

Document No. REZ002

Batch Process General Framework

Hunter Central Coast Renewable Energy Zone

Wired for good.™



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Contents

Introduction.....	4
Technical Standards and References	4
Abbreviations.....	5
Batched Wide Area Assessments	6
Batch Process – General Framework.....	6
Batch Process – Technical Requirements.....	7
Batch Process – Commercial and Contractual Requirements	7
Batch Process Overview.....	8
Roles and Responsibilities	8
Batch Round Identification	9
Batch Round Definition	9
Batch Process Expression of Interest (EOI)	10
Batch Round Notification.....	10
Batch Round Participation Assessment	10
Batch Round Eligibility Assessment	11
Batch Round Technical Assessment.....	11
Proponent Removal from Batch Round	12
Wide Area Network Model Integration.....	13
NSP and AEMO Model Integration	13
Proponent Model Integration.....	14
Wide Area Assessment.....	15
Batched Harmonic Assessment.....	15
Batched PSSE Assessment.....	16
Batched PSCAD Assessment.....	16
Technical Report Preparation	17
Outcomes Notification and Finalisation	19
Connection Application Continuation.....	20
Commercial and Contractual Arrangements	21
Batch Round Eligibility Assessment Agreement.....	21
Batch Round Technical Assessment Agreement	21
Batch Round Wide Area Assessment Agreement.....	21

Introduction

To support the efficient and effective connection of generation within the HCC REZ, Ausgrid has specifically targeted the Connection Application and Registration stages of the generator connections processes for improvement.

Under the existing Chapter 5 process, projects normally don't take each other into account until the application stage has been completed with the issuing of the 5.3.4A letter. This can cause risks to system security and performance and may require the re-running of complex studies and result in impacts to timelines. Using a batched assessment process (considering multiple generation proponents at once) allows parallel projects to take each other into account at an earlier stage, helping to reduce these risks.

Ausgrid will check the wide area impacts of the combined effects of the generation in a batched assessment process. This process includes undertaking system strength and system stability assessments as well as assessing and coordinating the tuning of the individual generators within the batch as required to manage wide area performance.

This allows projects to be developed and progressed through the connections process by Ausgrid as distinct batches aligned to the delivery of HCC REZ components.

Delivering this solution requires the batch process to be well defined and understood so that proponents can effectively engage with the process and derive its intended benefits. Supporting the batch process are several critical documents, which detail the operation and implementation of the batch process in more detail. These are:

- Batch Process - General Framework (this document)
- Batch Process - Technical Requirements
- Batch Process - Commercial and Contractual Documentation

This document describes the general framework of the batch process, including the various stages involved in the batch process, how proponent eligibility and technical requirements will be assessed, the various roles, responsibilities and obligations of parties under the process and how the batch process will be managed from a commercial and contractual perspective.

Technical Standards and References

A selection of technical references, standards and guidelines that will support proponents through the connection process are listed below in Table 1 and

Table 2. This list is not exhaustive, and proponents should seek further information as required.

Table 1: Ausgrid Technical Standards and References

Ausgrid Documentation	
Network Standards and Technical Requirements	
NS 194 Protection Requirements of Embedded Generators > 30kW	NS 194B Guidelines for Rotating machines connected to the Ausgrid Network
NS 195 High Voltage Customer Connections	NS 238 Supply Quality
NS 143 Easements, Leases and Rights of Way	NS 178 Secondary Systems Requirements for Major Substations
Network standards	ES3 Metering Installation Requirements Part A
Process Information	
Connecting large registered embedded generators	REZ Batch Process – Participation Technical Requirements
HCC REZ Negotiated Access Standards Guideline	

Batch Process General Framework

Table 2: Third Party Technical Standards and References

External Documentation	
AEMO Documentation	
Generator Connection Application Checklist	Generator Performance Standards (GPS) Template
Modelling requirements (website)	Power System Model Guidelines
Guidelines for Assessment of Generator Performance Standards	System Strength Impact Assessment Guidelines (website)
Dynamic Model Acceptance Test Guideline	System Strength Withstand SCR Methodology Review
Power System Stability Guidelines	
Other References	
National Electricity Rules	

Abbreviations

AEMO	Australian Energy Market Operator
CB	Circuit Breaker
CT	Current Transformer
GPS	Generator Performance Standard
NEM	National Electricity Market
NER	National Electricity Rules
NSP	Network Service Provider
VT	Voltage Transformer
HCC	Hunter Central Coast
REZ	Renewable Energy Zone
SMIB	Single Machine Infinite Bus ?
NEM	National Electricity Market
EOI	Expression of Interest
OEM	Original Equipment Manufacturer

Batched Wide Area Assessments

The wide area assessment ensures that system strength, network performance and stability are thoroughly evaluated for a generating system connecting to the grid. This process is jointly conducted by Ausgrid and AEMO in collaboration with the proponents. The static and dynamic performance of a proponent's plant is evaluated, considering the established system (i.e. network and generation) and the committed system (i.e. future network and generation). Changes to the network or generation can result in the repetition of wide area studies to account for newly committed assets, as system performance will be different.

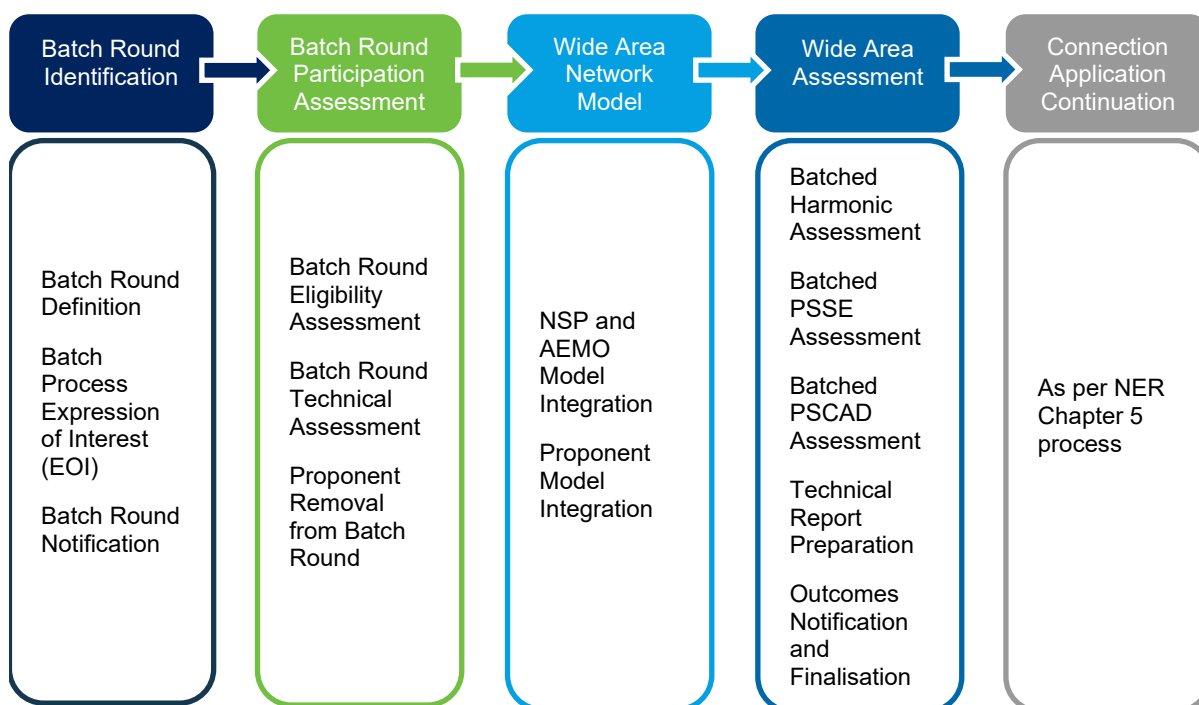
This is particularly problematic in grid locations where multiple generators are engaged in the connection process, each seeking to achieve the 5.3.4A letter. As each proponent reaches committed status, other generators will now need to consider this generation in their own assessments, causing multiple iterations of wide area assessment for both Network Service Providers (NSPs), AEMO and proponents.

By assessing multiple generation proponents together (as part of a batch process), combined with a known development pathway for the HCC REZ, the wide area assessment process can be streamlined. This will accelerate the grid connection process by accelerating the connection application and registration model finalisation, reducing the need for multiple iterations and rework. This contrasts with the traditional approach where individual proponents must incorporate others' models into their studies, leading to delays as updates and changes are identified. The traditional approach also potentially produces an adversarial environment as proponents race to achieve the 5.3.4A letter first.

Ausgrid will review the combined impact of the generation systems on system stability, network performance and system strength, and tuning as required before consulting with AEMO. This process allows for coordinated management of wide-area performance, ensuring the overall stability of the power system, while removing the risk of repeated studies and rework to account for multiple generation developments.

Batch Process – General Framework

The Batch Process – General Framework (this document) describes the overall, end-to-end process that enables batched wide area assessments to be undertaken. It describes each step of the Batch Process, including:

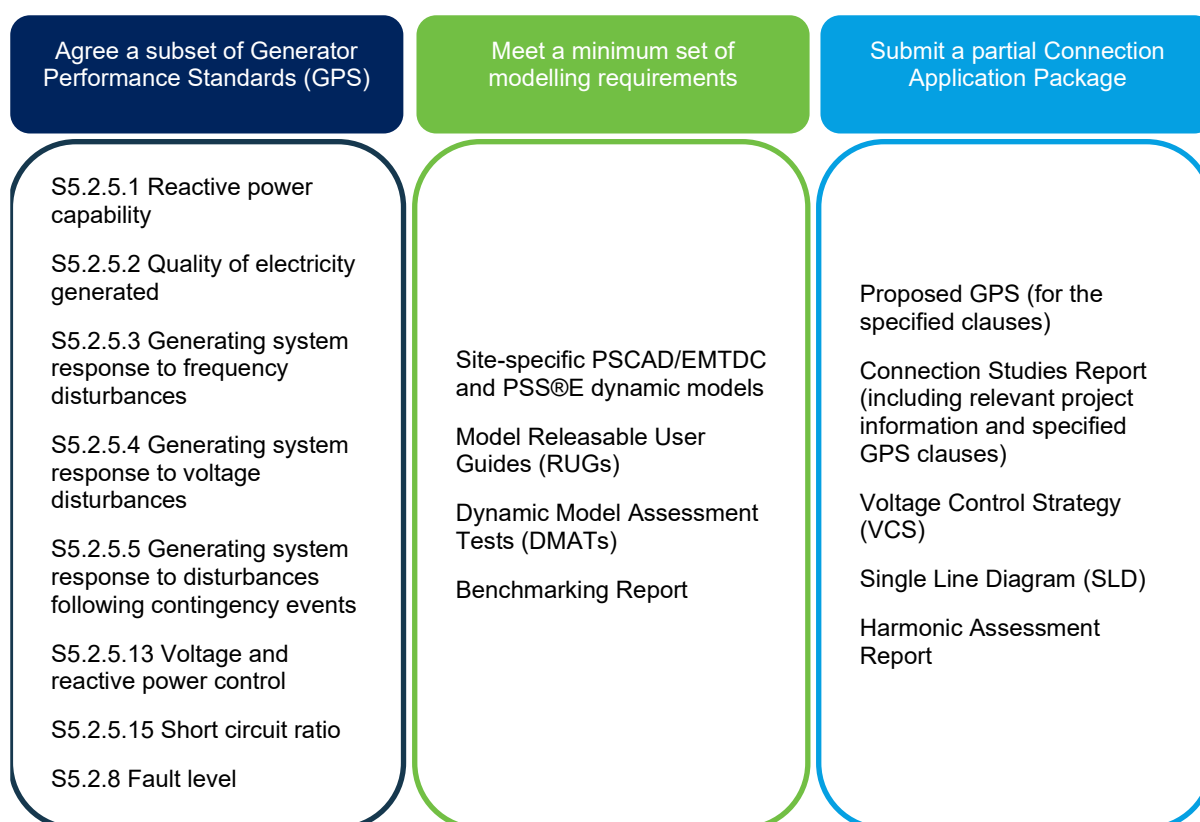


The various inputs, outputs, timelines and guidance for each step is provided to aid proponents in effectively engaging in the Batch Process.

Batch Process – Technical Requirements

To participate in the batch process, proponents must meet a series of technical requirements. They are described in detail in the Batch Process – Technical Requirements document.

These technical requirements reflect the minimum levels of connection application development that are required to support the integration of the proponent's plant into a wide area network model, complete the necessary batch assessments, and provide sufficiently meaningful and accurate results. These technical requirements have been set at a level that balances the need for accuracy and reliability of the wide area assessment results without being excessively onerous on proponents, allowing as many participants in a batch round as possible. In summary, proponents are required to:



Ausgrid will work collaboratively with proponents to assess proponents' submissions, reach agreement on performance (where required) and to progress submissions to a point where they are able to comply with the technical requirements and participate in the batch process.

Batch Process – Commercial and Contractual Requirements

Participation in the batch process will require proponents and Ausgrid to agree and adhere to certain contractual requirements. This is to ensure that the batch process can function as intended for the benefit of all batch participants, Ausgrid and AEMO. These Commercial and Contractual Requirements are in addition to those associated with the existing Chapter 5 Connection Process.

These requirements are detailed in the Batch Process – General Framework document. A summary of the additional commercial and contractual requirements for batch process participation are listed below:

- Eligibility Assessment Agreement
- Batch Technical Assessment Agreement

Batch Process General Framework

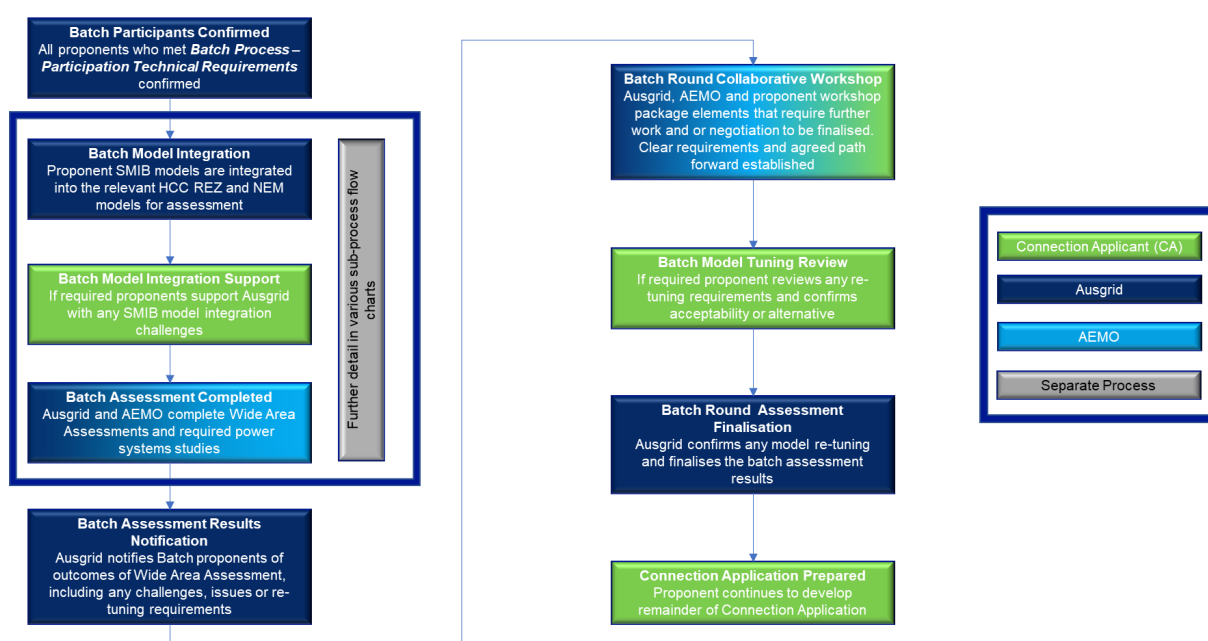
- Batched Wide Area Assessment Agreement

These contracts are executed in stages as proponents progress through the batch process stages.

Batch Process Overview

The batch process enables undertaking a wide area assessment for multiple connections proponents at once (i.e. as a batch of connections). As described in section 0, this provides an opportunity to reduce re-work for proponents, NSPs and AEMO. The batch process is designed and implemented in a way that is practical, achievable and efficient for all proponents, while ensuring that the various roles and responsibilities are clearly defined and understood. It must be supported by technical standards and commercial agreements that support the intended outcomes, while holding parties accountable for their active participation.

A batch round requires a minimum of one proponent, with no maximum limit on the number of participants. As such, Ausgrid will complete the batch round process while at least one proponent meets the eligibility criteria, technical criteria, and their on-going obligations under the batch process.



Roles and Responsibilities

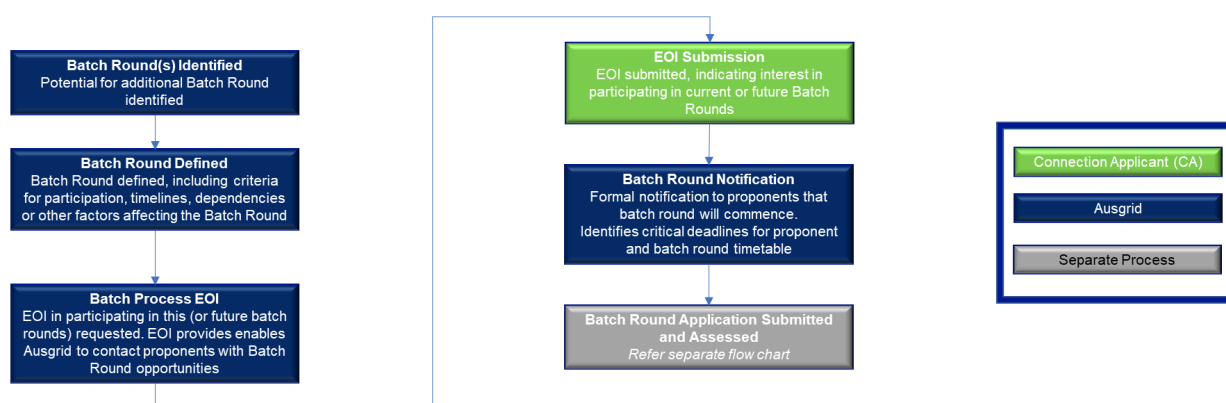
The following table outlines key stakeholders and who is Responsible, Accountable, Consulted, and Informed (RACI).

	AEMO	Ausgrid	Proponent	Other
Batch Round Identification				
Batch Round Defined	C	R, A	I	
Batch Process (EOI)	I	R, A (calling EOI)	R,A (submitting EOI)	
Batch Round Notification	I	R, A	I	
Batch Round Participation Assessment				
Batch Round Application Submitted	-	I	R, A	I (Transgrid)
Batch Round Eligibility Assessment	I	R, A	C	
Batch Round Eligibility Confirmed	I	R, A	I	

	AEMO	Ausgrid	Proponent	Other
Batch Round Package Prepared	-	C	R, A	
Batch Round Technical Assessment	C	R, A	C	
Batch Round Participation Confirmed	I	R, A	I	
Commercial and Contractual Agreements	-	R	A	

Batch Round Identification

Ausgrid will identify potential batch rounds where a group of proponents can be collectively taken through the wide area assessment process as a batch. It is at Ausgrid's discretion as to when batch rounds will be run and the eligibility criteria for a specific batch round. The technical requirements for participating in a batch round are pre-defined and described in the Batch Process – Technical Requirements document.



Batch Round Definition

When Ausgrid is proposing batch rounds, including defining eligibility criteria and developing batch round timetables, there are several factors which must be considered. This includes, but is not limited to:

- The HCC REZ development:** considering different REZ stages, their respective assets, capacity, staging and delivery timeframes, e.g. Ausgrid may call a batch round for proponents connecting to a specific stage or sub-stage of the HCC REZ assets.
- Proponent progression:** considering proponents who have received a detailed enquiry response, committed to a size, technology and connection point, have selected a plant OEM, have completed initial plant and connection design activities, etc.
- Proponent connection timeframes:** considering the expected timeframes in which proponents are intending to meet certain milestones, e.g. Ausgrid may call a batch round for proponents who intend on achieving a Connection Agreement or Registration prior within a specified date range.
- System dynamics:** considering how generation situated in one REZ sub-system may (or may not) influence generation situated in another component (i.e. Muswellbrook side vs. Newcastle side), e.g. Ausgrid may call a batch round for proponents who due to their co-location may cause challenging system dynamics that would be challenging to assess on a one-by-one basis.
- Delivery workload:** considering peaks and troughs in the expected workload of connection application assessment, e.g. Ausgrid may call a batch for all proponents for whom Ausgrid would be otherwise requested to conduct a wide area assessment within a specific time window.

The eligibility criteria for an individual batch round may be a combination of these factors or other factors. For each specific batch round identified, the eligibility criteria will be clearly defined so that proponents can demonstrate and be assessed for their eligibility.

Batch Process Expression of Interest (EOI)

Ausgrid will call for proponent expressions of interest for both specific batch rounds and participation in the batch process generally. This allows proponents and potential proponents to receive direct notification of batch rounds. The purpose of the EOI process is to:

- a) Help Ausgrid understand which proponents are interested in participating in a batch process and engage with them as appropriate
- b) Ensure proponents are considering the batch process as an attractive and valuable pathway to drive their specific connection forward
- c) Help Ausgrid define future batch rounds based upon information received from proponents engaged in the EOI process
- d) Provide direct communications to proponents about future batch rounds

The EOI process is entirely voluntary and does not commit Ausgrid to defining future batch round or proponents to participating in them. Proponents who do not submit an EOI are not excluded from participating in future batch rounds.

Batch Round Notification

When Ausgrid has finalised the details of a batch round, it will provide formal notification to those who have submitted an EOI, proponents and potential proponents and the industry generally that a batch round has been scheduled.

This notification will include:

- a) Eligibility requirements, consistent with the batch round definition
- b) Links to information that supports the batch process (i.e. Batch Process - Technical Requirements)
- c) Critical milestones, consistent with the those described in this document
- d) Model commercial and contractual agreements
- e) Method and requirements for submitting a Batch Round Application
- f) A contact person

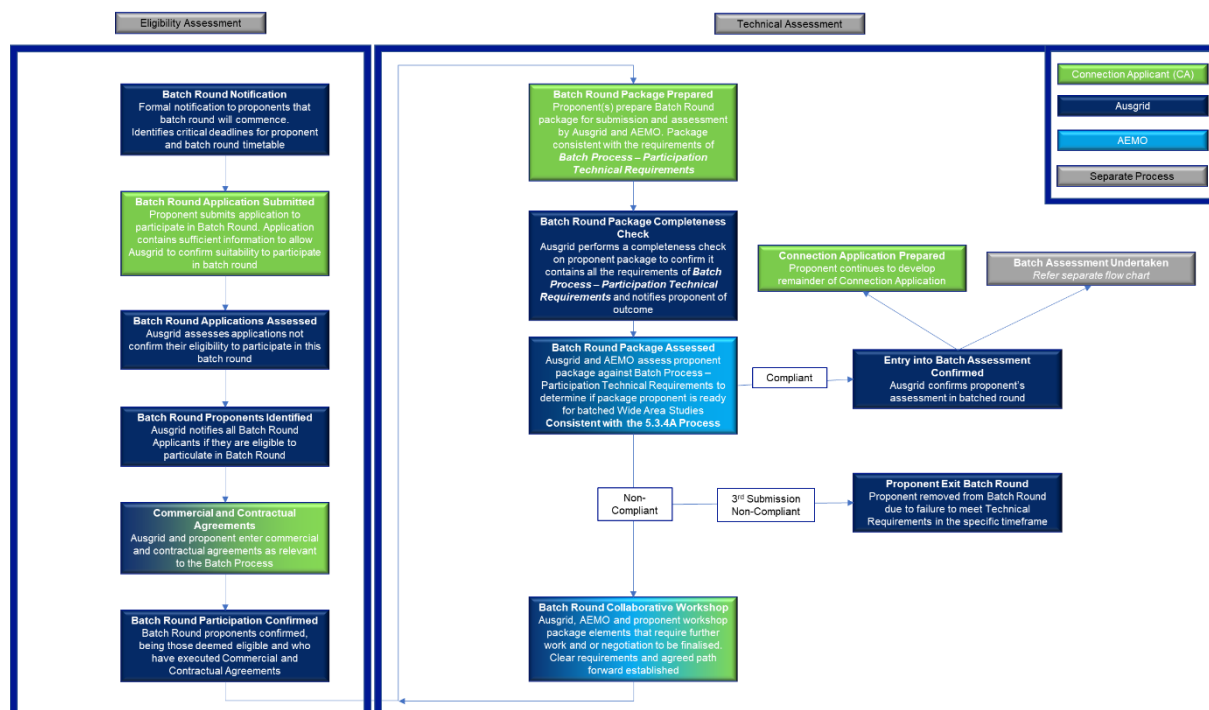
Further notifications and reminders may be provided as critical deadlines approach to ensure that proponents have every opportunity to make their applications and submissions consistent with Ausgrid's requirements.

Batch Round Participation Assessment

To participate in a specific batch round, proponents must meet a set of criteria as defined by Ausgrid. The requirements are as follows:

- Batch round eligibility assessment: determines if the proponent is eligible to participate in a specific batch round.
- Batch round commercial agreements: proponents must sign the relevant contracts and commercial agreements, pay the relevant fees
- Batch round technical assessment: the proponent's technical package is assessed to ensure it meets the minimum technical standards required to complete a wide area assessment.

Proponents may be removed or excluded from the batch round if they fail to meet the eligibility criteria, demonstrate the minimum technical performance required or otherwise fail to meet their obligations under the batch process.



Batch Round Eligibility Assessment

Proponents must demonstrate their eligibility to participate in a specific batch round. This includes demonstrating how their specific connection (or connections) meets the criteria defined for a batch round.

Table 3: Batch Round Eligibility Assessment Information

Applicant Inputs		Ausgrid Outputs	
Input	Guidance	Output	Guidance
<ul style="list-style-type: none"> Submitted Batch Round Application Executed Batch Round Eligibility Assessment Agreement 	<ul style="list-style-type: none"> Address all Batch Round Criteria Clearly demonstrate compliance Limited opportunity to revise/resubmit application 	<ul style="list-style-type: none"> Acknowledgement of Application Assessment of Application Notification of eligibility 	<ul style="list-style-type: none"> Provision of Commercial and Contractual Agreements
Proponent Costs	<i>Cost Estimate – Free of charge</i>		
Critical Timelines	<p><i>Proponents must submit a batch round eligibility application within 10 business days of applications opening.</i></p> <p><i>Ausgrid must assess applications and notify proponents of the outcome within 10 business days.</i></p>		

Batch Round Technical Assessment

Proponents must demonstrate their compliance with technical requirements to participate in a batch round. This includes agreeing performance standards, developing plant models and submitting a connection package as described in *Batch Process – Technical Requirements*.

Table 4: Batch Round Technical Assessment Information

Applicant Inputs		Ausgrid Outputs	
Input	Guidance	Output	Guidance
<ul style="list-style-type: none"> Submitted Batch Round Package Executed Batch Round Technical Assessment Agreement 	<ul style="list-style-type: none"> Subset of full Connection Application, detailed in Batch Process – Technical Requirements Proposed Performance Standards* Model package, including simulation models and associated design data Details of tuning that may be undertaken by Ausgrid Maximum of three rounds of review and assessment 	<ul style="list-style-type: none"> Notification of Package deficiency Ausgrid Due Diligence, confirming the proponent's assessment of the generator, performance standards and capabilities Agreed Performance Standards (5.3.4A process) Confirmed entry into or exit from Batch Round 	<ul style="list-style-type: none"> Shared with AEMO AEMO reviews Advisory matters for Performance Standards Collaborative Workshop to support outstanding items GPS items negotiated and agreed with CA, Ausgrid and AEMO
Proponent Costs	<i>Cost Estimate – ~\$160k for Ausgrid activities, plus additional ~\$200k to cover AEMO and Transgrid activities, depending on project complexity</i>		
Critical Timelines	<p><i>Proponents must submit a batch round package within 60 business days of eligibility for participation in Batch Round being confirmed.</i></p> <p><i>Ausgrid will provide a detailed response (including an Issue Tracker and Performance Standards feedback) within 30 business days. For each subsequent re-submission of a revised package, Ausgrid will provide a response within 30 business days.</i></p>		

Proponent Removal from Batch Round

The batch process relies upon Ausgrid, AEMO and multiple proponents actively delivering their respective contributions. Proponents who are failing to meet their obligations may need to be removed from the batch process to ensure that other proponents are not disadvantaged or ensure the batch round is not unreasonably delayed.

Proponents may be removed (by Ausgrid) from the batch process under several circumstances, proponents may also choose to withdraw. Ausgrid does not intend to apply proponent removals punitively and will collaborate with proponents as much as possible to achieve a successful outcome. However, in the event that an individual proponent is failing to meet their obligations and is as a result impacting the progression of the batch round they may be removed.

When a proponent is removed (or withdraws) from the batch process after the wide area assessment has commenced, part or all of the batch process may require to be redone. Commercial arrangements between batching participants associated with funding of rework should be negotiated between proponents prior to commencement of a batching round. To facilitate these negotiations, Ausgrid will be providing proponents with the details of other participants involved in a batch assessment.

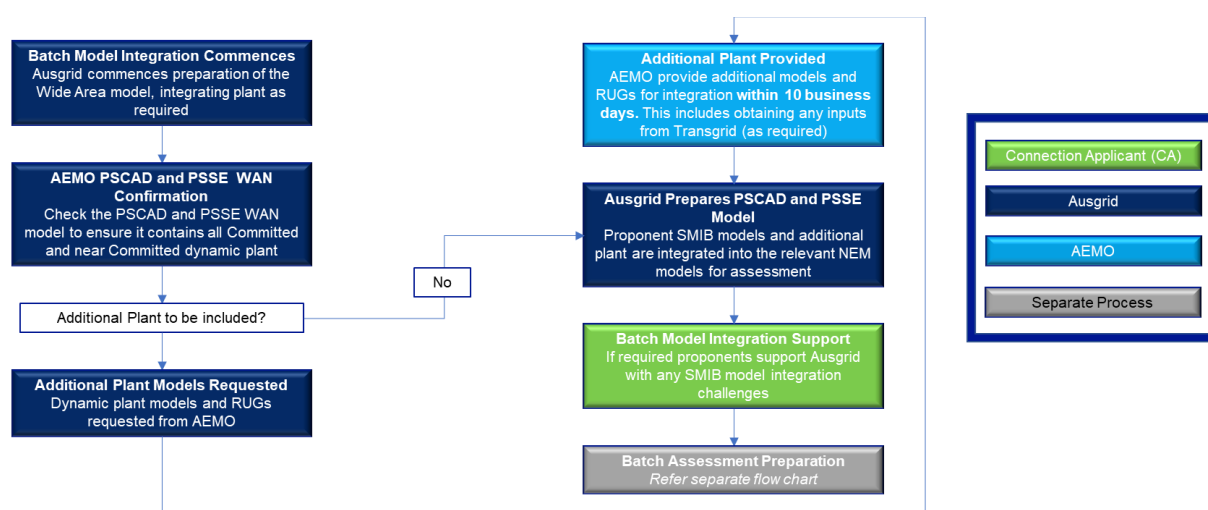
Following removal from a batch round, proponents may continue their connection application under the established Chapter 5 process, or alternatively re-apply to participate in future batch rounds. Examples of when a proponent may be removed from a batch round are shown below.

Table 5: Removal Points from Batching Process

Proponent Removal Points	
Batch Round Eligibility Assessment	
1	Proponent's application is incomplete, inadequate to support the assessment and no further supporting information is provided
2	Proponent is deemed ineligible to participate in the batch round, due to not meeting the eligibility criteria
Batch Round Technical Assessment	
1	Proponent's application is incomplete, inadequate to support the assessment and no further supporting information is provided
2	Proponent fails to meet the minimum technical performance requirements after their third submission
3	Proponent fails to meet the minimum technical performance requirements prior to the closure for final technical assessment submissions
Wide Area Assessment	
1	Proponent's model is causing difficulties with integration/performance of wide area model and proponent is failing to support Ausgrid in integrating and resolving issues
2	Proponent fails to undertake Batch Model Tuning Review (if required)
3	Proponent plant is identified as causing instability, or other poor performance in the wide area assessment and it cannot be remedied adequately through re-tuning.

Wide Area Network Model Integration

To complete a successful wide area assessment, Ausgrid must integrate proponent plant into the existing models (in different modelling platforms). This provides an accurate and representative model of the wide area network (both current and expected future) on which to complete the wide area assessment.



NSP and AEMO Model Integration

Ausgrid must obtain the relevant wide area models from AEMO (or Transgrid) as required. These models must then be reviewed to confirm they include all committed network and dynamic plant, as well as any “near-committed” dynamic plant that should also be included.

Table 6: NSP and AEMO Model Integration Information

AEMO Inputs		Ausgrid Outputs	
Input	Guidance	Output	Guidance
<ul style="list-style-type: none"> Existing PSSE and PSCAD wide area network model Committed plant models and RUGs Additional “near-committed” plant models and RUGs 	<ul style="list-style-type: none"> May require AEMO discussions with Transgrid to confirm “near-committed” plant 	<ul style="list-style-type: none"> Consolidated PSSE and PSCAD wide area network models 	<ul style="list-style-type: none"> All committed and “near-committed” plant integrated in wide area network models
Proponent Costs	Cost Estimate – Incorporated into existing proponent fees and charges.		
Critical Timelines	AEMO to provide any additional models and RUGs for integration within 10 business days.		

Proponent Model Integration

Ausgrid must integrate the proponent models provided and accepted under the Batch Round Technical Assessment into the relevant wide area models. Ausgrid must also confirm that these models integrate effectively and allow the wide area models to run.

Table 7: Proponent Model Integration Information

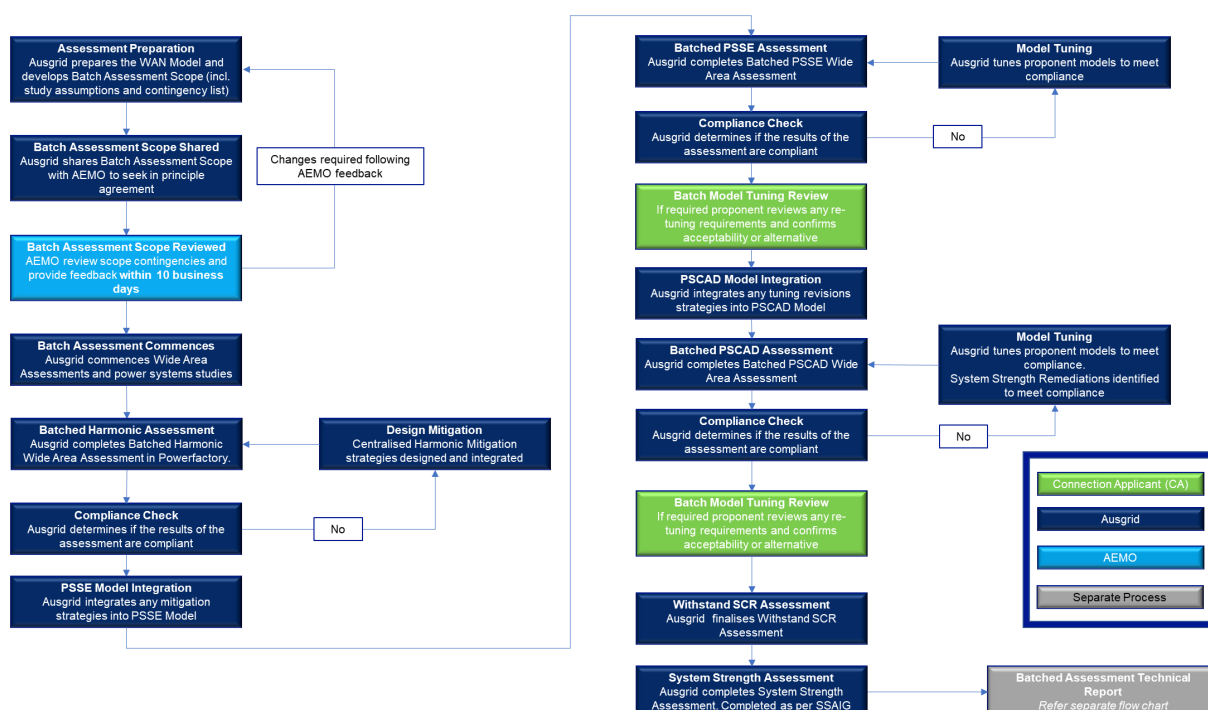
Proponent Inputs		Ausgrid Outputs	
Input	Guidance	Output	Guidance
<ul style="list-style-type: none"> Executed Batch Round Wide Area Assessment Agreement Powerfactory, PSSE and PSCAD SMIB models PSSE and PSCAD model RUGs Integration support (if required) to resolve model integration challenges 	<ul style="list-style-type: none"> Models and RUGs provided as per the Technical Assessment requirements. 	<ul style="list-style-type: none"> Consolidated Powerfactory, PSSE and PSCAD wide area network models 	<ul style="list-style-type: none"> All batch participant plant integrated into the wide area network model
Proponent Costs	Cost Estimate – Incorporated into existing proponent fees and charges.		
Critical Timelines	Proponent to respond to integration support requests within 5 business days. Proponent to provide integration support (to enable model integration) within 15 business days.		

Wide Area Assessment

Once Ausgrid has developed integrated wide area network models, batched wide area assessments can begin. For the purposes of the HCC REZ, batched wide area assessments includes:

- Harmonic assessment: to confirm compliance with network standards
- PSSE wide area assessment: to assess wide area performance is identify any potential model tuning
- PSCAD wide area assessment: to assess wide area performance is identify any potential model tuning, including system strength assessments as per the SSIAG

At each stage of assessment, strategies to mitigate and manage any adverse impacts on power system performance will be identified and implemented by Ausgrid. This may include designing power quality solutions (i.e. centralised harmonic filters) and/or tuning proponent models.



Batched Harmonic Assessment

A batched harmonic assessment is required to ensure that the cumulative impact of the harmonic emissions (and other power quality performance standards) of individual proponents do not result in overall network power quality degradation due to network properties that may result in amplification. Where required, Ausgrid will deploy centralised harmonic mitigation strategies to provide compliant level of network performance.

Table 8: Batched Harmonic Assessment Information

Proponent Inputs		Ausgrid Outputs	
Input	Guidance	Output	Guidance
<ul style="list-style-type: none"> Powerfactory SMIB models S5.2.5.2 Performance Assessment Report(s) Harmonic mitigation device specifications (i.e. filters) 	<ul style="list-style-type: none"> All inputs provided as per the previous Batch Round Technical Assessment 	<ul style="list-style-type: none"> Confirmation of wide area harmonic and power quality performance Identification, design and integration of any centralised harmonic mitigation strategies 	<ul style="list-style-type: none"> Efficient integration of centralised harmonic management (if required) Reflected into PSSE and PSCAD Models
Proponent Costs	Cost Estimate – Nil (incorporated into existing proponent fees and charges).		
Critical Timelines	Ausgrid to complete Batched Harmonic Assessment within 45 business days.		

Batched PSSE Assessment

A batched PSSE assessment is undertaken to assess the steady-state and dynamic interactions of proponent plant with the plant of other proponents in the batch, existing generation and the network in general. It allows for the testing and demonstration of performance for elements that cannot be tested in an SMIB model. It also allows for the identification, design and integration of any performance mitigation or improvement through proponent model tuning.

Table 9: Batched PSSE Assessment Information

Proponent Inputs		Ausgrid Outputs	
Input	Guidance	Output	Guidance
<ul style="list-style-type: none"> PSSE SMIB models Agreed performance standards Review of Ausgrid tuning changes, confirming acceptable 	<ul style="list-style-type: none"> All inputs provided as per the previous batch round technical assessment 	<ul style="list-style-type: none"> Confirmation of wide area network performance Identification, design and integration of any performance mitigation or improvement through proponent model tuning 	<ul style="list-style-type: none"> Complete sensitivity analysis by removing plant(s) identified as causing issues Prepare evidence to show new plant are not making existing performance issues worse Reflected into PSCAD Model
Proponent Costs	Cost Estimate – Nil (incorporated into existing proponent fees and charges).		
Critical Timelines	Ausgrid to complete Batched PSSE Assessment within 45 business days. Proponent to complete Model Tuning Review (if required) within 15 business days.		

Batched PSCAD Assessment

A batched PSCAD assessment is undertaken to assess the dynamic interactions of proponent plant with the plant of other proponents in the batch, existing generation and the network in general. It allows for the testing and demonstration of performance for elements that cannot be tested in a SMIB model and can identify and investigate issues that cannot be identified in PSSE. It allows for the identification, design and integration of any performance mitigation or improvement through proponent model tuning. The batched PSCAD assessment also includes the assessment of system strength (as per the SSIAG).

Table 10: Batched PSCAD Assessment Information

Proponent Inputs		Ausgrid Outputs	
Input	Guidance	Output	Guidance
<ul style="list-style-type: none"> PSCAD SMIB models Agreed Performance Standards Review of Ausgrid tuning changes, confirming acceptable 	<ul style="list-style-type: none"> All inputs provided as per the previous Batch Round Technical Assessment 	<ul style="list-style-type: none"> Confirmation of wide area network performance Identification, design and integration of any performance mitigation or improvement through proponent model tuning Assessment of System Strength (i.e. FIA) 	<ul style="list-style-type: none"> Complete sensitivity analysis by removing plant(s) identified as causing issues Prepare evidence to show new plant are not making existing performance issues worse Reflected into PSSE Model System Strength as per SSIAG
Proponent Costs	Cost Estimate – Nil (incorporated into existing proponent fees and charges).		
Critical Timelines	<p>Ausgrid to complete Batched PSCAD Assessment within 45 business days.</p> <p>Proponent to complete Model Tuning Review (if required) within 15 business days.</p>		

Technical Report Preparation

At the completion of the batched wide area assessment, Ausgrid will prepare a technical report that documents the results of the assessment. This report is reviewed and endorsed by AEMO to allow the results to be finalised and communicated with proponents.

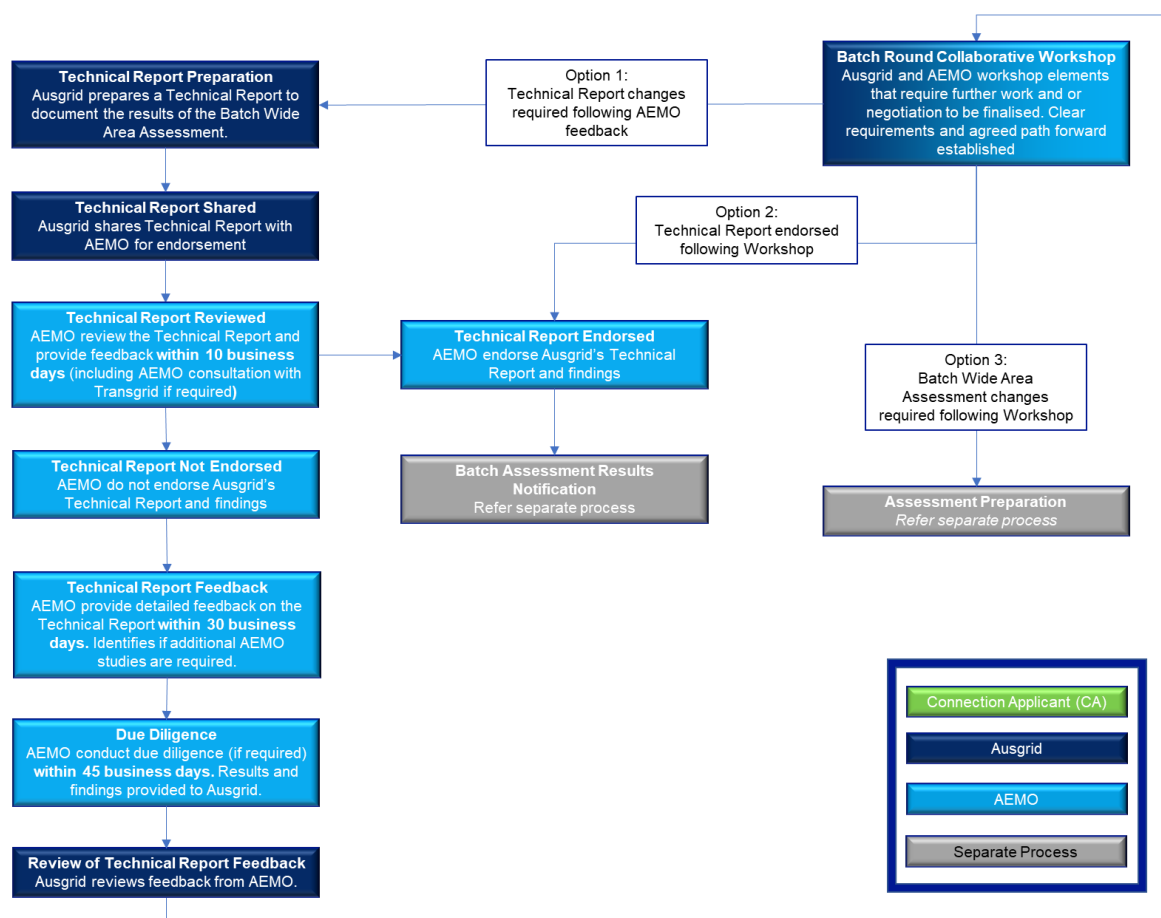


Table 11: Technical Report Preparation Information

Ausgrid Inputs		AEMO Outputs	
Input	Guidance	Output	Guidance
<ul style="list-style-type: none"> Technical Report drafted and shared with AEMO Feedback from AEMO reviewed as required Changes made to Report and obtain endorsement (if required) Elements of assessment revised/repeated if required 	<ul style="list-style-type: none"> Documents assessment findings, methodology, mitigations etc. Demonstrates compliant and acceptable results Completed in accordance with agreed scope Collaborative approach to avoid duplication of assessment and studies as much as possible 	<ul style="list-style-type: none"> Preliminary review of Technical Report to indicate acceptability or detailed review Detailed feedback describing any AEMO concerns with methodology or results Completion of any due diligence required to provide endorsement of technical report Endorsement of Technical Report 	<ul style="list-style-type: none"> Collaborative approach to avoid duplication of assessment and studies as much as possible
Proponent Costs	Cost Estimate – Nil (incorporated into existing proponent fees and charges).		
Critical Timelines	AEMO to provide preliminary review within 10 business days AEMO to provide detailed review within 20 business days AEMO to complete any further due diligence studies within 45 business days		

Outcomes Notification and Finalisation

Once Ausgrid's technical report has received endorsement from AEMO, it is provided to batch round participants, notifying them of the results of the wide area assessment. This includes clearly identifying any challenges or issues and re-tuning requirements.

This may include a collaborative workshop (if required) to allow Ausgrid, AEMO and proponents to work through any elements that require further work or negotiation.

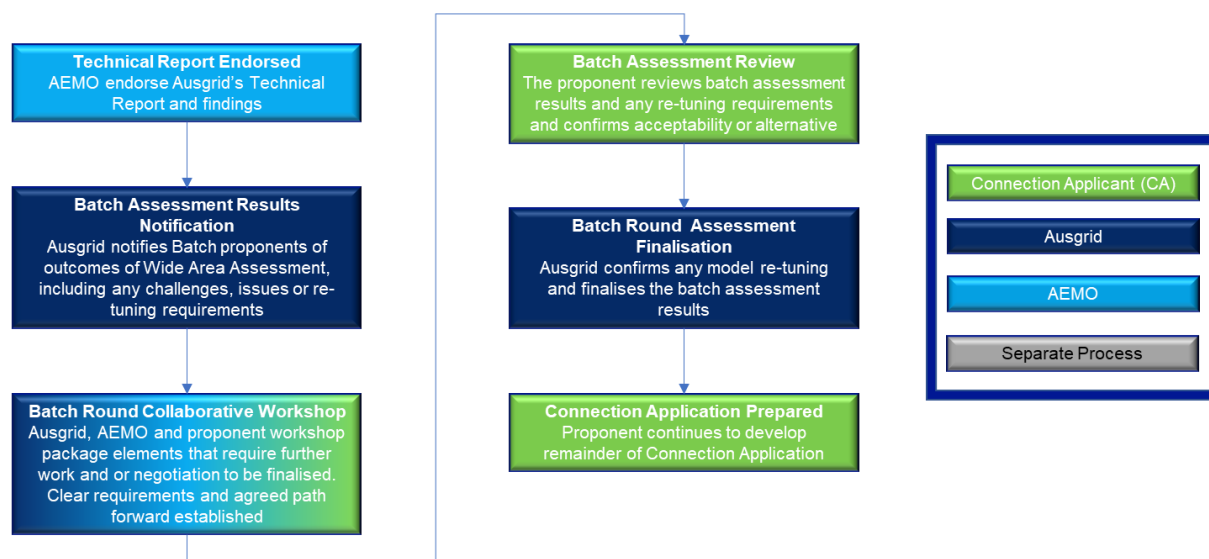


Table 12: Outcomes Notification and Finalisation Information

Proponent Inputs		Ausgrid Outputs	
Input	Guidance	Output	Guidance
<ul style="list-style-type: none"> Review of Technical Report findings and any re-tuning requirements Participation in collaborative workshop (if required) to resolve any outstanding issues 	<ul style="list-style-type: none"> Enables finalisation of Batch Round May require re-tuning to meet system needs. 	<ul style="list-style-type: none"> Finalised Technical Report Finalised Batch Round Assessment process 	
Proponent Costs	Cost Estimate – Nil (incorporated into existing proponent fees and charges).		
Critical Timelines	Ausgrid to host Batch Round Collaborative Workshop (if required) within 10 business days. Proponent to complete Batch Assessment Review within 15 business days.		

Connection Application Continuation

After proponents have been notified of the results of the wide area assessment and any re-tuning requirements, they are able to revise any impacted elements of their performance standards and complete any outstanding documentation, assessments and simulations required to complete their connection application.

From this point, the connection process reverts to the established NER process, with a final connection application, with all components completed and submitted to Ausgrid and AEMO. It is not intended for elements that have been assessed under the batch process to be re-assessed.

Commercial and Contractual Arrangements

Participation in the batch process is voluntary, proponents may elect to use the batch process to accelerate their connection application if they believe it will provide them a commercial advantage. Ausgrid firmly believes that participating in the batch process provides benefits for proponents and Ausgrid.

Given the voluntary nature of the batch process and the fact that it is not explicitly provided for under the NER, Ausgrid has established a series of commercial and contractual arrangements to support this process. These documents are in addition to the existing commercial and contractual agreements entered into as part of the Chapter 5 Connection Process.

Proponents are required to enter both sets of agreements as the batch process is a sub-part of the overall connection application process.

Batch Round Eligibility Assessment Agreement

Proponents who submit a batch round application must enter into an Eligibility Assessment Agreement. These services are defined as “Design Related Services” and are provided under Ausgrid’s [Contract for Design Related Services](#). Under this contract, the services to be provided are defined and Ausgrid provides an estimate of the expected costs to provide the services.

This agreement reflects the inputs, outputs and obligations to the batch round technical assessment (as described in section 0).

If eligibility is confirmed, proponents will be provided the Batch Round Technical Assessment Agreement.

Batch Round Technical Assessment Agreement

Proponents who are eligible to participate in a batch round and intend on submitting a Batch Round Package for technical assessment, must enter into a Batch Round Technical Assessment Agreement. These services are defined as “Design Related Services” and are provided under Ausgrid’s [Contract for Design Related Services](#). Under this contract, the services to be provided are defined and Ausgrid provides an estimate of the expected costs to provide the services.

As the technical assessment process reflects a subset of the Connection Application Package assessment under the Chapter 5 process, no additional fees are payable to cover Ausgrid’s and AEMO’s costs associated with administering the technical assessment process.

This agreement reflects the inputs, outputs and obligations to the Batch Round Technical Assessment (as described in section 0).

If the technical assessment concludes a proponent will be assessed as part of the batch round, proponents will be provided the Batch Round Wide Area Assessment Agreement.

Batch Round Wide Area Assessment Agreement

Proponents who are part of a Batched Wide Area Assessment, must enter into a Batch Round Wide Area Assessment Agreement. These services are defined as “Design Related Services” and are provided under Ausgrid’s [Contract for Design Related Services](#). Under this contract, the services to be provided are defined and Ausgrid provides an estimate of the expected costs to provide the services.

As the Wide Area Assessment process reflects a subset of the connection application package assessment under the Chapter 5 process, no additional fees are payable to cover Ausgrid’s and AEMO’s costs associated with administering the batched wide area assessment process.

This agreement reflects the inputs, outputs and obligations related to the Wide Area Assessment Model Integration (as described in section 0) and Wide Area Assessment (as described in section 0).