

System Control

Schedule of Audit and Inspection

Background

This Schedule of Audit and Inspection is issued pursuant to System Control Technical Code (SCTC) Clause 6.22.1 (e). It covers the 2022/23 Financial Year with a proposed Schedule covering the forward four year period. This Schedule was established with reference to the requirements laid out in Clause 6.22.1 (c). This Schedule of Audit and Inspection is available on Power and Water's website.

Benefits

Audits will provide ongoing benefits to all system participants and the audits will:

- Identify if documented processes and procedures are being adhered to, indicate if the sequence of processes are correct and effective, and aid system participants to gauge the effectiveness of the procedure in place,
- Assist with continuous improvement, improve awareness and understanding of the process requirements,
- Enable government policy by ensuring technical requirements and specifications are maintained, and
- Assist to minimise risk.

2022/23 Schedule

System Control will focus on four key areas in FY2022/2023:

1. Station Black Procedures

Station Black Start Procedures form a critical part of the power system restart and restoration processes. Ensuring that these procedures are modern and effective is critical in ensuring a smooth restoration following major system disturbances. Equally important is ensuring that staff involved in actioning these procedures are well informed and clear on their requirements as part of the procedure.

These audits seek to ensure Black Start Procedures are being adhered and to confirm generator's compliance with SCTC Clause 5.7.2 (Black System Procedures). The stations identified for technical audits in this period are Katherine Power Station (KPS), Weddell Power Station (WPS) and Ron Goodin Power Station (RGPS). Where appropriate to do so in reference to operational power system requirements at the time of the audit, an actual black station test will be undertaken as part of the audit.

2. System Restart Procedures

System Restart Procedures form the second critical part of the power system restart and restoration processes. Ensuring that these procedures are modern and effective is critical in ensuring a smooth restoration following major system disturbances. Equally important is ensure that staff involved in actioning these procedures are well informed and clear on their requirements as part of the procedure.

This audit seeks to ensure System Control has prepared a procedure that is compliant with the requirements of SCTC Clause 5.7.3 (Black System Restart Procedure). In particular the Alice Springs System Restart Procedure will reviewed in detail during this audit period.



3. Model Data and Information Governance

Power System Modelling is a key aspect of power system design, future planning and operational planning. It is a widely used asset that underpins a number of key decisions and key government policy. A robust governance framework is required to assure the integrity of the model when being changed.

This audit will review the processes involved in governing the information contained within the steady state network model and the application of these processes in line with NTC Clause 1.7.1.b.5 (Obligations of the Network Operator – modelling data). This will seek to ensure that both the network data and asset data in the models are accurate and up to date and that the processes governing the change and updating of information is effective.

4. Ongoing Generator Compliance

Generators have an obligation to ensure ongoing compliance of their machines to be in line with both the System Control Technical Code and the Network Technical Code. Ensuring that existing plant remains compliant has strong benefits to ongoing system security and reliability, and ensures that information used in longer term planning remains consistently informed of current performance.

The intent of this audit is to ensure compliance of Jenbacher generating units at Owen Springs Power Station meet the requirement of the Network Technical Code. This work stems from a significant level of rectification work undertaken by Territory Generation in response to the 2019 Alice Springs System Black. This audit will be established in regard to SCTC 6.22.1.c.1 (Requirement for technical audit and inspection), given the importance of Owen Springs Power Station in providing energy and services to the Alice Springs Power System and the degree of changes made since 2019.

In addition, C7 at Channel Island in the Darwin - Katherine System will be reviewed based on information gathered during an unrelated project.

Proposed Schedule

The proposed schedule will focus on continuing work regarding the audit sections above with an intent to move these to cyclic-based audits to ensure that best practice remains current.

Auditing of Protection and Plant Outage Procedures is proposed to be undertaken from FY2023/24 onwards. The forward looking schedule will be adjusted as necessary to account for new power system entrants.

Schedule of Audit and Inspection

Area of Technical Audit and Inspection	Fixed Schedule	Proposed Schedule			
	FY2022/2023	FY2023/2024	FY2024/2025	FY2025/2026	FY2026/2027
Station Black Procedures	<ul style="list-style-type: none"> ▪ Katherine Power Station ▪ Ron Goodin Power Station ▪ Weddell Power Station 	<ul style="list-style-type: none"> ▪ Tennant Creek Power Station ▪ Channel Island Power Station 	<ul style="list-style-type: none"> ▪ Katherine Power Station ▪ Owen Springs Power Station 	<ul style="list-style-type: none"> ▪ Ron Goodin Power Station ▪ Weddell Power Station 	<ul style="list-style-type: none"> ▪ Katherine Power Station ▪ Ron Goodin Power Station ▪ Weddell Power Station
System Restart Procedures	<ul style="list-style-type: none"> ▪ Alice Springs Power System 	<ul style="list-style-type: none"> ▪ Darwin-Katherine Power System 	<ul style="list-style-type: none"> ▪ Tennant Creek Power System 	<ul style="list-style-type: none"> ▪ Alice Springs Power System 	<ul style="list-style-type: none"> ▪ Darwin-Katherine Power System
Model Data and Information Governance	<ul style="list-style-type: none"> ▪ Network Assets 	<ul style="list-style-type: none"> ▪ TGEN Assets 	<ul style="list-style-type: none"> ▪ All Other Proponents 	<ul style="list-style-type: none"> ▪ Network Assets 	<ul style="list-style-type: none"> ▪ TGEN Assets
Ongoing Generator Compliance	<ul style="list-style-type: none"> ▪ C7 ▪ GEJ (OSPS) 	<ul style="list-style-type: none"> ▪ W1 ▪ MAN 	<ul style="list-style-type: none"> ▪ C8 ▪ GEJ (TCPS) 	<ul style="list-style-type: none"> ▪ P1 ▪ P2 	<ul style="list-style-type: none"> ▪ K1 ▪ K4
Change Management Procedures	<ul style="list-style-type: none"> ▪ TGEN 	<ul style="list-style-type: none"> ▪ Network Operator 	<ul style="list-style-type: none"> ▪ ENI ▪ EDL 	<ul style="list-style-type: none"> ▪ TGEN 	<ul style="list-style-type: none"> ▪ Network Operator
Protection	-	<ul style="list-style-type: none"> ▪ TGEN 	<ul style="list-style-type: none"> ▪ Network Operator 	<ul style="list-style-type: none"> ▪ ENI ▪ EDL 	<ul style="list-style-type: none"> ▪ TGEN
Reporting Procedures	<ul style="list-style-type: none"> ▪ Power System Controller 	<ul style="list-style-type: none"> ▪ All Proponents 	-	<ul style="list-style-type: none"> ▪ Power System Controller 	<ul style="list-style-type: none"> ▪ All Proponents
Plant Outage Procedures	-	<ul style="list-style-type: none"> ▪ Power System Controller 	<ul style="list-style-type: none"> ▪ All Proponents 	-	<ul style="list-style-type: none"> ▪ Power System Controller
Operating Protocols	<ul style="list-style-type: none"> ▪ TGEN 	<ul style="list-style-type: none"> ▪ ENI ▪ EDL 	<ul style="list-style-type: none"> ▪ Network Operator 	-	TGEN