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# WEMS SUBMISSION VALIDATION

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**Version 5.6**

March 2021

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# Important notice

## PURPOSE

AEMO has prepared this document to provide information about Wholesale Electricity Market System (WEMS) submission validations, as at the date of publication.

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## VERSION CONTROL

Version	Release date	Changes
5.5	09/09/2020	Document Template Update
5.6	29/03/2021	Updated for WEMS 3.38

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# 1. Introduction

This document outlines the validation applicable to Bilateral, STEM, Balancing and Load Following submissions made through file exchange in the Western Australian Wholesale Electricity Market System (WEMS). The tables below detail the data which is being validated, the action taken if the validation is not met, the stage which the validation will be implemented as well as the relevant error codes and messages to be displayed within file exchange.

Note: The validations below still reference Curtailable loads instead of Demand Side Programs. These validations will be updated at a later date.

## 1.1 Reserve Capacity Mechanism Reforms

This document has been updated to reflect number of changes introduced through the Wholesale Electricity Market Amending Rules 2016 made by the Minister under regulation 7(4) of the Electricity Industry (Wholesale Electricity Market) Regulations 2004 as published in the Government Gazette on 31 May 2016.

Replacement documentation is available through the API documentation available from <https://wems.aemo.com.au/rcm/api/docs/> and through the MPI User Guide.

# 2. Information messages

In addition to the errors and warning messages outlined in the subsequent sections, the system will also provide "Information Messages" to the user. The intention of these messages is to provide a general summary of status of the whole submission. These messages include:

Information Message	Message Code	Message
Indicates that the submission file has been received by AEMO.	I0001	File Uploaded to AEMO Server - Starting File Processing
Indicates that the submission file has passed all relevant validations and has been successfully submitted.	I0002	File Processing Completed Successfully
Indicates that the submission file has been successfully submitted.	I0003	File Processing Completed Successfully with Warnings
Indicates that part of the submission file has been successfully submitted.	I0004	File Processing Completed Successfully with Errors
Indicates that the submission file has been rejected due to critical validations not being passed.	I0005	File Processing Failed - File Rejected

Information Message	Message Code	Message
Indicates that a specific facility within the submission has been successfully processed.	I0101	Submission for facility {0} has been successfully processed

## 3. File Format Errors

Submissions made by participants must conform to the relevant XSD or CSV format as prescribed by AEMO. Where submission files do not meet the XSD or CSV format requirements, the file will be rejected automatically.

For CSV submissions, the following validation checks are performed on all uploaded files:

Validations	Consequence	Message Code	Message
CSV file must be of the correct form and syntax	Reject File	E0301	File processing error
CSV must contain data in the right form for the given submission type	Reject File	E0303	Submission does not contain any data
CSV header row must have the right number of columns for a given submission type	Reject File	E0304	Header row has incorrect number of columns for a <submission type> submission
CSV column names must be valid for the given submission type	Reject File	E0305	Invalid column name used for <submission type> submission

## 4. Balancing Variation Submissions and Cancellations

Balancing variation submissions allow participants to update their balancing positions up until gate closure. Post gate closure (up until 30 minutes prior to the commencement of the Trading Interval), participants will still be able to submit changes to their balancing positions to reflect bona fide changes in capability (e.g. a facility outage).

If a submission (either standing or variation) exists for a resource/interval and a variation submission is made for the same resource/interval, then the balancing variation submission always takes precedence (regardless of date/time submitted).

Balancing variation cancellation submissions allow the participant to cancel and revert their position back to their standing submission for the interval ranges specified in the cancellation.

For XML submissions, the validations that are captured by the XSD can be identified by those who have Reject File as its consequence. In such scenarios, the submitting user will receive Message Code E9994 – File does not conform to the XSD schema definition or Message Code E9992 – System Error instead of the message code and message directly related to the field error.

## 4.1 General Validation

Validations	Consequence	Message Code	Message
1. No trading interval ranges can overlap within a file submission for a given resource	Reject overlapping interval/range	E0001	Overlapping interval ranges are not permitted
2. Submissions that include intervals that are within the relevant gate closure will be accepted if Allow Gate Closure Violations is ticked.	Warning	W0002	There are gate closure violations within the submission
3. Submissions that include intervals that are within the relevant gate closure will be rejected if Allow Gate Closure Violations is not ticked.	Reject interval/range	E0002	Intervals violating gate closure have been removed from the submission
4. Submissions that include intervals that are within the relevant gate closure will be rejected if Discard Entire File on Errors is ticked and Allow Gate Closure Violations is not ticked	Reject File	E0099	Entire submission has been discarded due to gate closure violations
5. Submissions that include intervals with errors will be rejected if Discard Entire File on Errors is ticked and Allow Gate Closure Violations is not ticked	Reject File	E0113	Entire submission has been discarded due to Errors
6. IPP facility/Synergy SAF (except NSG) must include at least 1 price/quantity pair per interval, unless there is a non-zero unavailable quantity specified	Reject interval/range	E0003	Insufficient price/quantity pairs for trading interval
7. IPP facility/Synergy SAF (except NSG) must not exceed 10 price/quantity pairs per interval	Reject interval/range	E0004	Maximum number of price/quantity exceeded for trading interval
8. Synergy Portfolio must include at least 1 price/quantity pairs per interval, unless there is a non-zero unavailable quantity specified	Reject interval/range	E0005	Insufficient price/quantity pairs for trading interval
9. Synergy Portfolio must not exceed 35 price/quantity pairs per interval	Reject interval/range	E0006	Maximum number of price/quantity exceeded for trading interval
10. NSGs must only submit 1 tranche per interval, unless there is a non-zero unavailable quantity specified	Reject interval/range	E0007	NSGs can only submit a single price/quantity pair per trading interval

Validations	Consequence	Message Code	Message
11. If Discard File on Errors checkbox is not selected, partial submissions will be accepted if all fields are complete and correct for a specified resource/interval combination. Errors within a single tranche will result in the interval for the resource name being rejected.	See validation - Warning	W0001	Partial submission only – intervals in error have been removed
12. All price/quantity pairs submitted for a resource/interval combination must have the same values in the action, resource name, start hour, start interval, end hour and end interval fields. (CSV ONLY)	Reject interval/range	E0008	File format invalid – failed on file format business rules constraints
13. Submissions are only allowed for trading intervals which are in the future	Reject interval/range	E0009	Submissions must only include future intervals
14. All max ramp values must be the same for all price/quantity pairs within each interval/resource name combination	Reject interval/range	E0011	Ramp rates for all price/quantity pairs for a resource within an interval must be identical
15. Scheduled generators that do not meet conditions 2.1, 2.2, 2.3 and 2.4 within the balancing declaration in registration must not submit more than 2 price/quantity pairs per interval	Reject interval/range	E0012	Facility must not submit more than two price/quantity pairs per interval
16. Loss factored adjusted price must be less than or equal to the MAX price for the fuel	Reject interval/range	E0013	Invalid price submitted - must be less than MAX STEM price for particular fuel type
17. Loss factored adjusted price must be greater or equal to the MIN price	Reject interval/range	E0014	Invalid price submitted - must be greater than MIN STEM price
18. No two price/quantity pairs within an interval are allowed to have the same loss factor adjusted price for a given ancillary purpose (including no ancillary purpose)	Reject interval/range	E0096	Identical price used in two price/quantity pairs
19. Tranche elements (price, quantity, maxRamp, fuelType and ancillaryPurpose) are not required when action = CANCEL	Reject Resource	E9997	Tranche elements not required for cancel submission
20. Submission file must be of the right form for the purpose of the submission. (e.g. balancing variation submission can't be used for a LFAS submission)	Reject file	E9991	Submission file invalid
21. For Scheduled Generators other than the Synergy Portfolio, the sum of all quantities within an interval (including unavailability) must equal the Sent Out Capacity of the facility as specified in Registration	Warning	W0008	Balancing quantity offered does not equal the facility's sent out capacity

Validations	Consequence	Message Code	Message
22. LFAS_DN (cleared quantities) must equal the quantity in the tranche where ancillary purpose = LFAS and the price is MIN and LFAS_UP (cleared quantities) must equal the quantity in the tranche where ancillary purpose = LFAS and price is MAX.	Reject Resource	E0115	Balancing quantity is less than the facility's LFAS obligations
23. For an interval within a submission to be included in the forecast BMO calculation, the submission must be made prior to the start of the previous interval e.g. submissions for interval 13:00 must be received by 12:29:59 to be included in the 12:30 forecast BMO.	Warning	W0012	Interval {0} for facility {1} has not been included in the latest forecast BMO calculation
24. IPP and Synergy SAF facilities must submit their Minimum Stable Generation quantity at MIN if they are selected for any LFAS quantity	Reject Resource	E0114	Facility {0} must have Minimum Stable Loading quantity for fuel type {1} at price of MIN

## 4.2 Field Validations

Attribute/Field	Validations	Consequence	Message Code	Message
resourceName/ resource_name	Resource name must match a name of a registered facility for the trading date specified, or "Portfolio" if the submission is for Synergy Portfolio and the resource must be registered to the market participant which the user has logged in on behalf of	Reject Resource	E0015	Resource Name is invalid
	If the resource is registered to Synergy, it is only able to make Balancing Submission for the individual facility if it is a Synergy SAF (Trial and Permanent)	Reject Resource	E0108	Resource is part of the Synergy Portfolio
	Resource name must be of facility type Scheduled Generator or Non-scheduled Generator	Reject interval/range	E0046	Resource name must be either a Scheduled or Non-Scheduled Generator
	Resource must have a loss factor	Reject Resource	E0114	No loss factors available for facility {0}
tradingDate/ trading_date	Trade date must be of the correct format – YYYY-MM-DD (XML ONLY) and DD/MM/YYYY (CSV ONLY)	Reject file	E0016	Trade date XML format does not match YYYY-MM-DD  Trade date CSV format does not match DD/MM/YYYY



Attribute/Field	Validations	Consequence	Message Code	Message
	Trading date must not be more than 30 days into the future	Reject interval/range	E0047	Trading date must be within 30 days from today
	Trading Date must not be before Balancing/LFAS market start	Reject interval/range	E0101	Trading date must be after Market Start
action/action	Must only contain SUBMIT or CANCEL	Reject file	E0017	Action request invalid
startHour/ start_hour	Start hour can only contain integers between 0 to 23	Reject file	E0018	Start hour must be between 0 and 23
startInterval/ start_interval	Start Interval can only contain integers 1 and 2	Reject file	E0019	Start Interval must be either 1 or 2
endHour/ end_hour	End hour can only contain integers between 0 to 23	Reject file	E0020	End hour must be between 0 and 23
endInterval/ end_interval	Must only contain integers 1 and 2	Reject file	E0022	End Interval must be either 1 or 2
	The combination of start_hour/Start_interval has to be before or the same as the combination of end_hour/end_interval	Reject interval/range	E0023	Start time must be before end time
price/price	Must only contain a price in \$XXXX.XX format, or the MIN, MAX variables	Reject interval/range	E0024	Price format invalid
	If Resource is a Scheduled generators does not meet conditions 2.1, 2.2, 2.3 and 2.4 within the balancing declaration in registration, they must only bid at MIN and MAX	Reject interval/range	E0048	Resource must bid at MIN or MAX price as it does not meet minimum balancing facility minimum requirements
	If Resource is a NSG and does not meet conditions 2.1, 2.2, 2.3a and 2.4a within the balancing declaration in registration, they must only submit a price of MIN	Reject interval/range	E0111	Resource must only bid at MIN
	Where ancillary purpose = OTHER or LFAS , price must be either MIN or MAX	Reject interval/range	E0050	Price must be either MIN or MAX when providing Ancillary Services
	Where ancillary purpose = COMTEST price must be MIN	Reject interval/range	E0100	Price must be MIN when performing a commissioning test
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0025	Price must be NULL when action is set to CANCEL

Attribute/Field	Validations	Consequence	Message Code	Message
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0026	Price not required when action is set to CANCEL
quantity/ quantity	Must only contain a quantity in XXXX.XXXMW format	Reject interval/range	E0027	Quantity format invalid
	Quantity must be zero or positive and of number data type.	Reject file	E0028	Quantity must be a number and positive
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0029	Quantity must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0030	Quantity not required when action is set to CANCEL
maxRamp/ max_ramp	Max ramp must be in XXXX.XXXMW/minute format and zero or positive. Max ramp rate cannot be zero if the submitted quantity is positive.	Reject interval/range	E0031	Ramp rate must be positive with format XXXX.XXXMW/minute
	Max ramp must be a number data type	Reject file	E0032	Ramp rate must be number
	Ramp rate must not be greater than the absolute value of any ramp rate specified for the facility, where resource name is not Portfolio	Reject Interval Range	E0051	Ramp rate must not be greater than facility's maximum ramp rate
	Synergy Portfolio max ramp should be less than 100MW/minute	Warning	W0010	Synergy portfolio ramp rate should be less than 100MW/minute
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0033	Ramp rate must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0034	Ramp rate not required when action is set to CANCEL
fuelType/ fuel_type	Must only contain NON_LIQUID or LIQUID	Reject file	E0035	Fuel type invalid
	Resource name must be able to operate with fuel type specified as per in registration where resource name is not Portfolio	Reject resource	E0052	Invalid fuel type for Resource Name
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0036	Fuel type must be NULL when action is set to CANCEL

Attribute/Field	Validations	Consequence	Message Code	Message
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0037	Fuel type not required when action is set to CANCEL
ancillaryPurpose/ ancillary_purpose	Ancillary Purpose must only contain OTHER, LFAS, COMTEST or NULL	Reject file Reject file	E0038	Ancillary purpose type invalid
	IPPs can only submit an ancillary purpose of LFAS, COMTEST or NULL	Reject interval/range	E0039	IPP Facilities only permitted to enter ancillary purpose of LFAS, COMTEST or NULL
	If resource name has Synergy SAF flag, attribute must be set to OTHER, LFAS, COMTEST or NULL when submitting AS in the Balancing Submission	Reject interval/range	E0053	VSAF facility only permitted to enter ancillary purpose of OTHER, LFAS, COMTEST or NULL
	IPPs and Synergy SAF can only submit an ancillary purpose of LFAS if the facility has been registered for LFAS	Reject interval/range	E0112	Facility unable to submit ancillary purpose of LFAS as it is not registered for LFAS
	If resource name belongs to the Synergy Portfolio, attribute/field must only be either OTHER, LFAS, COMTEST or NULL, when submitting AS in the Balancing Submission	Reject file	E0054	Synergy Portfolio only permitted to enter ancillary purpose of OTHER, LFAS, COMTEST or NULL
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0040	Ancillary purpose must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0041	Ancillary purpose not required when action is set to CANCEL
Unavailable (XML ONLY)	Unavailable must be a number data type	Reject file	E0042	Unavailable entered must be a number
	Must be NULL if action = CANCEL	Reject file	E0043	Unavailable not required when action is set to CANCEL
submission_type (CSV ONLY)	Must only contain BAL or UNAV	Reject file	E0044	Submission type invalid
	Must be NULL if action = CANCEL	Reject file	E0045	Submission type must be NULL when action is set to CANCEL

# 5. Balancing Standing Submissions and Cancellations

Balancing standing submissions provide participants with “default” balancing submissions for trading days that fall within the effective date specified. Cancellations of balancing standing submissions will see both variation and standing submissions effectively “deleted” for the effective date stated in the submission.

For XML submissions, the validations that are captured by the XSD can be identified by those who have Reject File as its consequence. In such scenarios, the submitting user will receive Message Code E9994 – File does not conform to the XSD schema definition or Message Code E9992 – System Error instead of the message code and message directly related to the field error.

## 5.1 General Validation

All Balancing variation submissions and cancellation General Validations listed above apply, except where specified below.

Note: “New” validations refer to validations in addition to the variation validations specified above.

“Modification” validations refer to validations that exist for Variation submission types but have been modified to cater for standing submissions.

Validations	Consequence	Message Code	Message
<i>NEW:</i> 25. Supply Curve elements (startHour, startInterval, endHour, endInterval and unavailable) are not required when action = CANCEL	Reject Resource	E9998	Supply curve elements not required for cancel submission
<i>NEW:</i> 26. All standing submissions must be complete (include all 48 intervals) for a resource name/effective date combination.	Reject resource/ effective date combination	E0055	Standing submission must be complete for a trading day
<i>MODIFICATION:</i> 2. Submissions made inside the relevant gate closure will not be accepted under any circumstances.	Reject interval/range	E0056	Standing submission must not be within gate closure

Validations	Consequence	Message Code	Message
<p><i>MODIFICATION:</i></p> <p>11. If Discard File on Errors checkbox is not selected, partial submissions will be accepted if all fields are complete and correct for a full trading day for a given resource name/effective date combination. Any errors found within a submission for an effective trading date will see that section of the submission be rejected.</p>	Reject resource/ effective date combination	W0007	Partial submission only – Resource with errors have been removed

## 5.2 Field Validations

Balancing Standing Submission field validations are similar to the validations presented above for Balancing Variation submissions. The only change is to the trading day field, which now becomes the effective trading date field; however, all other validations are still applicable.

Attribute/Field	Validations	Consequence	Message Code	Message
resourceName/ resource_name	Resource name must match a name of a registered facility for the trading date specified, or Portfolio if the submission is for Synergy Portfolio and the resource must be registered to the market participant which the user has logged in on behalf of	Reject Resource	E0015	Resource Name is invalid
	If the resource is registered to Synergy, it is only able to make a Balancing Submission for the individual facility if it is a Synergy SAF (Trial and Permanent)	Reject Resource	E0108	Resource is part of the Synergy Portfolio
	Resource name must be of facility type Scheduled Generator or Non-Scheduled Generator	Reject Resource	E0046	Resource name must be either a Scheduled or Non-Scheduled Generator
effectiveTradingDate/ effective_trading_date	Effective trade date must not be in the past	Reject resource/ effective date combination	E0057	Effective trade date must not be in the past
	Effective trade date must be of the correct format – YYYY-MM-DD (XML ONLY) and DD/MM/YYYY (CSV ONLY)	Reject file	E0058	Effective trade date XML format does not match YYYY-MM-DD Effective trade date CSV format does not match DD/MM/YYYY
action/action	Must only contain SUBMIT or CANCEL	Reject file	E0017	Action request invalid
startHour/	Start hour can only contain integers between 0 to 23	Reject file	E0018	Start hour must be between 0 and 23

Attribute/Field	Validations	Consequence	Message Code	Message
start_hour	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0059	Start hour must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0060	Start hour not required when action is set to CANCEL
startInterval/ start_interval	Must only contain integers between 1 and 2	Reject file	E0019	Start Interval must be either 1 or 2
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0061	Start interval must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0062	Start interval not required when action is set to CANCEL
endHour/ end_hour	End hour must only contain integers from 0 to 23	Reject file	E0020	End hour must be between 0 and 23
	End hour must not be earlier than the start hour. Where the order is 8....23,0...7 (i.e. hour 0 is later than hour 23)	Reject file	E0021	End hour must be after start hour
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0063	End hour must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0064	End hour not required when action is set to CANCEL
endInterval/ end_interval	Must only contain integers 1 and 2	Reject file	E0022	End Interval must be either 1 or 2
	The combination of start_hour/Start_interval has to be before or the same as the combination of end_hour/end_interval	Reject Resource	E0023	End hour must be after start hour
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0065	End interval must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0066	End interval not required when action is set to CANCEL
price/price	Must only contain a price in \$XXXX.XX format or the MIN, or MAX variables	Reject Resource	E0024	Price format invalid
	If Resource does not meet the balancing facility minimum requirements (MPR checkbox), they must only bid at MIN and MAX	Reject Resource	E0048	Resource must bid at MIN or MAX price as it does not meet minimum balancing facility minimum requirements

Attribute/Field	Validations	Consequence	Message Code	Message
	Where ancillary purpose = OTHER or LFAS, price must be either MIN or MAX	Reject Resource	E0050	Price must be either MIN or MAX for an ancillary purpose
	Where ancillary purpose = COMTEST, price must be MIN	Reject Resource	E0100	Price must be MIN when performing a commissioning test
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0025	Price must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0026	Price not required when action is set to CANCEL
quantity/ quantity	Must only contain a quantity in XXXX.XXXMW format	Reject Resource	E0027	Quantity must be in XXXX.XXXMW format
	Quantity must be zero or positive and of number data type	Reject file	E0028	Quantity must be a number and positive
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0029	Quantity must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0030	Quantity not required when action is set to CANCEL
maxRamp/ max_ramp	Max ramp must be in XXXX.XXXMW/minute format and zero or positive. Max ramp rate cannot be zero if the submitted quantity is positive.	Reject Resource	E0031	Ramp rate must be positive with format XXXX.XXXMW/minute
	Max ramp must be a number	Reject file	E0032	Max ramp must be positive number
	Max Ramp must not be greater than the absolute value of any ramp rate specified for the facility, where resource name is not Portfolio (Synergy Portfolio are able to specify any ramp rate)	Reject Resource	E0051	Ramp rate must not be greater than facility's maximum ramp rate
	Synergy Portfolio max ramp should be less than 100MW/minute	Reject Resource	W0010	Synergy portfolio ramp rate should be less than 100MW/minute
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0033	Ramp rate must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0034	Ramp rate not required when action is set to CANCEL
fuelType/	Must only contain NON_LIQUID or LIQUID	Reject file	E0035	Fuel type invalid

Attribute/Field	Validations	Consequence	Message Code	Message
fuel_type	Resource name must be able to operate with fuel type specified as per in registration where resource name is not Portfolio	Reject Resource	E0052	Invalid fuel type for Resource Name
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0036	Fuel type must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0037	Fuel type not required when action is set to CANCEL
ancillaryPurpose/ ancillary_purpose	Ancillary Purpose must only contain OTHER, LFAS, COMTEST or NULL	Reject file	E0038	Ancillary Purpose type invalid
	IPPs can only submit an ancillary purpose of LFAS, COMTEST or NULL	Reject Resource	E0039	IPP Facilities only permitted to enter ancillary purpose of LFAS, COMTEST or NULL
	If resource name has Synergy SAF flag, attribute must be set to OTHER, LFAS, COMTEST or NULL when submitting AS in the Balancing Submission	Reject Resource	E0053	Ancillary purpose for VSAF must only be OTHER, LFAS, COMTEST or NULL
	If resource name belongs to the Synergy Portfolio, attribute/field must only be either OTHER, LFAS, COMTEST or NULL when submitting AS in the Balancing Submission	Reject Resource	E0054	Ancillary purpose for Portfolio must either be OTHER, LFAS, COMTEST or NULL
	IPPs and Synergy SAF can only submit an ancillary purpose of LFAS if the facility has been registered for LFA	Reject Resource	E0112	Facility unable to submit ancillary purpose of LFAS as it is not registered for LFAS
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0040	Ancillary purpose must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0041	Ancillary purpose not required when action is set to CANCEL
Unavailable (XML ONLY)	Unavailable must be a number data type	Reject file	E0042	Unavailable entered must be a number
	Must be NULL if action = CANCEL	Reject file	E0043	Unavailable not required when action is set to CANCEL
submission_type (CSV ONLY)	Must only contain BAL or UNAV	Reject file	E0044	Submission type invalid



Attribute/Field	Validations	Consequence	Message Code	Message
	Must be NULL if action = CANCEL	Reject file	E0045	Submission type must be NULL when action is set to CANCEL

## 6. Load Following Variation Submissions and Cancellations

Load following variation submissions allow participants to update their load following positions up until gate closure. *Load following submissions made after gate closure will not be reflected in the merit order for that interval.*

If a load following submission (either standing or variation) exists for a resource/interval and a variation submission is made for the same resource/interval, then the load following variation submission always takes precedence, regardless of date/time submitted.

In addition to this, load following variation cancellation submissions allow the participant to cancel and revert their position back to their standing submission for the interval ranges specified in the cancellation.

For XML submissions, the validations that are captured by the XSD can be identified by those who have Reject File as its consequence. In such scenarios, the submitting user will receive Message Code E9994 – File does not conform to the XSD schema definition or Message Code E9992 – System Error instead of the message code and message directly related to the field error.

### 6.1 General Validations

Validations	Consequence	Message Code	Message
1. No trading interval ranges can overlap for a given resource	Reject overlapping interval/range	E0001	Overlapping interval ranges are not permitted
2. Submissions that include intervals within the relevant gate closure will be accepted if Allow Gate Closure Violations is ticked	Warning	W0002	There are gate closure violations within the submission
3. Submissions that include intervals within the relevant gate closure will be rejected if Allow Gate Closure Violations is not ticked and Discard Entire File on Errors is not ticked	Reject interval/range	E0002	Intervals violating gate closure have been removed from the submission

Validations	Consequence	Message Code	Message
4. Submissions that include intervals within the relevant gate closure will be rejected if Allow Gate Closure Violations is not ticked and Discard Entire File on Errors is ticked	Reject File	E0099	Entire submission has been discarded due to gate closure violations
5. IPP facility/Synergy SAF must include either zero or at least 1 LFAS_UP band per interval for every interval they elect to participate in	Reject interval/range	E0069	Insufficient LFAS_UP price/quantity pairs for trading interval
6. IPP facility/Synergy SAF must include either zero or at least 1 LFAS_DN band per interval for every interval they elect to participate in	Reject interval/range	E0070	Insufficient LFAS_DN price/quantity pairs for trading interval
7. IPP facility/Synergy SAF must not include more than 5 LFAS_UP bands per interval for every interval they elect to participate in	Reject interval/range	E0071	Maximum number of LFAS_UP price/quantity pairs exceeded for trading interval
8. IPP facility/Synergy SAF must not include more than 5 LFAS_DN bands per interval for every interval they elect to participate in	Reject interval/range	E0072	Maximum number of LFAS_DN price/quantity pairs exceeded for trading interval
9. Synergy Portfolio must include either zero or at least 1 LFAS_UP band per interval	Reject interval/range	E0073	Insufficient LFAS_UP price/quantity pairs for trading interval
10. Synergy Portfolio must include either zero or at least 1 LFAS_DN bands per interval	Reject interval/range	E0074	Insufficient LFAS_DN price/quantity pairs for trading interval
11. Synergy Portfolio must not include more than 10 LFAS_UP bands per interval	Reject interval/range	E0075	Maximum number of LFAS_UP price/quantity pairs exceeded for trading interval
12. Synergy Portfolio must not include more than 10 LFAS_DN bands per interval	Reject interval/range	E0076	Maximum number of LFAS_DN price/quantity pairs exceeded for trading interval
13. Synergy Portfolio must include only 1 BACKUP_LFAS_UP band per interval	Reject interval/range	E0077	Only one BACKUP_LFAS_UP price per trading interval permitted
14. Synergy Portfolio must include only 1 BACKUP_LFAS_DN bands per interval	Reject interval/range	E0078	Only one BACKUP_LFAS_DN price per trading interval permitted
15. If Discard File on Errors checkbox is not selected, partial submissions will be accepted if all fields are complete and correct for a specified resource/interval combination. Errors within a single band will result in the whole interval for the resource name being rejected.	See validation  Warning to be issued	W0001	Partial submission only – intervals in error have been removed
16. All LFAS bands submitted for resource/interval combination must contain the same values for action, resource name, start hour, start interval, end hour, end interval and type (CSV ONLY)	Reject interval/range	E0081	File format invalid – failed on file format business rules constraints
17. No two bands within an interval are allowed to have the same price	Reject interval/range	E0096	Identical price used in two price/quantity pairs

Validations	Consequence	Message Code	Message
18. Band elements (price and size) not required when action = CANCEL	Reject resource	E9995	Band elements not required for cancel submission
19. The sum of a facility's LFAS_DN and LFAS_UP quantities within an interval must be less than or equal to the facility's Sent Out Capacity less its minimum generation quantity as specified in Registration	Warning	W0011	LFAS quantities exceed facility's Sent Out Capacity less minimum generation

## 6.2 Field Validations

Attribute/Field	Validations	Consequence	Message Code	Message
resourceName/ resource_name	Resource name must match a name of a registered facility for the trading date specified, or Portfolio if the submission is for Synergy Portfolio and the resource must be registered to the market participant which the user has logged in on behalf of	Reject resource	E0015	Resource Name is invalid
	If the resource is registered to Synergy, it is only able to make a LFAS Submission if it is a Synergy SAF (Trial and Permanent)	Reject Resource	E0108	Resource is part of the Synergy Portfolio
	Resource name must have met the minimum LFAS minimum requirements	Reject resource	E0091	Resource must meet the LFAS minimum requirements
tradingDate/ trading_date	Trading date must not be more than 30 days into the future	Reject interval/range	E0092	Trading date must be within 30 days from today
	Trade date must be of the correct format – YYYY-MM-DD (XML ONLY) and DD/MM/YYYY (CSV ONLY)	Reject file	E0016	Trade date XML format does not match YYYY-MM-DD Trade date CSV format does not match DD/MM/YYYY
	Trading Date must not be before Balancing/LFAS market start	Reject interval/range	E0101	Trading date must be after Market Start
action/action	Must only contain SUBMIT or CANCEL	Reject file	E0017	Action request invalid
type/type	Can only be LFAS_UP, LFAS_DN, BACKUP_LFAS_UP, BACKUP_LFAS_DN and CANCEL	Reject file	E0084	Type request invalid
	BACKUP_LFAS_UP and BACKUP_LFAS_DN can only be entered if resource name = Portfolio	Reject interval/range	E0085	Only Synergy Portfolio is able to provide Backup LFAS services
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0094	Type must be NULL when action is set to CANCEL
	Must be CANCEL if action = CANCEL (Only for XML)	Reject file	E0086	Type must be CANCEL when action is set to CANCEL
startHour/	Start hour can only contain integers from 0 to 23	Reject file	E0018	Start hour must be between 0 and 23

Attribute/Field	Validations	Consequence	Message Code	Message
start_hour	Submissions are only allowed for trading intervals which are in the future	Reject interval/range	E0082	Submissions must only include future intervals
startInterval/ start_interval	Must only contain integers 1 and 2	Reject file	E0019	Start Interval must be either 1 or 2
endHour/ end_hour	End hour can only contain integers from 0 to 23	Reject file	E0020	End hour must be between 0 and 23
	End hour must not be earlier than the start hour. Where the order is 8....23,0...7 (i.e. hour 0 is later than hour 23)	Reject file	E0021	End hour must be after start hour
endInterval/ end_interval	Must only contain integers 1 and 2	Reject file	E0022	End Interval must be either 1 or 2
	The combination of start_hour/Start_interval has to be before or the same as the combination of end_hour/end_interval	Reject interval/range	E0023	Start time must be before end time
price/price	Price must be in \$XXXX.XX format	Reject interval/range	E0068	Price must be in \$XXXX.XX format
	Price must be of a number data type	Reject file	E0098	Price must be a number
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0025	Price must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0026	Price not required when action is set to CANCEL
size/size	Size must be in XXXX.XXXMW format	Reject interval/range	E0087	Size must be in XXXX.XXXMW format
	Size must be positive and of a number data type	Reject file	E0088	Size must be a number and positive
	Size must be greater than or equal to the minimum MW band size for the lowest price band within each interval submitted.	Reject interval/range	E0103	Size must be greater than or equal to the minimum band size
	Where type is LFAS_DN, the sum of all sizes within an interval must be less than or equal to the facility specific LFAS down max quantity as specified in Registration	Reject interval/range	E0109	Size must be less than or equal to the facility specific LFAS down max quantity
	Where type is LFAS_UP, the sum of all sizes within an interval must be less than or equal to the facility specific LFAS up max quantity as specified in Registration	Reject interval/range	E0110	Size must be less than or equal to the facility specific LFAS up max quantity
	Size must be NULL if type is BACKUP_LFAS_UP or BACKUP_LFAS_DN (Only for CSV)	Reject file	E0106	Size must be NULL when offering backup LFAS services
	Size must not be included if type is BACKUP_LFAS_UP or BACKUP_LFAS_DN (Only for XML)	Reject file	E0107	Size not required when offering backup LFAS services

Attribute/Field	Validations	Consequence	Message Code	Message
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0089	Size must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0090	Size not required when action is set to CANCEL

## 7. Load Following Standing Submissions and Cancellations

Load following standing submissions allow participants to automatically have a default submission for the effective date specified. Cancellations of load following standing submissions will see both variation and standing submissions deleted for the effective date specified.

For XML submissions, the validations that are captured by the XSD can be identified by those who have Reject File as its consequence. In such scenarios, the submitting user will receive Message Code E9994 – File does not conform to the XSD schema definition or Message Code E9992 – System Error instead of the message code and message directly related to the field error.

### 7.1 General Validations

All Load Following standing submission and cancellation General Validations (above) apply except where specified below.

Note: "New" validations refer to validations in addition to the variation validations specified above.

"Modification" validations refer to validations that exist for Variation submission types but have been modified to cater for standing submissions.

Validations	Consequence	Message Code	Message
<i>New:</i>			
32. Offer elements (type, startHour, startInterval, endHour and endInterval) are not required when action = CANCEL	Reject resource	E9996	Offer elements not required for cancel submission
<i>MODIFICATION:</i>			
2. Submissions made inside the relevant gate closure will not be accepted under any circumstances.	Reject interval/range	E0056	Standing submission must not be made within gate closure

Validations	Consequence	Message Code	Message
<p><i>MODIFICATION:</i></p> <p>15. If Discard File on Errors checkbox is not selected, partial submissions will be accepted if all fields are complete and correct for a full trading day for a given resource/effective date combination. Any errors found within a submission for an effective trading date will see that section of the submission be rejected</p>	Reject resource/ effective date combination	W0007	Partial submission only – intervals in error have been removed

## 7.2 Field Validations

Load Following Standing Submission field validations are similar to the validations presented above for Variation submissions. The only change is to the trading day field which now becomes effective trading date field, however all other validations are still applicable.

Attribute/Field	Validations	Consequence	Message Code	Message
resourceName/ resource_name	Resource name must match a name of a registered facility, or Portfolio if the submission is for Synergy Portfolio and must registered to the market participant which the user has logged in on behalf of	Reject resource	E0015	Resource Name is invalid
	If the resource is registered to Synergy, it is only able to make a LFAS Submission if it is a Synergy SAF (Trial and Permanent)	Reject resource	E0108	Resource is part of the Synergy Portfolio
	Resource name must have met the minimum LFAS minimum requirements	Reject resource	E0091	Resource must meet the LFAS minimum requirements
effectiveTradingDate/ effective_trading_date	Effective trade date must be not be in the past	Reject Resource	E0057	Effective trade date must not be in the past
	Effective trade date must be of the correct format – YYYY-MM-DD (XML ONLY) and DD/MM/YYYY (CSV ONLY)	Reject file	E0058	Effective trade date XML format does not match YYYY-MM-DD Effective trade date CSV format does not match DD/MM/YYYY
action/action	Must only contain SUBMIT or CANCEL	Reject file	E0017	Action request invalid
type/type	Can only be LFAS_UP, LFAS_DN, BACKUP_LFAS_UP and BACKUP_LFAS_DN	Reject file	E0084	Type request invalid
	BACKUP_LFAS_UP and BACKUP_LFAS_DN can only be entered if resource name = Portfolio	Reject Resource	E0085	Only Portfolio resource is able to provide backup LFAS services
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0094	Type must be NULL when action is set to CANCEL

Attribute/Field	Validations	Consequence	Message Code	Message
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0086	Type not required when action set to CANCEL
startHour/ start_hour	Start hour can only contain integers from 0 to 23	Reject file	E0018	Start hour must be between 0 and 23
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0059	Start hour must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0060	Start hour not required when action set to CANCEL
startInterval/ start_interval	Must only contain integers 1 and 2	Reject file	E0019	Start Interval must be either 1 or 2
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0061	Start interval must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0062	Start interval not required when action set to CANCEL
endHour/ end_hour	End hour must not be earlier than the start hour. Where the order is 8....23,0...7 (i.e. hour 0 is later than hour 23)	Reject file	E0021	End hour must be after start hour
	End hour can only contain integers from 0 to 23	Reject file	E0020	End hour must be between 0 and 23
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0063	End hour must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0064	End hour not required when action set to CANCEL
endInterval/ end_interval	Must only contain integers 1 and 2	Reject file	E0022	End Interval must be either 1 or 2
	The combination of start_hour/start_interval has to be before or the same as the combination of end_hour/end_interval	Reject Resource	E0023	Start time must be before end time
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0065	End interval must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0066	End interval not required when action set to CANCEL
price/price	Price must be in \$XXXX.XX format	Reject Resource	E0068	Price must be in \$XXXX.XX format
	Price must be a number data type	Reject file	E0098	Price must be a number
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0025	Price must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0026	Price not required when action set to CANCEL
size/size	Size must be in XXXX.XXXMW format	Reject Resource	E0087	Size must be in XXXX.XXXMW format

Attribute/Field	Validations	Consequence	Message Code	Message
	Size must be positive and of a number data type	Reject file	E0088	Size must a number and positive
	Where type is LFAS_DN, the sum of all sizes within an interval must be less than or equal to the facility specific LFAS down max quantity as specified in Registration	Reject Resource	E0109	Size must be less than or equal to the facility specific LFAS down max quantity
	Where type is LFAS_UP, the sum of all sizes within an interval must be less than or equal to the facility specific LFAS up max quantity as specified in Registration	Reject Resource	E0110	Size must be less than or equal to the facility specific LFAS up max quantity
	Size must be NULL if type is BACKUP_LFAS_UP or BACKUP_LFAS_DN (Only for CSV)	Reject file	E0106	Size must be NULL when offering backup LFAS services
	Size must not be included if type is BACKUP_LFAS_UP or BACKUP_LFAS_DN (Only for XML)	Reject file	E0107	Size not required when offering backup LFAS services
	Must be NULL if action = CANCEL (Only for CSV)	Reject file	E0089	Size must be NULL when action is set to CANCEL
	Must not be included if action = CANCEL (Only for XML)	Reject file	E0090	Size not required when action set to CANCEL

## 8. Bilateral Submissions, Queries and Cancellations

When submitting an XML query or cancellation or CSV cancellation, the compulsory fields are application\_type, trading\_date, participant\_name, user\_name and version\_no, where applicable. Optional fields (nullable for CSV submissions and can be excluded from XML submissions) include standing\_flag, start\_hr, start\_int, end\_hr, end\_int and standing type.

Note: Queries are only available through XML submissions.

Bilateral submission validations are performed by legacy ABB code and consequently have inherent limitations. If submission files contain errors, the submitting user will receive Message Code E9993 or Message Code E9992 – System Error instead of the message code and message directly related to the field error.



## 8.1 General Validations

Validations	Consequence	Message Code	Message
1. The sum of supply quantity mwh and demand quantity mwh must equal zero	Reject file	No message code	The supply_quantity_mwh sum of {0} MWh plus the demand_quantity_mwh sum of {1} MWh must equal 0 MWh from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}
2. Username and participant name must match those of the user who has logged on	Reject file	No message code	The Participant and User {0} from the certificate does not match the participant_name and user_name in XML message body
3. The same consumer (participant) name must not appear more than once within the same submission	Reject file	No message code	The participant_name {0} may only occur once in trade_period element

## 8.2 Field Validations

Attribute/Field	Validations	Consequence	Message Code	Message
application_type (XML ONLY)	Must be BILATERAL	Reject file	No message code	One or more elements in the following do not match application_type {0}
trading_date	Trading date must be of the correct format – YYYY-MM-DD (XML ONLY) and DD/MM/YYYY (CSV ONLY)	Reject file	No message code	XML Schema validation - No message for XML submissions Trading expiry date CSV format does not match DD/MM/YYYY
	The market for normal submissions for the given application type must be open for the trading date submitted	Reject file	No message code	Market Window for normal submissions is not open for trading_date {0} and application_type {1}
	The market for standing submissions for the given application type must be open for the trading date submitted	Reject file	No message code	Market Window for standing submissions is not open for trading_date {0} and application_type {1}
	If submitting a query, trading date must be within a range of 7 days prior and 8 days after the current trading day	Reject file	No message code	The trading_date {0} is invalid. It must fall within the past {1} days and future {2} days
participant_name (XML ONLY)	Must match the name of a participant in registration	Reject file	No message code	The Participant and User {0} from the certificate does not match the participant_name and user_name in XML message body
	Only Market Generators are able to make submissions	Reject file	No message code	Only Market Generators can make a bilateral submission. The participant {0} is not a Market Generator for the trading_date {1}
user_name (XML ONLY)	Must match a username within user management for the participant name submitted	Reject file	No message code	The Participant and User {0} from the certificate does not match the participant_name and user_name in XML message body

Attribute/Field	Validations	Consequence	Message Code	Message
	User must have the correct privileges to make the submission	Reject file	No message code	The user_name {0} for participant_name {1} does not have system access privileges to participate in Market Trading for trading_date {2}
version_no (XML ONLY)	Must be set to "1.0"	Reject file	No message code	No Message - XML Schema validation
action (CSV ONLY)	Must only contain SUBMIT or CANCEL	Reject file	E0017	Action request invalid
standing_flag	Must only contain true or false	Reject file	No message code	No Message - XML Schema validation
standing_day_type/type	Standing day type can only contain "ALL" or a combination of "MON", "TUE", "WED", "THU", "FRI", "SAT" and "SUN"	Reject file	No message code	No Message - XML Schema validation
	If submission successful with standing day type of "ALL" unable to subsequently submit day type that is not "ALL". If submission successful with a combination of "MON", "TUE", "WED", "THU", "FRI", "SAT" and "SUN", unable to subsequently submit with day type "ALL"	Reject file	No message code	Submitted Standing Data with type {0} conflicts with existing Standing Data with type {1} for trading_date {2}
	If a submission has a day type with "ALL", no other day type can be submitted.	Reject file	No message code	In multiple Standing Data Submissions, type "ALL" conflicts with other type {0}
	Standing day type must be included if standing flag = true	Reject file	No message code	Standing Element must be present when standing_flag is set to true
	Standing flag must be true if standing element exists	Reject file	No message code	Standing_flag must be set to true when Standing Element is present
	Must be NULL if standing flag = false (Only for CSV)	Reject file	No message code	Standing type must be NULL when action is set to CANCEL
	Must not be included if standing flag = false (Only for XML)	Reject file	No message code	No Message - XML Schema validation
standing_expiry_date/expiry date	Standing expiry date must be of the correct format – YYYY-MM-DD (XML ONLY) and DD/MM/YYYY (CSV ONLY)	Reject file	No message code	No Message - XML Schema validation Standing expiry date CSV format does not match DD/MM/YYYY
	Standing day type must be included if standing flag = true	Reject file	No message code	Standing Element must be present when standing_flag is set to true

Attribute/Field	Validations	Consequence	Message Code	Message
	Standing expiry date must be in the future	Reject file	No message code	The expiry_date {0} must be in the future
	Must be NULL if standing flag = false (Only for CSV)	Reject file	No message code	Standing expiry date must be NULL when action is set to CANCEL
	Must not be included if standing flag = false (Only for XML)	Reject file	No message code	No Message - XML Schema validation
start_hr	Start hour can only contain integers from 0 to 23	Reject file	No message code	No Message - XML Schema validation
start_int	Must only contain integers 1 and 2	Reject file	No message code	No Message - XML Schema validation
end_hr	End hour must not be earlier than the start hour. Where the order is 8....23,0...7 (i.e. hour 0 is later than hour 23)	Reject file	No message code	Invalid combination of start_hr {0} and end_hr {1}
	End hour can only contain integers from 0 to 23	Reject file	No message code	No Message - XML Schema validation
end_int	Must only contain integers 1 and 2	Reject file	No message code	No Message - XML Schema validation
	The combination of start_hour/start_interval has to be before or the same as the combination of end_hour/end_interval	Reject file	No message code	Invalid combination of start_int {0} and end_int {1} for start_hr in {2} and end_hr in {3}
supply_quantity_mwh (XML ONLY)	Supply quantity MWh must be in XXXX.XXXMWh format	Reject file	No message code	No Message - XML Schema validation
	Supply quantity MWh must be a number data type	Reject file	No message code	No Message - XML Schema validation
	Supply quantity MWh must be greater than or equal to zero	Reject file	No message code	The supply_quantity_mwh value of {0} MWh must be greater than or equal to 0 MWh from start_hr {1}, start_int {2} to end_hr {3}, end_int {4}
wp_load_mwh	WP load MWh must be in XXXX.XXXMWh format	Reject file	No message code	No Message - XML Schema validation format
	WP load MWh must be a number data type	Reject file	No message code	No Message - XML Schema validation

Attribute/Field	Validations	Consequence	Message Code	Message
part_consumer	Part consumer must match a name of a market consumer participant per the registration system.	Reject file	No message code	The participant_name {0} in trade_detail element is invalid
	Part consumer must not be the same as the participant name unless the participant is a generator and retailer	Reject file	No message code	The participant_name {0} in trade_detail element can not be the same as the market generator participant_name
demand_quantity_mwh	Demand quantity MWh must be in XXXX.XXXMWh format	Reject file	No message code	No Message - XML Schema validation
	Demand quantity MWh must be a number data type	Reject file	No message code	No Message - XML Schema validation
	Demand quantity MWh must be less than or equal to zero	Reject file	No message code	The demand_quantity_mwh value of {0} MWh must be a negative value for participant_name {1}

## 9. STEM Submissions, Queries and Cancellations

When submitting an XML query or cancellation or CSV cancellation, the compulsory fields are application\_type, trading\_date, participant\_name, user\_name and version\_no, where applicable. Optional fields (nullable for CSV submissions and can be excluded from XML submissions) include standing\_flag, start\_hr, start\_int, end\_hr, end\_int and standing type.

Note: Queries are only available through XML submissions.

STEM submission validations are performed by legacy ABB code and consequently have inherent limitations. If submission files contain errors, the submitting user will receive Message Code E9993 or Message Code E9992 – System Error instead of the message code and message directly related to the field error.

### 9.1 General Validations

Validations	Consequence	Message Code	Message
1. The hour and intervals specified in the stem detail must match the hour and intervals specified in the declaration	Reject file	No message code	The following Hours and Intervals did not match between the stem_detail element and the declaration element: {0}

Validations	Consequence	Message Code	Message
2. Facility name and facility type submitted must be a valid combination within registration	Reject file	No message code	The submitted facility_type value {0} does not match the value {2} registered for Facility {1}
3. The sum of the total liquid MWh and the total non liquid MWh must equal the Ancillary Service Supply Quantity defined in the ancillary service daily	Reject file	No message code	The total_liquid_mwh value of {1} MWh plus the total_non_liquid_mwh value of {2} must match the Ancillary Service Supply Quantity of {3} MWh at Hour {4} and Interval {5}
4. Maximum number of Supply Curve Price-Quantity pairs is max(10,maximum supply Quantity/30) [rounded down to the nearest whole integer]	Reject file	No message code	The amount of Price-Quantity pairs submitted ({0}) must not exceed {1} in the period starting in hour and Interval {2} and ending in hour and Interval {3}
5. There must be at least one Supply Curve Price-Quantity pairs	Reject file	No message code	XML Schema validation - No message for XML submissions
6. Maximum number of Demand Curve Price-Quantity pairs is max(10,maximum supply Quantity/30) [rounded down to the nearest whole integer]	Reject file	No message code	The amount of Price-Quantity pairs submitted ({0}) must not exceed {1} in the period starting in hour and Interval {2} and ending in hour and Interval {3}
7. There must be at least one Demand Curve Price-Quantity pairs	Reject file	No message code	XML Schema validation - No message for XML submissions
8. Username and participant name must match those of the user who has logged on	Reject file	No message code	The Participant and User {0} from the certificate does not match the participant_name and user_name in XML message body
9. Dual fuel facilities must include a declaration element	Reject file	No message code	<p>The dual fuel facility {0} must declare fuel type for hour {1} and interval {2}</p> <p>And/or</p> <p>Missing fuel_in_use attribute in declaration element for facility_name {0} for hour {1} and interval {2}</p>

## 9.2 Field Validations

Attribute/Field	Validations	Consequence	Message Code	Message
application_type (XML ONLY)	Must be STEM	Reject file	No message code	One or more elements in the following do not match application_type {0}
trading_date	Trading date must be of the correct format – YYYY-MM-DD (XML ONLY) and DD/MM/YYYY (CSV ONLY)	Reject file	No message code	<p>XML Schema validation - No message for XML submissions</p> <p>Trading expiry date CSV format does not match DD/MM/YYYY</p>
	The market for normal submissions for the given application type must be open for the trading date submitted	Reject file	No message code	Market Window for normal submissions is not open for trading_date {0} and application_type {1}

Attribute/Field	Validations	Consequence	Message Code	Message
	The market for standing submissions for the given application type must be open for the trading date submitted	Reject file	No message code	Market Window for standing submissions is not open for trading_date {0} and application_type {1}
	If submitting a query, trading date must be within a range of 7 days prior and 8 days after the current trading day	Reject file	No message code	The trading_date {0} is invalid. It must fall within the past {1} days and future {2} days
participant_name (XML ONLY)	Must match the name of a participant in registration	Reject file	No message code	Invalid combination of participant_name {0} and user_name {1} for trading_date {2}
user_name (XML ONLY)	Must match a username within user management for the participant name submitted	Reject file	No message code	Invalid combination of participant_name {0} and user_name {1} for trading_date {2}
	User must have the correct privileges to make the submission	Reject file	No message code	The user_name {0} for participant_name {1} does not have system access privileges to participate in Market Trading for trading_date {2}
version_no (XML ONLY)	Must be set to "1.0"	Reject file	No message code	No Message - XML Schema validation
action (CSV ONLY)	Must only contain SUBMIT or CANCEL	Reject file	E0017	Action request invalid
standing_flag	Must only contain true or false	Reject file	No message code	No Message - XML Schema validation
standing_day_type/type	Standing day type can only contain "ALL" or a combination of "MON", "TUE", "WED", "THU", "FRI", "SAT" and "SUN"	Reject file	No message code	No Message - XML Schema validation
	If submission successful with standing day type of "ALL" unable to subsequently submit day type that is not "ALL". If submission successful with a combination of "MON", "TUE", "WED", "THU", "FRI", "SAT" and "SUN", unable to subsequently submit with day type "ALL"	Reject file	No message code	Submitted Standing Data with type {0} conflicts with existing Standing Data with type {1} for trading_date {2}
	If a submission has day type with "ALL", no other day type can be submitted.	Reject file	No message code	In multiple Standing Data Submissions, type "ALL" conflicts with other type {0}
	Standing day type must be included if standing flag = true	Reject file	No message code	Standing Element must be present when standing_flag is set to true
	Standing flag must be true if standing element exists	Reject file	No message code	Standing_flag must be set to true when Standing Element is present

Attribute/Field	Validations	Consequence	Message Code	Message
	Must be NULL if standing flag = false (Only for CSV)	Reject file	No message code	Standing type must be NULL when action is set to CANCEL
	Must not be included if standing flag = false (Only for XML)	Reject file	No message code	No Message - XML Schema validation
standing_expiry_date/expiry date	Standing expiry date must be of the correct format – YYYY-MM-DD (XML ONLY) and DD/MM/YYYY (CSV ONLY)	Reject file	No message code	No Message - XML Schema validation Standing expiry date CSV format does not match DD/MM/YYYY
	Standing day expiry must be included if standing flag = true	Reject file	No message code	Standing Element must be present when standing_flag is set to true
	Standing expiry date must be in the future	Reject file	No message code	The expiry_date {0} must be in the future
	Must be NULL if standing flag = false (Only for CSV)	Reject file	No message code	Standing expiry date must be NULL when action is set to CANCEL
	Must not be included if standing flag = false (Only for XML)	Reject file	No message code	No Message - XML Schema validation
start_hr	Start hour can only contain integers from 0 to 23	Reject file	No message code	No Message - XML Schema validation
start_int	Must only contain integers 1 and 2	Reject file	No message code	No Message - XML Schema validation
end_hr	End hour must not be earlier than the start hour. Where the order is 8....23,0...7 (i.e. hour 0 is later than hour 23)	Reject file	No message code	Invalid combination of start_hr {0} and end_hr {1}
	End hour can only contain integers from 0 to 23	Reject file	No message code	No Message - XML Schema validation
end_int	Must only contain integers 1 and 2	Reject file	No message code	No Message - XML Schema validation
	The combination of start_hour/start_interval has to be before or the same as the combination of end_hour/end_interval	Reject file	No message code	Invalid combination of start_int {0} and end_int {1} for start_hr in {2} and end_hr in {3}
total_liquid_mwh	Total liquid MWh must be a number data type	Reject file	No message code	No Message - XML Schema validation

Attribute/Field	Validations	Consequence	Message Code	Message
	Total liquid MWh must be greater than or equal to zero	Reject file	No message code	The value {0} of {1} MWh must be greater than or equal to 0 MWh from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}
	If standing flag = false, total liquid MWh must not equal zero	Reject file	No message code	The total_liquid_mwh value of {1} MWh plus the total_non_liquid_mwh value of {2} must match the Ancillary Service Supply Quantity of {3} MWh at Hour {4} and Interval {5}
total_non_liquid_mwh	Total non liquid MWh must be a number data type	Reject file	No message code	No Message - XML Schema validation
	Total non liquid MWh must be greater than or equal to zero	Reject file	No message code	The value {0} of {1} MWh must be greater than or equal to 0 MWh from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}
	If standing flag = false, total non liquid MWh must not equal zero	Reject file	No message code	The total_liquid_mwh value of {1} MWh plus the total_non_liquid_mwh value of {2} must match the Ancillary Service Supply Quantity of {3} MWh at Hour {4} and Interval {5}
supply_curve_price	Supply curve price must be of \$XXXX.XX format	Reject file	No message code	No Message - XML Schema validation
	Supply curve price must be a number data type	Reject file	No message code	No Message - XML Schema validation
	Supply curve price must be greater than or equal to the Minimum STEM price	Reject file	No message code	The price value of {0} in the {1} must be greater than or equal to the Minimum STEM Price value of {2} for the period starting from {3} and ending at {4}
	Supply curve price for liquid fuel facilities must be less than or equal to the Alternative Maximum STEM price	Reject file	No message code	The price value of {0} in the supply_portfolio_curve must not exceed the Alternative Maximum STEM Price value of {1} for the period starting from {2} and ending at {3}
	The submission must not include duplicate supply curve prices	Reject file	No message code	The following prices can not have the same value of {1} for the period starting from {2} and ending at {3}:
supply_curve_quantity	Supply curve quantity must be of XXXX.XXXMWh format	Reject file	No message code	No Message - XML Schema validation
	Supply curve price must be a number data type	Reject file	No message code	No Message - XML Schema validation



Attribute/Field	Validations	Consequence	Message Code	Message
	If standing flag = false, sum of all quantities (price-quantity pairs) must be less than or equal to Max(0, ( Maximum Supply Capability - total of unavailable_capacity_mwh) per interval. Max Supply Capability is defined in the participants_limits table.	Reject file	No message code	<p>The {0} can not be validated because no {1} is defined in resource_limits table for facility_name {2}, Hour {3} and Interval {4}</p> <p>And/or</p> <p>The sum of the quantity values in the supply_portfolio_curve {0} must not exceed the Maximum Supply Capability value of {1} for Hour {2} and Interval {3}</p>
	Sum of all quantities where the price quantity pairs are greater than the maximum STEM price must be less than or equal to the Total of Maximum Supply Liquid MWh - Total of unavailable_capacity_mwh with Liquid type - total_liquid_mwh in ancillary_service element per interval. Max Supply Capability is defined in the participants_limits table.	Reject file	No message code	<p>The {0} can not be validated because no {1} is defined in resource_limits table for facility_name {2}, Hour {3} and Interval {4}</p> <p>And/or</p> <p>The sum of all quantity values with prices greater than the Maximum STEM price of {1} is {0} MW in hour {3} and interval {4}, which exceeds the maximum allowed value of {2}</p>
	Supply curve quantity must be greater than or equal to zero	Reject file	No message code	The value {0} of {1} MWh must be greater than or equal to 0 MWh from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}
demand_curve_price	Demand curve price must be of \$XXXX.XX format	Reject file	No message code	No Message - XML Schema validation
	Demand curve price must be a number data type	Reject file	No message code	No Message - XML Schema validation
	Demand curve price must be greater than or equal to the Minimum STEM price	Reject file	No message code	The price value of {0} in the {1} must be greater than or equal to the Minimum STEM Price value of {2} for the period starting from {3} and ending at {4}
	Demand curve price must be less than or equal to the Alternative Maximum STEM price	Reject file	No message code	The price value of {0} in the demand_portfolio_curve must not exceed the Alternative Maximum STEM Price value of {1} for the period starting from {2} and ending at {3}
	The submission must not include duplicate demand curve prices	Reject file	No message code	The following prices can not have the same value of {1} for the period starting from {2} and ending at {3}:

Attribute/Field	Validations	Consequence	Message Code	Message
demand_curve_quantity	Demand curve quantity must be of XXXX.XXXMWh format	Reject file	No message code	No Message - XML Schema validation
	Demand curve quantity must be a number data type	Reject file	No message code	No Message - XML Schema validation
	Demand curve quantity must be less than the Maximum Consumption Quantity	Reject file	No message code	The sum of the quantity values in the demand_portfolio_curve {0} must not exceed the Maximum Consumption Capability value of {1} for Hour {2} and Interval {3}
	Demand curve quantity must be greater than or equal to zero	Reject file	No message code	The value {0} of {1} MWh must be greater than or equal to 0 MWh from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}
facility_name	Facility name must match a name of a registered facility and must be registered to the market participant which the user has logged in on behalf of	Reject file	No message code	The facility_name {0} is invalid
	A facility name must only appear once within a single submission	Reject file	No message code	The {0} facility may only occur once in any STEM submission
	Must not be included if submitting a query or cancel (Only for XML)	Reject file	No message code	No Message - XML Schema validation
facility_type	Only facility types SCHED_GEN, NON_SCHED_GEN and INTMNT_GEN including Synergy, but only in respect of its Stand Alone Facilities, should be able to submit	Reject file	No message code	Invalid facility_type {0} given for facility_name {1}, it must be SCHED_GEN, NON_SCHED_GEN or INTMNT_GEN
	Must not be included if submitting a query or cancel (Only for XML)	Reject file	No message code	No Message - XML Schema validation
fuel_in_use	Must only contain LIQUID or NON-LIQUID	Reject file	No message code	No Message - XML Schema validation
	Must be a valid fuel type as specified in the resource_limits table	Reject file	No message code	<p>The {0} can not be validated because no {1} is defined in resource_limits table for facility_name {2}, Hour {3} and Interval {4}</p> <p>And/or</p> <p>Invalid fuel_in_use type of {0}, it must be {1} for facility_name {2} for hour {3} and interval {4}</p>

Attribute/Field	Validations	Consequence	Message Code	Message
unavailable_capacity_mwh	Unavailable capacity mwh must be less than or equal to the max supply capability of the facility	Reject file	No message code	The unavailable_capacity_mwh values of {0} MWh must not exceed the {1} value of {2} MWh for hour {3} and interval {4}
	Unavailable capacity mwh must be greater than or equal to zero	Reject file	No message code	The value {0} of {1} MWh must be greater than or equal to 0 MWh from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}