



DS5002

Centralines’ Default Price Quality Path Annual Compliance Statement 2020-2021

For the assessment period ended 31 March 2021

Pursuant to
Electricity Distribution Services Default Price-Quality Path Determination 2020

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DS5002 Centralines' Default Price Quality-Path Annual Compliance Statement 2020-2021

Overview

Document status
Draft **In Service** Under Review Archived
Document purpose

This annual compliance statement is published in accordance with clause 11.4 of the 2020 Default Price-Quality Path Determination. It applies to the first assessment period, commencing 1 April 2020 and ending 31 March 2021.

Intended audience

Publicly disclosed.

Document contributors

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Key dates
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Related references
Legislation

- Electricity Distribution Services Default Price-Quality Path Determination 2020 (the Determination)

Disclaimer

The information presented in this Annual Compliance Statement has been prepared solely for the purpose of complying with the requirements of the Electricity Distribution Services Default Price-Quality Path Determination 2020. This statement has not been prepared for any other purpose. Centralines Limited expressly disclaims any liability to any other party who may rely on this statement for any other purpose.

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Certification of Annual Compliance Statement



DIRECTORS' CERTIFICATE ON ANNUAL COMPLIANCE STATEMENT

We, Ian Walker and Derek Walker, being directors of Centralines Limited certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached Annual Compliance Statement of Centralines Limited, and related information, prepared for the purposes of the *Electricity Distribution Services Default Price Quality Path Determination 2020* are true and accurate.



Ian Walker, Board Chair

Date: 26-07-2021



Derek Walker, Audit and Risk Committee Chair

Date: 26-07-2021

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Overview, Continued

Clarification Clarification of any matter referred to in this document should be directed to:

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1. Wash-up Amount

1.1 Statement of Compliance As demonstrated in *point 1.2*, Table 1 and consistent with clause 8.6 of the Determination, Centralines has complied with the wash-up amount calculation for the first assessment period.

1.2 Wash-up amount calculation

Wash-up Amount RY21		
Term	Description	Value (\$000)
Actual allowable revenue (AAR)	<i>Actual net allowable revenue Plus: actual pass-through costs Plus: actual recoverable costs Less: pass-through balance at cost of debt</i>	12,867
Actual revenue (AR)	<i>Sum of actual revenue from prices plus other regulated income</i>	13,466
Revenue foregone (RV)	<i>Actual net allowable revenue x (revenue reduction percentage – 20%) when revenue reduction percentage is greater than 20%, otherwise nil</i>	0
Wash-up amount	<i>AAR - AR - RV</i>	(599)

Table 1 – Wash-up Amount Calculation

Continued on next page

Wash-up Amount, Continued**1.3 Actual allowable revenue (AAR)**

Actual Allowable Revenue RY21		
Term	Description	Value (\$000)
Actual net allowable revenue (ANAR)	<i>Amount specified as forecast net allowable revenue for the first assessment period</i>	9,367
Actual pass-through costs	<i>Sum of all pass-through costs that were incurred or approved by the Commission in the assessment period</i>	88
Actual recoverable costs	<i>Sum of all recoverable costs that were incurred or approved by the Commission in the assessment period</i>	3,505
Pass-through balance	<i>The amount calculated for the assessment period ending 31 March 2020 under clause 8.6 of the 2015 DPP Determination</i>	90
Total actual allowable revenue (AAR)	<i>Actual net allowable revenue + actual pass-through costs and actual recoverable costs – (pass-through balance x (1 + 67th percentile estimate of post-tax WACC))</i>	12,867

Table 2 – Actual Allowable Revenue**1.4 Actual revenue (AR)**

Actual Revenue RY21		
Term	Description	Value (\$000)
Actual revenue from prices	<i>Actual prices between 1 April 2020 and 31 March 2021 multiplied by actual quantities for the assessment period</i>	13,466
Other regulated income	<i>Other income associated with supply of electricity distribution services</i>	0
Total actual revenue (AR)	<i>Sum of actual revenue from prices plus other regulated income</i>	13,466

Table 3 – Actual Revenue

Appendix B contains further information supporting actual revenue from prices.

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Wash-up Amount, Continued**1.5 Revenue foregone (RV)**

Revenue Foregone RY21		
Term	Description	Value (\$000)
Actual net allowable revenue (ANAR)	<i>Amount specified as forecast net allowable revenue for the first assessment period</i>	9,367
Revenue reduction percentage (RRP)	<i>1 - (actual revenue from prices / forecast revenue from prices)</i>	-6.51%
Revenue foregone (RV)	<i>Actual net allowable revenue x (RRP- 20%) when RRP is greater than 20%, otherwise nil</i>	0

Table 4 – Revenue Foregone

2. Quality Standards

2.1 Compliance with planned interruptions quality standards

Centralines is subject to a planned accumulated SAIDI limit and a planned accumulated SAIFI limit. These limits are assessed for the DPP regulatory period as stated in clause 9.2 of the Determination.

Tables 5 and 6 show the:

- planned accumulated SAIDI and SAIFI limits for Centralines for the DPP regulatory period, and
- planned SAIDI and SAIFI assessed values for the first assessment period.

Planned Interruptions Quality Standard – SAIDI	
Sum of planned SAIDI assessed values ≤ Planned accumulated SAIDI limit	
Planned accumulated SAIDI limit	1,064.46
Planned SAIDI assessed value for the first assessment period	73.33
Compliance result	Compliant

Table 5 – Planned SAIDI Compliance

Planned interruptions quality standard – SAIFI	
Sum of planned SAIFI assessed values ≤ Planned accumulated SAIFI limit	
Planned accumulated SAIFI limit	5.8573
Planned SAIFI assessed value for the first assessment period	0.3708
Compliance result	Compliant

Table 6 – Planned SAIFI Compliance

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Quality Standards, Continued

2.2 Planned SAIDI and SAIFI assessment values

Tables 7 and 8 show Centralines' planned SAIDI and SAIFI assessed values for the assessment period.

Planned SAIDI Assessed Value RY21		
Term	Description	Value
Class B non-notified interruptions		73.33
Class B notified interruptions falling outside window		0
SAIDI _B	<i>Sum of Class B non-notified interruptions</i>	73.33
Class B notified interruptions falling inside window		0
Class B intended interruptions cancelled without notice		0
Class B intended interruptions cancelled with notice		0
SAIDI _N	<i>Sum of Class B notified interruptions</i>	0
Planned SAIDI assessed value	$SAIDI_B + (SAIDI_N/2)$	73.33

Table 7 – Planned SAIDI Assessment

Planned SAIFI Assessed Value RY21		
Term	Description	Value
Planned SAIFI assessed value	<i>Sum of Class B interruptions commencing within the assessment period</i>	0.3708

Table 8 – Planned SAIFI Assessment

Continued on next page

Quality Standards, Continued

2.3 Compliance with unplanned interruptions quality standards

As demonstrated in Tables 9 and 10, and consistent with clause 9.7 of the Determination, Centralines has complied with the unplanned interruptions quality standard.

Unplanned Interruptions Quality Standard RY21 – SAIDI		
Unplanned SAIDI assessed value ≤ Unplanned SAIDI limit		
Unplanned SAIDI limit		83.61
Unplanned SAIDI assessed value	<i>Sum of normalised SAIDI values for Class C interruptions commencing within the assessment period</i>	38.46
Compliance result		Compliant

Table 9 – Unplanned SAIDI

Unplanned Interruptions Quality Standard RY21 – SAIFI		
Unplanned SAIFI assessed value ≤ Unplanned SAIFI limit		
Unplanned SAIFI limit		3.1616
Unplanned SAIFI assessed value	<i>Sum of normalised SAIFI values for Class C interruptions commencing within the assessment period</i>	1.4926
Compliance result		Compliant

Table 10 – Unplanned SAIFI

Appendix C provides information about policies, procedures and calculations for measuring planned and unplanned interruptions during the assessment period.

Continued on next page

Quality Standards, Continued

2.4 Major events

Tables 11 and 12 show the SAIDI and SAIFI values attributed to major events which occurred during the assessment period. The unplanned SAIDI and unplanned SAIFI boundary values for these major events are 6.79 and 0.1442 respectively. These figures are taken from the Determination, Schedule 3.2.

Unplanned SAIDI Major Events RY21			
Start	End	Pre-normalised unplanned SAIDI	Normalised unplanned SAIDI
22/07/2020 9:00 am	24/07/2020 7:00 am	8.84	1.08
31/10/2020 11:30 pm	02/11/2020 3:30 am	11.10	0.28
08/11/2020 11:30 am	10/11/2020 11:00 am	9.01	0.23
20/01/2021 4:00 pm	22/01/2021 3:30 pm	17.99	0.42

Table 11 – Unplanned SAIDI Major Events

Unplanned SAIFI Major Events RY21			
Start	End	Pre-normalised Unplanned SAIFI	Normalised Unplanned SAIFI
-	-	-	-

Table 12 – Unplanned SAIFI Major Events

2.5 Compliance with extreme event standards

As demonstrated in Table 13, and consistent with clause 9.9 of the 2020 DPP Determination, Centralines has complied with the extreme event standard.

Extreme Event Standard RY21	
<i>Unplanned SAIDI value \leq 120 minutes, and customer interruption minutes \leq six million during any 24-hour period, excluding unplanned interruptions from major external factors</i>	
Number of Extreme Events	Compliance Result
0	Compliant

Table 13 – Extreme Event Compliance

Continued on next page

Quality Standards, Continued

2.6 Quality incentive adjustment

Table 14 shows Centralines' quality incentive adjustment for the assessment period.

Quality Incentive Adjustment RY21		
Term	Description	Value (\$000)
SAIDI planned adjustment	$(SAIDI_{planned, target} - SAIDI_{planned, assessed}) \times 0.5 \times IR$	(1.27)
SAIDI unplanned adjustment	$(SAIDI_{unplanned, target} - SAIDI_{unplanned, assessed}) \times IR$	26.10
Total adjustment	<i>SAIDI planned adjustment + SAIDI unplanned adjustment</i>	24.83
Revenue at risk	$0.02 * ANAR$	187.34
Total penalty/reward		24.83
67 th percentile estimate of post-tax WACC		4.23%
Quality incentive adjustment		26.98

Table 14 – Quality Incentive Adjustment

Table 15 shows Centralines' quality incentive adjustment inputs consistent with Schedule 4 of the Determination

Quality Incentive Adjustment Inputs RY21		
SAIDI	Planned	Unplanned
Interruption Cap	212.89	83.61
Interruption Collar	0.00	0.00
Interruption Target	70.96	62.83
Assessed Value	73.33	38.46
Incentive Rate		1,071.00
Actual Net Allowable Revenue (ANAR) \$000		9,367
Minimum of Cap and Assessed	73.33	38.46
SAIDI subject to incentive (target – assessed)	(2.37)	24.37
Adjustment rate \$	535.50	1,071.00
SAIDI adjustment \$000	(1.27)	26.10

Table 15 – Quality Incentive Inputs

3. Transactions

3.1 Statement of Compliance Centralines has not entered into any agreements with another EDB or Transpower for an amalgamation, merger, major transaction or transfer in the assessment period.

Appendix A – Pass-through and Recoverable Costs

Actual and Forecast Pass-through Costs RY21				
Actual Pass-through Costs	Actual (\$000)	Forecast (\$000)	Variance (\$000)	Explanation for Variances
Local Body Rates on system fixed assets	41	41	0	
Commerce Act levies	19	26	(8)	Forecasts were based on the last known invoice at the time of price setting.
Electricity Authority levies	24	22	2	Forecasts are set using forecast kWh and numbers of connections at the last known rates.
Utilities Disputes levies	5	5	0	
Total actual pass-through costs	88	94	(6)	

Table 16 – Actual Pass-through Costs

Actual and Forecast Recoverable Costs RY21				
Actual Recoverable Costs	Actual (\$000)	Forecast (\$000)	Variance (\$000)	Explanation for Variances
IRIS incentive adjustment	839	839	0	
Transmission charges	2,568	2,568	0	
New investment contract charges	0	0	0	
System operator services charges	0	0	0	
Avoided transmission charges	0	0	0	
Distributed generation allowance	0	0	0	
Extended reserves allowance	0	0	0	
Quality incentive adjustment	86	86	0	
Capex wash-up adjustment	0	0	0	
Fire and Emergency NZ levies	12	11	1	Forecasts were based on previous year's invoices.
Innovation project allowance	0	0	0	
Total actual recoverable costs	3,505	3,504	1	

Table 17 – Total Actual Recoverable Costs

Appendix B – Prices and Quantities

Price Code	Unit	Unit Price	Actual Quantity	Actual Revenue (\$000)
E-C-CH11-DMND	\$/kW	4.3000	16,564.44	71
E-C-CH11-KVAR	\$/KVAR	7.7500	87.52	1
E-C-CH11-SOPD	\$/kW	8.5000	15,672.30	133
E-C-CH11-TAIC	\$/kWh	0.0000	7,140,586.00	0
E-C-CH1-24UC	\$/kWh	0.1960	5,834,142.17	1,143
E-C-CH12-DMND	\$/kW	4.3000	45,639.18	196
E-C-CH12-KVAR	\$/KVAR	7.7500	66.33	1
E-C-CH12-SOPD	\$/kW	8.5000	45,519.82	387
E-C-CH12-TAIC	\$/kWh	0.0000	21,747,772.00	0
E-C-CH1-AICO	\$/kWh	0.1670	8,569,742.70	1,431
E-C-CH1-CTRL	\$/kWh	0.1240	481,690.13	60
E-C-CH1-CTUD	\$/kWh	0.2520	297,430.51	75
E-C-CH1-DGEN	\$/kWh	0.0000	83,343.72	0
E-C-CH1G-24UC	\$/kWh	0.2270	137,577.03	31
E-C-CH1G-AICO	\$/kWh	0.1980	16,507.46	3
E-C-CH1G-CTRL	\$/kWh	0.1550	-70.70	-0
E-C-CH1G-CTUD	\$/kWh	0.2920	26.27	0
E-C-CH1G-DGEN	\$/kWh	0.0000	85,539.26	0
E-C-CH1G-NITE	\$/kWh	0.0750	14.00	0
E-C-CH1G-PROJ	\$/kWh	0.2270	0.00	0
E-C-CH1-NITE	\$/kWh	0.0650	119,097.42	8
E-C-CH1-PROJ	\$/kWh	0.1960	4,513.00	1
E-C-CH1T-CTRL	\$/kWh	0.1240	17,502.99	2
E-C-CH1T-DGEN	\$/kWh	0.0000	1,255.00	0
E-C-CH1T-OFPK	\$/kWh	0.1580	372,183.37	59
E-C-CH1T-ONPK	\$/kWh	0.2670	179,780.11	48
E-C-CH1T-PROJ	\$/kWh	0.2670	5,648.25	2
E-C-CH2G-24UC	\$/kWh	0.1390	323,927.69	45
E-C-CH2G-AICO	\$/kWh	0.1100	68,753.25	8
E-C-CH2G-CTUD	\$/kWh	0.1790	1,862.37	0
E-C-CH2G-DGEN	\$/kWh	0.0000	167,730.09	0
E-C-CH2G-NITE	\$/kWh	0.0460	531.57	0
E-C-CH2G-PROJ	\$/kWh	0.1390	-2,667.00	-0
E-C-CH2H-24UC	\$/kWh	0.1410	8,719,403.59	1,229
E-C-CH2H-CTRL	\$/kWh	0.0880	137,375.13	12
E-C-CH2H-CTUD	\$/kWh	0.1830	838,926.46	154
E-C-CH2H-DGEN	\$/kWh	0.0000	0.00	0
E-C-CH2H-NITE	\$/kWh	0.0630	321,866.92	20
E-C-CH2H-PROJ	\$/kWh	0.1410	13,895.00	2
E-C-CH2I-24UC	\$/kWh	0.1050	4,043,168.84	425
E-C-CH2I-CTRL	\$/kWh	0.0580	-1,177.97	-0

Price Code	Unit	Unit Price	Actual Quantity	Actual Revenue (\$000)
E-C-CH2I-CTUD	\$/kWh	0.1430	2,263,124.52	324
E-C-CH2I-DGEN	\$/kWh	0.0000	60,580.80	0
E-C-CH2I-NITE	\$/kWh	0.0350	1,092,545.12	38
E-C-CH2I-PROJ	\$/kWh	0.1050	38,317.00	4
E-C-CH2L-24UC	\$/kWh	0.1170	2,920,232.19	342
E-C-CH2L-CTRL	\$/kWh	0.0640	19,838.09	1
E-C-CH2L-CTUD	\$/kWh	0.1590	28,132.93	4
E-C-CH2L-NITE	\$/kWh	0.0390	12,432.09	0
E-C-CH2L-PROJ	\$/kWh	0.1170	6,728.00	1
E-C-CH2R-24UC	\$/kWh	0.1390	12,229,890.05	1,700
E-C-CH2R-AICO	\$/kWh	0.1100	12,331,515.42	1,356
E-C-CH2R-CTRL	\$/kWh	0.0670	739,959.64	50
E-C-CH2R-CTUD	\$/kWh	0.1790	624,074.24	112
E-C-CH2R-DGEN	\$/kWh	0.0000	60,157.87	0
E-C-CH2R-NITE	\$/kWh	0.0460	241,719.46	11
E-C-CH2R-PROJ	\$/kWh	0.1390	7,080.00	1
E-C-CH2T-CTRL	\$/kWh	0.0670	19,847.60	1
E-C-CH2T-NITE	\$/kWh	0.0460	-17.10	-0
E-C-CH2T-OFPK	\$/kWh	0.1010	496,945.24	50
E-C-CH2T-ONPK	\$/kWh	0.2100	232,776.14	49
E-C-CH2T-PROJ	\$/kWh	0.2100	6,282.04	1
E-C-CH3-24UC	\$/kWh	0.1100	4,620,176.68	508
E-C-CH3-CTRL	\$/kWh	0.0605	22,996.00	1
E-C-CH3-CTUD	\$/kWh	0.1500	598,697.41	90
E-C-CH3-DGEN	\$/kWh	0.0000	9,334.45	0
E-C-CH3-DMND	\$/kW	5.0000	1,527.30	8
E-C-CH3-KVAR	\$/kVAR	7.7500	132.91	1
E-C-CH3-NITE	\$/kWh	0.0360	870,649.22	31
E-C-CH3-PROJ	\$/kWh	0.1100	1,418.00	0
E-C-CH3-SOPD	\$/kW	8.5000	1,474.54	13
E-C-CH3-TAIC	\$/kWh	0.0000	601,378.00	0
E-C-CH4-24UC	\$/kWh	0.0750	1,769,226.28	133
E-C-CH4-CTUD	\$/kWh	0.1020	816,095.75	83
E-C-CH4-DGEN	\$/kWh	0.0000	10,177.00	0
E-C-CH4-DMND	\$/kW	5.0000	4,928.94	25
E-C-CH4-KVAR	\$/kVAR	7.7500	795.62	6
E-C-CH4-NITE	\$/kWh	0.0250	249,379.35	6
E-C-CH4-PROJ	\$/kWh	0.0750	61,650.57	5
E-C-CH4-SOPD	\$/kW	8.5000	4,828.52	41
E-C-CH4-TAIC	\$/kWh	0.0000	1,882,813.00	0
E-C-CH5-DEFT	\$/kWh	0.0800	136,025.00	11
E-C-CH5-DMND	\$/kW	4.3000	17,172.02	74
E-C-CH5-KVAR	\$/kVAR	7.7500	1,528.45	12

Price Code	Unit	Unit Price	Actual Quantity	Actual Revenue (\$000)
E-C-CH5-SOPD	\$/kW	8.5000	16,694.80	142
E-C-CH5-TAIC	\$/kWh	0.0000	5,089,291.00	0
E-C-CH6-DMND	\$/kW	4.3000	2,021.92	9
E-C-CH6-KVAR	\$/kVAR	7.7500	452.24	4
E-C-CH6-SOPD	\$/kW	8.5000	1,801.36	15
E-C-CH6-TAIC	\$/kWh	0.0000	546,735.00	0
E-C-CH8-DMND	\$/kW	4.3000	1,578.60	7
E-C-CH8-KVAR	\$/kVAR	7.7500	79.17	1
E-C-CH8-TAIC	\$/kWh	0.0000	522,667.00	0
E-C-CH8-WOPD	\$/kW	8.5000	1,522.84	13
E-C-T1P-24UC	\$/kWh	0.1383	-2,573.31	-0
E-C-U01-UNMT	\$/kWh	0.2100	330,393.38	69
E-C-U02-UNMT	\$/kWh	0.0400	413,431.44	17
E-C-U03-UNMT	\$/kWh	0.0400	109,503.00	4
F-C-CH1	\$/day	0.1500	1,022,155.00	153
F-C-CH11	\$/day	89.5000	365.00	33
F-C-CH12	\$/day	495.0000	365.00	181
F-C-CH1G	\$/day	0.1500	11,557.00	2
F-C-CH1T	\$/day	0.1500	36,699.00	6
F-C-CH2G	\$/day	2.0800	18,313.00	38
F-C-CH2H	\$/day	1.4000	197,724.00	277
F-C-CH2I	\$/day	7.0000	29,788.00	209
F-C-CH2L	\$/day	1.8000	471,297.00	848
F-C-CH2R	\$/day	1.4000	1,180,942.00	1,653
F-C-CH2T	\$/day	1.4000	31,180.00	44
F-C-CH3	\$/day	6.5000	32,447.00	211
F-C-CH4	\$/day	24.0000	8,625.00	207
F-C-CH5	\$/day	40.0000	3,475.00	139
F-C-CH6	\$/day	50.0000	365.00	18
F-C-CH8	\$/day	89.5000	365.00	33
F-C-T1P	\$/day	1.5500	3,884.00	6
F-C-U02	\$/fitting	0.1500	320,294.00	48
F-C-U03	\$/fitting	0.1500	52,541.00	8
E-C-Minimum	\$/ICP	-55.0000	2,490.00	-137
E-C-Maximum	\$/ICP	-5,850.0000	19.00	-111
E-C-kWh	\$/kWh	-0.0198	66,620,994.00	-1,318
Grand Total			182,045,475.05	13,466

Table 18 – Actual Prices and Quantities for Actual Revenue

Appendix C – Policies and Procedures for Measuring Planned and Unplanned Interruptions

Centralines' systems for recording SAIDI and SAIFI

Centralines uses ADMS SCADA for recording operations of network switches with time stamped data used for calculation of SAIDI and SAIFI. A detailed explanation of how the ADMS system is used to calculate SAIDI and SAIFI can be found in the 'ADMS – All interruptions' section in this Appendix.

SCADA timing

Automatically recorded SCADA data is time stamped at the Remote Terminal Unit (RTU), and the data is time corrected to the master station each half hour.

Centralines' SCADA: Remote devices in ADMS

Centralines' ADMS SCADA system has been designed to capture real-time data.

In Centralines' SCADA, all zone substation 33kV and 11kV circuit breakers are linked by Remote Terminal Units (RTUs). The RTUs report automatically and time stamp all changes of state of devices directly to the SCADA ADMS Event Summary.

On the SCADA system, each zone substation and 11kV feeder is represented by a schematic picture and a SCADA tile.

Centralines' SCADA: Non-remote devices in ADMS

Switching devices that have no SCADA link to Centralines have a pseudo point defined in the SCADA database. Each point has an identifier name that relates to the real world switch number.

As Field Operators complete operational items, they report this to the System Control Operator. The System Control Operator then manually sets the field device's pseudo point on the appropriate SCADA tile. This action is automatically recorded and time stamped in the SCADA ADMS Event Summary.

Outage data sources

The capture of outage data uses the following data sources and utilities:

Data	Source
(1) Number of ICPs attached to 11kV/400v transformers	GIS
(2) Transformers connected between isolation points	GIS
(3) Real time data	ADMS SCADA

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Appendix C – Policies and Procedures for Measuring Planned and Unplanned Interruptions, Continued

ADMS – All Interruptions

ADMS is updated with customer numbers and connectivity from GIS daily. Zone (33kV/11kV) substation connectivity is maintained manually by the SCADA team.

The SCADA file is updated by either:

- an operation of a device that is linked via SCADA, or
- a manual update which is a switch status updated by the System Control Operator.

The software is updated to reflect the real-time physical state of the network, including energisation of customers.

If the switching operation de-energises customers, ADMS will create an 'incident' and 'SDP interruptions'.¹ The 'incident' has a unique identifier for the interruption and contains operational information, for example, the cause of the interruption. The 'SDP interruptions' are created in ADMS for each supply disruption to each customer affected. It records the start and end times of the interruption and contains a link to the parent 'incident'.

When all customers are restored, the System Control Operator updates the relevant general details on the incident and 'archives' it. This removes the incident from the list of current interruptions in ADMS and allows it to be viewed by other systems at Centralines.

Customer Minutes Lost (CML) is calculated for each incident by adding all the minutes from the 'SDP interruptions' associated with that incident. CML is then divided by the number of connected customers to calculate SAIDI for the incident. This task is performed by a Centralines' database script.

SAIFI is calculated for the incident by dividing the number of customers affected by the number of connected customers (the average customers for the disclosure year).

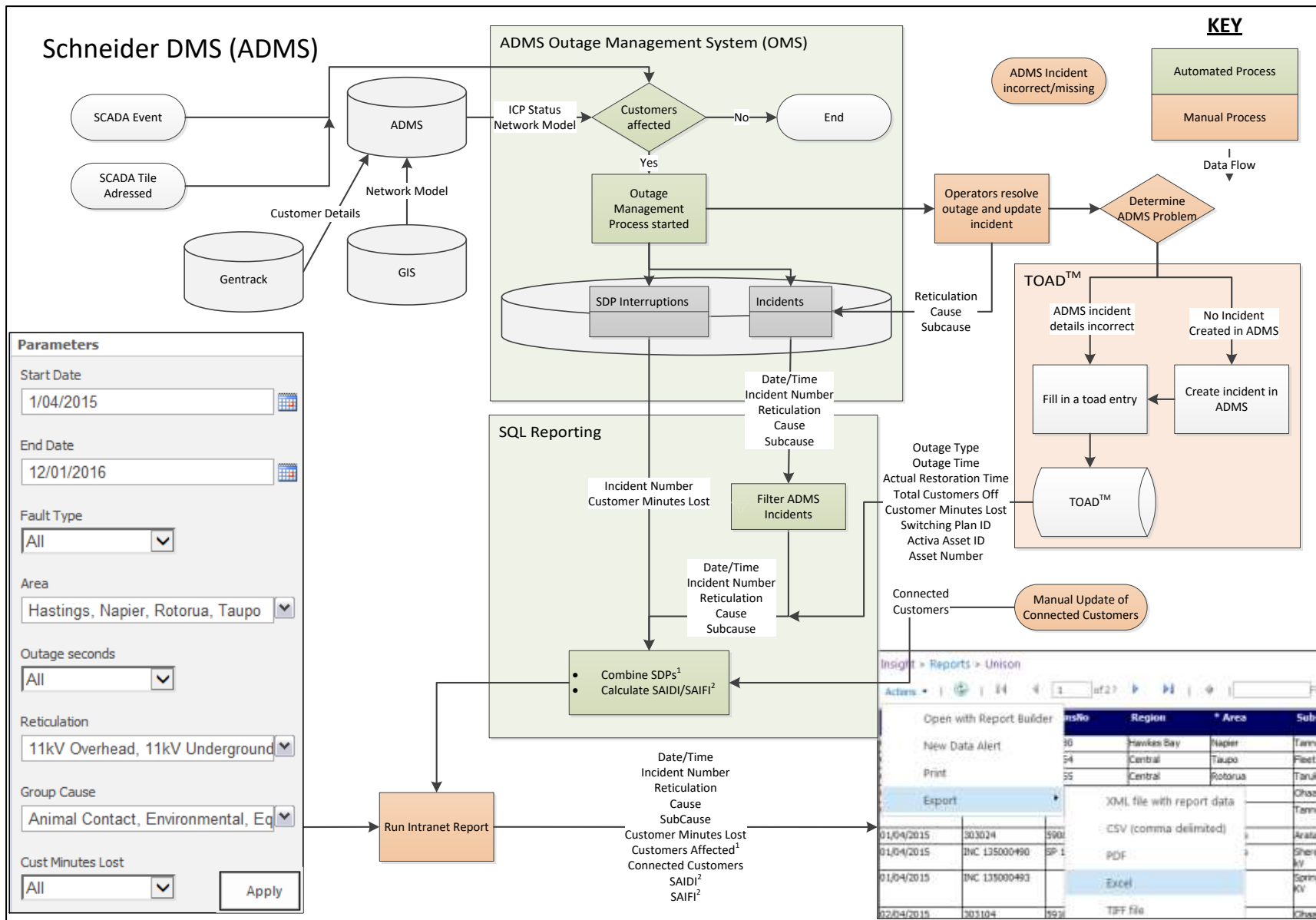
TOAD

ADMS does not allow manual editing of SAIDI and SAIFI. If there is an error that results in incorrect SAIDI or SAIFI, they must be calculated manually and entered into TOAD. This is then used for reporting SAIDI and SAIFI.

Continued on next page

¹ SDP – Service Delivery Point, the ADMS equivalent of an ICP.

Appendix C – Policies and Procedures for Measuring Planned and Unplanned Interruptions, Continued



Appendix D – SAIDI and SAIFI Major Events

SAIDI Major Event 22/07/2020 – 24/07/2020

A storm hitting the region triggered a number of unplanned outages across many circuits on the network. Strong winds led to defective equipment and vegetation faults as fall distance zone trees toppled onto overhead distribution lines.

Outage response included damage assessments, repairs and progressive restoration. Improved forecasting of the event may have assisted in preparations for the response, leading to more in-depth industry specific weather tools being investigated.

SAIDI Major Event 31/10/2020 – 2/11/2020

Two independent incidents involving distribution lines on the CL46 circuit triggered this SAIDI major event.

1. A vegetation fault with a tree through the lines caused notable damage to overhead assets.
2. Animal contact on overhead assets triggered a sustained outage.

Response to each event followed standardised outage management processes. However, with long drive times to the rural circuit, lengthy repairs, and difficult fault finding, outage impacts were still significant.

Availability of temporary fault indication devices, that can be easily installed by field staff, may have assisted in reducing the impact from the animal contact event by reducing time spent fault finding. The suitability of temporary fault indicators for on-call fault staff is being investigated.

SAIDI Major Event 8/11/2020 – 10/11/2020

An outage to replace a pole supporting overhead distribution lines critically damaged after a car versus pole (external influence) incident on the CL18 circuit affected a significant number of customers, with minimal options for restoration via alternative supplies during the repairs. Response to the incident included LV restoration of one transformer circuit, however greater options for LV restoration may have assisted in minimising the impact of the outage.

Consideration was given to cost-effective options for increasing resilience of the LV network in this area. A wider review of design and security of supply standards is being undertaken.

SAIDI Major Event 20/01/2021 – 22/01/2021

A truck left the road and collided with two HV poles on the CL86 circuit. Both poles, distribution lines, and a distribution cable to a transformer were damaged after the external influence event, resulting in a sustained outage while assets were repaired. Alongside typical damage assessment and repair actions, jumpers on the affected section of the overhead line were broken to allow more customers to be restored during the repair period. Generation at the transformer supplied by the affected cable may have helped to minimise outage impact, but LV damage and resourcing availability constrained the feasibility of this. Mobile generation competency plans are being developed and may assist in mitigating the resourcing constraint when considering generation options in future.

Appendix E – Independent Auditor's Report



Independent Assurance Report

**To the directors of Centralines Limited
on the Annual Compliance Statement
for the assessment period ended 31 March 2021
as required by the Electricity Distribution Services Default Price-Quality Path
Determination 2020**

The Auditor-General is the auditor of Centralines Limited (the Company). The Auditor-General has appointed me, Chris Webby, using the staff and resources of Audit New Zealand, to undertake a reasonable assurance engagement, on his behalf, on whether the Annual Compliance Statement on pages 5 to 21 for the assessment period ended on 31 March 2021 has been prepared, in all material respects, in compliance with the Electricity Distribution Services Default Price-Quality Path Determination 2020 (the "Determination").

Opinion

In our opinion, in all material respects:

- as far as appears from our examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from the Company's accounting and other records, sourced from its financial and non-financial systems; and
- the Company has complied with clauses 11.5 and 11.6 of the Determination in preparing the Annual Compliance Statement for the assessment period ended 31 March 2021.

Basis for opinion

We conducted our engagement in accordance with the Standard on Assurance Engagements (SAE) 3100 (Revised) Assurance Engagements on Compliance, issued by the New Zealand Auditing and Assurance Standards Board. An engagement conducted in accordance with SAE (NZ) 3100 (Revised) requires that we also comply with the International Standard on Assurance Engagements (New Zealand) 3000 (Revised) Assurance Engagements Other Than Audits or Reviews of Historical Financial Information.

We have obtained sufficient recorded evidence and explanations that we required to provide a basis for our opinion.

Directors' responsibilities

The directors of the Company are responsible:

Continued on next page

Appendix E – Independent Auditor's Report, Continued

- For the preparation of the Annual Compliance Statement under clause 11.4 and in accordance with the requirements in clauses 11.5 and 11.6 of the Determination.
- For the identification of risks that may threaten compliance with the clauses identified above and controls which will mitigate those risks and monitor ongoing compliance.

Auditor's responsibilities

Our responsibilities in terms of clause 11.5(e) and schedule 8(1)(b)(vi) and 8(1)(c) of the Determination, are to express an opinion on whether:

- as far as appears from our examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from the Company's accounting and other records, sourced from its financial and non-financial systems; and
- the Annual Compliance Statement, for the assessment period ended 31 March 2021, has been prepared, in all material respects, in accordance with the requirements in clauses 11.5 and 11.6 of the Determination.

To meet these responsibilities, we planned and performed procedures in accordance with SAE 3100 (Revised), to obtain reasonable assurance about whether the Company has complied, in all material respects, with clauses 11.5 and 11.6 of the Determination.

In relation to the wash-up amount set out in clause 8.6 of the Determination, our procedures included recalculation of the wash-up amount in accordance with schedule 1.6 of the Determination and assessing it against the amounts and disclosures contained on pages 5 to 7 and 14 to 17 of the Annual Compliance Statement.

In relation to the quality standards in clause 9 of the Determination, our procedures included examination, on a test basis, of evidence relevant to the values and disclosures contained on pages 8 to 11 and 21 of the Annual Compliance Statement.

In relation to the quality incentive adjustment set out in Schedule 4 of the Determination, our procedures included recalculation of the quality incentive adjustment in accordance with Schedule 4 of the Determination and assessing it against the amounts and disclosures contained on page 12 of the Annual Compliance Statement.

In relation to transactions set out in clauses 10.1 to 10.18 of the Determination, our procedures included examination, on a test basis, of evidence relevant to the values and disclosures contained on page 13 of the Annual Compliance Statement.

An assurance engagement to report on the Company's compliance with the Determination involves performing procedures to obtain evidence about the compliance activity and controls implemented to meet the requirements. The procedures selected depend on our judgement, including the identification and assessment of the risks of material non-compliance with the requirements.

Continued on next page

Appendix E – Independent Auditor's Report, Continued

Inherent limitations

Because of the inherent limitations of an assurance engagement, together with the internal control structure, it is possible that fraud, error, or non-compliance with clauses 11.5 and 11.6 of the Determination may occur and not be detected. A reasonable assurance engagement throughout the assessment period does not provide assurance on whether compliance with clauses 11.5 and 11.6 of the Determination will continue in the future.

Restricted use

This report has been prepared for use by the directors of the Company and the Commerce Commission in accordance with clause 11.5 (e) of the Determination and is provided solely for the purpose of establishing whether the compliance requirements have been met. We disclaim any assumption of responsibility for any reliance on this report to any person other than the directors of the Company and the Commerce Commission, or for any other purpose than that for which it was prepared.

Independence and quality control

We complied with the Auditor-General's:

- independence and other ethical requirements, which incorporate the independence and ethical requirements of Professional and Ethical Standard 1 issued by the New Zealand Auditing and Assurance Standards Board; and
- quality control requirements, which incorporate the quality control requirements of Professional and Ethical Standard 3 (Amended) issued by the New Zealand Auditing and Assurance Standards Board.

The Auditor-General, and his employees, and Audit New Zealand and its employees may deal with the Company on normal terms within the ordinary course of trading activities of the Company. Other than any dealings on normal terms within the ordinary course of trading activities of the Company, this engagement, the assurance engagement on the Information Disclosures and the annual audit of the Company's financial statements and performance information, we have no relationship with or interests in the Company.



Chris Webby
Audit New Zealand
On behalf of the Auditor-General
Palmerston North, New Zealand
26 July 2021