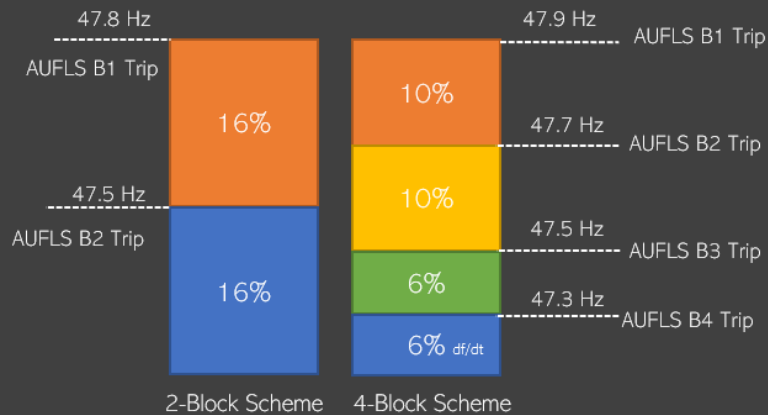


AUFLS Transition Quarterly Industry Session - March 2024

What Are We Doing?

Transitioning from a 2-block to a 4-block AUFLS scheme



Why Are We Transitioning?

EIPC Requirement

Informed by



AUFLS Technical Report

When is the transition happening?

Start: 1 January 2024

End: 30 June 2025

Who Is Involved?

AUFLS Provider has the obligation to transition.

EA is the project owner and responsible for compliance.

SO to conduct system security studies

SO is supporting the AUFLS Provider and EA in the transition process.



Contact Us

Transpower website: [AUFLS web page](#) and [AUFLS Project web page](#)

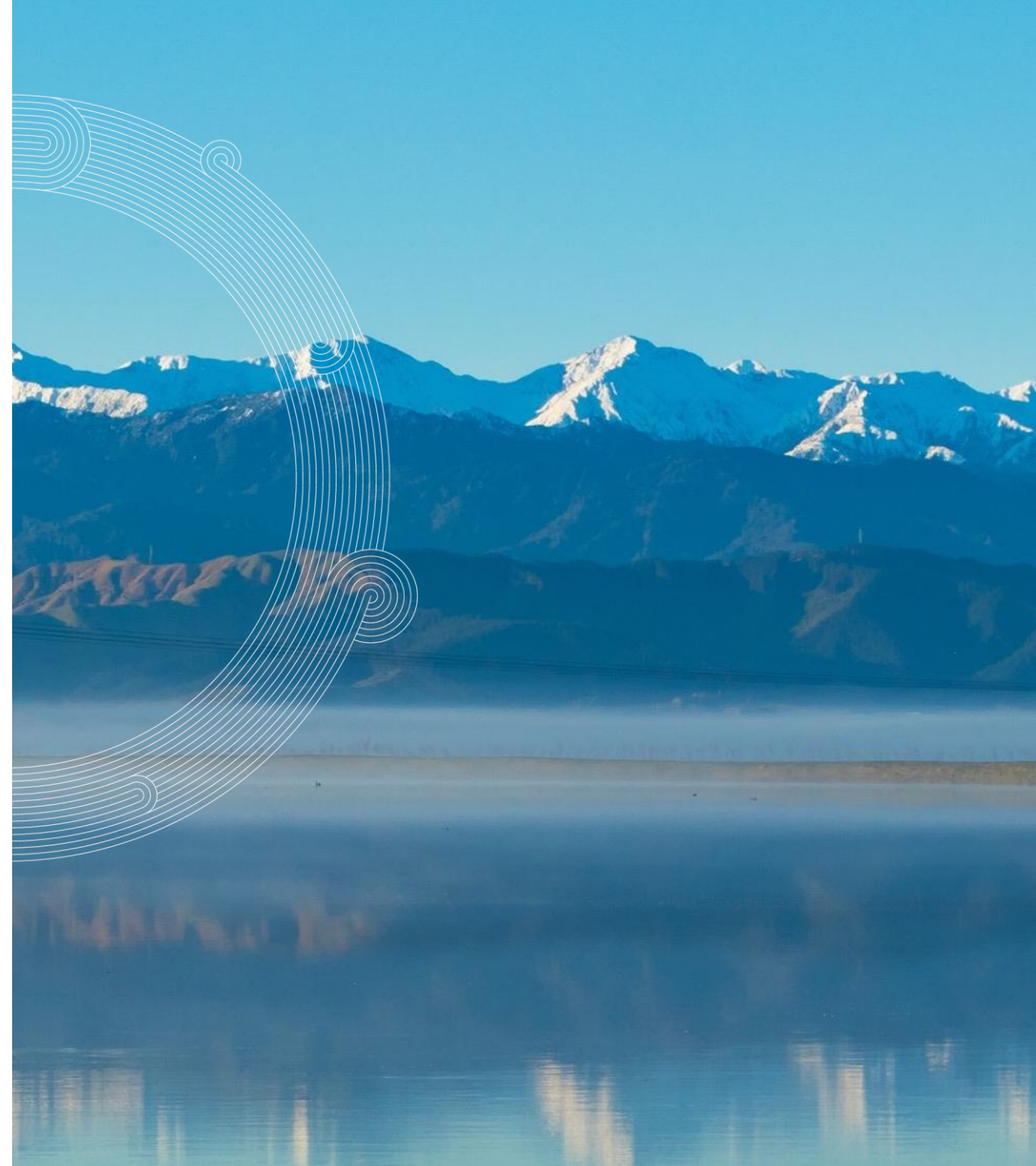
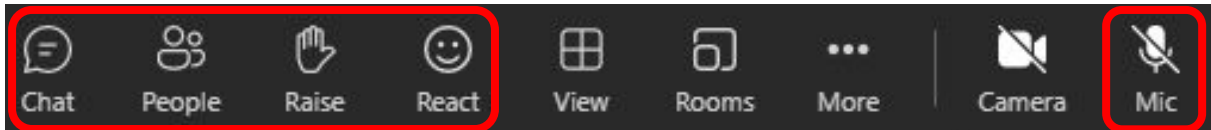
Transpower Customer Newsletter / EA Market Brief

AUFLS Transition queries: AUFLSTransition@transpower.co.nz

AUFLS Portal queries: SOcustomerportal@transpower.co.nz

Routine Testing Results: compliance@transpower.co.nz

Welcome and housekeeping





Agenda

High level recap on the AUFLS transition process

EA report

- What data is reported to the EA

AUFLS transition dashboard

- Number of feeders that have transitioned to date
- What is the projection of block sizes until the transition is complete
- Risks monitored and their trends

Lessons learnt

BAU requirements linked to the transition

- Test Results

BAU: Annual load data submission

Questions & feedback

The AUFLS Transition Project Team

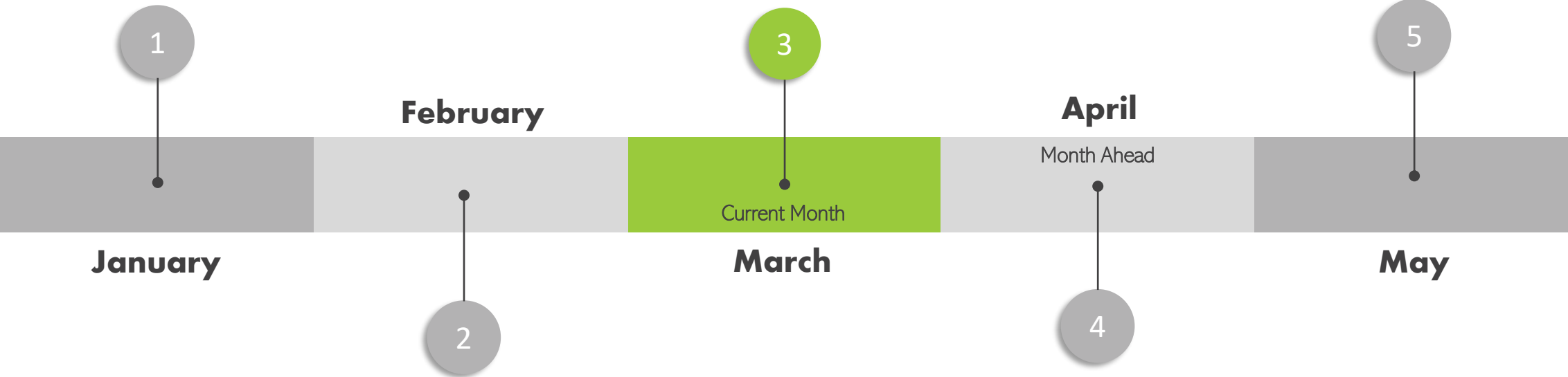
Marije Postma	Lead Project Manager Markets and Business Group.
Alexey Kabalinskiy (Task Lead) Ivani Molver, Connor McCarthy	Power Systems Engineers Supporting the project by performing the studies and part of the team managing the transitions.
Dr Nyuk-Min Vong	Principal Engineer – Power System Development Supporting the project team as required.
Kevin Wronski	Principal Engineer – Compliance Supporting the project team as required.





High-level recap on the AUFLS transition process

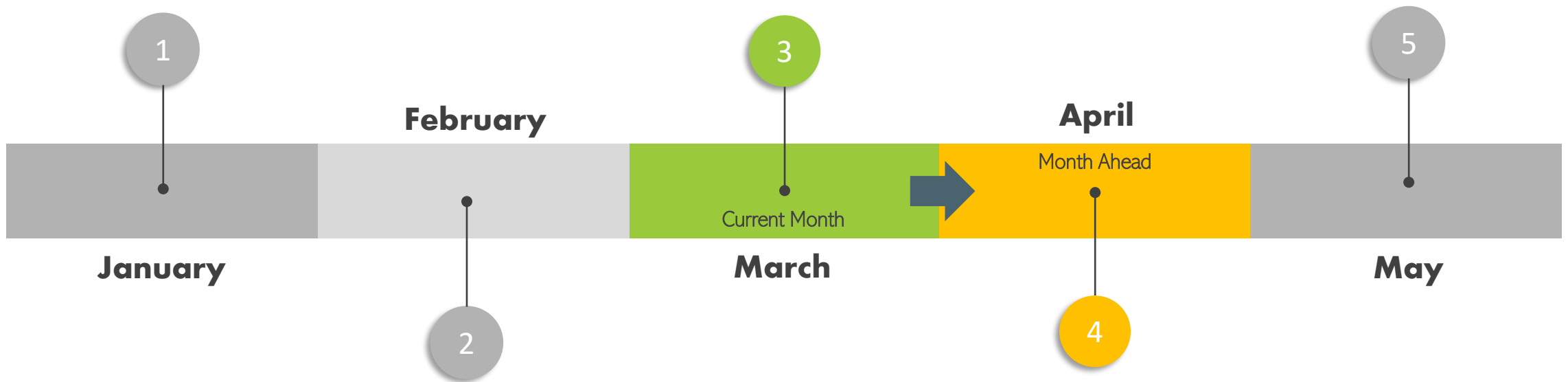
Transition Process Recap



Transition Process Recap

AUFLS Provider to supply Transition information:

- Progress update of feeders transitioned to date
- Any change request for the month ahead



SO to perform system security studies for the month ahead:

- Update the AUFLS models with data supplied by AUFLS Provider
- Setup the casefile and run the study
- Inform AUFLS Provider if change is accepted/declined
- Report findings and non-adherence to the EA

Transition activities and agreed dates

SO Lead: Connor McCarthy

January						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

SO Lead: Alexey Kabalinskiy

February						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

SO Lead: Ivani Molver

March						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

SO Lead: Connor McCarthy

April						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

SO Lead: Alexey Kabalinskiy

May						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

SO Lead: Ivani Molver

June						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

SO Lead: Connor McCarthy

July						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

SO Lead: Alexey Kabalinskiy

August						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Key:

- NZ National Holidays
- SO - Send 1-week reminder to AUFLS Providers to provide ITP
- AUFLS Provider - Submit monthly ITP Progress/Change Request
- SO - Informs AUFLS Provider of outcome change request
- AUFLS Provider - Acknowledges acceptance/rejection of change request
- AUFLS Team - Inform other SO groups (incl SO Gatekeeper)
- SO - Quarterly Industry Progress Meeting
- Updated AUFLS Percentages in Production

SO Lead: Ivani Molver

September						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

SO Lead: Connor McCarthy

October						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

SO Lead: Alexey Kabalinskiy

November						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

SO Lead: Ivani Molver

December						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Transition activities and agreed dates

SO Lead: Connor McCarthy

April						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

- Key:
- NZ National Holidays
 - SO - Send 1-week reminder to AUFLS Providers to provide ITP
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EA report

EA Report

Informs the overall status

AUFLS Provider		Code	Status (G/A/R)	Transition	Transition Dates (Planned / Actual)	Total Feeders		Feeders Commissioned (#)	Comments
						#	% of Total		
AUFLS Provider 1	AP1		<input checked="" type="checkbox"/> Transition Plan in place	Planned Start – January 2024	45	3.40%	0	Transition is delayed. Change request for Mar-2024 has been approved. Change requests for future months will be assessed one month in advance	
			<input type="checkbox"/> Transition complete	Planned Finish – March 2024					
				Actual Start – January 2024					
				Actual Finish –					
AUFLS Provider 2	AP2		<input checked="" type="checkbox"/> Transition Plan in place	Planned Start – July 2024	38	2.90%	0	Transition has not started. Assumed to be proceeding as planned.	
			<input type="checkbox"/> Transition complete	Planned Finish – March 2025					
				Actual Start –					
				Actual Finish –					
AUFLS Provider 3	AP3		<input checked="" type="checkbox"/> Transition Plan in place	Planned Start – January 2024	99	7.60%	0	Did not complete agreed transition activities in Jan-2024	
			<input type="checkbox"/> Transition complete	Planned Finish – March 2025					
				Actual Start – February 2024					
				Actual Finish –					
Report on activities per AUFLS Provider				Activities Reported: <ul style="list-style-type: none">Committed start/end datesCommitted feeders to be transitionsActual feeders to be transitioned					Comments: <ul style="list-style-type: none">Elaborate any facts regarding transition to the EA

Legend

	Work on track to complete AUFLS transition as planned
	Risk that NI AUFLS Providers may not complete transition on time as per agreed plan and/or has requested a change to original plan which is under review
	Transition plan not completed within agreed timeframe and / or NI AUFLS Provider not following change request assessment outcome (i.e. rejection of the change request)

EA Report

Risks

Risks, Risk Detail, Risk Level, Mitigation and comments

Risk title	Last Month	Risk level This Month	Residual
Transition Plan is not followed during Transition Period (<u>insufficient</u> prior notice)	Low	Low	Low
Transition Plan is not followed during Transition Period (<u>sufficient</u> prior notice)	Low	Low	Low
Key Resourcing during AUFLS Transition Period.	Low	Low	Low
Reactive Equipment not available (e.g. Hamilton	Low	Low	Low

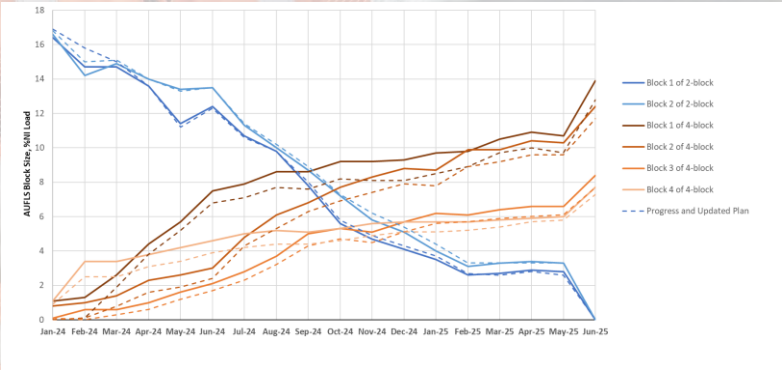
Changes

Changes from the original plan

AUFLS Provider		Code	Study horizon 2024												2025						
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
1	Deviation from original plan per AUFLS provider																				
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					

Impact

Impact to the block sizes over the transition period



EA uses the report to assess and handle non-adherence



AUFLS Transition dashboard & lessons learnt

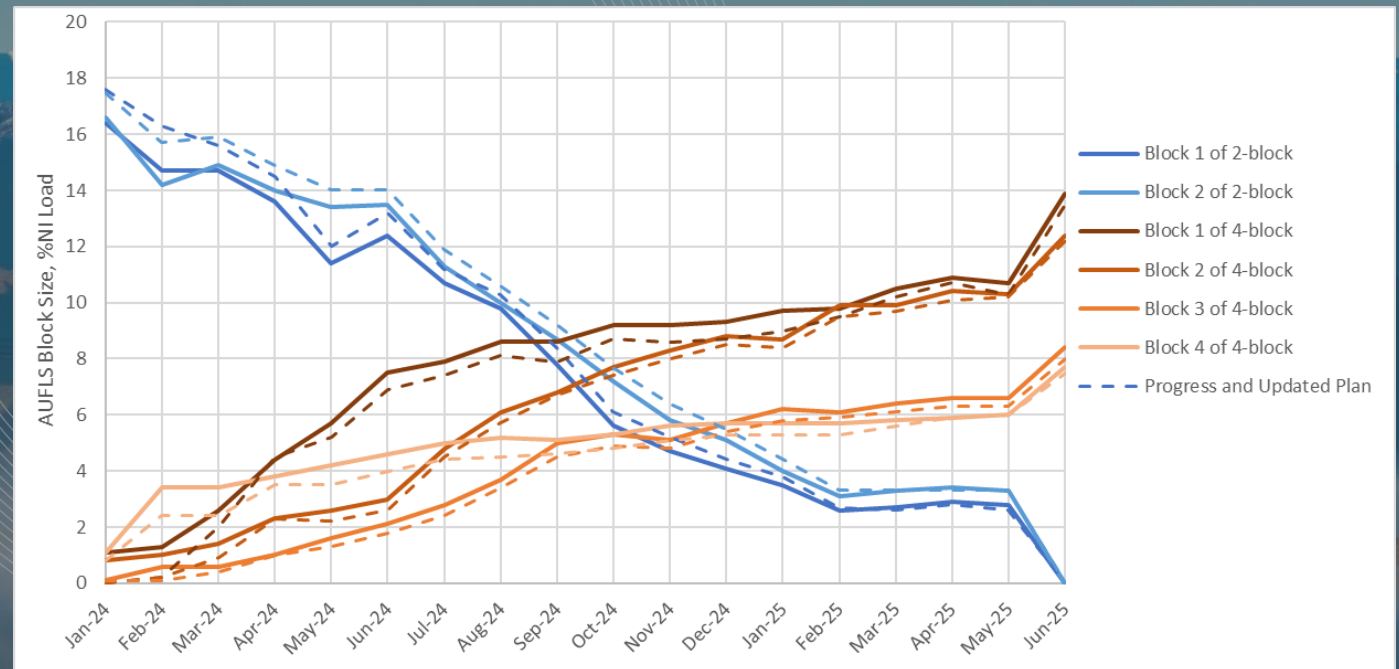
AUFLS Transition Overview

Overall Transition Status



12 % complete
154 feeders transitioned
Unassessed changes

Block Size Outlook



Legend



Work on track to complete AUFLS transition as planned

Risk that NI AUFLS Providers may not complete transition on time as per agreed plan and/or has requested a change to original plan which is under review

Transition plan not completed within agreed timeframe and / or NI AUFLS Provider not following change request assessment outcome (i.e. rejection of the change request)

AUFLS Transition Overview

Overall Transition Status



12 % complete
154 feeders transitioned
Unassessed changes

Risks to system security



Risk title	Risk level (Last Month)		
	March	April	Residual
Transition Plan is not followed during Transition Period (<u>insufficient</u> prior notice)	Low	Low	Low
Transition Plan is not followed during Transition Period (<u>sufficient</u> prior notice)	Low	Low	Low
Key Resourcing during AUFLS Transition Period.	Low	Low	Low
Reactive Equipment not available (e.g. Hamilton STATCOM / UNIRPC)	Low	Low	Low

Legend

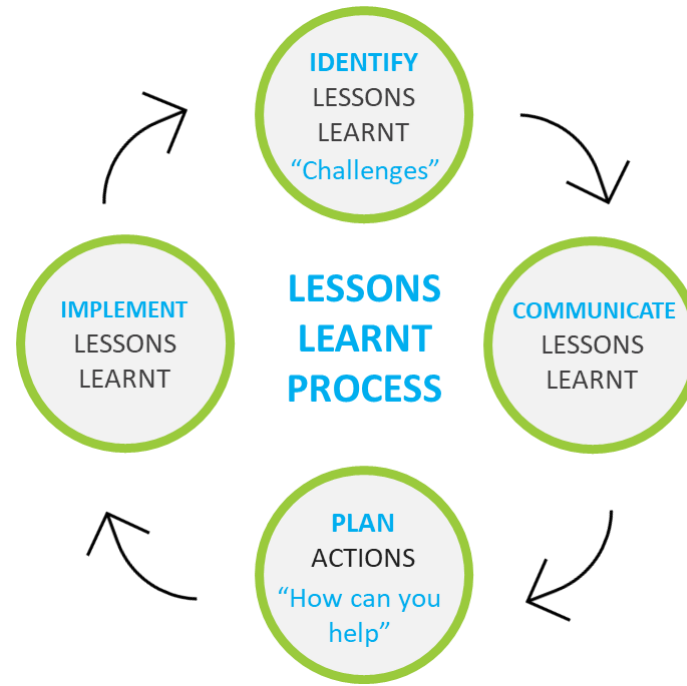


Work on track to complete AUFLS transition as planned

Risk that NI AUFLS Providers may not complete transition on time as per agreed plan and/or has requested a change to original plan which is under review

Transition plan not completed within agreed timeframe and / or NI AUFLS Provider not following change request assessment outcome (i.e. rejection of the change request)

Lessons learnt



Challenges

Submitting ITP and **not specifying changes**.

Consolidating **previous submissions** for the month ahead is a challenge esp. when considering multiple AUFLS Providers (prone to error).

How you can help

Require **clear communication of changes on the ITP and in email** needs to be provided for the month ahead. We have had good communications from some AUFLS providers so far.

AUFLS providers need to **advise the SO of changes 1 month in advance including previous communications** as per the agreed process. AUFLS provider can inform the SO in advance, but a reminder needs to be sent a month before changes.

Lessons learnt

Challenges	How you can help
Changes submitted after the submission date triggers our risks and cannot be accommodated in studies.	AUFLS Providers need to adhere to the submission dates . SO will send a reminder 1 week before. Any non-adherence to the process needs to be reported to the EA.
Feeder naming inconsistent with the portal creates a warning in our scripts and introduces errors with mapping and AUFLS block size calculation for our studies.	Feeder naming in the portal is locked, that is why AUFLS Providers must use consistent naming . However, load types, AUFLS allocations, DG and IL numbers could be changed and are updated by several AUFLS providers.
New feeders not configured in the portal and have no historical load data, which might introduce errors with AUFLS block size calculation for our studies.	<p>AUFLS Providers should:</p> <ul style="list-style-type: none">• add and configure new feeders in the portal following the existing process,• if armed for AUFLS, advise SO the estimated loading (average, peak, and trough).• the above will help mapping the feeder correctly and improve the accuracy of AUFLS block size calculation for our studies.• use consistent feeder naming.• Use "change request" process to inform AUFLS Transition of this change.
There needs to be effective collaboration between: AUFLS Provider and SO AUFLS Provider and EA	<p>AUFLS Providers need to collaborate with the SO and EA, and self-report any issues around not meeting the AUFLS requirements.</p> <p>There has been good collaboration with several AUFLS Providers.</p>





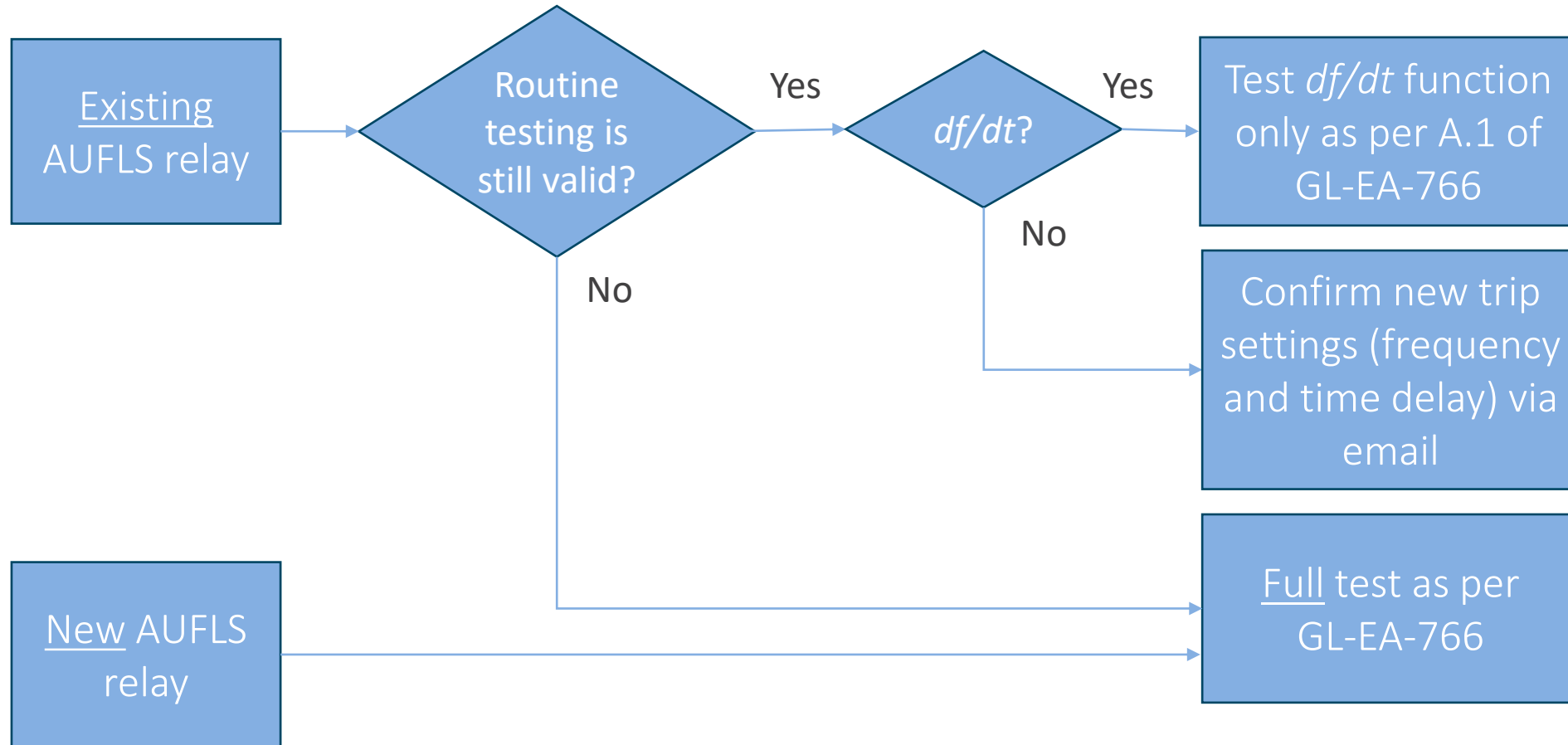
AUFLS BAU requirements linked to the transition

AUFLS BAU: Testing of AUFLS systems

- Be aware of your Code obligations during the transition, incl. the [obligations to verify your AUFLS profiles and trip settings](#) detailed in the Code and the AUFLS Technical Requirements (ATR) report
- Recommend to coincide routine tests with transition activities
- [Different testing requirements](#) apply to existing and new AUFLS relays
- Submit the test results to the AUFLS Transition team or directly to the SO compliance at compliance@transpower.co.nz.
 - AUFLS Providers have up to 3 months to submit these
 - SO aims to review and provide feedback
 - Testing methodology will not be reviewed. Specific queries will be addressed.
- Remember to update the portal!
- For reference:
 - [GL-EA-766 Distribution Asset Test Requirements](#)
 - [ATR report](#)



AUFLS BAU: Testing of AUFLS systems



AUFLS BAU: Annual load data submission

- Separate requirement to AUFLS transition
- Please submit your **annual load data** via the AUFLS portal no later than [1 April 2024](#)



Questions & Feedback

Thank you

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