



Powerlink Queensland

Request for power system security services in central, southern and broader Queensland regions

May 2022

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Executive Summary

Powerlink Queensland (Powerlink) is engaging with Registered Participants in the National Electricity Market (NEM) and interested parties to ascertain and evaluate options (both non-network and network) to meet the system security requirements in Queensland.

The option or combination of options with the lowest cost identified through this consultation process and which satisfy Powerlink's regional obligations to maintain system security under the National Electricity Rules will be recommended for implementation.

This document has been prepared to inform potential non-network providers and interested parties with pertinent information regarding Powerlink's requirements and for the purpose of inviting expressions of interest (EOI) for potential options which will enable Powerlink to fulfil its regulatory obligations.

Powerlink is required to make available system strength services and Network Support and Control Ancillary Services (NSCAS)

As specified in the Australian Energy Market Operator's (AEMO) *2021 System Security Reports: System Strength, Inertia and NSCAS* and *May 2022 Update to 2021 System Security Reports*, AEMO has declared

- an immediate system strength shortfall of up to 90 MVA at the Gin Gin fault level node to be addressed by March 2023 and
- an NSCAS gap in South Queensland of up to 250 MVAR to be addressed immediately.

Description of the identified need for system strength services

Based on Electromagnetic Transients type analysis, Powerlink advises that the lower synchronous generator dispatches in Central Queensland (aligned with the fault level shortfall at Gin Gin) will result in the power system being in a non-secure operating state in Central and North Queensland.

In this instance the declared system strength fault level shortfall is at the Gin Gin fault level node. However, consideration of the declared shortfall location in isolation may not capture technical components of the system strength shortfall or indicate from where the particular problem is most efficiently addressed. That is, options are welcome which address the technical power system performance issues elsewhere in Central and North Queensland that may reduce or remove the fault level shortfall at Gin Gin.

Powerlink is also interested in other potential long-term non-network solutions, to understand what options may be available, as the need to procure system strength services is expected to increase over time.

Non-network options will be compared against a network option to install a synchronous condenser.

Description of the identified need for NSCAS

The System Reliability and Security Ancillary Service (RSAS) gap occurs at times of minimum system demand and is caused by an imbalance of reactive power generated by various system components and the capability of online generators and other dynamic reactive power sources to absorb that reactive power.

In July 2021, prior to the declaration of the RSAS gap, Powerlink commenced a Regulatory Investment Test for Transmission (RIT-T) with the publication of a Project Specification Consultation Report (PSCR), *Managing voltages in South East Queensland*. The proposed network option identified in the PSCR includes installation of three 120MVAR reactors in South East Queensland, with the first reactor expected to be installed in 2023.

While the RIT-T can only deliver a network or non-network solution from 2023, the immediate RSAS gap declared by AEMO remains unaddressed. This EOI for additional system security services presents an opportunity to address this gap in the short term.

[Lodging a submission with Powerlink](#)

Potential proponents of non-network solutions are encouraged to contact Powerlink prior to the lodgement of submissions for further clarification and/or assistance if required.

Powerlink welcomes submissions to this EOI by COB Friday, 24 June 2022.

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1. Purpose and scope

Powerlink Queensland (Powerlink) is engaging with Registered Participants in the National Electricity Market (NEM) and interested parties to ascertain and evaluate options (both non-network and network) to meet the power system security requirements identified in the Australian Energy Market Operator's (AEMO) [2021 System Security Reports: System Strength, Inertia and NSCAS](#) and [Update to 2021 System Security Reports](#) (2021 System Security Reports and 2022 Update) for the NEM, published on 17 December 2021 and 11 May 2022 respectively.

In December 2021, AEMO identified power system security needs for the next five years based on its Progressive Change scenario, prepared for the [Draft 2022 Integrated System Plan](#) (ISP), driven by declining minimum demand and forecast reductions of synchronous generator dispatch.

In May 2022, AEMO updated the identified system strength and inertia needs based on the accelerated Step Change scenario, now considered most likely in the draft 2022 ISP.

The option or combination of options with the lowest cost identified through this expression of interest (EOI) process and which best satisfy Powerlink's regional System Strength Service Provider and Network Support and Control Ancillary Services (NSCAS) obligations under the National Electricity Rules (NER)¹ will be recommended for implementation.

This document has been prepared to inform potential non-network providers and interested parties of Powerlink's requirements, to meet the needs identified in AEMO's 2021 System Security Reports and 2022 Update. Powerlink invites expressions of interest to deliver network and non-network solutions and for the identification of potential options which may enable it to fulfil its regulatory obligations.

Respondents to this EOI process should be aware and acknowledge as part of an EOI response that:

- Powerlink is not obliged to make an offer to contract with a non-network provider as a result of this EOI
- proposed options or combinations thereof are subject to confirmation by Powerlink of their technical and economic feasibility to meet the pre-requisites and criteria identified in this EOI
- all costs incurred by non-network providers in relation to this EOI must be borne by them
- regardless of the outcome of the EOI process, non-network providers are not entitled to claim for reimbursement of time, materials or expenses incurred.

2. Engaging with our customers and stakeholders

With five million Queenslanders and 236,000 Queensland businesses depending on Powerlink's network performance, Powerlink recognises the importance of engaging with a diverse range of customers and stakeholders who have the potential to affect, or be affected by, Powerlink activities and/or investments. In particular, Powerlink works collaboratively with its Customer Panel in the normal course of business, which provides a valuable avenue to keep customers and stakeholders better informed, and to receive feedback about topics of relevance. While maintaining EOI confidentiality, Powerlink will:

- provide updates to and request input from the Customer Panel throughout the EOI process; and
- include current information and the status of this EOI in the 2022 Transmission Annual Planning Report².

¹ NER, Rules 5.20C.3 and 3.11.3.

² Powerlink's Transmission Annual Planning Report is published on [Powerlink's website](#) by 31 October each year.

3. Description of the requirements for power system security services in Queensland³

As the Transmission Network Service Provider and Jurisdictional Planning Body for Queensland, Powerlink is responsible for providing and procuring System Strength Services and NSCAS (collectively referred to as 'system security services' throughout this report). Section 3.1 of this EOI discusses the system strength services required to be made available by Powerlink by 31 March 2023 and Section 3.2 discusses the NSCAS services required to be made available immediately.

3.1 Description of the requirement for system strength services

System strength is a measure of the ability of a power system to remain stable under normal conditions and to return to a steady-state condition following a system disturbance. System strength can be considered low in areas with low levels of local synchronous generation and deteriorates further with high penetration of inverter-based resources (IBR).

Under the NER, system strength is measured by fault level at designated fault level nodes. The [System Strength Requirements Methodology](#) published by AEMO on 1 July 2018 determined the system strength requirements for five nodes in Queensland.

Applying the process outlined in the System Strength Requirements Methodology, AEMO's 2022 Update confirmed the minimum fault level requirement of 2,250 MVA at the Gin Gin 275kV node remains unchanged to that determined in the 2021 System Security Reports. AEMO's 2022 Update amended the previously declared immediate fault level shortfall at the Gin Gin 275kV fault level node to an immediate shortfall of 33 megavolt-amperes (MVA) increasing progressively to 90 MVA by 2026/27.

As the *System Strength Service Provider* for the Queensland region, Powerlink must use reasonable endeavours to make the system strength services available by the date of 31 March 2023⁴, as specified by AEMO in the notice issued under clause 5.20C.2(c) of the NER.

The declared fault level shortfall is a result of AEMO's market model forecasting lower synchronous generator dispatches in Central Queensland compared to dispatches that define the current minimum fault level requirement.

Breaching a currently defined minimum fault level requirement, at one or more fault level nodes, for more than 1% of the time is the threshold criterion that AEMO use to declare a fault level shortfall. AEMO's market modelling forecasts that fewer synchronous generator units than required to maintain the minimum fault level requirement⁵ may be on-line in Central Queensland for more than 1% of the time.

In this instance the declared fault level shortfall is at the Gin Gin fault level node. However, consideration of the declared shortfall location in isolation may not capture technical components of the system strength shortfall or indicate from where the particular problem is most efficiently addressed. Both of these can only be informed through system-wide Electromagnetic Transients (EMT)-type analysis and in the context of the location and technical nature of any proposed solutions. That is, options which address the technical power system performance issues elsewhere in Central and North Queensland may reduce or remove the fault level shortfall at Gin Gin.

³ The inertia shortfall declared in December 2021 was rescinded in the May 2022 Update.

⁴ This EOI is not seeking services to support the Efficient Management of System Strength on the Power System rule change as separate consultation will address the identified need when required.

⁵ Typically 7 synchronous generator units in Central Queensland deliver sufficient system strength to meet the minimum requirements.

Based on EMT-type analysis, Powerlink advises that the lower synchronous dispatches in Central Queensland (aligned with the fault level shortfall at Gin Gin) may result in the power system being in a non-secure operating state in Central and North Queensland.

3.2 Description of the requirement for NSCAS and interactions with the current RIT-T

On 17 December 2021, AEMO declared an immediate Reliability and Security Ancillary Service (RSAS) gap of approximately 120 megavolt-amperes reactive (MVar) power absorption, increasing to 250MVar reactive power absorption by 2026 in southern Queensland.

The RSAS gap occurs at times of minimum system demand and is caused by an imbalance of reactive power generated by various system components and the capability of online generators and other dynamic reactive power sources to absorb that reactive power.

In July 2021, before declaration of the RSAS gap, Powerlink commenced a Regulatory Investment Test for Transmission (RIT-T) with the publication of a Project Specification Consultation Report (PSCR), [Managing voltages in South East Queensland](#). The proposed network option identified in the PSCR includes installation of three 120MVar reactors in South East Queensland (SEQ), with the first reactor expected to be installed in 2023.

While the RIT-T⁶ can only deliver a network or non-network solution from 2023, the immediate RSAS gap declared by AEMO remains unaddressed. This EOI for additional system security services presents an opportunity to address this gap in the short term and will be taken into account in the comparison of options for the longer-term solution in subsequent stages of the RIT-T⁷.

Powerlink anticipates publication of the Project Assessment Draft Report (PADR) in September/October 2022 and will seek further submissions from Registered Participants, AEMO and interested parties at that time. To maximise opportunities to identify the *preferred option*, where proposed solutions to this EOI have the potential to meet longer term reactive power requirements, the proponents of such submissions will be encouraged to engage in the current RIT-T process by lodging submissions to the PADR.

Powerlink has agreed with AEMO that a linear assumption between the published immediate and future gap be applied to determine requirements for the time until a solution may be delivered through the RIT-T process. The shortfall for each year is shown in Table 1.

Table 1 Short-term NSCAS requirements as at December 2021

Financial Year	Reactive Power absorption gap
2021/22	120 MVar
2022/23	152.5 MVar
2023/24	185 MVar
2024/25	217.5 MVar

⁶ Analysis of network and non-network solutions is in progress to identify the credible option that maximises the present value of net economic benefit to all those who produce, consume and transport electricity in the NEM.

⁷ The subsequent stages of the RIT-T consultation process include publication of the Project Assessment Draft Report and Project Assessment Conclusions Report.

2026/27	250 MVar
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4. Option pre-requisites

Potential non-network options submitted or identified through this EOI process must

- address the requirements set out in AEMO's 2021 System Security Reports and 2022 Update in part or in full;
- be commercially and technically feasible; and
- be implementable in sufficient time to enable Powerlink to meet its regional System Strength Service Provider and NSCAS obligations in accordance with the NER.

5. Non-network options

5.2 Potential Options Identified

Potential options to address the system strength requirements identified by AEMO and Powerlink include, but are not limited to:

- synchronous condensers (with/without fly wheel);
- synchronous generators;
- modifications to existing synchronous generators to operate as synchronous condensers; and
- grid-forming BESS.

Potential options to address the NSCAS requirements identified by AEMO and Powerlink include, but are not limited to:

- synchronous condensers (with/without fly wheel);
- synchronous generators;
- modifications to existing synchronous generators to operate as synchronous condensers;
- grid-forming BESS;
- grid-following BESS; and
- contributions from existing market participants beyond their current generator performance standards (GPS).

5.3 Technical characteristics of non-network options

5.3.1 General

The technical characteristics of non-network options are summarised in Table 2 and expanded in sections 5.3.2 to 5.3.4

Table 2 Non-network solution requirements as at May 2022

Need	Declared shortfall or gap	Technical Characteristics	Anticipated Contract Period
System Strength	Up to 90MVA from March 2023	Increase system strength support to maintain the power system in a secure operating state in Central and North Queensland at full output of existing and committed IBR plant.	Up to three years

NSCAS	Up to 250 MVAR immediately and until RIT-T delivers solution	Reactive Power Absorption in SEQ	Up to three years, but can be assessed as a longer-term solution in the SEQ RIT-T
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5.3.2 System Strength

A minimum level of system strength is required to maintain

- the stability of IBR;
- satisfactory operation of protection systems; and
- the quality of supply (harmonics, flicker etc.).

Under the NER, system strength is approximated by fault level at designated fault level nodes. While three phase fault level can be used as an indicator of system strength, power system protection and power quality can be linked to the fault level more directly than stability of IBR.

IBR stability can be improved by increasing synchronous fault level, control system improvements and/or connection of grid-forming Battery Energy Storage Systems (BESS). However, fault level is critical to maintain the performance of existing protection systems and the quality of supply.

Grid-forming BESS can also help improve the quality of supply, but their contribution towards fault level to support the operation of existing protection systems is limited. A combination of grid-forming BESS and synchronous machines could also form a potential solution.

The system strength services sought under this EOI should focus on maintaining the power system in a secure operating state in Central and North Queensland, rather than a solution for increasing the Gin Gin fault level.

The currently defined minimum fault level is sufficient to maintain power system security⁸ in Central and North Queensland.

Therefore, the system strength services sought under this technical specification are required to maintain the power system in a secure operating state in Central and North Queensland. For clarity, restoring the Gin Gin fault level alone is not the primary objective of this shortfall as this may not technically address the system strength requirements. To the extent that any technically viable system strength service increases the fault level at Gin Gin, this would be a positive by-product of a proposed service.

AEMO has requested that the services be made available from 31 March 2023. Powerlink may also investigate proposed system strength services that may not meet this timeframe, where it is demonstrable that these solutions are in the best long term interest of customers or form part of a package of solutions.

Potential System Strength services must be market participants registered with AEMO and must, at a minimum:

- ensure that power system security is maintained with the coincident lower synchronous generator dispatches identified in AEMO's modelling
- be available for enablement for 95% of each year, or part thereof for the proposed service availability
- upon notification from Powerlink to enable the services, proposed services shall commit and continuously maintain the proposed service as soon as possible and within no longer than 20 minutes from the time of notification

⁸ Refer to AEMO's 2022 Update, Appendix A2, EMT studies for system strength, Success criteria, page 54.

- once the system strength response is activated, the service shall remain activated until a signal to disable is received
- continue to meet any relevant GPS when providing the system strength support services.

5.3.3 NSCAS

Based on the synchronous generator dispatch associated with AEMO's defined minimum fault level, AEMO has declared a shortfall of up to 250MVAR reactive power absorption in South East Queensland. This minimum synchronous generator dispatch corresponds to four synchronous generators in South West Queensland.

The NSCAS gap can be addressed in part or in full by:

- synchronous generators on-line in addition to the minimum fault level dispatch
- accessing reactive absorption capability beyond that defined in the respective GPS of generators in South Queensland (may be synchronous or IBR)
- grid-forming or grid-following BESS in South Queensland to absorb reactive power (at or beyond GPS).

Potential NSCAS services must be market participants registered with AEMO and their reactive power absorption capability must at a minimum:

- be available for enablement for 95% of each year, or part thereof for the proposed service availability
- upon notification from Powerlink to enable the services, proposed services shall commit and continuously maintain the proposed service as soon as possible and within no longer than 20 minutes from the time of notification. Services will largely be called upon:
 - between 12am and 4pm
 - in the shoulder and winter seasons, weekends and public holiday periods

but may be called upon at any time

- once the proposed service is activated, the service shall remain activated until a signal to disable is received
- provide a minimum capability of 50MVAR
- continue to meet any relevant GPS when providing the proposed service.

5.3.4 Common criteria

The exact requirements depend on the nature of the potential non-network options offered and the ability of the offered network support to respond to and operate in accordance with power system security requirements. Common criteria include:

Location and size

- Proposed solutions must be large enough, individually or collectively, to meet power system security requirements. However, the level of support depends on the location and type of network support offered.
- Notwithstanding the location of any solution, each proposal would require assessment in relation to technical constraints or other issues pertinent to the network connection to meet power system security requirements.

Operation and Availability

- A non-network option would need to be capable of operating for extended periods (including consecutive days/weeks) and be available over the anticipated contract period.

- If a generation service is proposed (either standalone or in conjunction with other services), the power system security services will be required to operate “on demand” at certain times to satisfy Powerlink’s power system security requirements. Such operation will be required regardless of the pool price at the time⁹.
- Proponents of generation services are advised that network support payments are intended for output that can be demonstrated to be additional to the plant’s normal operation in the National Electricity Market.
- Where there are network costs associated with a proposed non-network option, these costs will form part of the option’s economic assessment.

Reliability

- Proposed services must be capable of reliably meeting power system security requirements under a range of conditions and, if a generator, must meet all relevant National Electricity Rules requirements related to grid connection.
- Powerlink has obligations under the National Electricity Rules, its Transmission Authority and connection agreements to ensure supply reliability and power system security is maintained to its customers. Proponents of non-network options must also be willing to accept any liability that may arise from its contribution to a failure to provide system strength services and/or NSCAS, including a consequential reliability of supply failure.

Timeframe and certainty

- The AEMO 2021 System Security Reports and 2022 Update identified that the fault level shortfall and NSCAS gap currently exist and Powerlink has regulatory obligations to make services available to address the identified shortfalls. Proposed services should:
 - be able to be implemented in sufficient time to meet the identified shortfall requirements at the lowest overall cost to electricity consumers;
 - use proven technology; and
 - where not already in operation, provide information in relation to development status, such as funding and development timelines, to support delivery within the required timeframe.

Duration

- The agreement duration for any proposed service will provide sufficient flexibility to ensure Powerlink is pursuing the lowest cost investment to address the power system security requirements.

Powerlink welcomes submissions from non-network solution providers who consider that they could offer a non-network option that meets the pre-requisite requirements listed in Section 4.

6. EOI process

Powerlink is undertaking a process to seek feasible non-network options to address the requirements for power system security services.

Powerlink is seeking proposals to provide system strength support from 31 March 2023 for a period of up to three years and/or NSCAS immediately, with the potential for incremental NSCAS growth, for a period of up to three years¹⁰ and based on the outcome of the current RIT-T.

Powerlink is seeking proposals that either fully or partially address the power system security requirements. Powerlink may also investigate proposed services that may not meet the required

⁹ The National Electricity Rules prevent a generator that is providing network support from setting the market price.

¹⁰ The outcome of the RIT-T currently underway is expected to influence these requirements in the longer term and are yet to be determined.

timeframes where it is demonstrable that these solutions are in the best long-term interest of customers.

Based on submissions received to this EOI, the subsequent economic analysis will identify the optimal timing and requirements of a non-network solution and/or combination of options (i.e. non-network and network) which deliver the lowest overall cost to customers.

Note: Powerlink

- has completed an assessment of the viability of a network option to install a synchronous condenser which provides a benchmark against which non-network options proposed can be compared and
- is concurrently exploring interest for the installation and operation of large-scale BESS on its transmission network and invites submissions from the proponents involved in that process¹¹.

7. Network Support Service legal and commercial requirements

Powerlink's standard Network Support Contracting Principles can be found in Appendix A.

8. Expressions of interest

Powerlink welcomes proposals from potential providers of non-network solutions to address the system strength shortfalls and NSCAS gap identified in AEMO's System Security Reports.

Submissions should be presented in writing and clearly identify the author of the submission, including contact details for subsequent follow-up if required. If parties prefer, they may request to meet with Powerlink ahead of providing a written response.

The EOI period will close by COB Friday, 24 June 2022. It is anticipated the proposed solution will be published on Powerlink's website by the end of September 2022.

8.2 Submissions from non-network providers

The EOI process is not a tender. Submissions are requested so that Powerlink can fulfil its regulatory obligations to analyse non-network options. If a non-network option appears to be a viable alternative, Powerlink will engage with non-network providers to clarify commercial terms.

Submissions from potential non-network providers should contain the following information:

- details of the party making the submission (or proposing the service), clearly stating which power system security service and/or services the submission is addressing
- technical details (connection point etc.) to allow an assessment of a non-network option to be undertaken
- sufficient information to allow the costs of options (non-network and network) to be prudently and efficiently assessed as part of the economic assessment to ensure the least cost outcome for customers
- an assessment of the ability of the proposed non-network option to meet the technical requirements of the Rules
- timing of the availability of the proposed non-network option and
- other material that would be relevant for the assessment of the proposed service.

As the submissions may be made public, any commercially sensitive material, or material that the party making the submission does not want to be made public, should be clearly identified. It should be noted that Powerlink intends to publish the outcomes of the process.

¹¹ Given this EOI is a requirement of the NER, in order to be eligible to be considered to receive regulated funding for power system security services, potential proponents of non-network solutions are required to lodge submissions through this EOI process.

Potential proponents of non-network solutions are encouraged to contact Powerlink prior to the lodgement of submissions for further clarification and/or assistance if required.

Please note: Emailed submissions are subject to a 10MB file size (including email text). Please contact networkassessments@powerlink.com.au to arrange a file transfer if submissions exceed this limit.

Contact details:

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PO Box 1193
VIRGINIA QLD 4014

Tel: 0409 270 293

Submissions or enquiries can be emailed to: networkassessments@powerlink.com.au

8.3 EOI assessment and decision

Powerlink intends to carry out the following process to evaluate technically feasible options (both non-network and network) to meet the power system security services needs identified in AEMO's System Security Reports.

Step 1	Publish EOI	19 May 2022
Step 2	Submissions due	24 June 2022
Step 3	Publication of the decision	September 2022

Powerlink reserves the right to amend the timetable at any time.

8.4 EOI engagement process

Powerlink will:

- inform Powerlink's Customer Panel of the need for Powerlink to carry out its obligations as the System Strength Service Provider and Primary Transmission Network Service Provider for Queensland in accordance with the NER
- publish this request for power system security services on its website
- issue a Notice via AEMO Communications to advise the NEM of the EOI and also advise all members of Powerlink's Non-Network Engagement Stakeholder Register that an EOI has been issued
- undertake direct engagement with possible non-network solution providers and any interested parties
- publish a summary on its website noting the outcomes of the analysis and recommended solution for implementation.

The information provided on Powerlink's website in relation to the outcome of the EOI is not intended to contain confidential data.

APPENDIX A

NETWORK SUPPORT CONTRACTING FRAMEWORK

Whilst the ultimate structure and content of any non-network support agreement will depend on the particular circumstances of the non-network support that is proposed to be provided, the following is an outline of the key contracting principles that are likely to appear in any non-network support agreement:

1. **Conditions precedent** – a non-network support agreement may contain conditions precedent that need to be satisfied by either or both parties prior to the substantive obligations in the agreement having force and effect (e.g. obtaining necessary approvals, obtaining funding, testing to confirm non-network support services meet certain requirements etc.).
2. **Term:**
 - Start Date and End Date
 - Ability of Powerlink to extend the Term for a specified period/s and how the charges payable during the extended period will be calculated.
3. **Non-Network Support Services** – describes the services to be provided and the times and manner in which they will be provided, including:
 - General obligations
 - AEMO directions
 - Provision of metering points;
 - Performance standards.
4. **Operation and Maintenance** – inclusion of these clauses will depend on the nature of the non-network support that is to be provided but may include clauses in relation to operation, maintenance, generator capacity, modifications, right to inspect etc.
5. **Representations and Warranties** - and consequences of making representations and breaching warranties. Inclusion of these clauses will depend on the nature of the non-network support that is to be provided.
6. **Charges and Invoicing** – describes the charges payable by Powerlink to the Service Provider, including how those charges are to be calculated, when those charges are to be invoiced and GST. May also address NEM Revenue and avoided TUoS charges.
7. **Payment:**
 - Paying invoices
 - Disputed Items
8. **Liability:**

Whilst the extent of the liability of the Service Provider to Powerlink will depend on the type of non-network support that is proposed to be provided and other relevant factors, generally the types of liability provisions Powerlink would seek to include in a Non-Network Support Agreement are as follows:

 - **Limitations of liability and indemnity** – will set out the extent of the Service Provider's liability to Powerlink, including any specific exclusions and/or limitations or indemnities;

- **'Consequential loss' excluded** – generally except for liabilities provided for in the above clause, neither party will be liable for the other's loss of profits, loss of revenue, loss of anticipated profit, loss of commercial opportunity, loss of business, cost of finance or increases in operating costs;

9. Insurance - The insurances the Service Provider is required to have in place will depend on the type of non-network support that is proposed to be provided and other relevant factors.

10. Default and Termination – these clauses will depend on the nature of the non-network support that is to be provided but will generally address:

- **Breach** – sets out the process for dealing with breaches, including the notice requirements and rectification period and what is to occur if there is a failure to cure a breach (including a right of termination);
- **Termination for non-performance** – depending on the type of non-network support that is to be provided, the agreement will detail what is to occur where there is non-performance and ongoing non-performance, such as no entitlement to charges, reduction in charges, termination etc.;
- **Termination for insolvency** – allows a party to terminate by written notice where there is an insolvency event in respect of the other party;
- **Survival** – outlines which clauses in the agreement will survive despite termination of the agreement. (e.g. confidentiality)

11. Dispute Resolution provisions - Sets out a process whereby disputes are dealt with efficiently.

12. Confidentiality, including the instances where disclosure of confidential information is permitted.

13. Media – Sets out a process whereby approval is sought and obtained before a party discloses any information through any communications media concerning the non-network solution or responds to any enquiry from any media.

14. Change in Law – sets of procedure for dealing with changes in law affecting the agreement.

15. General boiler plate provisions, such as:

- Entire agreement
- No representations or warranties
- Amending agreement
- Severability
- No Assignment
- No Merger
- Notices
- Legal costs and stamp duty
- Counterparts
- Governing law;
- Covid-19 provisions.

16. Defined Terms and Interpretation provisions