

Electricity Distribution Network Service Provider Performance Data

Introduction

This workbook contains performance data for the electricity distribution businesses regulated by the AER. Charts and data are presented for a range of financial and network performance measures.

Interpretation

The data covers the regulatory years from 2006 to 2017. It is reported on an end of year basis. Victorian distribution businesses report on a calendar year basis, and so for these businesses is for the year ending 31 December. All other distribution businesses report on a financial year basis, hence the label 2015 refers to data collected for the year ending 30 June 2015.

All financial values have been converted to June 2017 dollars.

Any changes in service classification between regulatory periods have not been adjusted for in the data contained in this report.

Sources

Data is classified as actual or forecast data.

Actual data is generally sourced from individual annual RIN responses, including economic benchmarking and category analysis RINs, or historical data provided at the time of regulatory determinations. The RIN responses of the distribution businesses are available on the AER website.

Forecast data is generally sourced from the final regulatory determinations made by the AER for each of the businesses, updated for decisions by the Australian Competition Tribunal, and other allowed adjustments.

Detailed data sources are listed in each of the worksheets.

VERSION RECORD

Version	Publication date	Data range/updates	
1	Nov 2018	Financial years	2005-06 to 2016-17
		Calendar years	2006 to 2017

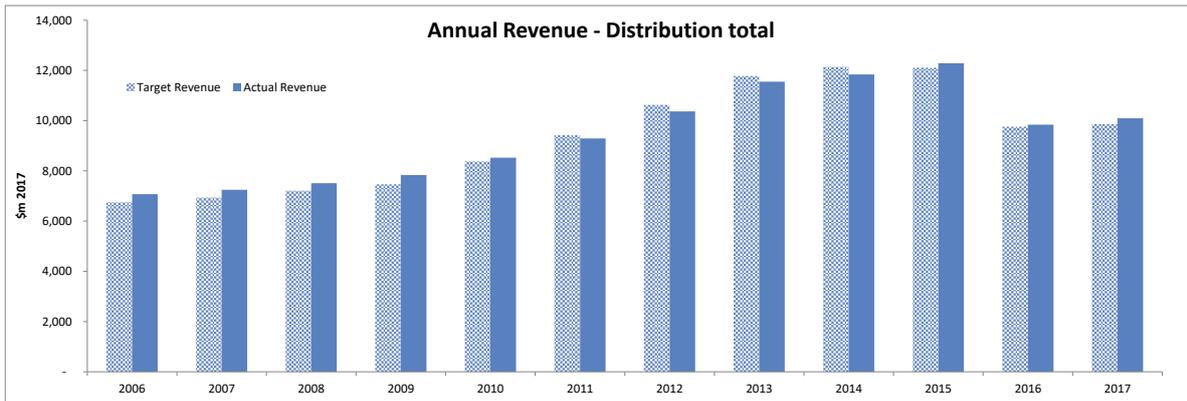
Electricity Distribution Network Service Provider

Performance Data

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Revenue



Actual revenues reported by the distribution businesses are for core distribution services - standard control services. Standard control services, which may include network, connection and metering services, make up the bulk of the services provided by distribution businesses and are regulated by the AER.

Target revenue is derived from regulatory decisions, but adjusted to present it on a comparable basis to actual revenues. The adjustments include rewards and penalties from incentive schemes, cost pass throughs and other factors that are taken into account in determining the target revenues used to set prices each year.

Target Revenue

	\$m 2017	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy*	ACT	136	141	148	141	162	170	174	185	200	161	131	144	
Ausgrid	NSW	800	861	912	967	1,468	1,758	2,079	2,459	2,321	2,036	1,500	1,622	
Endeavour Energy	NSW	690	717	742	776	898	1,039	1,168	1,163	1,096	996	802	784	
Essential Energy	NSW	767	795	821	871	1,005	1,203	1,420	1,585	1,508	1,345	931	914	
Energex	Qld	821	894	973	1,059	1,087	1,235	1,357	1,625	1,804	2,000	1,603	1,513	
Ergon Energy	Qld	986	1,015	1,056	1,053	1,086	1,233	1,328	1,489	1,689	1,909	1,478	1,474	
SA Power Networks	SA	598	612	626	639	651	655	872	896	950	951	698	765	
TasNetworks (D)	Tas	203	219	232	252	265	268	275	302	308	313	307	295	
AusNet (D)	Vic	399	385	401	399	424	481	508	534	600	614	610	642	
CitiPower	Vic	252	236	221	222	233	227	244	255	271	294	283	280	
Jemena Electricity	Vic	179	170	175	186	183	207	224	246	265	265	251	254	
Powercor Australia	Vic	441	449	457	469	479	490	509	545	600	648	621	618	
United Energy	Vic	374	347	354	335	317	343	357	372	384	416	368	389	
Power and Water*	NT	102	91	93	100	118	111	114	120	143	160	173	173	
DNSP Total			6,748	6,934	7,210	7,468	8,377	9,422	10,629	11,777	12,138	12,106	9,756	9,867

Sources:

Target revenue is sourced from pricing determinations made each year and published on the AER web site. Where pricing determinations are not available (prior to the AER taking on the role of economic regulation of distribution businesses, during the judicial review process), forecast revenue has been sourced from post tax revenue models determined as part of final regulatory decisions, as made by jurisdictional regulators or the AER, and amended to take into account any updates made after the final decision.

AER pricing data has been used in the following years:

2010-2016: Evoenergy, Ausgrid, Endeavour Energy, Essential Energy

2011-2017: Energex, Ergon Energy, SA Power Networks, Austen (D), CitiPower, Jemena Electricity, Powercor Australia, United Energy

2012-2017: TasNetworks (D)

2016-2017: Power and Water

Actual Revenue

	\$m 2017	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy*	ACT	146	148	156	144	166	218	222	231	242	194	163	169	
Ausgrid*	NSW	1,109	1,135	1,196	1,253	1,482	1,763	2,004	2,378	2,261	2,087	1,536	1,559	
Endeavour Energy*	NSW	711	727	800	817	917	1,034	1,108	1,120	1,077	1,025	861	881	
Essential Energy*	NSW	758	812	849	887	1,025	1,144	1,393	1,618	1,474	1,421	875	957	
Energex	Qld	837	886	940	1,098	1,166	1,173	1,315	1,487	1,706	1,980	1,596	1,554	
Ergon Energy	Qld	905	892	914	951	1,002	1,159	1,273	1,448	1,626	1,841	1,481	1,512	
SA Power Networks	SA	605	615	622	635	650	703	860	890	902	964	695	761	
TasNetworks (D)	Tas	177	185	212	230	259	254	270	290	290	297	315	303	
AusNet (D)	Vic	394	410	409	396	446	469	491	540	609	678	597	648	
CitiPower	Vic	259	260	248	248	251	225	236	251	267	296	283	279	
Jemena Electricity	Vic	197	204	204	211	201	211	218	242	257	266	260	271	
Powercor Australia	Vic	507	506	499	511	492	480	510	571	617	675	630	629	
United Energy	Vic	367	372	363	349	347	345	354	367	370	412	379	402	
Power and Water	NT	102	91	93	100	118	111	114	120	143	149	170	170	
DNSP Total			7,074	7,245	7,507	7,830	8,522	9,290	10,368	11,553	11,841	12,285	9,842	10,095

Sources:

Economic benchmarking RIN responses, 2006 - 2017

Regulatory accounts 2006 to 2010

Annual reporting RIN responses 2011 to 2017

Notes:

Victorian DNSPs report information on a calendar year. All other DNSPs report on a financial year ending June. Information is shown for each DNSP for the regulatory year, such that data shown in 2017 is for the period 1 January 2017 to 31 December 2017 for Victorian DNSPs, and 1 July 2016 to 30 June 2017 for non-Victorian DNSPs.

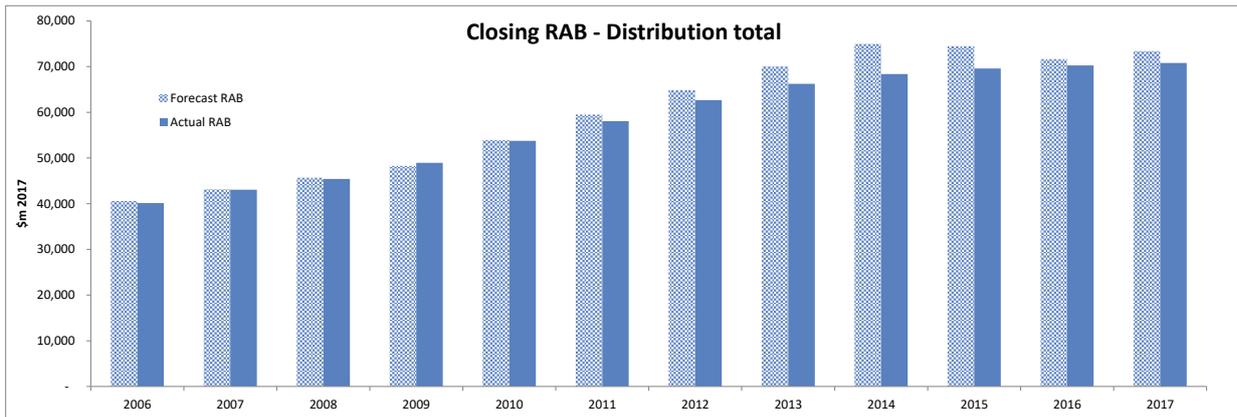
Any distribution revenue derived from cross boundary revenue sources has been excluded.

Evoenergy operates under an average revenue cap form of control and therefore it does not have a "target revenue". Rather, it has a target yield. Compliance with this target yield is determined by multiplying individual proposed tariffs by volumes from two years prior to arrive at a notional revenue figure. The notional revenue reported in Evoenergy's pricing proposal for the purposes of determining compliance is not comparable to the actual revenue reported in its RIN.

Power and Water (NT) 2006-2014: Revenue forecasts are not available for this period. To ensure the aggregate target revenue data is comparable with the aggregate actual revenue data, the target revenue for PWC has been assumed to match the actual revenue in the years 2006 to 2014. This data is shaded green in the table.

The actual revenues reported for 2014-15 to 2016-17 for NSW/ACT electricity distributors should be interpreted with caution. The reported revenues for those years were affected by two factors that do not typically occur over a regulatory control period: the transitional decision for 2014-15; and, an appeal on the 2015 final decision (which was subsequently set aside subject to remittal processes).

Regulated asset base



The regulated asset base (RAB) represents the value of the distribution networks' assets used to provide the core services regulated by the AER, at a given point in time. The value changes each year due to capital expenditures, depreciation, and disposal of assets.

Forecast RAB

	\$m 2017	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy		ACT	712	714	707	705	755	788	817	837	852	917	924	935
Ausgrid		NSW	6,579	7,022	7,450	7,889	11,308	12,691	14,254	15,781	17,222	15,188	15,341	15,478
Endeavour Energy		NSW	3,746	4,005	4,264	4,462	4,816	5,311	5,718	6,064	6,386	6,117	6,256	6,327
Essential Energy		NSW	3,716	3,938	4,172	4,417	5,723	6,308	6,944	7,552	8,149	7,397	7,632	7,837
Energex		Qld	6,579	7,277	7,979	8,642	8,037	10,154	11,194	12,178	13,094	14,057	11,757	11,972
Ergon Energy		Qld	6,194	6,828	7,526	8,249	8,990	9,108	9,874	10,656	11,459	12,362	10,438	10,674
SA Power Networks		SA	3,352	3,349	3,336	3,333	3,345	3,529	3,737	3,883	4,016	4,129	4,091	4,203
TasNetworks (D)		Tas	1,168	1,240	1,294	1,350	1,399	1,439	1,472	1,623	1,646	1,664	1,683	1,703
AusNet (D)		Vic	1,878	1,934	1,985	2,041	2,099	2,559	2,774	2,984	3,185	3,379	3,671	3,918
CitiPower		Vic	1,408	1,446	1,482	1,536	1,566	1,570	1,661	1,765	1,862	1,955	1,867	1,962
Jemena Electricity		Vic	811	814	820	818	825	930	976	1,016	1,057	1,086	1,273	1,379
Powercor Australia		Vic	2,302	2,383	2,467	2,545	2,624	2,701	2,862	3,020	3,186	3,343	3,548	3,766
United Energy		Vic	1,693	1,694	1,693	1,719	1,769	1,690	1,797	1,860	1,900	1,934	2,210	2,302
Power and Water		NT	472	486	522	569	633	705	758	842	973	933	949	949
DNSP Total			40,611	43,131	45,696	48,274	53,888	59,483	64,837	70,061	74,985	74,460	71,640	73,405

Sources:

Forecast closing RAB has been sourced from post tax revenue models (PTRM) developed as part of final regulatory decisions, as made by the AER or jurisdictional regulators, and amended to take into account any updates made after the final decision.

Actual RAB

	\$m 2017	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy		ACT	700	704	713	712	654	685	704	715	731	914	918	915
Ausgrid		NSW	6,464	7,146	7,890	8,678	11,168	12,579	13,991	14,840	15,054	15,095	14,872	14,751
Endeavour Energy		NSW	3,560	3,837	4,071	4,388	4,602	4,931	5,394	5,771	5,881	6,061	6,056	6,015
Essential Energy		NSW	3,841	4,223	4,644	5,137	5,629	6,109	6,646	7,022	7,137	7,358	7,483	7,577
Energex		Qld	6,514	7,122	7,628	8,288	9,110	9,925	10,641	11,260	11,688	11,529	11,715	11,865
Ergon Energy		Qld	6,078	6,673	7,152	7,688	8,279	8,795	9,234	9,727	10,081	10,188	10,361	10,480
SA Power Networks		SA	3,529	3,493	3,446	3,444	3,358	3,470	3,627	3,769	3,842	3,899	3,920	3,909
TasNetworks (D)		Tas	1,126	1,256	1,305	1,405	1,482	1,550	1,599	1,605	1,614	1,611	1,631	1,615
AusNet (D)		Vic	1,830	1,922	1,979	2,208	2,392	2,514	2,772	3,027	3,292	3,511	3,642	3,770
CitiPower		Vic	1,348	1,379	1,348	1,429	1,471	1,541	1,611	1,675	1,746	1,798	1,826	1,818
Jemena Electricity		Vic	800	842	813	874	873	951	1,033	1,094	1,155	1,210	1,251	1,302
Powercor Australia		Vic	2,251	2,361	2,356	2,493	2,528	2,647	2,836	3,000	3,195	3,373	3,472	3,631
United Energy		Vic	1,628	1,635	1,559	1,643	1,577	1,683	1,818	1,898	1,993	2,125	2,164	2,191
Power and Water		NT	472	486	522	569	633	705	758	842	973	933	949	949
DNSP Total			40,140	43,079	45,427	48,957	53,757	58,086	62,663	66,244	68,381	69,605	70,260	70,788

Sources:

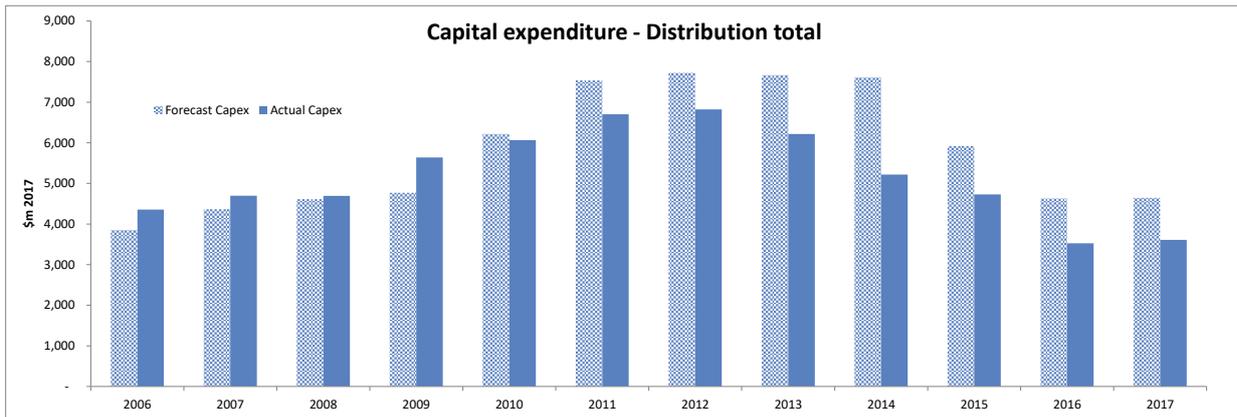
Actual RAB has been taken from roll forward models (RFM) developed as part of final regulatory decisions, as made by the AER or jurisdictional regulators, and amended to take into account any updates made after the final decision. When a final decision RFM is unavailable, we have used the regulatory proposal or draft decision RFM, and if no RFM is available economic benchmarking data has been used.

Note:

Victorian DNSPs report information on a calendar year. All other DNSPs report on a financial year ending June. Information is shown for each DNSP for the regulatory year, such that data shown in 2017 is for the period 1 January 2017 to 31 December 2017 for Victorian DNSPs, and 1 July 2016 to 30 June 2017 for non-Victorian DNSPs.

Power and Water (NT) 2006-2014: Revenue forecasts are not available for this period. An error in asset revaluation for the 2014 to 2019 period resulted in the forecasts not being aligned with the actual RAB, and hence comparisons are inaccurate. To ensure the aggregate forecast RAB data is comparable with the aggregate actual RAB data, the forecast RAB for PWC has been assumed to match the actual RAB. This data is shaded green in the table.

Capital expenditure



Capital expenditure (capex) is a measure of investment in the distribution networks. This includes augmentation of the network, replacement of assets, improving network performance and non-network investments (for example, buildings). Capex is reported on an as-incurred basis.

Forecast Capex

	\$m 2017	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy	ACT	29	32	28	29	75	69	67	60	57	76	63	68	
Ausgrid	NSW	610	791	786	792	1,677	1,716	1,944	1,970	1,913	637	678	687	
Endeavour Energy	NSW	404	483	489	578	677	725	644	585	560	436	353	298	
Essential Energy	NSW	327	484	489	490	858	891	913	916	937	521	519	507	
Energex	Qld	810	863	1,006	1,004	1,026	1,311	1,339	1,320	1,286	1,352	572	575	
Ergon Energy	Qld	670	718	741	733	722	1,157	1,113	1,147	1,196	1,288	681	613	
SA Power Networks	SA	201	202	196	210	220	350	402	359	361	357	398	390	
TasNetworks (D)	Tas	65	64	124	145	140	137	135	111	115	107	101	101	
AusNet (D)	Vic	174	164	165	176	185	319	324	335	325	319	337	409	
CitiPower	Vic	132	125	124	136	114	169	167	184	183	185	168	194	
Jemena Electricity	Vic	64	55	58	52	61	105	100	101	107	97	143	175	
Powercor Australia	Vic	201	221	226	223	226	296	295	303	319	324	355	388	
United Energy	Vic	133	125	126	135	145	192	196	166	154	155	219	209	
Power and Water	NT	29	36	54	66	92	101	84	109	95	66	41	29	
DNSP Total		3,849	4,364	4,613	4,767	6,218	7,538	7,722	7,665	7,607	5,919	4,628	4,644	

Sources:

Forecast capex is sourced from post tax revenue models (PTRM) determined as part of final regulatory decisions, as made by the AER or jurisdictional regulators, and amended to take into account any updates made after the final decision.

Actual Capex

	\$m 2017	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy	ACT	31	38	45	26	75	80	74	71	87	75	61	54	
Ausgrid	NSW	699	909	999	1,376	1,537	1,732	1,839	1,318	703	562	310	436	
Endeavour Energy	NSW	420	462	439	514	477	558	687	606	548	380	215	191	
Essential Energy	NSW	454	556	605	668	775	789	806	685	594	482	414	403	
Energex	Qld	945	910	825	978	1,134	1,089	1,030	959	797	756	529	511	
Ergon Energy	Qld	789	892	778	855	777	877	798	870	752	792	610	501	
SA Power Networks	SA	188	151	141	196	178	293	347	349	294	334	248	274	
TasNetworks (D)	Tas	141	110	126	151	163	152	96	94	102	90	104	130	
AusNet (D)	Vic	155	163	230	278	274	293	331	389	401	360	292	323	
CitiPower	Vic	108	92	97	113	121	151	123	145	157	145	120	104	
Jemena Electricity	Vic	74	77	48	86	92	130	121	125	129	134	115	132	
Powercor Australia	Vic	210	205	207	196	218	260	282	310	349	320	266	347	
United Energy	Vic	113	98	98	136	148	196	204	190	211	216	170	153	
Power and Water	NT	29	36	54	66	92	101	84	109	95	82	70	50	
DNSP Total		4,355	4,698	4,693	5,639	6,062	6,702	6,820	6,218	5,218	4,728	3,525	3,610	

Sources:

Actual capex has been taken from roll forward models (RFM) developed as part of final regulatory decisions, as made by the AER or jurisdictional regulators, and amended to take into account any updates made after the final decision. Where a final decision RFM is unavailable, we have used draft decision or regulatory proposal RFMs. When RFM data is unavailable, economic benchmarking data is used.

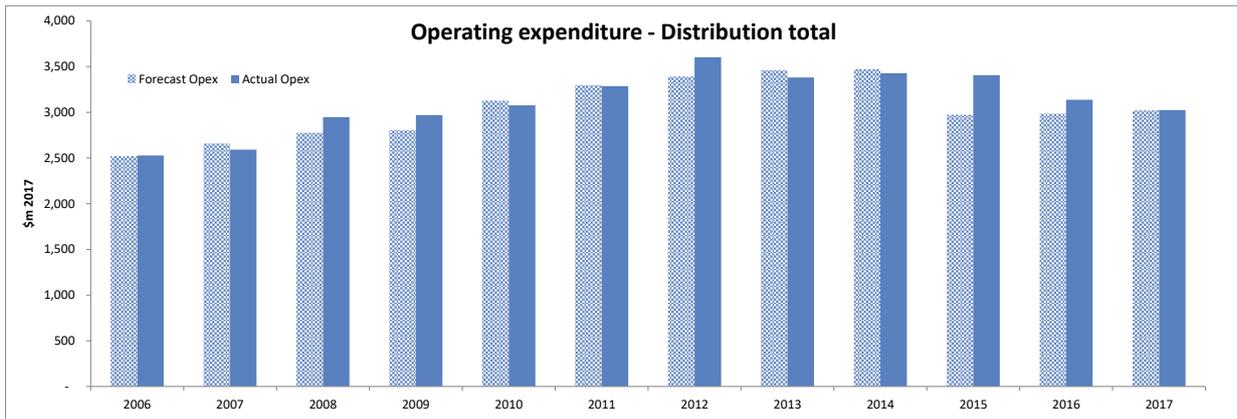
Note:

Capital contributions have been removed from both forecast and actual capex.

Victorian DNSPs report information on a calendar year. All other DNSPs report on a financial year ending June. Information is shown for each DNSP for the regulatory year, such that data shown in 2017 is for the period 1 January 2017 to 31 December 2017 for Victorian DNSPs, and 1 July 2016 to 30 June 2017 for non-Victorian DNSPs.

Power and Water (NT) 2006-2014: Capex forecasts are not available for this period. To ensure the aggregate forecast capex data is comparable with the aggregate actual capex data, the forecast capex for PWC has been assumed to match the actual capex in the years 2006 to 2014. This data is shaded green in the table.

Operating expenditure



Operating expenditure (opex) includes network operation, maintenance and other non-capital costs incurred by the distribution businesses.

Forecast Opex

	\$m 2017	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy		ACT	54	53	55	56	72	78	83	88	91	49	50	51
Ausgrid		NSW	429	441	448	450	602	615	628	639	641	454	426	434
Endeavour Energy		NSW	282	286	288	290	353	356	361	366	364	251	255	260
Essential Energy		NSW	317	375	379	385	470	479	489	497	502	337	341	344
Energex		Qld	289	337	378	388	386	368	370	380	389	385	353	350
Ergon Energy		Qld	359	355	354	316	319	409	429	428	424	410	350	356
SA Power Networks		SA	168	177	180	179	180	224	221	243	248	250	251	260
TasNetworks (D)		Tas	44	43	78	85	87	91	90	81	80	80	80	80
AusNet (D)		Vic	147	151	155	159	163	181	189	195	205	208	230	234
CitiPower		Vic	47	48	49	50	51	50	54	57	54	55	84	85
Jemena Electricity		Vic	69	70	71	73	75	66	65	65	71	70	92	90
Powercor Australia		Vic	157	161	164	167	172	170	187	198	187	190	232	238
United Energy		Vic	111	114	116	118	118	120	123	124	128	130	143	146
Power and Water		NT	47	48	59	89	81	93	104	101	87	103	97	93
DNSP Total			2,520	2,659	2,775	2,804	3,128	3,298	3,392	3,461	3,473	2,974	2,985	3,021

Sources:

Forecast opex is sourced from post tax revenue models determined as part of final regulatory decisions, as made by the AER or jurisdictional regulators, and amended to take into account any updates made after the final decision.

Actual Opex

	\$m 2017	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy		ACT	45	45	49	50	56	63	68	75	84	77	41	47
Ausgrid		NSW	515	450	633	580	635	616	680	548	612	677	602	535
Endeavour Energy		NSW	224	245	302	280	267	280	286	260	295	282	318	307
Essential Energy		NSW	322	383	435	411	433	447	540	502	486	407	320	324
Energex		Qld	270	315	333	343	346	381	412	441	402	410	357	359
Ergon Energy		Qld	364	340	368	360	359	435	456	377	375	404	403	358
SA Power Networks		SA	149	142	160	177	175	220	230	246	251	261	219	253
TasNetworks (D)		Tas	65	66	67	75	88	86	94	77	79	67	72	95
AusNet (D)		Vic	122	155	165	197	206	211	217	241	249	259	220	191
CitiPower		Vic	47	55	52	61	65	63	77	76	79	58	76	72
Jemena Electricity		Vic	68	74	64	60	71	70	80	78	76	77	83	87
Powercor Australia		Vic	182	172	157	182	183	186	221	235	223	229	200	196
United Energy		Vic	108	103	104	105	111	137	138	124	128	121	140	130
Power and Water		NT	47	48	59	89	81	93	104	101	87	78	84	73
DNSP Total			2,528	2,592	2,946	2,969	3,076	3,288	3,602	3,382	3,428	3,407	3,137	3,026

Sources:

Economic benchmarking RIN responses

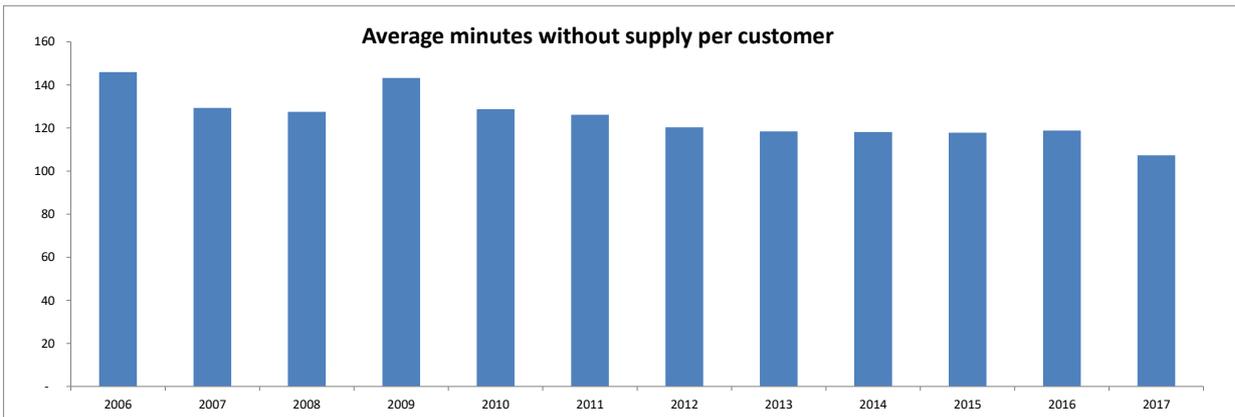
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Power and Water (NT) 2006-2014: Opex forecasts are not available for this period. To ensure aggregate forecast opex data is comparable with aggregate actual opex data, the forecast opex for PWC has been assumed to match the actual opex in the years 2006 to 2014. This data is shaded green in the table.

Only some networks have operating expenditure for metering services. Those which recorded no opex for metering across the span of the report were: Evoenergy, CitiPower, Power and Water, Powercor Australia, SA Power Networks, TasNetworks (D) and United Energy.

Network reliability - outage duration



Outage duration is measured using a System Average Interruption Duration Index (SAIDI). This shows the average length of time each customer was without supply when averaged over all customers in the distribution network. This data does not include outages caused by force majeure events or other outages primarily caused or initiated by third parties. Aggregate data has been weighted by each network's customer numbers.

Minutes/customer

	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy	ACT	35	44	26	30	26	48	33	29	27	33	35	40
Ausgrid	NSW	87	86	97	107	79	89	79	68	77	71	76	79
Endeavour Energy	NSW	99	96	102	96	79	77	93	104	83	91	87	73
Essential Energy	NSW	297	222	218	261	197	223	238	233	181	222	214	236
Energex	Qld	128	88	100	91	88	79	64	67	70	84	74	62
Ergon Energy	Qld	380	264	317	352	352	325	296	264	228	281	280	217
SA Power Networks	SA	156	180	130	136	181	162	130	143	168	124	139	151
TasNetworks (D)	Tas	132	173	175	201	205	139	160	137	185	141	150	137
AusNet (D)	Vic	190	177	132	178	130	145	126	133	157	137	171	121
CitiPower	Vic	25	22	17	30	30	23	29	27	35	26	25	20
Jemena Electricity	Vic	69	68	63	71	62	55	50	60	59	47	46	42
Powercor Australia	Vic	121	141	119	170	150	125	130	139	166	134	130	100
United Energy	Vic	51	61	63	61	57	61	79	74	78	66	55	43
Power and Water	NT	216	211	227	239	174	305	243	214	114	178	175	179
Weighted Average		146	129	127	143	129	126	120	118	118	118	119	107

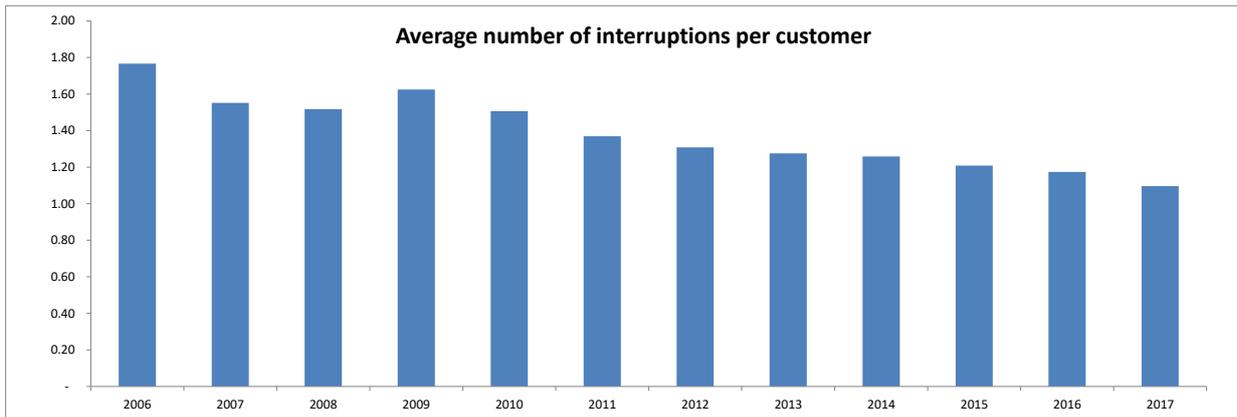
Sources:

Economic benchmarking RIN responses

Note:

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Network reliability - outage frequency



Outage frequency is measured using a System Average Interruption Frequency Index (SAIFI). This shows the number of supply interruptions each customer experienced in a year when averaged over all customers on the distribution network. This data does not include outages caused by force majeure events or other outages primarily caused or initiated by third parties.

Interruptions/customer

	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy	ACT	0.71	0.64	0.56	0.59	0.62	0.80	0.63	0.59	0.50	0.61	0.67	0.70
Ausgrid	NSW	1.16	1.04	1.15	1.30	1.06	1.03	0.88	0.73	0.83	0.69	0.70	0.71
Endeavour Energy	NSW	1.21	1.22	1.23	1.10	0.97	0.90	1.01	1.22	0.98	1.09	0.87	0.85
Essential Energy	NSW	2.64	2.30	2.26	2.34	2.00	1.87	2.12	1.85	1.73	1.97	1.77	1.86
Energex	Qld	1.72	1.25	1.38	1.30	1.38	1.10	0.85	0.88	0.89	0.91	0.86	0.75
Ergon Energy	Qld	3.95	2.75	2.94	3.42	3.27	2.83	2.71	2.42	2.32	2.52	2.49	2.14
SA Power Networks	SA	1.66	1.74	1.35	1.37	1.65	1.55	1.31	1.33	1.45	1.12	1.20	1.24
TasNetworks (D)	Tas	2.04	1.77	1.77	1.72	1.84	1.45	1.73	1.46	1.82	1.30	1.56	1.45
AusNet (D)	Vic	2.49	2.33	1.96	2.18	1.91	1.94	1.66	1.90	1.80	1.73	1.69	1.50
CitiPower	Vic	0.53	0.47	0.31	0.55	0.44	0.40	0.47	0.39	0.42	0.39	0.40	0.33
Jemena Electricity	Vic	1.19	1.32	1.00	1.17	0.94	0.90	0.92	1.11	0.96	0.77	0.88	0.79
Powercor Australia	Vic	1.89	1.73	1.50	1.81	1.77	1.35	1.37	1.44	1.60	1.38	1.30	1.11
United Energy	Vic	0.92	1.07	1.30	1.30	0.98	0.96	1.09	1.01	1.00	0.91	0.81	0.64
Power and Water	NT	3.61	3.33	2.78	3.68	2.56	3.65	3.46	3.46	1.74	1.85	2.63	2.75
Weighted Average		1.77	1.55	1.52	1.63	1.51	1.37	1.31	1.28	1.26	1.21	1.17	1.10

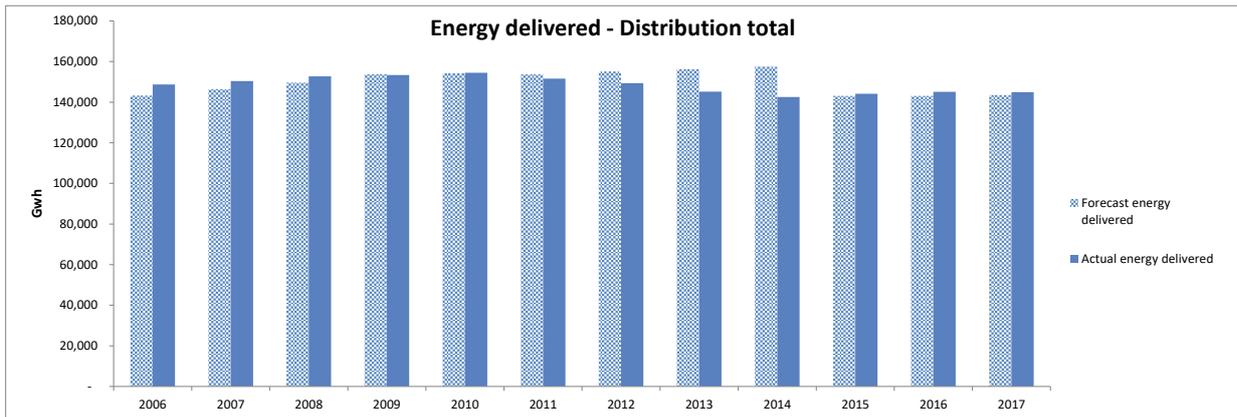
Sources:

Economic benchmarking RIN responses

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Energy delivered



Energy delivered is a measure of total energy transported through the distribution networks in each year.

Forecast energy delivered

Gwh	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy	ACT	2,655	2,694	2,733	2,906	2,933	2,916	2,908	2,898	2,889	2,737	2,730	2,761
Ausgrid	NSW	26,771	27,236	27,843	28,482	27,948	28,041	27,989	27,673	27,477	25,057	24,944	24,795
Endeavour Energy	NSW	17,796	18,091	18,483	18,860	17,373	17,313	17,526	17,967	18,202	15,367	15,245	15,259
Essential Energy	NSW	11,071	11,269	11,455	11,610	12,092	12,147	12,202	12,258	12,314	11,681	11,628	11,557
Energex	Qld	20,480	21,305	22,250	23,170	24,085	22,416	23,138	24,042	24,795	20,629	20,569	20,504
Ergon Energy	Qld	13,358	13,650	13,944	14,592	14,889	15,871	16,450	16,874	17,433	14,115	14,399	14,773
SA Power Networks	SA	10,509	10,690	10,869	10,994	11,119	11,618	11,422	11,264	11,194	10,418	10,510	10,530
TasNetworks (D)	Tas	4,176	4,297	4,110	4,694	4,625	4,601	4,560	4,467	4,509	4,551	4,081	4,074
AusNet (D)	Vic	7,374	7,588	7,785	7,967	8,173	7,975	7,978	7,961	7,974	7,449	7,456	7,458
CitiPower	Vic	5,702	5,803	5,901	5,959	6,014	6,180	6,227	6,218	6,201	6,371	6,566	6,726
Jemena Electricity	Vic	4,213	4,264	4,302	4,326	4,357	4,334	4,322	4,271	4,222	4,274	4,326	4,344
Powercor Australia	Vic	10,024	10,228	10,419	10,605	10,804	10,726	10,795	10,781	10,761	11,087	11,225	11,339
United Energy	Vic	7,665	7,817	7,943	8,046	8,161	7,936	7,964	7,905	7,842	7,625	7,585	7,600
Power and Water	NT	1,432	1,476	1,545	1,576	1,640	1,643	1,640	1,671	1,719	1,751	1,812	1,780
DNSSP Total		143,226	146,408	149,582	153,787	154,213	153,717	155,121	156,250	157,531	143,110	143,076	143,501

Source:

Reset RIN responses (regulatory proposals) or final decision post tax revenue models, as updated by the AER.

Actual energy delivered

Gwh	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy	ACT	2,758	2,821	2,847	2,873	2,896	2,910	2,891	2,904	2,830	2,856	2,876	2,914
Ausgrid	NSW	30,120	30,442	30,555	30,707	30,533	30,570	29,345	26,338	25,523	25,630	25,618	25,669
Endeavour Energy	NSW	17,196	17,483	18,112	17,426	17,411	17,501	16,506	16,001	15,637	16,128	16,645	16,716
Essential Energy	NSW	11,965	11,974	12,037	12,121	12,104	11,943	11,853	12,291	12,030	12,271	12,313	12,389
Energex	Qld	20,618	20,707	21,155	21,994	22,193	21,454	21,210	21,055	20,838	21,154	21,138	21,355
Ergon Energy	Qld	13,486	13,576	13,813	14,130	14,257	13,227	13,692	13,496	13,716	13,656	13,747	13,332
SA Power Networks	SA	10,955	11,259	11,344	11,267	11,504	11,259	11,019	11,008	10,603	10,342	10,355	10,215
TasNetworks (D)	Tas	4,449	4,417	4,441	4,586	4,545	4,445	4,318	4,248	4,112	4,186	4,243	4,193
AusNet (D)	Vic	7,398	7,500	7,886	7,750	7,909	7,630	7,595	7,501	7,448	7,686	7,560	7,673
CitiPower	Vic	5,975	6,079	6,100	6,096	6,210	6,105	6,085	5,981	5,919	5,944	5,876	5,917
Jemena Electricity	Vic	4,279	4,379	4,490	4,375	4,450	4,415	4,364	4,254	4,136	4,212	4,187	4,264
Powercor Australia	Vic	10,148	10,299	10,510	10,491	10,678	10,471	10,744	10,556	10,333	10,713	10,657	10,720
United Energy	Vic	7,915	7,973	7,896	8,013	8,163	8,023	8,121	7,856	7,696	7,604	8,068	7,844
Power and Water	NT	1,432	1,476	1,545	1,576	1,640	1,643	1,640	1,671	1,719	1,751	1,812	1,780
DNSSP Total		148,693	150,384	152,731	153,406	154,492	151,594	149,382	145,160	142,540	144,133	145,096	144,980

Sources:

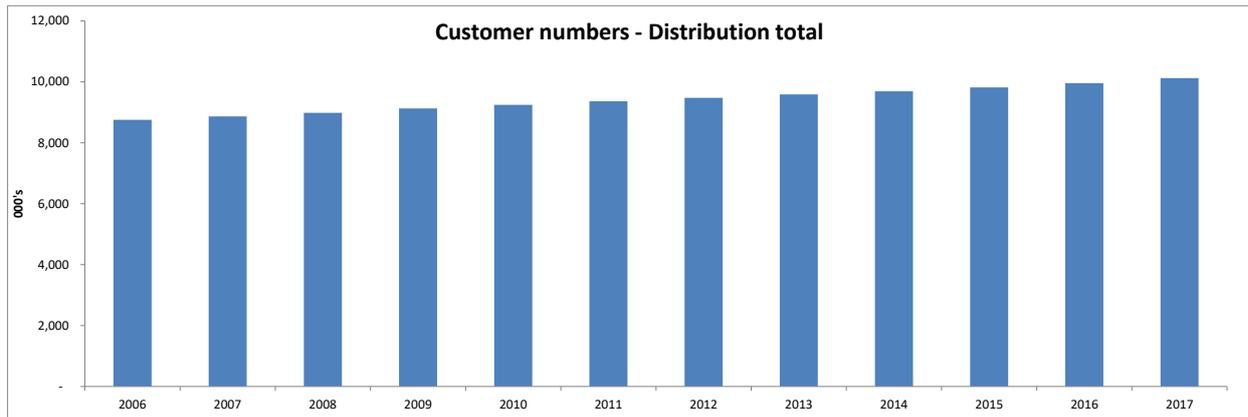
Economic benchmarking RIN responses

Note:

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Power and Water (NT): Forecasts of energy delivered for Power and Water (NT) are not available. To ensure the aggregate forecast energy delivered data is comparable with the aggregate actual energy delivered data, the forecast for Power and Water has been assumed to match actual energy delivered. This data is shaded green in the table.

Customer numbers



Customer numbers represent the number of customers connected to the distribution networks, including both metered and unmetered customers.

Customer numbers

000's	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy	ACT	155	156	158	161	165	169	173	177	179	182	185	191
Ausgrid	NSW	1,546	1,562	1,574	1,586	1,597	1,609	1,622	1,635	1,651	1,670	1,688	1,707
Endeavour Energy	NSW	850	860	870	879	886	895	904	919	940	956	968	984
Essential Energy	NSW	799	805	815	822	825	834	838	844	854	867	879	892
Energex	Qld	1,212	1,236	1,264	1,287	1,308	1,327	1,344	1,360	1,376	1,397	1,422	1,448
Ergon Energy	Qld	624	635	648	663	677	689	699	710	722	728	739	746
SA Power Networks	SA	779	779	781	814	827	836	844	848	852	854	859	878
TasNetworks (D)	Tas	251	255	260	265	271	276	278	280	281	283	285	288
AusNet (D)	Vic	605	617	628	639	646	655	669	681	685	706	713	735
CitiPower	Vic	295	300	303	306	310	314	319	323	326	328	336	339
Jemena Electricity	Vic	293	299	303	305	310	313	317	319	318	321	327	335
Powercor Australia	Vic	664	676	688	701	715	731	744	754	765	777	800	816
United Energy	Vic	613	618	624	628	634	641	648	657	658	665	670	677
Power and Water	NT	67	68	69	72	74	76	77	79	81	83	84	86
DNSSP Total		8,752	8,867	8,985	9,129	9,244	9,365	9,476	9,586	9,689	9,817	9,955	10,122

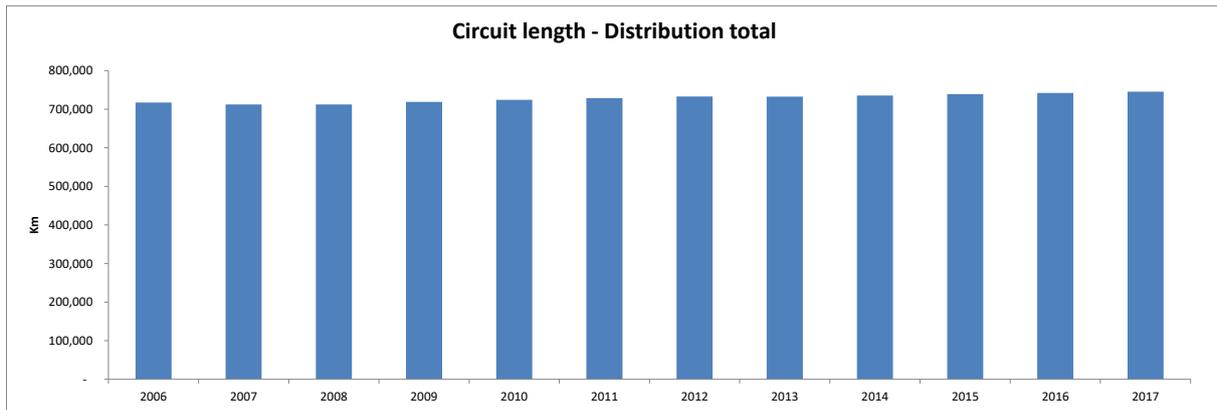
Sources:

Economic benchmarking RIN responses

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Circuit length



The circuit length data is measured at the end of each regulatory year. It includes both overhead lines and underground cables. Circuit length is always greater than or equal to route length, as a double circuit line that traverses 10 kms is counted as 20 km of circuit length.

Circuit length

Km	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy	ACT	4,649	4,684	4,740	4,813	4,886	4,990	5,108	5,171	5,220	5,272	5,312	5,333
Ausgrid	NSW	38,742	38,875	39,224	39,462	39,745	40,272	40,626	40,964	41,271	41,324	41,453	41,642
Endeavour Energy	NSW	32,432	32,832	33,299	33,579	33,817	34,172	34,568	35,029	35,492	36,005	36,468	36,993
Essential Energy	NSW	199,551	189,452	185,829	187,750	188,634	190,592	190,819	191,107	191,156	191,475	191,945	192,103
Energex	Qld	46,658	47,645	48,486	49,427	50,117	50,771	51,342	51,781	52,097	52,565	53,202	53,757
Ergon Energy	Qld	148,353	150,136	150,660	151,770	152,580	152,730	153,748	150,472	151,122	152,460	152,255	152,491
SA Power Networks	SA	84,830	85,326	85,822	86,625	87,209	87,194	87,648	87,882	88,083	88,201	88,808	88,971
TasNetworks (D)	Tas	21,210	21,210	21,210	21,268	21,632	22,027	22,222	22,336	22,496	22,629	22,681	22,725
AusNet (D)	Vic	41,507	41,836	42,111	42,712	42,969	43,214	43,702	43,822	44,255	44,349	44,703	44,907
CitiPower	Vic	3,952	4,076	4,036	4,070	4,099	4,284	4,303	4,347	4,481	4,505	4,541	4,550
Jemena Electricity	Vic	5,719	5,770	5,868	5,927	5,971	6,042	6,102	6,135	6,161	6,246	6,301	6,345
Powercor Australia	Vic	71,677	71,931	72,121	72,939	73,499	73,133	73,597	73,889	74,181	74,452	74,675	75,121
United Energy	Vic	12,384	12,476	12,583	12,538	12,644	12,725	12,818	12,835	12,823	12,873	12,875	13,342
Power and Water	NT	5,747	5,929	6,110	6,186	6,308	6,460	6,522	6,601	6,664	6,845	6,945	7,015
DNISP Total		717,411	712,178	712,098	719,065	724,110	728,606	733,125	732,371	735,502	739,202	742,164	745,295

Sources:

Economic benchmarking RIN responses

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Circuit length - overhead

Km	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy	ACT	2,422	2,414	2,404	2,396	2,391	2,404	2,404	2,395	2,365	2,368	2,365	2,361
Ausgrid	NSW	26,109	25,885	25,986	25,934	25,967	26,139	26,085	26,072	26,044	26,006	25,934	25,890
Endeavour Energy	NSW	23,387	23,409	23,440	23,443	23,431	23,411	23,417	23,412	23,387	23,369	23,295	23,227
Essential Energy	NSW	194,385	183,413	179,875	181,761	182,431	183,526	183,454	183,500	183,490	183,530	183,612	183,386
Energex	Qld	34,457	34,623	34,659	34,731	34,780	34,900	34,992	35,033	35,102	35,122	35,129	35,119
Ergon Energy	Qld	144,396	145,654	145,367	145,424	145,685	145,390	146,023	142,293	142,618	143,546	143,114	143,176
SA Power Networks	SA	71,069	71,025	70,982	71,136	71,323	71,066	71,148	71,153	71,160	71,230	71,322	71,217
TasNetworks (D)	Tas	19,308	19,308	19,308	19,337	19,537	19,752	19,883	19,962	20,063	20,164	20,179	20,201
AusNet (D)	Vic	37,642	37,724	37,820	38,099	38,176	38,145	38,380	38,320	38,527	38,383	38,436	38,333
CitiPower	Vic	2,261	2,292	2,193	2,192	2,185	2,223	2,230	2,233	2,270	2,272	2,274	2,275
Jemena Electricity	Vic	4,418	4,426	4,452	4,463	4,464	4,476	4,472	4,456	4,436	4,451	4,450	4,453
Powercor Australia	Vic	68,353	68,418	68,579	68,355	68,370	68,445	68,767	68,824	68,933	68,875	68,814	68,795
United Energy	Vic	10,108	10,158	10,197	10,113	10,148	10,130	10,186	10,144	10,085	10,080	10,041	10,046
Power and Water	NT	4,663	4,804	4,953	5,003	5,042	5,120	5,153	5,178	5,204	5,331	5,367	5,405
DNISP Total		642,977	633,553	630,214	632,387	633,929	635,127	636,593	632,974	633,685	634,729	634,332	633,882

Sources:

Economic benchmarking RIN responses

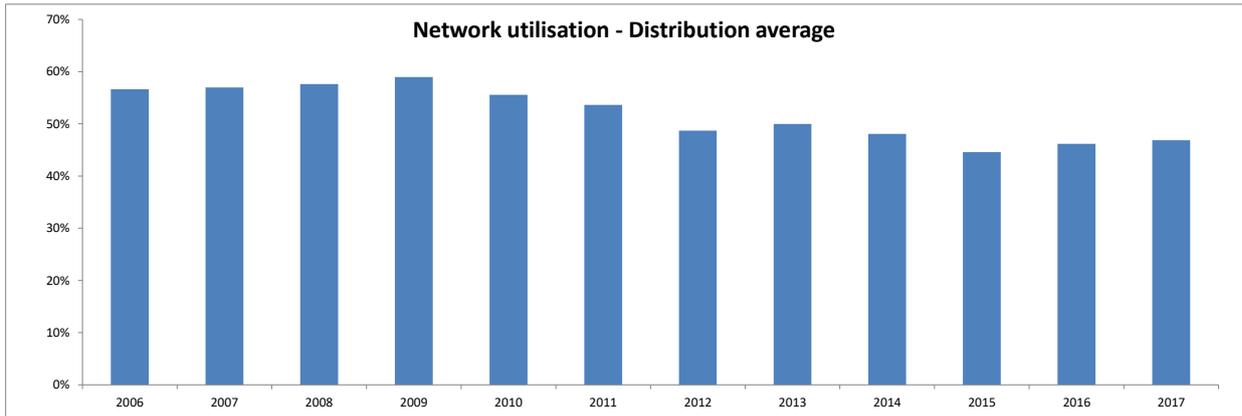
Circuit length - underground

Km	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy	ACT	2,227	2,271	2,337	2,418	2,496	2,586	2,704	2,776	2,855	2,904	2,946	2,972
Ausgrid	NSW	12,634	12,990	13,238	13,528	13,779	14,134	14,542	14,892	15,227	15,318	15,519	15,752
Endeavour Energy	NSW	9,045	9,423	9,859	10,136	10,386	10,761	11,151	11,617	12,105	12,636	13,173	13,766
Essential Energy	NSW	5,166	6,039	5,954	5,989	6,203	7,066	7,365	7,607	7,666	7,946	8,333	8,717
Energex	Qld	12,201	13,022	13,827	14,696	15,337	15,871	16,350	16,748	16,995	17,442	18,073	18,638
Ergon Energy	Qld	3,958	4,482	5,293	6,346	6,895	7,339	7,725	8,179	8,504	8,913	9,141	9,315
SA Power Networks	SA	13,762	14,301	14,840	15,489	15,885	16,128	16,500	16,729	16,923	16,971	17,486	17,754
TasNetworks (D)	Tas	1,902	1,903	1,903	1,931	2,095	2,275	2,339	2,374	2,433	2,465	2,502	2,524
AusNet (D)	Vic	3,865	4,111	4,291	4,613	4,793	5,069	5,322	5,502	5,728	5,966	6,267	6,575
CitiPower	Vic	1,691	1,784	1,843	1,878	1,914	2,061	2,073	2,114	2,211	2,233	2,267	2,274
Jemena Electricity	Vic	1,301	1,344	1,416	1,463	1,507	1,566	1,630	1,679	1,725	1,795	1,851	1,892
Powercor Australia	Vic	3,324	3,513	3,542	4,585	5,129	4,688	4,830	5,065	5,248	5,577	5,861	6,326
United Energy	Vic	2,276	2,318	2,386	2,424	2,497	2,595	2,632	2,691	2,738	2,793	2,834	3,297
Power and Water	NT	1,084	1,124	1,157	1,183	1,266	1,340	1,369	1,423	1,460	1,514	1,578	1,610
DNISP Total		74,434	78,625	81,884	86,678	90,181	93,479	96,531	99,396	101,817	104,473	107,832	111,413

Sources:

Economic benchmarking RIN responses

Network utilisation



Network utilisation is a measure of the use of the network. Utilisation rates are derived by comparing maximum demand to the total capacity of the distribution network, at the zone substation level.

Network utilisation

	State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Evoenergy	ACT	0.48	0.50	0.49	0.52	0.49	0.49	0.45	0.46	0.46	0.44	0.46	0.47
Ausgrid	NSW	0.53	0.50	0.49	0.46	0.42	0.42	0.35	0.34	0.30	0.29	0.32	0.36
Endeavour Energy	NSW	0.59	0.52	0.51	0.54	0.52	0.54	0.43	0.47	0.40	0.40	0.44	0.48
Essential Energy	NSW	0.40	0.36	0.32	0.33	0.31	0.29	0.26	0.27	0.19	0.18	0.19	0.20
Energex	Qld	0.50	0.48	0.48	0.50	0.50	0.46	0.45	0.44	0.42	0.39	0.41	0.43
Ergon Energy	Qld	0.71	0.73	0.76	0.77	0.69	0.65	0.64	0.64	0.55	0.57	0.52	0.53
SA Power Networks	SA	0.71	0.69	0.71	0.75	0.70	0.69	0.59	0.59	0.59	0.53	0.55	0.57
TasNetworks (D)	Tas	0.43	0.56	0.52	0.45	0.45	0.36	0.35	0.36	0.37	0.37	0.35	0.34
AusNet (D)	Vic	0.64	0.65	0.67	0.66	0.62	0.58	0.57	0.57	0.62	0.54	0.54	0.49
CitiPower	Vic	0.61	0.62	0.65	0.68	0.59	0.61	0.54	0.56	0.55	0.47	0.50	0.51
Jemena Electricity	Vic	0.57	0.62	0.64	0.68	0.65	0.63	0.56	0.61	0.63	0.53	0.57	0.58
Powercor Australia	Vic	0.83	0.80	0.83	0.87	0.83	0.80	0.75	0.77	0.74	0.72	0.74	0.73
United Energy	Vic	0.65	0.66	0.69	0.73	0.71	0.67	0.60	0.64	0.66	0.57	0.64	0.62
Power and Water	NT	0.28	0.29	0.30	0.31	0.31	0.30	0.27	0.28	0.24	0.24	0.23	0.25
DNBP Average		0.57	0.57	0.58	0.59	0.56	0.54	0.49	0.50	0.48	0.45	0.46	0.47

Sources:

Economic benchmarking RIN responses

Note:

Victorian DNSPs report information on a calendar year. All other DNSPs report on a financial year ending June. Information is shown for each DNSP for the regulatory year, such that data shown in 2017 is for the period 1 January 2017 to 31 December 2017 for Victorian DNSPs, and 1 July 2016 to 30 June 2017 for non-Victorian DNSPs.