

Meeting Date: 21 August 2024

SYSTEM OPERATOR SERVICE
PROVIDER AGREEMENT REVIEW AND
RESET – UPDATE FOR SRC

SECURITY
AND
RELIABILITY
COUNCIL

The Authority's commercial team will provide SRC members with an update on its work to review the system operator service provider agreement, a key document governing the relationship between the parties. The purpose and context for this update item is noted in the paper, so we have not included a cover paper.

System operator service provider agreement – review and reset

Prepared by:

Michael Clark, Project Manager

Peter Taylor, Manager Commercial

Mark Herring, General Manager Corporate and Market Services

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1. Purpose

- 1.1. The purposes of this paper are to:
 - (a) inform the Security and Reliability Council (SRC) of the Authority's objectives for its review and reset of the system operator service provider agreement,
 - (b) seek advice from the SRC on its view of the security and reliability implications for those objectives, and for the system operator's functions.

2. Context

- 2.1. The system operator service is the largest and most costly of the Authority's service providers and is forecast to cost \$50m in 2024-25. As the SRC will be aware, the service is critically important for facilitating the wholesale market, ensuring quality of supply and managing short-and-medium term security of supply.
- 2.2. Unlike the other MOSPs, the system operator service cannot be commercially tendered since under the Electricity Industry Act 2010, Transpower is required to perform the system operator service for New Zealand. In the absence of commercial pressure, the Authority carries out an extensive review and reset process is used to ensure the service remains current, fit for purpose and efficient. This includes the use of external experts in areas such as finance, ICT, and business and system processes and performance to help inform the reset.
- 2.3. The previous review occurred in 2020 and resulted in few variations to the base agreement. The review and reset that is underway must be completed to give effect to an updated SOSPA to take effect on 1 July 2025.
- 2.4. The SOSPA in essence is aligned to and works alongside the system operator obligations in the Act and the Code and collectively the system operator must comply with its obligations under the Act, Code and the SOSPA, in that order of legal priority.
- 2.5. Critically, as a MOSP, the system operator must:
 - (a) act consistently with the Authority's section 15 statutory objective;
 - (b) deliver services to the objective level of a reasonable and prudent system operator; and
 - (c) must be impartial in its dealings with all industry participants, including Transpower in its role as Grid Owner.
- 2.6. For the coming term, the Authority in its review and reset intends to seek a reduced contractual term of three (3 years), rather than the usual five-year term. This is to allow more flexibility in the service in light of the considerable changes and increasing uncertainty in the electricity system in coming years, which are expected to have material effects and demands on the system operator role.

3. The Authority's nine objectives

- 3.1. The Authority has identified nine core objectives to progress through negotiations. These are outlined in the table below, along with brief notes on the potential implications of each objective for security and reliability. The Authority would be grateful for the SRC's views on the objectives as they relate to security and reliability, to help inform the Authority's negotiation.

Objective	Summary of outcomes for that objective	Security	Reliability
Strategic Outlook / Fit for Future	<ul style="list-style-type: none"> • SO is actively seeking the most efficient system and market outcomes • Better data sharing by the SO, including insights and experience • SO is working collaboratively with the Authority to lead innovative initiatives approved by the Authority • SO is prudently managing security and reliability including by actively participating in industry-wide system stress testing to ensure adequate preparedness for high impact, low frequency events 	<ul style="list-style-type: none"> • Improved preparedness for security-related events through annual systems stress testing and heightened awareness and training • Innovative reserve and ancillary service arrangements, including those provided by new participant classes 	<ul style="list-style-type: none"> • Proactive responsiveness to training and operational improvements in the use of tools to support reliability and quality of supply • Improved automated tools (ICT) and more capacity and capability focused on connections, systems modelling and outage coordination
High Quality Performance	<ul style="list-style-type: none"> • SOSPA facilitates and encourages high quality and continuous performance and improvement, and its measurement and reporting • SO meets international good practice • Performance at all times meets reasonable and prudent system operator standard and delivers to the Authority statutory objective 	<ul style="list-style-type: none"> • Proactive, well-prepared management of security demands including calm, decisive, and accurate responses to potential security events to mitigate the risk of security escalations • Well-developed and maintained readiness for emergency management services • Active and innovative ancillary services product use and procurement 	<ul style="list-style-type: none"> • Better collection, collation and sharing of electricity quality data and insights • Better collaboration with the Authority on policy responses and improvements to reliability issues, including quality of supply
Impartiality	Enhanced impartiality obligations to ensure that all SO activities are (and are perceived to be) sufficiently impartial and transparently so, to ensure strong stakeholder trust in SO services and fair treatment of all participants	<ul style="list-style-type: none"> • Impartial, collaborative and even-handed in the procurement and use of ancillary services • Impartial and even-handed approach to outage coordination and connections that minimises security of supply risk • SO works collaboratively with the Authority to deliver security of supply information, insights, and advocate for solutions 	<ul style="list-style-type: none"> • Better collection, collation and sharing of electricity quality data and insights • meaningful engagement with the growing, increasingly diverse stakeholder base and sharing of the insights gained with the Authority to enable an improving policy response, including market design initiatives to improve promotion of competition, reliability of supply, and efficiency of that supply

Risk	<p>The SO actively participates in the identification, mitigation and management of risk and transparently shares risk management reporting and risk identification with the Authority</p>	<ul style="list-style-type: none"> • SO authoritatively acts on key systems resilience and risks early, determining how best to manage such risks, and actively communicating the issue(s) and proposed solutions early. • SO challenges its own processes and proactively advises on Code changes as these are identified to the Authority for the Authority to take action. 	<ul style="list-style-type: none"> • Identification and improvement of “minor” tools that impact reliability • More in-depth focus on aspects of quality such as frequency and voltage variability within bands
ICT / Cyber	<ul style="list-style-type: none"> • ICT and cyber best practice is achieved • strategic investment is accurately prioritised including that it is efficient, proactive, innovative, fit-for-purpose • Changes to be carried out in a manner that ensures seamless, safe integration, and collaboration with other MOSPs and participants • Proactive preparedness for advances in cyber threats and technology change that can drive innovation and improvement in the sector, and in its own ICT systems 	<ul style="list-style-type: none"> • Better tools and data to automate aspects of supply security and reduce human error risk • Better expanded and focused data to improve security of supply and to mitigate causative factors, such as downstream (below the GXP) impacts on supply 	<ul style="list-style-type: none"> • Better tools and data to deal with quality and reliability of supply • Better responsiveness to restore voltage, frequency (reliable quality) • Better expanded and focused information and data to improve supply reliability
Reporting, Assurance & Audit	<ul style="list-style-type: none"> • clear, timely, complete and effective reporting of performance that enables oversight of the system operator service • Reporting that provides relevant, balanced and transparent information to stakeholders on SO service provision and performance • Audits and assurance exercises objectively confirm a fit-for-purpose, high-quality performing, impartial and proactive SO 	<ul style="list-style-type: none"> • Reporting, papers, presentations (information and insights) are provided in a complete, transparent and timely manner 	<ul style="list-style-type: none"> • Reporting, papers, presentations (information and insights) are provided to the SRC in a complete, transparent and timely manner

The Authority is also aiming to achieve the three objectives below. These have less immediate impact on security and reliability but are critically important for the Authority to perform its wider functions in a manner that is consistent with its statutory objectives:

Finances	<ul style="list-style-type: none">• Efficient, cost-effective purchase of system operator services for the long-term benefit of consumers to deliver value for money		
Mechanics & Timing	<ul style="list-style-type: none">• Processes and governance are aligned as much as possible to ensure external milestones and legal requirements are consistently met		
Projects	<ul style="list-style-type: none">• Projects and professional services performed by SO are delivered in accordance with best practice		

4. System operator functions

- 4.1. The Authority also requests the SRC's feedback on matters the Authority ought to take into account as they apply to each of the system operator's functions.
- 4.2. We are keen to gauge SRC member's views and advice on how well the system operator performs its functions and are keen to receive any insights that will better inform the Authority when considering the review and reset of the SOSPA and conducting future policy development on relevant aspects of system operator services.
- 4.3. The system operator service currently consists of six core functions. As set out in the current system operator strategic plan, these are (with slight edits including for context and consistency):
 - (a) *Manage security* – manage the flow of electricity from generation sources to points of demand all around the national grid, keeping frequency and voltage within operating limits and avoiding cascade failure (these are the Principal Performance Obligations (PPOs)).
 - (b) *Schedule and dispatch the power system* – coordinate electricity supply resources and balance them with the demand for electricity in real-time.
 - (c) *Monitor and coordinate security of supply* – regularly assess the adequacy of resources on the power system to meet expected demand and provide information to the industry that allows them to respond to potential supply risks, in both the operational and investment time frames.
 - (d) *Manage system security risks* – undertake long-term planning and engineering studies to ensure any threats to real-time operation of the system are understood and mitigated. Procure and schedule ancillary services to keep the system in a secure operating state.
 - (e) *Monitor and assess compliance* – ensure equipment connected to the power system is operating in a way that makes the system accessible for all participants. Advise asset owners when they are commissioning and refurbishing their plant and monitor its operation against performance requirements.
 - (f) *Assess and coordinate outages* – work closely with industry, including Transpower in its grid owner role, to ensure they can undertake maintenance on the system and keep assets in sound operating condition, without compromising supply to consumers.