

RC_2013_15: Availability Declarations Workshop

7 November 2018

Workshop purpose

Focus on RC_2013_15 Issue 13: Availability declarations for Planned Outage approval requests

Consider options for provisions relating to availability declarations by comparing their outcomes for a range of outage planning scenarios

Provide input to call for further submissions

Discuss next steps

Purpose of RC_2013_15

Clarify the obligations of Rule Participants around the outage planning processes

Provide greater flexibility for Rule Participants in outage planning

Improve the transparency and consistency of outage planning and Balancing Market Processes

Outage Planning Objectives

Assist AEMO to maintain power system security and reliability

Provide transparency to Market Participants to reduce market risks/costs associated with outages

Encourage and provide mechanisms for Rule Participants to manage their facility maintenance efficiently – for example to

- efficiently coordinate network and generator outages
- undertake an efficient level of maintenance that balances maintenance costs against the need to meet reliability obligations
- manage the timing of outages efficiently to reduce their impact on market costs

Support the integrity of the Reserve Capacity Mechanism

Assessment factors – want options that

Improve transparency

Provide as much certainty as possible as soon as possible

Encourage forward planning

Provide flexibility for Rule Participants

Avoid unnecessary obligations or administrative burdens

Avoid unwarranted complexity or system development costs

Avoid placing impossible requirements on participants

Discourage withholding of information from AEMO

Reward facility reliability

Workshop terminology (1)

Capacity would not otherwise be available

In respect of a Planned Outage request - if System Management rejected the request, the capacity to which the request applies would not be available for dispatch for the duration of the proposed Planned Outage.

Lock-in of a Planned Outage

The point in time after which the outage request does not have to be withdrawn/rejected if it ceases to meet the availability requirement

Workshop terminology (2)

Availability-challenged

A Planned Outage for which AEMO is aware that the relevant capacity would not otherwise be available

Extension outage

A Planned Outage that immediately follows another Planned Outage and is exempt from the usual availability requirements (extension outages are not considered to be availability-challenged)

No demonstrated availability

A Planned Outage request has no demonstrated availability over a period if the relevant capacity is continuously on Forced Outages or availability-challenged Planned Outages during all of that period

Workshop terminology (3)

Available for dispatch

Capacity is deemed to be available for dispatch if

- Capacity is bid as available in the Balancing Market
- Facility is not on a Commissioning Test
- Capacity is not recorded in SMMITS as being on an Planned Outage
- Capacity is not on a Forced Outage

RC_2013_15 – Issue 13 changes (1)

Clarify and strengthen availability requirement

New clause 3.19.2B – prohibits a Market Participant from requesting approval of a Planned Outage for a Scheduled Generator or Non-Scheduled Generator if the Market Participant does not expect in good faith that the capacity would be otherwise available

New clause 3.19.2C – requires a Market Participant with a Planned Outage request that has not yet been approved or rejected by System Management to immediately notify System Management and withdraw the request if it ceases to expect that the capacity would be otherwise available (e.g. in the event of a Forced Outage)

Replace 3.19.3A(c) with new clause 3.19.3B – System Management may decline to approve a Planned Outage request where it considers that the capacity would not otherwise be available

RC_2013_15 – Issue 13 changes (2)

Two exceptions (new clause 3.19.2D)

- Where the proposed Planned Outage will immediately follow a Scheduled Outage of the relevant capacity – i.e. the outage is effectively an extension of a Scheduled Outage (extension outage)
- Where the Market Participant reasonably expects that the capacity would be otherwise subject to a Consequential Outage

RC_2013_15 – Issue 13 changes (3)

Implications of proposed changes

No requirement for written availability declarations as these would be implicit in the request for approval of the outage

If a Facility experiences a Forced Outage after a Planned Outage has been approved but before the outage commences, this would not affect the status of the Planned Outage ('lock-in' on approval)

Requests for extensions of Planned Outages will be managed as a request for a new, separate Planned Outage, and treated no differently from any other Planned Outage request except that the implicit availability declaration is not required

Extension outage may be either a Scheduled Outage or Opportunistic Maintenance

Issues affecting original proposal (1)

Three issues affect the original intent of RC_2013_15

Interpretation of “removal from service” (clauses 3.18.4A, 3.18.7 and 3.18.8)

AEMO’s interpretation of recent Supreme Court decision (Bluewaters vs AEMO)

- To be eligible for a Planned Outage a Facility must be available for dispatch (or capable of being in that state) immediately prior to the start of the outage
- A Facility cannot undertake a Commissioning Test during a Planned Outage as this would constitute a return to service
- Continual reassessment of availability requirement

Conflicts with proposed changes and can lead to inefficient outcomes

Issues affecting original proposal (2)

No obligation to notify AEMO of any changes to Outage Plan details other than for outage timing

The current Market Rules and RC_2013_15 place no explicit obligation on participants to provide updated Outage Plan or Opportunistic Maintenance request details to System Management if any of the details (other than start or end time) change

When does revised Outage Plan become a new Outage Plan?

Unclear what changes would trigger reassessment or re-prioritisation of a Planned Outage request, e.g. changes to start an outage earlier or later than originally proposed

Expected solution

Expect RC_2013_15 will be amended to address these issues as follows

- Clarify that capacity not always required to be available immediately before the start of a Planned Outage
- Clarify that Facility can undertake approved Commissioning Test under a Planned Outage
- Require participants to update outage request if details change and clarify that changes do not affect priority unless
 - Earlier start and/or later end of outage period, or
 - Material increase in outage quantity

Assuming these changes for the purpose of this workshop

Additional issues

Three additional issues raised in submissions and discussions

- Availability requirement may be too onerous
- Lock-in of Scheduled Outages at time of approval may be too late
- Difficulty in starting work on a Scheduled Outage early

One additional issue identified by RCP Support

- How to prevent the new flexibility from being abused?

Availability requirement

The proposed requirement for the participant to expect in good faith that capacity would otherwise be available may be too onerous because

- Difficult for the participant to be confident that capacity will be otherwise available for a period in the future
- Even more difficult if the participant is seeking the Planned Outage to investigate a potential problem

May also be difficult for the ERA/ERB to assess compliance with the availability requirement as based on the participant's good faith expectations

Availability requirement – straw man

Could change availability requirement to

Participant **must not** request a Planned Outage if **aware** that the capacity would not otherwise be available

Main benefits

Clearer requirement – simpler to determine compliance and/or non-compliance

Does not prevent taking a Planned Outage to investigate a problem

Main concern

Increased risk of disingenuous Planned Outage requests

Availability requirement scenarios

A Market Participant is considering whether to request a Planned Outage

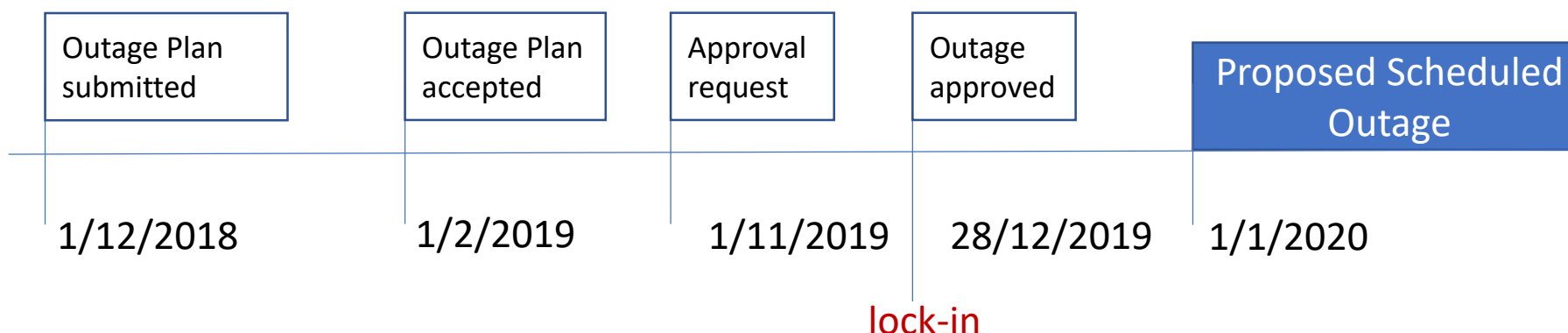
Scenario	Can outage be requested	
	RC_2013_15	Straw man
Facility in perfect condition – routine maintenance	Yes	Yes
Suspicious rattle – no immediate action needed but needs to be checked	No	Yes
System alert – need to shut down and investigate within a week	No	Yes
System alert – need to shut down immediately	No	No
System alert – need to shut down within a week and requires 3 weeks to repair	No	No
Facility currently on Forced Outage but issue might be fixed by intended start of Planned Outage	No	Yes*
Facility currently on Forced Outage and issue will not be fixed by intended start of Planned Outage	No	No
Generator explodes and burns to the ground	No	No

* Note the risk of excessive optimism

Lock-in of Scheduled Outages

Lock-in: The point in time after which an outage request does not have to be withdrawn or rejected because it ceases to meet the availability requirement

RC_2013_15 (example timeline)



Issue: Scheduled Outage approval can occur very late which can lead to inefficient outcomes, e.g. if a large Scheduled Outage that is scheduled many months in advance is cancelled in the last few days before its start due to a minor Forced Outage

Lock-in of Scheduled Outage - straw man

Straw man: Availability requirement applies to Outage Plan submission and acceptance rather than the approval request

Example timeline



Forced Outage occurs after Outage Plan is accepted

- Outage Plan does not have to be withdrawn
- Scheduled Outage must not be rejected due to Forced Outage
- **But** Participant must notify AEMO and update Outage Plan details – outage becomes ‘availability-challenged’

Lock-in of Scheduled Outage scenarios (1)

A Market Participant becomes aware that capacity would not be otherwise available and outage is not an extension outage

Scenario	Participant Action	
	RC_2013_15	Straw man
AEMO has not yet accepted or rejected Outage Plan	Notify AEMO and withdraw Outage Plan	Notify AEMO and withdraw Outage Plan
AEMO has accepted Outage Plan	Notify AEMO and withdraw Outage Plan	Notify AEMO that capacity would not otherwise be available and update any affected Outage Plan details – still able to request approval
AEMO has approved Outage Plan	No action specified	Notify AEMO that capacity would not otherwise be available and update affected Outage Plan details

Lock-in of Scheduled Outage scenarios (2)

Situation: AEMO becomes aware that capacity would not be otherwise available and outage is not an extension outage

Scenario	AEMO Action	
	RC_2013_15	Straw man
AEMO has not yet accepted or rejected Outage Plan	Reject Outage Plan	Reject Outage Plan
AEMO has accepted but not approved Outage Plan	Reject Outage Plan	Flag as availability-challenged
AEMO has approved Outage Plan	No action	Flag as availability-challenged

Starting Scheduled Outages early (1)

Participants have made several suggestions including

- Allow longer Opportunistic Maintenance outages (possibly with longer lead times) that can last until a Scheduled Outage commences
- Allow consecutive Opportunistic Maintenance requests
 - These options make it very easy to hide Forced Outages, conflict with concept of Opportunistic Maintenance, decrease transparency, and may incentivise 'last minute' maintenance approach
- Allow Opportunistic Maintenance to precede a Scheduled Outage without affecting the status of the Scheduled Outage
 - Considering this option

Starting Scheduled Outages early (2)

Issue: RC_2013_15 may not allow for Opportunistic Maintenance to be used to commence a Scheduled Outage a day earlier because

- in this case the Scheduled Outage would no longer meet the availability requirement
- the exemption from the availability requirement for extension outages only applies for Planned Outages following Scheduled Outages (Opportunistic Maintenance is a Planned but not a Scheduled Outage)

Straw man: Further amend the proposed exemption from the availability requirement for extension outages to allow Planned Outages to follow Planned Outages

Disingenuous Planned Outage requests

Issue: In some situations RC_2013_15 changes could lead to the approval of Planned Outages that should be Forced Outages

- Straw man changes to availability requirement and Scheduled Outage lock-in time increase the risk

Examples:

If a Facility trips just before an accepted/approved Planned Outage and fixing the Forced Outage issue takes longer than the Planned Outage, the participant can request extension outages that would be exempt from the availability requirement

A participant can request a Planned Outage for capacity that is on a Forced Outage by being 'optimistic' that the Forced Outage will end by the start of the Planned Outage (not actually aware that the capacity will not be otherwise available, even if this is very likely)

Disingenuous requests – straw man (1)

Introduce concept of availability-challenged Planned Outages

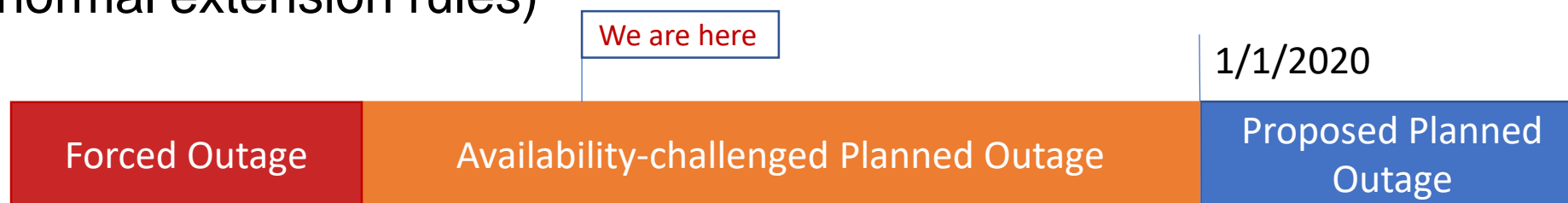
Amend proposed exemption from availability declaration requirement to exclude a Planned Outage that immediately follows an availability-challenged Planned Outage

Introduce special requirements where no demonstrated availability:

- Scheduled Outages: where capacity has no demonstrated availability from the time when System Management first evaluates the Outage Plan for acceptance
- Opportunistic Maintenance: where capacity has no demonstrated availability from the time the request for Opportunistic Maintenance is submitted

Disingenuous requests – straw man (2)

Scenario: Capacity is on availability-challenged Planned Outage and participant considering to request extension outage (cannot rely on normal extension rules)



Scenario	Can outage be requested
Aware that Facility would be unable to return to service by 1/1/2020	No
Hopeful that Facility would be able to return to service by 1/1/2020	Yes but no demonstrated availability – special requirements apply
Certain that Facility would be able to return to service by 1/1/2020	Yes but no demonstrated availability – special requirements apply

Disingenuous requests – straw man (3)

Special requirements for Scheduled Outages

Participant may submit Outage Plan but AEMO must not accept the Outage Plan until either

- Capacity becomes available for dispatch again OR
- AEMO receives evidence to its satisfaction from the participant that the capacity would be capable of being made available for dispatch prior to the start of the proposed Scheduled Outage

Test applied at acceptance stage to avoid optimistic outage requests that are likely to be rejected from preventing the acceptance of another participant's Outage Plan

Disingenuous requests – straw man (4)

Special requirements for Opportunistic Maintenance

Participant may request outage but AEMO must not approve until either

- Capacity becomes available for dispatch again OR
- AEMO receives evidence to its satisfaction from the participant that the capacity would be capable of being made available for dispatch prior to the start of the Opportunistic Maintenance outage

This means the outage request will be rejected if neither event has occurred by the approval deadline

Availability requirements for non-generator Equipment List Facilities

Availability requirements will apply to Scheduled Generators and Non-Scheduled Generators on the Equipment List

Question: Should the availability requirements also apply to other Equipment List Facilities, e.g.

- Network equipment?
- Facilities providing Ancillary Services?

Next steps

RCP Support to consider feedback provided in this workshop when developing the call for further submissions for Rule Change Panel consideration

Rule Change Panel to publish call for further submissions in late November 2018 (without drafting)

Question: How long should the call for further submissions be out for consultation?