Process, New Data