Information to be included in LBSPs of DC Links

All fields in the applicable sections must be filled out.

Section 0: LBSP version information

The following information is to be provided using the table below.

Version:	
Release Date:	
Approver:	

Section 1: General information on the DC Link

Item	Information required	Include the information in this column
1A	Registered name of the DC Link:	
1B	Is the DC Link a party to an energy support agreement (refer to the Rules definition)?	Yes / No (If yes, include all relevant information in section 4)
1C	Primary and back up contact for matters relating to local black system procedures[1]:	<table><tr><td></td><td>Primary Contact</td><td>Secondary Contact</td></tr><tr><td>Name</td><td></td><td></td></tr><tr><td>Position</td><td></td><td></td></tr><tr><td>Phone</td><td></td><td></td></tr><tr><td>Email</td><td></td><td></td></tr></table>
1D	Provide the TNSP or DNSP substation where the DC Link connects to the power system	
1E	Are the converter stations manned under normal operation conditions?	

[1] This field is seeking contact details for personnel that provide and update LBSP information. Any updates to contact details for operational staff e.g. control room personnel or traders, are to be provided to the following email: supporthub@aemo.com.au.

Section 2: Assessment of the situation and safe shut down

Item	Information required	Include the information in this column
2A	Who would the staff of DC Link contact to get an assessment of the situation and the estimated time to receive external power?	
2B	What organisation is responsible for restoring the power system in the vicinity of converter stations?	
2C	Is staff need to be called out to manage the situation? If yes, how long will it take to get on-call / standby/ other staff to the converter station site/s?	
2D	Is external supply is required to safely shut down the DC Link?	
2E	Are emergency diesels/ gas turbines installed at converter stations sufficient to safely shut down?	
2F	Indicate how the time without external supply following a supply disruption affects the restart of the DC Link when the power system is restored?	
2G	How long will it take for the DC Link to return to service once the power system in the vicinity of converter stations is restored?	

Section 3: Restoration of DC Links

Item	Information required	Include the information in this column
3A	DC link technology and restoration process. • Line Commutated Converter (LCC) • Voltage Source Converter (VSC) Are there any unique/complex switching requirements to provide converter station auxiliary supply from the power system?	
3B	Which substation/s are capable of providing external supply to converter stations?	
3C	Are AC sources required at both ends of the DC Link for transferring power across the link? (include details of specific technical requirements of the AC sources)	
3D	Provide a summary of the restart plan of the DC Link	
3E	Can the DC Link provide voltage support at one or both ends immediately following energising the DC Link? (provide details)	
3F	Is there any limitation of the power transfer capability of the DC Link immediately following the return to service, due to the state of the power system in the vicinity of the DC Link?	

Section 4: DC Link participation in energy support arrangements

Item	Information required	Include the information in this column
4A	Is the DC Link a party to an energy support arrangement (refer to Rule definition)?	
4B	Include relevant information on the energy support arrangement that requires this DC Link to operate in a particular manner ~~associated with the DC Link~~following a major supply disruption.	

Section 5: Relevant technical information for DC links

Item	Information required	Include the information in this column
5A	Please provide the minimum fault level for: • The default settings and control strategy that would apply during normal operation? • Where the controller can provide stable response under emergency or restoration conditions?	
5B	Would a switchover to another control mode occur under emergency or restoration conditions? Is the switchover automatic or operator enabled? Please also list the criteria used to determine whether a switchover is required.	
5C	Whether any additional control loop applies during system restoration? (e.g. resonance control etc.)	
5D	Does this require any changes to static reactive plant/filter switching compared to that applied during system intact conditions?	
5E	What criteria are used to determine whether switchover should occur?	
5F	What changes would apply to control system settings/strategies compared to those applied for system intact conditions? To what extent have these control settings/strategies for system restoration have been tested?	
5G	Whether or not parallel mode of operation with other FACTS controllers will be suspended during these emergency conditions?	
5H	If the DC link has black start capability, please specify the details of this capability. For instance does it include: • Grid forming technology or • Inhouse diesel units?	

Section 6: Communication facilities

Item	Information required	Include the information in this column
6A	What communication facilities and provider do you have to communicate with your on-call, standby and other staff, in particular during a major supply disruption (e.g. landline, mobile and/or satellite phone - separate telephone facilities using independent telecommunications service providers?	
6B	What communication facilities do you have to communicate with AEMO, TNSP and DNSP, under black system condition? Please specify whether these are fixed installations on site (e.g. the generation facility control room) with external antennas or portable satellite phones.	