

Company name: Western Power
Electricity Compliance Manual Datasheet - Distribution Indicators 2016/17

IMPORTANT NOTICE FOR ELECTRICITY DISTRIBUTION LICENSEES

Licensees should refer to the Electricity Distribution Licence Performance Reporting Handbook for information on the definitions of electricity distribution indicators, listed in these datasheets.

2017 Electricity Licence Reporting Datasheets - NQR Code

Distributor: Western Power

Reporting Period: 2016/17

Network Reliability			
Indicator No.	Reference	Description	Comments
NQR 1	Electricity Industry (Network Quality and Reliability of Supply) Code Sch 1(5), item 5	The number of premises of small use customers to which the supply of electricity has been interrupted for more than 12 hours continuously	REFER TABLE 1 (below)
NQR 2	Electricity Industry (Network Quality and Reliability of Supply) Code Sch 1(5), item 5	The number of premises of small use customers to which the supply of electricity has been interrupted more than the permitted number of times, as is defined in section 12(1) {of the NQ&R Code}	REFER TABLE 1 (below)
NQR 3	Electricity Industry (Network Quality and Reliability of Supply) Code Sch 1(11)(a), item 11(a)	For each discrete area, the average length of interruption of supply to customer premises expressed in minutes	REFER TABLE 6
NQR 4	Electricity Industry (Network Quality and Reliability of Supply) Code Sch 1(11)(b), item 11(b)	For each discrete area, the average number of interruptions of supply to customer premises	REFER TABLE 6
NQR 5	Electricity Industry (Network Quality and Reliability of Supply) Code Sch 1(11)(c), item 11(c)	For each discrete area, the average percentage of time that electricity has been supplied to customer premises	REFER TABLE 6
NQR 6	Electricity Industry (Network Quality and Reliability of Supply) Code Sch 1(11)(d), item 11(d)	For each discrete area, the average total length of all interruptions of supply to customer premises expressed in minutes	REFER TABLE 6
NQR 7	SCONRRR	Overall SAIDI by Total Network, CBD, Urban, Short Rural and Long Rural	REFER TABLE 2 (below)
NQR 8	SCONRRR	Distribution Network (Planned) SAIDI by Total Network, CBD, Urban, Short Rural and Long Rural	REFER TABLE 2 (below)
NQR 9	SCONRRR	Distribution Network (Unplanned) SAIDI by Total Network, CBD, Urban, Short Rural and Long Rural	REFER TABLE 2 (below)

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Network Reliability			
Indicator No.	Reference	Description	Comments
NQR 10	SCONRRR	Normalised distribution network SAIDI by Total Network, CBD, Urban, Short Rural and Long Rural	REFER TABLE 2 (below)
NQR 11	SCONRRR	Overall SAIFI by Total Network, CBD, Urban, Short Rural and Long Rural	REFER TABLE 2 (below)
NQR 12	SCONRRR	Distribution Network (Planned) SAIFI by Total Network, CBD, Urban, Short Rural and Long Rural	REFER TABLE 2 (below)
NQR 13	SCONRRR	Distribution Network (Unplanned) SAIFI by Total Network, CBD, Urban, Short Rural and Long Rural	REFER TABLE 2 (below)
NQR 14	SCONRRR	Normalised distribution network SAIFI by Total Network, CBD, Urban, Short Rural and Long Rural	REFER TABLE 2 (below)
NQR 15	SCONRRR	Overall CAIDI by Total Network, CBD, Urban, Short Rural and Long Rural	REFER TABLE 2 (below)
NQR 16	SCONRRR	Distribution Network (Planned) CAIDI by Total Network, CBD, Urban, Short Rural and Long Rural	REFER TABLE 2 (below)
NQR 17	SCONRRR	Distribution Network (Unplanned) CAIDI by Total Network, CBD, Urban, Short Rural and Long Rural	REFER TABLE 2 (below)
NQR 18	SCONRRR	Normalised distribution network CAIDI by Total Network, CBD, Urban, Short Rural and Long Rural	REFER TABLE 2 (below)

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NQ&R - Network Reliability - Table 1					
Description	Discrete Area	Total Network	Perth CBD and the urban areas combined	Other areas of the State	Comments
Interruptions for more than 12 hours continuously (Sch 1 section 5(a) NQ&R Code)	Number of premises interrupted	43,794			
	Number of interruptions	1,625			
More than the permitted number of interruptions (Sch 1 section 5(b) NQ&R Code)	Premises interrupted more than 9 times in a year		7,166		
	Premises interrupted more than 16 times in a year			3,344	

SCONRRR - Network Reliability - Table 2							
Description	Discrete Area	Total Network	CBD	Urban	Short Rural	Long Rural	Comments
SAIDI	Overall	343.40	23.00	232.40	410.30	1062.00	
	Distribution Network (Planned)	116.30	8.50	79.40	185.80	229.10	
	Distribution Network (Unplanned)	200.90	13.80	130.90	203.20	758.10	
	Normalised Distribution Network	165.10	13.80	104.40	175.60	626.20	
SAIFI	Overall	2.27	0.14	1.70	2.76	5.57	
	Distribution Network (Planned)	0.34	0.02	0.24	0.50	0.73	
	Distribution Network (Unplanned)	1.53	0.11	1.09	1.84	4.17	
	Normalised Distribution Network	1.44	0.11	1.02	1.76	3.95	
CAIDI	Overall	151.00	167.00	137.00	149.00	191.00	
	Distribution Network (Planned)	344.00	413.00	337.00	371.00	314.00	
	Distribution Network (Unplanned)	131.00	123.00	120.00	110.00	182.00	
	Normalised Distribution Network	115.00	123.00	102.00	100.00	159.00	

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Complaints						
Indicator No.	Reference	Description	Basis of Reporting			Comments
			Number	Percentage	Value (\$)	
NQR 19	Electricity Industry (Network Quality and Reliability of Supply) Code Sch 1(6)	Total number of complaints received {that Part 2 or an instrument made under section 14(3) of the NQ&R Code has not been, or is not being, complied with}	728			
NQR 20	Electricity Industry (Network Quality and Reliability of Supply) Code clause Sch 1(7)	Total number of complaints received from customers in each of the discrete areas {that Part 2 or an instrument made under section 14(3) of the NQ&R Code has not been, or is not being, complied with}	REFER TABLE 3 (below)			
NQR 21	Electricity Industry (Network Quality and Reliability of Supply) Code clause Sch 1(8)	Total amount spent in addressing complaints {that Part 2 or an instrument made under section 14(3) of the NQ&R Code has not been, or is not being, complied with} other than by way of payment under sections 18 and 19 {of the NQ&R Code}			\$320,470	
NQR 22	SCONRRR	Total number of technical QoS complaints	2,245			
NQR 23	SCONRRR	Total number of technical QoS complaints that are low supply voltage complaints	156			
NQR 24	SCONRRR	Percentage of technical QoS complaints that are low supply voltage complaints		6.9%		
NQR 25	SCONRRR	Total number of technical QoS complaints that are voltage dip complaints	18			
NQR 26	SCONRRR	Percentage of technical QoS complaints that are voltage dip complaints		0.8%		
NQR 27	SCONRRR	Total number of technical QoS complaints that are voltage swell complaints	20			
NQR 28	SCONRRR	Percentage of technical QoS complaints that are voltage swell complaints		0.9%		
NQR 29	SCONRRR	Total number of technical QoS complaints that are voltage spike complaints	6			
NQR 30	SCONRRR	Percentage of technical QoS complaints that are voltage spike complaints		0.3%		
NQR 31	SCONRRR	Total number of technical QoS complaints that are waveform distortion complaints	-			
NQR 32	SCONRRR	Percentage of technical QoS complaints that are waveform distortion complaints				
NQR 33	SCONRRR	Total number of technical QoS complaints that are TV or radio interference complaints	80			
NQR 34	SCONRRR	Percentage of technical QoS complaints that are TV or radio interference complaints		3.6%		
NQR 35	SCONRRR	Total number of technical QoS complaints that are noise from appliances complaints	-			
NQR 36	SCONRRR	Percentage of technical QoS complaints that are noise from appliances complaints				
NQR 37	SCONRRR	Total number of technical QoS complaints that are other complaints	1,965			
NQR 38	SCONRRR	Percentage of technical QoS complaints that are other complaints		87.5%		

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Complaints						
Indicator No.	Reference	Description	Basis of Reporting			Comments
			Number	Percentage	Value (\$)	
NQR 39	SCONRRR	Breakdown of technical QoS complaints into the likely cause of problem that caused the complaint separated into:				
		Network equipment faulty - Total Number	150			
		Network equipment faulty - Percentage		6.7%		
		Network interference by NSP equipment - Total Number	4			
		Network interference by NSP equipment - Percentage		0.2%		
		Network interference by another customer - Total Number	2			
		Network interference by another customer - Percentage		0.1%		
		Network limitation - Total Number	837			
		Network limitation - Percentage		37.3%		
		Customer internal problem - Total Number	230			
		Customer internal problem - Percentage		10.2%		
		No problem identified - Total Number	870			
		No problem identified - Percentage		38.8%		
		Environmental - Total Number	27			
		Environmental - Percentage		1.2%		
		Other - Total Number	125			
Other - Percentage		5.6%				

NQ&R - Complaints - Table 3		
Discrete Area	Number of Complaints Received	Comments
Perth CBD	2	
Urban areas other than the Perth CBD	419	
All other areas of the State	307	
Total	728	

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Compensation Payments						
Indicator No.	Reference	Description	Basis of Reporting			Comments
			Number	Percentage	Value (\$)	
NQR 40	Electricity Industry (Network Quality and Reliability of Supply) Code clause Sch 1(9)	The number of payments made, and the total amount paid under section 18 of the NQ&R Code	601		\$12,020	\$12,020 is indicative of \$20 statutory payments. Western Power pays customers \$50 i.e. an additional ex-gratia payment of \$30 per occurrence. Total ex-gratia payments were \$18,030
NQR 41	Electricity Industry (Network Quality and Reliability of Supply) Code clause Sch 1(9)	The number of payments made, and the total amount paid under section 19 of the NQ&R Code	13,289		\$1,063,120	There were 13,289 payments of \$80 made during 2016/17, totalling \$1,063,120, for supply interruptions exceeding 12 hours

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Network and Asset Information					
Indicator No	Reference	Description	Basis of Reporting		Comments
			Number	Percentage	
NQR 42	SCONRRR	Number of metered supply points by feeder category (CBD, urban, short rural and long rural), reported against the categories of residential and non-residential customers and sub-transmission, high voltage and low voltage	REFER TABLE 4A (below)		
NQR 43	SCONRRR	Number of unmetered supply points, by type of feeder (CBD, urban, long rural and short rural)	REFER TABLE 4B (below)		
NQR 44	SCONRRR	Energy delivered (GWh) by type of feeder (CBD, urban, long rural and short rural) reported against the categories of residential and non-residential customers and sub-transmission, high voltage and low voltage	REFER TABLE 4C (below)		
NQR 45	SCONRRR	Line lengths by type of feeder (CBD, urban, long rural and short rural) reported against the categories of underground and overhead line categories and sub-transmission, high voltage and low voltage	REFER TABLE 5A (below)		
NQR 46	SCONRRR	Number and total capacity of transformers, separated into sub-transmission and distribution	REFER TABLE 5B (below)		
NQR 47	SCONRRR	Total distribution losses (%)		3.23	
NQR 48	SCONRRR	Size of network service area (sq km)	255,064		
NQR 49	SCONRRR	Number of poles	778,561		Distribution poles only
NQR 50	SCONRRR	Peak demand (MW)	2,988		This is 15% lower than the 2015/16 Peak demand value (3,515MW) and is attributed to a moderate summer

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Network & Asset Information - Table 4A							
Number of Metered Supply Points	Total No.	By type of customer		By supply voltage			Comments
Feeder Category		Residential	Non-residential	ST	HV	LV	
CBD	5,520	3,273	2,247	N/A	55	5,465	Numbers across the feeder categories may have a different distribution from the previous year due to annual feeder assessment and reclassification
Urban	770,414	702,610	67,804	N/A	440	769,974	
Rural Short	258,448	239,691	18,757	N/A	134	258,314	
Rural Long	96,848	77,188	19,660	N/A	51	96,797	

Network & Asset Information - Table 4B					
Number of Un-metered Supply Points					Comments
	CBD	Urban	Rural Short	Rural Long	
Total No.	438	10,810	3,035	1,002	

Network & Asset Information - Table 4C							
Energy delivered (GWh)	By type of customer			By supply voltage			Comments
Feeder Category	Total GWh	Residential	Non-residential	ST	HV	LV	
CBD	519	18	501		171	340	Numbers across the feeder categories may have a different distribution from the previous year due to annual feeder assessment and reclassification
Urban	9,063	3,492	5,572		2,432	6,631	
Rural Short	2,994	1,298	1,696		936	2,068	
Rural Long	1,068	452	616		173	894	

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SCONRRR Business Descriptors - Table 5A							
Line length (km)				By supply voltage			Comments
Feeder Category	Total km	Underground	Overhead	ST	HV	LV	
CBD	218	218	0	N/A	124	94	Numbers across the feeder categories may have a different distribution from the previous year due to annual feeder assessment and reclassification
Urban	22,749	15,597	7,153	N/A	6,133	16,616	
Rural Short	18,046	7,018	11,028	N/A	10,028	8,019	
Rural Long	52,917	3,070	49,847	N/A	50,177	2,739	

SCONRRR Business Descriptors - Table 5B			
Transformer Type	Number of Transformers	Total capacity of Transformers	Comments
Sub-transmission	N/A	N/A	
Distribution	68,560	10,104 MVA	

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Table 6 - Reliability						
Description	Clause No.	Discrete Area	2013/14	2014/15	2015/16	2016/17
The average length of interruption of supply to customer premises expressed in minutes	Sc1 (11)(a)	Perth CBD	162	166	272	167
		The urban areas other than the Perth CBD	138	123	139	138
		All other areas of the State	199	184	208	178
The average number of interruptions of supply to customer premises	Sc1 (11)(b)	Perth CBD	0.25	0.20	0.19	0.14
		The urban areas other than the Perth CBD	2.04	1.86	1.55	1.80
		All other areas of the State	4.95	5.44	5.40	4.94
The average percentage of time that electricity has been supplied to customer premises:	Sc1 (11)(c)	Perth CBD	99.992%	99.994%	99.990%	99.996%
		The urban areas other than the Perth CBD	99.946%	99.956%	99.959%	99.953%
		All other areas of the State	99.813%	99.810%	99.786%	99.833%
The average total length of all interruptions of supply to customer premises expressed in minutes:	Sc1 (11)(d)	Perth CBD	40	33	51	23
		The urban areas other than the Perth CBD	281	229	215	249
		All other areas of the State	984	1,000	1,125	880