

Date: 4 April 2024

1. Introduction

This DNA Access Operational Protocol must be read in conjunction with the MacIntyre DNA Access Policy available on Powerlink's website (**MacIntyre DNA Access Policy**) and the associated contract documents, including the Access Agreement for any specific Existing Connected Party and the DNA Management and Administration Deed. This document will be updated from time to time with the agreement of Powerlink (in its separate capacities as DNA Owner and Primary TNSP) and the Existing Connected Parties.

This version of the DNA Access Operational Protocol indicates the operational schemes that may be required in the future. The initial connection of MacIntyre Wind Farm only will not require all operational schemes.

The procedures in this DNA Access Operational Protocol are always subject to the Electricity Laws, including the existence of a court order or any order or direction made by an Authority under the Electricity Laws.

2. Definitions

Capitalised terms in this DNA Access Operational Protocol have the meanings given to them in the MacIntyre DNA Access Policy, unless the context requires otherwise. Italicised terms have the meanings given to them in the Rules.

3. Operational Responsibilities

Powerlink is the owner of the MacIntyre DNA, and operator of the MacIntyre DNA in its capacity as Primary TNSP.

4. Operational Communication

Powerlink (as Primary TNSP) maintains a Network Operations Control Centre staffed 24 hours per day, seven day a week for operational purposes.

Powerlink's contact details are available in the Access Agreement for each Existing Connected Party.

5. Technical Envelope of DNA

The MacIntyre DNA is primarily limited by the thermal capacity of DNA Component 1 (the 330kV transmission lines between Tummalville Switching Station and MacIntyre Intermediate Switching Station).

The IUSA - Non-Shared IUSA Facilities (located at Tummalville Switching Station) will also limit the technical envelope of operation of the MacIntyre DNA, as set out further below.

DNA Component 1 will be operated within its technical envelope by AEMO's NEMDE as other Powerlink transmission lines are. The technical envelope is advised to AEMO under the following parameters in Table 1. DNA Component 1 includes two circuits, and the ratings set out in Table 1 are on a per circuit basis.

Table 1 – MacIntyre DNA Component 1 Thermal Ratings Table

Season	Normal Rating (MVA) per circuit	Emergency Rating (MVA) per circuit
Summer	913	1123
Shoulder	1059	1270
Winter	1164	1379

The ratings in the table for each season apply to the periods as note below:

- “Summer” applies from 1 October to 31 March;
- “Shoulder” applies from 1 April to 31 May and from 1 September to 30 September; and
- “Winter” applies from 1 June to 31 August.

Dynamic ratings are not used for this transmission element.

The IUSA - Non-Shared IUSA Facilities currently contain metering CT/VT units that limit the circuit ratings at the IUSA end of DNA Component 1. The normal rating of the metering units is 1143 MVA per circuit.

6. Priority Order

In normal operating conditions, Powerlink will provide DNA Service 1 to the Existing Connected Parties in the Priority Order, with Existing Connected Parties higher in the Priority Order receiving higher priority over Existing Connected Parties lower in the Priority Order (as defined in the MacIntyre DNA Access Policy).

The Existing Connected Parties will be directed to reduce the use of DNA Service 1 by reducing their output in the Priority Order to maintain the DNA within its technical envelope (referred to in item 5 above) in the event of congestion while the DNA is intact (no DNA transmission circuits are out of service). The Existing Connected Party first in the Priority Order will be the last to be directed to reduce output, and the Existing Connected Party last in the Priority Order will be the first to be directed to reduce output. As at the date of this DNA Access Operational Protocol, the Priority Order is as follows:

Table 2 – MacIntyre DNA Priority Order

Priority Order	DNA Party
1A. Foundation Proponent	MacIntyre Wind Farm
1B. Foundation Proponent	Karara Wind Farm
2. Second priority (conditional)	Herries Range Wind Precinct

The congestion management scheme will not apply to the Foundation Proponents, so all positions in the Priority Order are relative to the Foundation Proponents.

7. Contingency Events – Run-back Scheme

A run-back scheme is required to ensure that the full DNA Capacity is available for use by the Existing Connected Parties.

Run-back schemes are based on studies of power system performance (e.g. system stability and thermal impacts). This is part of Powerlink's network security requirements and is critical for compliance with the NER. The run-back scheme(s) will be managed in conjunction with this DNA Access Operational Protocol and will be documented separately as part of TNSP processes (connections, etc.). Any run-back scheme must comply with, and be consistent with, clause E3.2(e) of the Access Policy.

The Priority Order does not apply during *contingency events*. During any *contingency event*, all Existing Connected Parties will be required to ramp or trip generation output down to a pre-determined level. The time required to reach the pre-determined output is dependent on the thermal parameters of the circuit and the level of overload experienced. The expected times will be in the order of one minute.

Where necessary, Powerlink will take action to secure the network (in accordance with the Existing Connecting Party/s Access Agreement) should any Existing Connected Party not comply with any run-back scheme implemented under this item 7.

8. DNA Intact – Congestion Management Scheme

A congestion management scheme is not required as at the date of this DNA Access Operational Protocol.

To the extent the total of the Agreed DNA Transfer Limits allocated to all the Existing Connected Parties exceeds the DNA Capacity, a congestion management scheme is required to manage the total output from the Existing Connected Parties to within the technical envelope of the DNA (as set out in item 5).

Any congestion management scheme must comply with, and be consistent with, clause E3.2(e) of the Access Policy, including giving effect to the Priority Order of the Existing Connected Parties. The congestion management scheme will give effect to the Priority Order and may be implemented by Powerlink in its capacity as Primary TNSP or using an alternative mechanism.

Where necessary, Powerlink will take action to implement the Priority Order should any Existing Connected Party not comply with any congestion management scheme implemented under this item 8.

9. Other Operational Matters

None as at the date of this DNA Access Operational Protocol.