



Guidelines for Preparing Local Black System Procedures

December 2019

Final Report

Executive summary

The publication of this Final Report concludes the consultation by AEMO on the amendments to the Guidelines for Preparing Local Black System Procedures (LBSPs). The purpose of the amendments was to improve the quality and usefulness of the LBSPs in current and future power system conditions, and enable AEMO to better reflect the capabilities of newer generation technologies in its system restart plans.

AEMO commenced consultation on 13 August 2019 by publishing the proposed amendments to the Guidelines and called for submissions, particularly from generators, network service providers and market customers (or end users) with major loads. AEMO received three submissions in response and responded to those in the Consultation Report published on 31 October 2019, including a notice of second stage consultation calling for submissions by 18 November 2019.

One submission from a NSP was received as part of the second stage consultation.

After considering the second stage submission and further review, including with reference to relevant AER recommendations from its investigation of the 2016 South Australia black system event, AEMO has made the following additional changes to the final version of the Guidelines and included templates:

- Clarify timeframes of LBSPs to be submitted by network service providers (NSP)
- Recognise that NSP and Generator switching sequences are dependent on the status of the network and plant following a major supply disruption, and as such modified the Guidelines to refer to proposed switching sequences.
- Minor drafting changes to clarify the information required.

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1. Consultation process

AEMO consulted on the amendments to the Guidelines for preparing Local Black System Procedures (LBSPs) under clause 4.8.12(e) of the National Electricity Rules (NER).

The Guidelines must be amended in consultation with Generators and Network Service Providers (NSPs), being the registered participant categories required to prepare and submit LBSPs under the NER. Some very large loads will also play an important role in system restart, therefore AEMO invited interested Market Customers (or relevant end users) to also participate in the consultation. The Guidelines are **not** subject to the Rules consultation procedures in rule 8.9 of the NER.

The publication of this final report marks the end of the consultation. AEMO's consultation milestones are outlined below.

Process Stage	Date
AEMO issues initial consultation notice and draft Guidelines	13 August 2019
Closing date for submissions on initial consultation	20 September 2019
Publication of updated draft guidelines and report (this document)	31 October 2019
Closing date for submissions on updated Consultation on draft guidelines	18 November 2019
Publication of final guidelines	12 December 2019

2. Summary of second stage submissions and AEMO responses

Table 1 Summary of second stage submissions received on the proposed amendments to the Guidelines for preparing Local Black System Procedures

Item	From	Issue	AEMO response
1	Ergon Energy and Energex	<p>Ergon Energy and Energex are largely supportive of the Procedures as proposed by AEMO, but make the following two comments:</p> <ul style="list-style-type: none"> • Clause 3.2 (b) of the Procedures provides “<i>the Network Service Provider (NSP) Local Black System Procedures (LBSPs) must summarise internal switching procedures followed by NSP operations staff following major supply disruptions and include, as an attachment, the detailed switching sequences</i>”. <p>It is our view that detailed switching sequences are rarely produced as part of prepared contingency plans as contingency actions are dependent on the status of the network following the event. Ergon Energy and Energex therefore recommend that this clause be amended to reflect ‘proposed switching sequences’ rather than ‘detailed switching sequences’. It is critical for NSPs to keep the switching sequence as proposed due to the increasing volume of embedded renewable generation and the variability of renewable availability.</p>	<p>AEMO agrees that the Guidelines should refer to ‘proposed switching sequences’ instead of ‘detailed switching sequences for both NSPs and Generator LBPs. However, noting that the actual sequences on restart may be different, the proposed sequences should still reflect a credible path and be sufficiently detailed to be utilised by AEMO and the NSP for planning and training purposes</p> <p>Further, if the network changes due to installation and volume of embedded renewable generation which impacts on the ‘proposed switching sequences’, NSPs must provide updated switching sequences to AEMO as per Section 4 of the Guidelines.</p>
2	Ergon Energy and Energex	<p>Clause 3.2 (d) of the Procedures provides “NSPs are required to complete and submit a LBSP for each network (including a transmission network, distribution network or separate DC Link) that they own, operate or control. NSPs must submit LBSPs to AEMO electronically by emailing to the following email address: system_restart_advice@AEMO.com.au.”</p> <p>Ergon Energy and Energex recommend that a timeframe for the submission of an LBSP be incorporated within this clause.</p>	<p>The following has been provided in the Guidelines:</p> <ul style="list-style-type: none"> • The transitional provisions (Section 1.2A) provides the timeframe (30 June 2020) for when existing registered NSPs must update and resubmit their LBSPs. • Section 4 of the Guidelines provides guidance of when both NSPs (and Generators) should review and update existing LBSPs, if necessary. <p>In addition, all new NSPs need to submit a LBSP prior to registration.</p> <p>AEMO agrees that clause 3.2(d) can be clarified to cross refer to the timeframes in the above provisions.</p>

3. Additional minor changes

AEMO has revisited the Guidelines generally and in the light of relevant AER recommendations from its investigation of the 2016 South Australia black system event, and has made the following minor drafting changes for clarity:

- In the Generator and NSP LBSP templates, updated items 5 and 8 respectively to clarify what is meant by 'relevant information' relating to energy support and other operational arrangements.
- In the Generator LBSP template, updated item 1B to refer to Section 5 instead of Section 9.
- In the DC Links LBSP template, updated items related to energy support arrangements to provide more context on relevant details required, consistent with the NSP LBSP template.
- In the major load LBSP template, included a new section to confirm whether the load is supported by any energy support arrangements.
- Minor typographical corrections.

4. Final Guidelines

AEMO has published a final version of the revised Guidelines (including LBSP templates) having considered the matters raised in consultation. The final Guidelines take effect on 12 December 2019, subject to the transitional provisions for relevant Registered Participants to update their LBSPs in section 1.2A of the Guidelines.

AEMO has published a marked-up version of the final Guidelines against the previous consultation draft, to help stakeholders identify the changes made as a result of this final determination.