

Chapter 19

Electric Power Statistics

Summary of Power Statistics

This chapter presents information on electric power statistics, includes consumption of electricity by type of consumers, revenues and expenditures.

In 2003, 81,832,380 kilowatt hours of power power was consumed, 28,897,499 kilowatt hours by residential customers and 50,574,412 hours by the government and public buildings, and commercial customers.

Total revenues of Palau Public Utility Corporation (PPUC) increased from \$10.97million in 2002 to \$12.66 million in 2003. Total expenditures also increased from \$11.58 million in 2002 to \$12.17 million in 2003.

Table 19.1 Electricity Rates by Type of Customers and Electricity Band: 2000 to 2003 (Cents)

Electricity Band (Kwh/Month)	Residential	Commercial	Government
2000			
0-500	9	-	-
0-2000	-	11	11
501 - 2000	11	-	-
2001 & above	13	13	13
2001			
0-500	8	-	-
0-2000	-	10	11
501 - 2000	10	-	-
2001 & above	12	12	13
2002			
0-500	8	-	-
0-2000	-	10	11
501 - 2000	10	-	-
2001 & above	12	12	13
2003			
0-500	10	-	-
0-2000	10	12	13
501 - 2000	12	-	-
2001 & above	14	14	15

Source: Palau Public Utility Corporation, Republic of Palau

Table 19.2 Consumption of Electricity by State and Type of Customers: 2000 (Kwh)

States and Hamlets	2000			
	Total	Commercial	Government & Public Buildings	Residential
Total	77,882,660	32,374,606	19,008,101	26,499,953
Koror	63,649,394	30,088,614	11,551,477	22,009,303
Dngeronger	6,951,999	5,792,416	75,115	1,084,468
Idid	1,771,449	354,411	110,956	1,306,082
Ikelaui	3,689,338	2,782,246	13,281	893,811
Iyebukl	1,996,028	469,044	261,404	1,265,580
Medalali	17,905,492	9,389,158	3,959,915	4,556,419
Meketii	4,113,445	2,730,747	238,038	1,144,660
Meyuns	8,906,778	2,624,076	3,838,767	2,443,935
Ngerbeched	9,046,232	3,419,214	2,370,820	3,256,198
Ngerchemai	4,252,792	829,679	423,232	2,999,881
Ngerkesoal	1,278,588	135,091	133,282	1,010,215
Ngermid	3,737,253	1,562,532	126,667	2,048,054
Other States	14,233,266	2,285,992	7,456,624	4,490,650
Aimeliik	1,343,294	48,243	1,031,823	263,228
Airai	10,389,763	1,959,415	5,875,235	2,555,113
Ibobang	148,790	22,980	62,624	63,186
Melekeok	350,428	39,401	58,844	252,183
Ngaraard	302,036	93,700	34,952	173,384
Ngardmau	133,342	27,850	17,740	87,752
Ngatpang	165,811	9,857	46,590	109,364
Ngchesar	165,056	-	70,926	94,130
Ngerchelong	213,279	3,168	46,194	163,917
Ngeremlengui	353,362	31,646	110,369	211,347
Ngiwal	203,551	25,791	30,903	146,857
Peleliu	464,554	23,941	70,424	370,189

Source: Palau Public Utility Corporation, Republic of Palau

Table 19.2a Consumption of Electricity by State and Type of Customers: 2001 (Kwh)

Hamlets and States	2001			
	Total	Commercial	Government & Public Buildings	Residential
Total	81,875,164	34,042,820	19,545,244	28,287,100
Koror	65,822,823	31,279,860	11,783,118	22,759,845
Meketii	3,860,416	2,436,564	274,867	1,148,985
Ikellau	3,689,796	2,827,127	12,894	849,775
Madalaii	19,131,125	9,850,001	4,618,231	4,662,893
Ngerbeched	9,130,856	3,355,760	2,259,368	3,515,728
Idid	1,754,897	332,485	77,505	1,344,907
Dngerongr	8,162,342	6,976,692	115,033	1,070,617
Iyebukl	2,027,259	458,792	276,372	1,292,095
Ngerkesouaol	1,359,752	199,150	108,791	1,051,811
Ngerchemai	4,226,801	868,899	390,592	2,967,310
Meyuns	8,998,427	2,780,362	3,633,578	2,584,487
Ngermid	3,481,152	1,194,028	15,887	2,271,237
Other States	16,052,341	2,762,960	7,762,126	5,527,255
Aimeliik	1,185,282	39,648	847,670	297,964
Ngatpang	194,026	31,765	63,173	99,088
Airai	11,196,582	2,057,218	6,133,627	3,005,737
Ngchesar	256,750	-	64,716	192,034
Melekeok	632,383	228,812	56,297	347,274
Ibobang	145,328	23,935	60,424	60,969
Ngeremlengui	428,021	22,681	181,344	223,996
Ngiwal	233,395	25,280	29,739	178,376
Ngardmau	176,665	32,476	35,947	108,242
Ngaraard	499,840	260,051	53,747	186,042
Ngerchelong	270,492	2,124	79,215	189,153
Peleliu	833,577	38,970	156,227	638,380

Source: Palau Public Utility Corporation, Republic of Palau

Table 19.2b Consumption of Electricity by State and Type of Customers: 2002 (Kwh)

Hamlets and States	2002			
	Total	Commercial	Government & Public Buildings	Residential
Total	78,783,252	32,014,880	18,620,625	28,147,747
Koror	62,153,773	29,073,562	10,870,462	22,209,749
Meketii	3,769,669	2,456,640	267,912	1,045,117
Ikelaui	3,582,947	2,712,924	15,823	854,200
Madalaii	17,185,890	8,609,192	4,197,118	4,379,580
Ngerbeched	8,221,549	2,960,913	2,036,291	3,224,345
Idid	1,752,610	332,259	72,682	1,347,669
Dngerongr	7,956,670	6,833,599	101,975	1,021,096
Iyebukl	2,115,598	459,612	315,486	1,340,500
Ngerkesouaol	1,389,454	272,639	35,461	1,081,354
Ngerchemai	4,155,082	777,791	353,223	3,024,068
Meyuns	8,642,597	2,769,088	3,333,164	2,540,345
Ngermid	3,381,707	888,905	141,327	2,351,475
Other States	16,629,479	2,941,318	7,750,163	5,937,998
Aimeliik	1,272,909	26,602	898,619	347,688
Ngatpang	203,742	8,541	75,438	119,763
Airai	10,915,410	2,029,560	5,899,103	2,986,747
Ngchesar	263,413	-	68,358	195,055
Melekeok	897,866	393,716	58,276	445,874
Ibobang	153,842	21,577	69,093	63,172
Ngeremlengui	472,662	28,483	208,294	235,885
Ngiwal	256,944	23,707	48,950	184,287
Ngardmau	201,949	48,100	24,505	129,344
Ngaraard	627,354	311,922	90,687	224,745
Ngerchelong	296,580	779	98,421	197,380
Peleliu	856,608	37,815	159,842	658,951
Angaur	136,228	10,516	28,849	96,863
Kayangel	73,972	-	21,728	52,244

Source: Palau Public Utility Corporation, Republic of Palau

Almost 82 million kilowatt hours of electricity were consumed in the Republic in 2003. About 63 million kwh (78 percent) of the power was consumed in Koror State, with Airai consuming 12 million kwh (14 percent) – the other states used about 8 percent of the total.

Table 19.2c Consumption of Electricity by State and Type of Customers: 2003 (Kwh)

Hamlets and States	2003			
	Total	Commercial	Government & Public Buildings	Residential
Total	81,832,380	32,896,938	20,037,943	28,897,499
Koror	63,791,798	29,391,470	11,806,043	22,594,285
Meketii	3,740,878	2,573,391	196,321	971,166
Ikellau	3,968,009	3,031,981	26,690	909,338
Madalaii	18,037,169	8,815,556	4,629,116	4,592,497
Ngerbeched	8,802,862	3,096,118	2,328,084	3,378,660
Idid	1,769,532	348,670	72,784	1,348,078
Dngerongr	8,552,897	7,428,963	46,673	1,077,261
Iyebukl	2,086,413	477,914	290,323	1,318,176
Ngerkesouaol	1,398,656	303,811	12,352	1,082,493
Ngerchemai	3,939,369	703,482	334,096	2,901,791
Meyuns	8,723,374	2,258,300	3,691,471	2,773,603
Ngermid	2,772,639	353,284	178,133	2,241,222
Other States	18,040,582	3,505,468	8,231,900	6,303,214
Aimeliik	1,362,869	22,084	958,829	381,956
Ngatpang	210,032	23,268	69,659	117,105
Airai	11,558,809	2,234,074	6,225,859	3,098,876
Ngchesar	275,018	-	70,625	204,393
Melekeok	995,695	465,417	54,603	475,675
Ibobang	138,843	5,796	67,911	65,136
Ngeremlengui	471,090	57,743	181,662	231,685
Ngiwal	390,985	125,388	70,631	194,966
Ngardmau	217,357	47,509	40,621	129,227
Ngaraard	854,612	446,714	109,268	298,630
Ngerchelong	325,023	6,817	112,818	205,388
Peleliu	856,823	49,292	169,449	638,082
Angaur	232,193	20,028	51,859	160,306
Kayangel	151,233	1,338	48,106	101,789

Source: Palau Public Utility Corporation, Republic of Palau

Figure 19.1 Consumption of Electricity by Type of Customers: 2002 & 2003

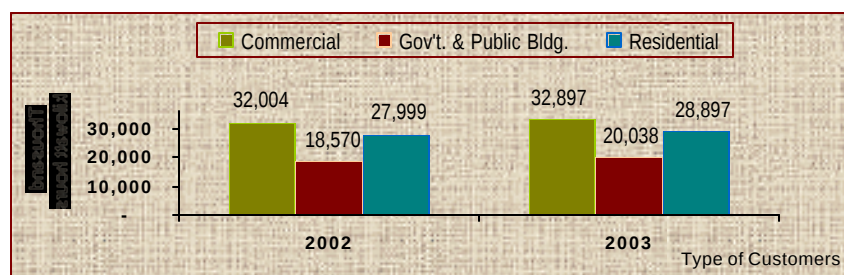


Table 19.3 Consumption of Electricity by Type of Customers: FY 2000-2003 (KwHr)

Type of Consumers	FY 2000	FY 2001	FY 2002	FY 2003
Total	76,727,497	81,875,164	78,573,052	82,491,079
Business/Commercial	31,921,187	34,042,820	32,004,364	33,030,931
Government & Public Buildings	18,668,999	19,545,244	18,570,048	20,238,276
Residential Areas	26,137,311	28,287,100	27,998,640	29,221,872

Source: Palau Public Utility Corporation, Republic of Palau

Of the 82 million kilowatt hours of electricity, about 33 million (40 percent) were used by businesses and other commercial establishments, 20 million (25 percent) by government and public buildings, and 29 million (35 percent) by residential areas.

Table 19.4 Generation of Electricity by Location of Plant: FY 2000-2003 (KwHr)

Type of Consumers	FY 2000	FY 2001	FY 2002	FY 2003
Total	100,860,973	103,351,399	102,636,931	104,069,266
Malakal	41,824,933	54,396,353	55,582,481	57,701,414
Aimeliik	58,598,880	47,816,400	45,812,820	44,432,510
Peleliu	437,160	1,138,646	1,241,630	1,270,230
Angaur	-	-	-	437,863
Kayangel	-	-	-	227,249
% Billed	76.1	79.2	76.6	79.3

Source: Palau Public Utility Corporation, Republic of Palau

Note: The power plant in Peleliu State began its operations in May 2000

All plants generate more than 100 million kilowatt hours of electricity annually. In 2003, Malakal generated the most power at 58 million (55 percent), followed by Aimeliik at 44 million (43 percent).

Table 19.5 Revenues and Expenditures of Palau Public Utility Corporation: FY 2000-2003

Particulars	FY 2000	FY 2001	FY 2002	FY 2003
Total Revenues	\$ 11,238,419	\$ 12,725,181	\$ 10,973,000	\$ 12,661,200
Energy Charges	9,029,616	11,107,747	10,190,000	10,808,976
Other	218,429	419,747	231,000	262,117
Non-operating revenues	1,990,374	1,197,687	552,000	1,590,107
Total Expenditures	\$ 11,400,152	\$ 12,263,167	\$ 11,576,000	\$ 12,170,763
Salaries, goods & services	9,063,576	10,014,319	9,342,000	9,932,473
Depreciation	2,336,576	2,248,848	2,234,000	2,238,290
Other	-	-	-	-
Non-operating expenses	-	-	-	-
Net Income / Loss	(161,733)	462,014	(603,000)	490,437

Source: Palau Public Utility Corporation, Republic of Palau

In FY2003 the Palau Public Utility Corporation had a net income of \$500 thousand, with revenues at \$12.7 million and expenditures at \$12.2 million.

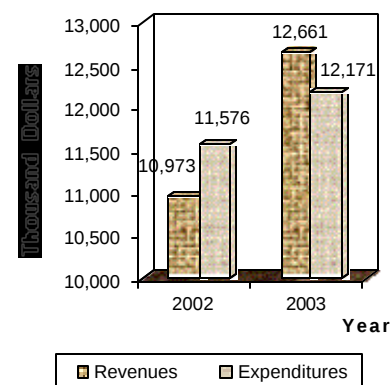
Figure 19.2 Revenues & Expenditures of Palau Public Utilities Corp.: 2002 & 2003

Table 19.6 Customers of Palau Public Utility Corporation by State: 2000

States and Hamlets	Customer Type			
	Total Number of Customers	Commercial	Government & Public Buildings	Residential
Total	5,042	600	421	4,021
Koror	3,614	506	254	2,854
Ngermid	303	17	12	274
Ngerkesoal	175	15	5	155
Ngerchemai	448	28	18	402
Iyebukl	217	17	15	185
Meketii	196	45	12	139
Idid	192	17	9	166
Ikela	154	32	1	121
Dngeronger	186	40	5	141
Ngerbeched	578	57	69	452
Medalaii	731	198	77	456
Meyuns	434	40	31	363
Other States	1,428	94	167	1,167
Aimeliik	89	6	16	67
Ngatpang	31	2	5	24
Ibobang	40	3	17	20
Airai	508	64	38	406
Ngchesar	87	-	11	76
Melekeok	85	5	10	70
Ngeremlengui	87	3	15	69
Ngiwal	68	3	8	57
Ngardmau	53	1	6	46
Ngaraard	115	3	13	99
Ngerchelung	91	1	12	78
Peleliu	174	3	16	155

Source: Palau Public Utility Corporation, Republic of Palau

Note: Number of customers refers to number of electric meters installed in structures.

Table 19.6a Customers of Palau Public Utility Corporation by State: 2001

Hamlets and States	Total Number of Customers	Customer Type		
		Commercial	Government & Public Buildings	Residential
Total	5,616	836	604	4,176
Koror	4,051	725	385	2,941
Meketii	237	74	19	144
Ikela	165	41	1	123
Madalaii	887	292	132	463
Ngerbeched	635	84	85	466
Idid	199	23	10	166
Dngeronger	208	53	7	148
Iyebukel	231	20	23	188
Ngerkesouaol	173	8	5	160
Ngerchemai	485	39	23	423
Meyuns	490	51	59	380
Ngermid	341	40	21	280
Other States	1,565	111	219	1,235
Aimeliik	99	5	22	72
Ngatpang	32	2	6	24
Airai	568	73	55	440
Ngchesar	89	-	11	78
Melkeok	96	12	10	74
Ibobang	42	3	18	21
Ngeremlengui	98	3	22	73
Ngiwal	67	2	8	57
Ngardmau	61	2	9	50
Ngaraard	116	3	20	93
Ngerchelong	115	1	23	91
Peleliu	182	5	15	162

Source: Palau Public Utility Corporation, Republic of Palau

Note: Number of customers refers to number of electric meters installed in structures.

Table 19.6b Customers of Palau Public Utility Corporation by State: 2002

Hamlets and States	Total Number of Customers	Customer Type		
		Commercial	Government & Public Buildings	Residential
Total	6,409	925	614	4,870
Koror	4,419	766	362	3,291
Meketii	252	77	16	159
Ikelaau	187	44	3	140
Madalaii	975	316	124	535
Ngerbeched	677	76	86	515
Idid	218	27	9	182
Dngeronger	209	48	6	155
Iyebukel	253	25	21	207
Ngerkesouaol	197	16	6	175
Ngerchemai	528	40	19	469
Meyuns	552	57	55	440
Ngermid	371	40	17	314
Other States	1,990	159	252	1,579
Aimeliik	121	7	23	91
Ngatpang	41	2	8	31
Airai	686	100	52	534
Ngchesar	100	-	12	88
Melkeok	125	20	11	94
Ibobang	45	3	21	21
Ngeremlengui	109	3	23	83
Ngiwal	80	5	12	63
Ngardmau	72	3	7	62
Ngaraard	159	5	19	135
Ngerchelong	127	1	22	104
Peleliu	195	6	20	169
Angaur	75	3	12	60
Kayangel	55	1	10	44

Source: Palau Public Utility Corporation, Republic of Palau

Note: Number of customers refers to number of electric meters installed in structures.

Table 19.6c Customers of Palau Public Utility Corporation by State: 2003

Hamlets and States	Total Number of Customers	Customer Type		
		Commercial	Government & Public Buildings	Residential
Total	6,610	951	627	5,032
Koror	4,534	781	374	3,379
Meketii	256	76	16	164
Ikela	212	46	4	162
Madala	1,008	327	132	549
Ngerbeched	688	78	86	524
Idid	220	27	9	184
Dngeronger	209	48	6	155
Iyebukel	263	25	21	217
Ngerkesouaol	205	17	6	182
Ngerchemai	532	41	19	472
Meyuns	563	57	56	450
Ngermid	378	39	19	320
Other States	2,076	170	253	1,653
Aimeliik	132	8	23	101
Ngatpang	42	2	9	31
Airai	731	103	59	569
Ngchesar	105	-	12	93
Melkeok	133	22	12	99
Ibobang	45	3	21	21
Ngeremlengui	119	6	23	90
Ngiwal	82	5	12	65
Ngardmau	73	3	7	63
Ngaraard	163	6	19	138
Ngerchelong	132	1	22	109
Peleliu	188	7	11	170
Angaur	74	3	12	59
Kayangel	57	1	11	45

The PPUC had about 6,600 customers in 2003, with about 5,000 being residential customers – about 3/4ths of the total. Palau had the most residential customers, followed by Airai

Source: Palau Public Utility Corporation, Republic of Palau

Note: Number of customers refers to number of electric meters installed in structures.