

### ANNUAL REPORT 2014

his majesty Sultan Qaboos bin Said



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### **GLOSSARY OF TERMS**

BOO	Build Own and Operate
Bulk Supply Tariff (BST)	Tariffs charged by PWP and RAEC for bulk supplies of electricity and water, where such tariffs are calculated each year and approved by the Authority;
DPC	The Dhofar Power Company SAOC
DPS	Dhofar Power System connecting the systems of DPC and OETC in Dhofar region
EHC	The Electricity Holding Company SAOC
EPC	Engineering, Procurement and Construction
ERWS	Electricity and Related Water Sector
GCCIA	Gulf Cooperation Council Interconnection Authority
I(W)PP and IPP	Independent Power and Water Project
Main Interconnected System or MIS	The interconnected systems of OETC, and the Muscat, Majan and Mazoon Discos
Majan or MJEC	The Majan Electricity Company SAOC
Mazoon or MZEC	The Mazoon Electricity Company SAOC
MAR	Maximum Allowed Revenue
Muscat or MEDC	The Muscat Electricity Distribution Company SAOC
OETC	The Oman Electricity Transmission Company SAOC
Omanisation	The policy for the employment of Omani nationals as issued from time to time by the Government of Oman
Permitted Tariff	Tariffs Customers are obliged to pay in consideration for Supply of electricity or for Connection to a Distribution System or a Transmission System, which tariff shall be determined in the manner stipulated in Article (9) of the Sector Law
PAEW	The Public Authority for Electricity and Water
PWP	The Oman Power and Water Procurement Company SAOC
RAEC	The Rural Areas Electricity Company SAOC
OMR	Omani Rial
ROP	Royal Oman Police
SCRC	Schedule Charge Restriction Condition
Sector Law	The law for the regulation and privatization of the electricity and related water sector promulgated by Royal Decree 78/2004 as amended by Royal Decree 59/2009
Related Water	Desalinated water in the Sultanate of Oman which is combined or co-located with the electricity sector and which is subject to regulation
The Authority	The Authority for Electricity Regulation, Oman, being the authority established pursuant to Article (19) of the Sector Law as amended





### **CHAIRMAN'S FOREWORD**

On behalf of the Authority, it is with great pleasure that I present our Annual Report for 2014, a year of further strong growth in the demand for electricity and water, and corresponding increases in production to meet demand. The main highlights of 2014 are as follows:

- The number of electricity Customer accounts in the Sultanate increased by 67,792, or 7.9% from 859,392
   in 2013 to 927,184 in 2014. Residential customers accounted for 69% of the increase in accounts. Since
   the 2005 market restructuring the number of electricity accounts has increased by 396,933 or 75%;
- ii. Electricity Supply in 2014 reached 25.2 TWh,10.4% higher than in 2013 and 164% higher than in 2005;
- iii. The Authority's measure of electricity intensity (MWh per account) reached 27.1 in 2014, higher than 2013 by 2.4% and 51% higher than in 2005. Increasing intensity is an important driver of electricity demand that has implications for costs and subsidy. If the 927,184 registered accounts in 2014 had the same average intensity as in 2005, electricity supply in 2014 would have been 34%, or 8.5 TWh lower with corresponding reductions in costs and subsidy;
- Sector gas use increased by 7.8% in 2014 to support increases in gross electricity and related water production of 9.6% and 2.6%, respectively. RAEC consumed about 211,904,000 litres of diesel in 2014 to support increases in electricity and related water production of 10.5% and 4.7%, respectively;
- v. Technical and non-technical losses accounted for 11.5 % of total units entering electricity systems in the Sultanate in 2014, a decrease on reported losses of 12.7% in 2013. MIS losses decreased from 12.6% in 2013 to 11.6% in 2014, RAEC losses fell from 10.8% in 2013 to 9.2% in 2014, and Dhofar Power System losses fell from 14.1% in 2013 to 12.2% in 2014;
- vi. Total electricity and related water sector employment (Direct and Contractor employees) increased by 10.5 % in 2014, reflecting a 1% increase in Direct employment (from 2,798 to 2,825) and a15.4% increase in Indirect employment (from 5,479 to 6,322). The 2014 overall electricity and related water sector Omanisation rate was 58%;
- vii. The Authority issued no new Customer Complaint Determination in 2014, and resolved 111 outstanding complaints on the basis of policy precedents established in 65 previously issued Determinations;
- viii. The Sur IPP entered full commercial operation providing 2000 MW of highly fuel efficient contracted capacity in 2014;
- ix. The electricity sector benefited from 287.1 million Rial Omani of support from the Ministry of Finance in 2014: 214.1 million Rial Omani of MIS subsidy, 44.5 million Rial Omani of RAEC subsidy and 28.5 million Rial Omani of Dhofar Power System subsidy.
- x. Electricity licensees approved 359 electricity related projects in 2014 with a total value of 232 million Rial Omani, these projects will support the provision of electricity services in all of the Sultanate's regions; and



xi. The cost of regulating the electricity and related water sector in 2014 was around 3.2 Rial Omani per Customer account, around one ten of one baiza per kWh Supplied and less than 0.25% of total electricity and related water sector turnover, we believe metrics compare favourably to international benchmarks of regulatory costs.

In May 2014 the Council of Ministers approved changes in Authority Members. In welcoming Ayisha bint Zaher Al Mawali and Mohammed bin Ahmed AlShahri, as new Members, we bid farewell to the Authority's previous Chairman Amur bin Mubarak Al Kiyumi and the founding Executive Director & Member John Cunneen with our sincerest thanks and appreciation for their leadership, and contributions to the sector and wish them all the best in the future.

Members would particularly like to acknowledge with thanks the hard work of Authority staff who contributed to and are responsible for the activities and work described in this report.

Members and staff of the Authority express their sincere gratitude to His Majesty Sultan Qaboos bin Said for his vision, guidance and leadership and to His Majesty's government for their continuing support.

**Dr. Amer Bin Saif Al Hinai** Chairman Authority for Electricity Regulation, Oman



### **Electricity and Related Water Sector Market Structure**



Sources: MIS & Dhofar 2014 Capacities from PWP 7-Year Statement (Issue 8), other data AER

The Sector Law designates certain activities as regulated activities and requires persons seeking to undertake such activities to be authorised by the Authority to do so. Further details of the new market structure and its regulation are available at www.aer-oman.org.



### **Electricity & Related Water Sector Activity and Statistics**

### Customer Accounts: 2012 and 2013

The number of registered electricity customer accounts in the Sultanate increased by 7.9% in 2014 from 859,392 in 2013 to 927,184. The MIS accounted for 85.4% of the increase in accounts (85.2% in 2013), RAEC accounted for 3.9% of the increase (4.2% in 2013) and DPC for 10.7% of the increase (10.6% in 2013). Please refer to Figure 1 below and Table 1 of Annex C for further details.



### Figure 1: Registered Customer Accounts by Company: 2013 & 2014

	Muscat	Majan	Mazoon	MIS	RAEC	DPC	Total
2013 Accounts	261,480	174,592	318,182	754,254	28,287	76,851	859,392
2014 Accounts	284,625	186,605	340,923	812,153	30,904	84,127	927,184
net change in Accounts	23,145	12,013	22,741	57,899	2,617	7,276	67,792
% change in Accounts	8.9%	6.9%	7.1%	7.7%	9.3%	9.5%	7.9%

Source: Company returns

For the Sultanate as a whole, Residential customers accounted for 69% of the 67,792 increase in accounts and Commercial customers for 27.8% of the increase.

Residential customers accounted for 75% of all customer accounts in 2014.

### Electricity Supply: 2013 and 2014

Total electricity supply in the Sultanate increased by 2.38 TWh in 2014 from 22.8 TWh in 2013 to 25.2 TWh, an increase of 10.4% following the 8.7% increase in 2013. MIS supply increased by 10.4% (or 2.1 TWh) in 2014, accounting for 88% of the total (2.38 TWh) growth in supply. RAEC supply was 14.8% higher than in 2013, reflecting strong growth in supply to Residential, Industrial and Commercial customers. DPC supply growth of 9.8% in 2014 was lower than the 11.7% increase in 2013. See Figure 2 below and Table 2 of Annex C for further details.





Figure 2: Electricity Supply by Company: 2013 & 2014

Source: Company returns

Residential customers accounted for 47.5% of total supply in 2014, compared to a 55.2% share in 2005.

Figure 3 compares the 2014 increases in accounts and supply by customer category. Residential customers accounted for 69% of the 67,792 increase in accounts, but for just 49% of the 2.38 TWh increase in Supply. Commercial customers accounted for 27.8% of the accounts increase and for 19.8% of the Supply increase. Industrial customers accounted for less than 1% of the increase in 2014 accounts and 21.1 % of the increase in Supply.



### Figure 3: 2014 Increases in Accounts & Supply by Customer Category

Source: Company returns

The structure of electricity demand in Oman continues to change as the rate of growth in supply to Industrial and Commercial customers exceeds that to other customer categories. Industrial and Commercial customers accounted for 36% of total supply in 2014, up from 23% in 2005. Supply to Majan's Commercial and Industrial customers accounted for 56% of Majan's total 2014 supply, compared to just 21% in 2005, 40% in 2010, and 50% in 2011.

Figure 4 presents electricity Supply by tariff category for each of the three market segments in 2013 and 2014.

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## Figure 4:Electricity Supply by Tariff Category & System - 2013 & 2014

	Main Inte	Main Interconnected System	_	RAECI	<b>AEC Rural Systems</b>		Dhofar	Jhofar Power System	
Category	2013 MWh	2014 MWh	% Change	2013 MWh	2014 MWh	% Change	2013 MWh	2014 MWh	% Change
Residential	9,693,587	10,697,579	10%	301,562	342,148	13%	791,930	919,557	16%
Industrial	3,155,664	3,641,101	15%	32,976	37,989	15%	497,375	509,739	2%
Commercial	4,035,168	4,449,640	10%	106,399	117,944	11%	385,794	431,245	12%
<b>Agriculture &amp; Fisheries</b>	264,656	303,406	15%	25,857	26,191	1%	8,925	9,458	6%
Hotels / Tourism	22,966	25,981	13%	21,031	23,028	9%6	2,072	2,124	3%
Government	2,706,551	2,777,264	3%	144,645	168,156	16%	329,325	346,846	5%
<b>Ministry of Defence</b>	142,372	202,731	42%	18,449	31,663	72%	103,351	108,302	5%
Totals	20,020,964	22,097,701	10%	650,920	747,119	15%	2,118,773	2,327,270	10%





### Electricity Supply per Account: 2013 & 2014

Electricity intensity (MWh per account) increased by 2.4% in 2014, from 26.5 in 2013 to 27.1 MWh per account. Customers of electricity suppliers in the Sultanate registered increased electricity intensity in 2014: MIS customers registered a 4.8% increase, RAEC customers a 5.1% increase and DPC customers a 0.3% increase. Please refer to Figure 5 and Table 3 of Annex C for further details.



### Figure 5: MWh Supplied per Registered Account: 2013 & 2014

	Muscat	Majan	Mazoon	MIS	RAEC	DPC	Total
2013 MWh Supply/per Acct	30.7	34.5	18.8	26.5	23.0	27.6	26.5
2014 MWh Supply/per Acct	30.5	35.9	19.7	27.2	24.2	27.7	27.1
net change MWh S/per Acct	-0.2	1.4	0.9	0.7	1.2	0.1	0.6
% change in MWh S/per Acct	-0.5%	4.1%	4.8%	2.5%	5.1%	0.3%	2.4%

Source: Company returns

The 4.1% and 4.8% increase in electricity intensity for Majan and Mazoon, respectively, reflect continued strong growth in Supply to Industrial and Commercial customers in 2014. Electricity intensity is an increasingly important driver of electricity demand. Figure 6 shows that between 2005 and 2014 the average electricity intensity of all customers increased by 52% with significant variation in intensity changes across customer categories.

### Figure 6: Changes in Electricity Intensity between 2005 and 2014

MWh/Account	2005	2014	% change	
Residential	12.8	17.2	34%	34%
Industrial	1,561.5	4,470.5	<b>186</b> %	186
Commercial	17.2	27.1	<b>58</b> %	58%
Agriculture & Fisheries	41.4	45.3	<b>9</b> %	9%
Government & MOD	75.5	95.3	<b>26</b> %	26%
All Categories	17.9	27.1	<b>52%</b>	52%

The 186% increase in Industrial customer intensity reflects increased supply to a relatively small number of new Industrial customers who are large consumers of electricity. Industrial customers actually account for a smaller proportion of the overall increase in intensity shown in Figure 6 than Residential and Commercial customers, whose intensity in 2014 was 34% and 58% higher, respectively, than in 2005 and who accounted for 67.4% of total 2014 Supply, compared to the 21.1% share of Industrial customers.

Increasing intensity is an important driver of electricity demand that has implications for costs and subsidy. If the 927,184 registered accounts in 2014 had the same average intensity as in 2005, electricity supply in 2014 would have been 34% or 8.5 TWh lower with corresponding reductions in costs and subsidy.

The Authority does not consider intensity increases of this magnitude to be sustainable and continues to believe that the introduction of Cost-Reflective Tariffs (for large Industrial, Commercial and Government customers) coupled with the implementation of measures to improve energy efficiency will help to reduce the electricity intensity of all customers.



### Electricity and Related Water Production: 2013 & 2014

2014 gross electricity production of 29.13 TWh was 11% higher than in 2013. The 28.3 TWh of net electricity generation (including PWP and RAEC purchases) was 10% higher than in 2013. Both, gross and net related water production increased by 6.5% and 7.6% (to 211.02 million m<sup>3</sup> and 207.9 million m<sup>3</sup> respectively). Please refer to Figure 7 and Table 6 of Annex C for further details.

### Figure 7: Electricity & Related Water Production by System: 2013 & 2014



### % Changes in production: 2013 to 2014

Gross production

Net production

Source: Company returns

**Dhofar System** 

MIS gross generation was 11.4% higher in 2014 than in 2013, RAEC generation was 10.5% higher and generation for the Dhofar Power System was 7.7% higher. Desalinated water production in Dhofar increased by 41.2% in 2014, which accounted for 11.4% of the 2014 increase in total water production in Oman

2,836.3

2.651.7

7.7%

7.4%

16,753.6

16.753.6

23,652.7

23.652.7

41.2%

41.2%

2,632.4

2.467.9



### **ERWS Fuel Use in 2014**

### Natural Gas

The electricity and related water sector consumed 7.8% more gas in 2014 than in 2013, compared to an increase of 9.6% and 2.6% in electricity and water production, respectively, please refer to Figure 8. The specific gas consumption of MIS connected facilities fell to 283 Sm3/MWh in 2014 from 289 Sm3/MWh in 2013 (a 2.3% reduction), and was 21% lower than in 2005.



### Figure 8: Gas Consumption at Major Production Facilities: 2013 & 2014

Source: PWP & Company returns

Sm3: Standed Cubic Meter

### ERWS Activity by Region: 2014

While all regions of Oman benefitted from electricity and related water sector activity in 2014, activity is heavily concentrated in Muscat, North Batinah and South Batinah. These three areas accounted for 74% of 2014 electricity production, 88% of related water production, 66% of supply, 56% of customer accounts and 54% of sector related employment in 2014.

Figure 9 presents details of the regional distribution of electricity and related water sector activities in 2014.

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# Figure 9: ERWS Activity by Region (Production, Supply, Accounts, Intensity & Employment): 2014

	Electricity Production	Production	Related Water Production	Production	Electricity Supply & Accounts	v & Accounts		Employment
Regions	MWh Gross	MWh Net	m3 Gross	m3 Net	MWh Supplied	Accounts	MWh per Account	Direct + Contractors
Al Dahirah	947	894			790,356	44,224	17.9	383
Al Sharqia	2,871,063	2,843,556	1,231,519	1,114,454	2,090,468	122,720	17.0	857
Al Wusta	177,510	160,016	1,027,622	986,184	296,148	12,640	23.4	578
Al Burami					669,014	32,140	20.8	423
Al Dakhliyah	1,110,785	1,102,269			1,870,177	98,044	19.1	516
Dhofar	3,008,527	2,813,456	23,693,655	23,693,176	2,489,769	89,823	27.7	945
Musandam	332,155	315,131	97,407	95,484	288,473	12,568	23.0	512
Muscat	5,929,999	5,774,074	51,234,007	50,380,244	8,688,583	284,625	30.5	3,206
North Batinah	8,049,675	8,199,617	50,703,696	48,785,642	5,244,039	110,241	47.6	1,114
South Batinah	7,647,317	7,133,885	83,037,642	82,807,408	2,745,064	120,159	22.8	613
Totals	29,127,977	28,342,899	211,025,548	207,862,592	25,172,090	927,184	27.1	9,147





### System Losses

Outturn 2014 data of units supplied and units entering electricity systems imply that MIS losses decreased from 12.6% in 2013 to 11.6% in 2014, RAEC losses fell from 10.8% in 2013 to 9.2% in 2014, and Dhofar Power System losses fell from 14.1% in 2013 to 12.2% in 2014.

Figure 10 shows annual MIS losses reductions since 2005.



### Figure 10: Technical and non-technical Losses in the MIS

Transmission, Distribution and Supply losses are a key performance indicator of efficiency and the Authority is pleased to note the continuing downward trend in losses across all three systems in Oman.

With MIS losses now at 11.6% (around 13 percentage points lower than the pre-restructuring level), further losses reductions are expected to occur at a lower rate. The Authority has set new losses targets for the MIS Discos as part of their price controls that (if achieved) would result in total MIS system losses of around 9% by 2017.

Source: SCRC returns, price control data and Authority calculation





### System Peak Demands: MIS and Dhofar Power System in 2013 and 2014

Figure 11 presents monthly MIS peak demands in 2013 and 2014.

### Figure 11: Main Interconnected System Peak Demand - 2013 & 2014



	2013 Peak MW	2014 Peak MW	% change	Temp oC at times of 2014 Peak MW
Jan	2,222	2,338	5%	20
Feb	2,322	2,290	-1%	24
Mar	2,604	2,744	5%	25
Apr	3,833	4,191	9%	39
May	4,175	5,079	22%	39
Jun	4,634	5,269	14%	42
Jul	4,555	4,980	9%	36
Aug	4,202	4,871	16%	34
Sep	4,228	4,835	14%	35
Oct	4,082	4,101	0%	36
Nov	3,165	3,357	6%	33
Dec	2,323	2,602	12%	24
Max MW	4,634	5,269	14%	

Source: OETC

Figure 12 presents Dhofar Power System monthly peak demands in 2013 and 2014.

### Figure 12: Dhofar Power System Peak Demand - 2013 & 2014



	2013 Peak MW	2014 Peak MW	% change	Temp oC at times of 2014 Peak MW
Jan	258	268	4%	26
Feb	274	283	3%	27
Mar	349	357	2%	27
Apr	398	406	2%	27
May	422	434	3%	28
Jun	406	439	8%	29
Jul	344	394	14%	29
Aug	350	395	13%	28
Sep	382	403	5%	27
Oct	374	396	6%	27
Nov	365	380	4%	28
Dec	307	329	7%	26
Max MW	422	439	4%	



### **Electricity Demand Forecasts**

In accordance with Condition 5 of the Power and Water Procurement licence, the PWP publishes an annual statement presenting a 7-year outlook for electricity and desalinated water demand, and the capacities required to meet forecast demand, for the MIS and Dhofar Power System. The electricity demand forecasts in each 7-year statement are official forecasts to which electricity sector planning is referenced. The most recent 7-year statement (Issue 9, for the period 2015 to 2021) is available for review and download from the PWP's website (www.omanpwp.com). The main highlights of the electricity demand forecasts are as follows:

- MIS: in the expected case, MIS peak demand is projected to grow at 9% per year to reach 9,530 MW in 2021 which is higher than previous forecasts. The "low case" projects 7% annual growth, resulting in peak demand of 8,372 MW in 2021, the "high case" projects 11% annual growth and peak demand at 10,329 MW in 2021, around 800 MW higher than the central case. In terms of energy, the expected, low and high case forecasts for 2021 are 47.1 TWh, 41.3 TWh and 51.8 TWh respectively; and
- Dhofar System: in the expected case peak demand is expected to grow at 10% per year, reaching 839 MW in 2021. The "low case" projects 8% annual growth, reaching 729 MW by 2021. The "high case" allows for more rapid industrialization, and has peak demand increasing at 12% per year to 965 MW in 2021.
  In terms of energy, the expected, low and high case forecasts for 2021 are 5.22 TWh, 4.54 TWh and 5.98 TWh respectively.

Please refer to Issue 9 of the PWP 7-year statement for further details of the electricity demand forecasts and how PWP plans to ensure sufficient contracted capacity will be available to meet forecast demand for electricity and related water.

### Approved Projects and Capital Expenditure: 2014

Licensed system operators (OETC, Muscat, Majan, Mazoon, RAEC and DPC) approved 359 projects in 2014, with a total value of 232 million OMR. Table 1 presents details of the approved projects by Licensee, region and value.

				Company					
Region		OETC*	Muscat	Majan	Mazoon	RAEC	DPC	Totals	% <b>To</b> t
Al Dahirah	OMR	5,572,336		3,249,008		375,716		9,197,060	4.0%
Al Sharqiya	OMR	20,909,721			7,528,906	20,533,144		48,971,771	21,2%
Al Wusta	OMR					1,382,945		1,382,945	0.6%
Dakhiliya	OMR	11,504,730			6,540,867			18,045,597	7.8%
Dhofar	OMR	3,470,000				1,114,016	21,375,303	25,959,319	11.2%
Musandam	OMR					2,258,568		2,258,568	1.0%
Muscat	OMR	39,964,931	23,298,797					63,263,727	27.3%
North Batinah	OMR	19,586,887		6,141,225	6,763,331			32,491,443	14.0%
South Batinah	OMR				5,320,062			5,320,062	2.3%
Al Buraimi	OMR			1,527,283				1,527,283	0,7%
Other**	OMR	20,437,158		143,581	1,529,695	999,075		23,109,508	10.0%
Total Value		121,445,762	23,298,797	11,061,096	27,682,861	26,663,465	21,375,303	231,527,284	
% of Total		52.5%	<b>10.1%</b>	4.8%	<b>12.0</b> %	11.5%	9.2%		
Number of Project	cts	23	35	88	28	23	162	359	

### Table 1: Project Approvals by Licensees in 2014

Source: Company returns

\* Projects are categorised under the region where the project commence

\*\* Other: includes material costs and any other costs that are general to the whole region, not specific to one region



Following the restructuring of the Dhofar system, we now report as part of Figure 13 network investments by the licensed Transmission (OETC) and Distribution (DPC) system operators in the Dhofar region.

OETC accounts for 52.5% of approved projects by value, which reflects the significant investment made to connect and transport electricity from new production facilities. Mazoon accounts for 12% of projects by value, RAEC for 11.5%, Muscat 10.1%, DPC 9.2% and Majan 4.8%.

In terms of regional investment, Muscat region accounts for 27.3% (RO 63.3 million) of approved projects and Al Sharqiya 21.2% (RO 49.0 million) due to significant network investments by OETC, Mazoon and RAEC in these regions.

All regions benefited from ERWS sector investment in 2014 in line with the government's policy commitment to provide electricity and related water services throughout the Sultanate.

### ERWS Employment & Omanisation: 2013 and 2014

The Authority undertakes an annual survey of electricity and related water sector employment and Omanisation. The survey provides information on Direct and Indirect (contractor) employment by entity, by grade, by regulated activity, by region, and by nationality (Omani nationals and expatriates).

Table 2 summarises the results of the 2014 survey.

			2013		2014			
Туре	Function	Omani	Expatriate	Total	Omani	Expatriate	Total	
Direct	Admin & Supervisory	1,009	97	1,106	882	80	962	
	Managerial	164	51	215	196	56	252	
	Operations	197	79	276	217	39	256	
	Technical	952	119	1,071	1,097	104	1,201	
	Others	124	6	130	142	12	154	
Direct Total		2,446	352	2,798	2,534	291	2,825	
Contractor	Admin & Supervisory	601	129	730	215	197	412	
	Managerial	68	42	110	129	111	240	
	Operations	943	361	1,304	505	706	1,211	
	Technical	722	1,493	2,215	457	1,425	1,882	
	Others	842	278	1,120	1,468	1,109	2,577	
Contractor Total		3,176	2,303	5,479	2,774	3,548	6,322	
Total Emplo	yment	5,622	2,655	8,277	5,308	3,839	9,147	
% Change from 2013					-5.6%	44.6%	10.5%	

### Table 2: Total ERWS Employment by Type, Nationality and Function: 2013 & 2014

Source: Authority 2014 employment survey

2014 Direct employment was 1% higher than in 2013. Indirect employment in 2014 (6,322) was 15.4% higher than the previous year and reflects the addition of 1,245 contractor expatriate nationals. Since 2005, total (Direct and Indirect) employment has increased by 91% from 4,796 to 9,147 in 2014. Direct employment accounts for 40% of this increase, with Omani nationals accounting for 89% of the increase in Direct employment.

Figure 13 presents the 2014 Omanisation rates for Direct and Indirect employment.



	Omani	Expatriate	Total	% Oman
Direct Employees	2,534	291	2,825	90%
Indirect Employees	2,774	3,548	6,322	44%
Total Employees	5,308	3,839	9,147	<b>58%</b>

### Figure 13: ERWS Employment & Omanisation: 2014



Source: Authority 2014 employment survey

Omani nationals accounted for 90% of Direct employment in 2014 (higher than percentage reported as in 2013), and for 44% of Indirect employment, contributing to a sector Omanisation rate of 58%.

The Authority's annual employment survey highlights changes in the underlying composition of electricity and related water sector employment; these are shown in Figure 14.







### Figure 14: Employment & Omanisation by Activity: 2014

The increase in 2014 ERWS employment shown in Figure 14 reflects the continuing employment needs of a sector that is working hard to keep pace with strong electricity demand growth. Licensees have a responsibility to ensure that the new recruits have the training and guidance needed to increase their productivity and thereby help moderate future increases in electricity sector costs.



### Electricity & Related Water Sector Issues in 2014

### **Fatal Accidents**

Regrettably, the electricity sector again witnessed a number of fatal accidents in 2014. The high number of deaths is an obvious concern for the Authority, for people working in the electricity sector and those who come into contact with utility assets. The Authority is continuing its efforts to increase awareness of the importance of health and safety to both licensees and contractors in order to minimise the number of accidents that occur, and to reduce the seriousness of any accident that does occur.

Date	Location	Licensee	Incident
18th January 2014	Mudhaibi	OETC	Contractor fell from tower under construction.
14th April 2014	Sayh Al Dhabi	MEDC	Contractor electrocuted whilst undertaking repairs to an underground cable.
12th August 2014	Muscat	MEDC	A worker was electrocuted when a crane arm came into contact with an overhead 11kV line on the boundary of his company yard.
12th September 2014	Bidiya Mazoon	MAZOON	A linesman died whilst working on a live LV connection to a customer's property.
12th November 2014	Musandam	RAEC	A contractor working on tower foundations for a new 132kV overhead line died when his vehicle fell down the mountain side.

### Table 3: Summary of Fatal Incident Investigations by the Authority - 2014

### **Professional Development of Authority Staff**

The Authority is committed to the professional development of Omani staff. In 2014, two staff members of the Authority commenced Masters programmes in various disciplines. Hilal Al Ghaithi commenced an MSc in Renewable Energy and Power Systems Management at the City University in London. Bushra Al Maskari is pursuing an MSc in Public Policy Programme at the Blavatnik School of Government at the University of Oxford.

### **Overseas Visits**

In September 2014, the Authority participated in a delegation including senior government officials representing the Steering Committee tasked with restructuring the water sector in Oman. The delegation aimed to visit a number of jurisdictions that have unbundled and restructured their water sectors to learn from their experiences and understand best practices. The Authority is keen to establish a regulatory framework that best addresses the objectives of the government for the water sector and will work closely to ensure the fundamental building blocks for best-practice regulation are established to facilitate the restructuring process.



### **Customer Awareness Programmes**

The Authority's Forward Work Programme for 2014 identified the delivery of successful Road Shows designed to raise customers' and stakeholders' awareness of what they have a right to expect from licensed suppliers, as a key priority.

Three Road Shows were delivered during the year, in Sur, Salalah and Muscat. The Road Shows generated lively debate and have provided a platform to increase liaison between stakeholder groups and the Authority, as well as ensuring that stakeholders better understand the role of the local distribution and supply licensees and their meter reading, billing and collection contractors (OIFC and ONEIC).

In order to support the overall awareness raising programme the Authority prepared a new booklet describing in customer friendly terms the precedent determinations made by the Authority since 2005. This will be published during 2015 and provide a basis for both customers and licensees to understand the issues considered by the Authority when issuing determinations.

### New Procedures on Processing Applications for electricity Supply

The Authority has statutory duty to ensure licensees meet all reasonable demand applications for electricity. The Authority introduced new procedures to assess the reasonableness of applications for electricity Supply submitted by new Commercial and Industrial customers whose requirements are in excess of 20 MW. In line with new policy requirements, all new electricity Supply applications submitted by Commercial and Industrial customers whose requirements by Commercial and Industrial customers whose requirements are in excess of 20 MW will be discussed with the Public Authority for Electricity and Water (PAEW), MOCI (to confirm that the project accords with the commercial and industrial strategy of the ministry) and the Ministry of Oil & Gas (MOG), to confirm, subject to securing MOCI consent, that sufficient gas will be allocated to the electricity sector to meet the project's electricity requirements, and relevant gas pricing arrangements.

### **OES – Indoor Substations**

During 2014 the Authority retained a consultant (Energy People) to prepare a draft Oman Electrical Standard (OES) for Indoor Substations and Dry Type Distribution Transformer. The OES will be used to support the requirement by planning Authorities in Oman for electricity substations to be developed inside buildings.

The review was conducted in close consultation with the distribution licensees, Distribution Code Review Panel and the Public Authority for Civil Defense and Ambulance and will provide an alternative solution to overcome the constraint of land availability outside buildings. The Authority hopes to issue the revised standards in 2015.

### Joining GCCIA

On 20 November 2014 the Sultanate signed the General Agreement and the Power Exchange and Trading Agreement to officially join the GCC Interconnection Project. The General Agreement was signed by the Public Authority of Electricity and Water (representing the Government of the Sultanate) and the Power Exchange and Trading Agreement was signed by Oman Power and Water Procurement Company and Oman Electricity Transmission Company. Oman's interconnection with the GCC Electricity Interconnection Authority interconnector will be using the existing interconnection between the Sultanate and the UAE and through the network of Abu Dhabi transmission network.



To enable Oman Power and Water Procurement Company (SAOC) to Import and Export electricity through the GCC Interconnection and in accordance with the provisions of the Power Exchange and Trading Agreement the Authority proposed to modify the Licence granted to PWP to allow the company to Import and Export electricity in accordance with the provisions of Article (114) of the Sector Law. The proposed modification will be implemented after the finalization of the Access Conditions and other relevant procedural matters. The Authority also proposed to modify the Licence granted to the Oman Electricity Transmission Company (SAOC) to allow the company to make an International Interconnection with the GCC Interconnection Authority (through the transmission network of Abu Dhabi) in accordance with Article (115) of the Sector Law. The two License modifications will be implemented simultaneously.

### Strategic Study for the Privatization of Muscat Electricity Distribution Company SAOC

The Public Authority for Electricity and Water (PAEW), with approval from the Ministry of Finance (MOF), has tasked the Electricity Holding Company SAOC (EHC) with undertaking a strategic study for the privatization of Muscat Electricity Distribution Company SAOC (MEDC).

A team of consultants has been retained to explore options for the privatization of MEDC, including undertaking a gap analysis and technical, legal, financial, economic and organisational due diligence of MEDC.

In line with our statutory obligation (under Article 7 of the Sector Law) to "facilitate the privatisation of the electricity and Related Water sector in the Sultanate of Oman", the Authority is playing an active role in contributing to and supporting this important study.



### **Regulatory Focus #1 Health and Safety**

### Background

The Sector Law (Article 22, para (3)) requires the Authority to secure the safe, effective and economic operation of the electricity and related water sector in the Sultanate and to enhance the safety of the public. The Authority has sought to achieve this duty through the obligations included in the licences and licence exemptions it issues, coupled with audits and inspections. Despite a range of initiatives and approaches taken since 2005 and some improvements that have been secured, it is clear that there remains considerable work to be done to meet the duties prescribed in the Law.

Since restructuring of the Oman electricity industry, there has been a significant increase in capital expenditure in order to meet growth in demand. Access to electricity across the Sultanate has increased dramatically, but the changes have been accompanied by a regrettably high number of incidents and accidents, resulting in injuries in most cases to those working in the electricity sector and in some cases to members of the public. Sadly, some of these injuries have been fatal.

### Regulatory actions taken, and Licensee response

The Authority has used a range of regulatory tools in its efforts to increase awareness and enhance performance, and in some cases these have been very effective, in other cases less so.

Regulatory action	Impact
Advice and request: From 2005, the Authority undertook inspections and noted open substations, unsecure assets, and requested that they be made safe.	When problems have been identified to licensees some remedial works were completed, but this was reactive and generally limited to the specific cases identified by the Authority.
In 2012, the Authority hosted a seminar to raise awareness of corporate obligations and responsibilities, and in 2014 has had greater liaison with EHC to reinforce appropriate corporate behaviours.	Although some licensees do recognise their corporate responsibilities, the awareness within government owned companies is generally much lower than the private sector, and there is a tendency to pass responsibility to contractors and consultants.
Accident investigations: The Authority has investigated many accidents some of which were on behalf of the Public Prosecution, but with the aim of identifying the root cause of the accident rather than apportioning blame to individuals.	The root causes of many of the fatal accidents suffered by the sector are the same, and the Authority remains concerned with the level of commitment by licensees to make sustained changes to ensure safety
<b>Audit and follow-up</b> : From 2006, the Authority appointed consultants to complete health and safety audits of licensees, starting with production facilities and then distribution companies, RAEC, and finally in 2014 OETC, DPC and OPWP.	The experience with licensed production facilities was generally very good, such that issues were recognised and all similar issues were systematically addressed. Follow-up audits demonstrated significant improvements. The experience with distribution companies so far is less positive, with some audit findings being addressed but not in a systematic way, such that the same issues keep recurring.

### Table 4: Regulatory actions taken, and Licensee response 2014



<b>Breach of Licence Notice:</b> In 2008 the Authority placed AI Ghubrah power station on breach of licence for its health and safety performance, and the stipulated actions were routinely followed-up In 2009, the Authority placed the MIS discos on breach of licence for unsecure and unsafe distribution assets, which has been followed up by regular inspections by the Authority.	The action at AI Ghubrah power station resulted in significant changes to the way that the business was managed, and is considered to be a major success. This was detailed in the Authority Annual report for 2011
Appropriate Person Criteria: The Authority had expressed concern regarding the manner in which a new power plant was being developed, specifically with respect to safety. Despite assurances being given by the project company, the outturn performance was not to the required standard. The Authority therefore notified the Shareholder that pursuant to the Appropriate Person criteria, it was not minded to issue a Generation Licence.	The initial response to the concerns articulated by the Authority was mainly in terms of documentation. However, following the formal notification of the Authority's position regarding the Appropriate Person eligibility, significant changes and improvements were secured on the ground. A detailed audit confirmed that the measures were effective and therefore the Authority issued a licence for the plant to operate.

The Authority is fully committed to its legal and moral obligations to secure a safe electricity sector for those working in it, and for the general public, and will continue its efforts to ensure others meet their obligations as well. It is clear that there is no single means to enhance safety of the electricity and related water sector, hence the Authority will remain active in its role to ensure complaince and deliver improvements.



### **Regulatory Focus # 2 Cyber Security**

In 2013 the Authority appointed PA Consulting to assist in the development of new regulations to address the risks associated with cyber security for critical infrastructure in the Electricity and Related Water sector in Oman. The current status of cyber security in Oman is enforced by the Oman e-Transaction (the Electronic Transaction law promulgated by Royal Decree No 69/2008) and e-Crime (the Cyber Crime law promulgated by Royal Decree No 12/2011) that addresses general IT crimes rather than industrial automation control systems. The Authority confirmed that there are presently no regulations in Oman dealing with Supervisory Control and Data Acquisition systems (SCADA) and Distributed Control System (DCS) cyber security.

The Authority statutory functions and duties related to security of supply are articulated in Article 22 of the Sector Law and that includes:-

- A duty to secure and develop the safe, effective and economic operation of the Electricity and Related Water sector;
- A duty to secure the Security of Supply in the Sultanate; and
- A duty to secure the preparation of technical specifications and criteria, and Performance Security Standards, for the Electricity and Related Water sector.

The Authority initiated this work by reviewing first what international standards are available to secure the critical infrastructure including industrial control systems and what would be suitable and applicable for the system configurations available in Oman. The scope of work was to:-

- Undertake a review of SCADA and DCS cyber security regulations in other jurisdictions;
- Evaluate and assess the configuration of SCADA and DCS in generation, transmission and distribution networks in Oman which included a risk assessment of the configurations;
- Undertake a cost assessment of implementing cyber security regulations including cost benefit analysis of options to be proposed in new regulations;
- Propose and inform the basis of new regulations suitable for Oman setting up a minimum requirement to safeguard the SCADA and DCS equipment from cyber-attacks;
- Identify the required timeframe for the licensees to implement and fully comply with new regulations; and
- Include recommendations for development of a regulatory framework that will allow the Authority to Audit licensee compliance with the new regulations.

The main conclusion identified from the audit carried out by the Authority is that the sector does not yet have a mature approach to SCADA and DCS cyber security. The areas of concerns includes very little evidence that management systems are in place for SCADA and DCS cyber security, a low level of security awareness and ultimately, the impact of security threats is not only dependent on the level of protection in place, but the capability to detect and the capability to respond.



To raise the awareness across the sector, a seminar was organised on 18 March 2014 and licensees and exemption holders were invited. The Authority explained the scope of the research done, the basis of the recommendations to the Authority, and how implementation of the new regulations will bring the electricity and related water sector in Oman up to date with best practice approaches to Cyber Security in other jurisdictions. The Authority also explained how companies are expected to comply with the new cyber security standard.

Having identified the weaknesses and the current status of cyber security of the SCADA and DCS, the Authority decided to take a proactive regulatory approach which covers regulation through setting baseline mandatory standards, with a phased transition from regular compliance audits to audits by exception. The expected transition period from the regular compliance audits to audits by exceptions would vary between three to five years depending on the progress to develop management systems and capabilities. The licensees would be required to comply with the baseline mandatory standard which is incorporated into a license condition.

As a good Regulatory practice, the Authority consulted with Licensees and exemption holders connected to the main interconnected system on the draft Standards and license modifications and expect to have these in place in 2015. At this stage, the Authority does not propose to require Exemption Holders to comply with these standards. The Authority, however, expects Exemption Holders connected to Licensed Systems or networks put in place adequate measures to secure the SCADA and DCS systems from cyber security risks. Furthermore, the Authority consulted with Information Technology Authority (ITA) who welcomed this important initiative by the electricity sector to secure the critical infrastructure in Oman and provided constructive comments on the draft standard.





### **ARTICLE (29) REPORTING**

### **Further Market Liberalisation**

Table 5 presents the Authority's assessment of the possible implementation of the four Liberalisation measures identified in the Sector Law.

Liberalisation measure	Authority's assessment of market readiness:
1. Disposal of the Government's interest in the Electricity Holding Company SAOC or the Oman Power and Water Procurement Company SOAC	The Authority does not consider the market ready for this liberalisation measure. The Authority does not believe customers, investors or the government would benefit from the implementation of this measure at the present time. The Authority does not propose to take steps to prepare the market for the implementation of this measure.
2. Permitting licensed Production Facilities to sell to persons other than Oman Power and Water Procurement Company SAOC	The Authority does not consider the market ready for this liberalisation measure. However, work is underway to develop a spot market for electricity trade that would provide an alternative way for licensed Production Facilities to sell power to the PWP. The spot market would operate alongside and in conjunction with the existing system of long-term PPAs and PWPAs. The spot market is expected to increase the potential for competition in Oman's power generation market, and to provide a mechanism to make available additional capacity that might otherwise not be readily accessible.
3. Permitting persons other than Oman Power and Water Procurement Company SAOC and the Rural Areas Electricity Company SOAC to Import or Export electricity from or to another country	The Authority does not consider the market ready for this liberalisation measure. Oman became a formal signatory to the GCCIA in 2014 and the Authority ensured the proposals are consistent with the regulatory regime in Oman and provide safeguards to protect the interests of customers, and other stakeholders, The GCCIA opted not to own any assets in Oman and therefore will not be licensed to import or export electricity. While no further action is contemplated to promote this liberalisation measure in the medium term as previously stated by the Authority but discussions continue with the GCCIA on facilitating trade across the GCCIA interconnector
4. Creation of competition amongst Licensed Suppliers	The Authority believes the market is ready for Supply Competition and will initiate the Consultation required by the Sector Law prior to submitting proposals to government The Authority progressed the small scale implementation of AMR for the largest 8,000-10,000 customers, requiring distribution and supply licensees to provide information on the likely costs and benefits of the programme. Given the poor quality of the information received the Authority agreed with the distribution and supply licensees that the Electricity Holding Company be asked to appoint consultant advisors to support and co-ordinate their work on the project plan and funding requirements. The consultants commenced work early in 2015.

### Table 5: Further Market Liberalisation



### **Electricity Subsidy**

Article (18) of the Sector Law implements a mechanism through which the Ministry of Finance provides electricity Subsidy calculated by the Authority to licensed suppliers on an annual basis. The Authority undertakes three separate Subsidy calculations: the first calculates MIS Subsidy required by MEDC, Majan and Mazoon, the second calculates RAEC Subsidy, while the third calculates the Subsidy requirement of Dhofar Power Company.

Subsidy is defined as the difference between the economic cost of Supply (including financing costs) and Permitted Tariff (and other) revenue.

### MIS Subsidy in 2014

Outturn MIS Subsidy in 2014 was OMR 214.1 million. This reflects total economic costs of OMR 560.0 million and customer revenues of OMR 345.9 million. Figure 15 presents outturn MIS Subsidy in 2014 by company.

### Figure 15: 2014 MIS Outturn Subsidy by Company



Source: 2014 audited SCRC Statements & Authority calculations

2014 MIS Subsidy accounted for 38% of the total economic cost of supply (OMR 560.0 million), the remaining 62% of costs was recovered through customer revenue.

MEDC, Majan and Mazoon accounted for 27%, 31% and 42%, respectively, of total 2014 MIS Subsidy. MEDC's 2014 Subsidy of OMR 58.5 million accounted for 28% of its total economic cost requirements, while Subsidy to Majan and Mazoon (OMR 65.4 million and OMR 90.3 million respectively) constituted 40% and 48% of their respective 2014 economic costs. The Subsidy requirement of each company reflects differences in customer mix and the characteristics of their respective distribution systems.





### 2015 MIS Subsidy Forecast

### Gas Price Increases

Subsidy

The price of natural gas sold by the Ministry of Oil and Gas ("MOG") to electricity generation plants has been increased, with effect on 1 January 2015, from USD 1.50 per MMBTU to USD 3.00 per MMBTU,

The increase in the price of gas doubles the fuel cost for power generation in the MIS and Dhofar Power System ("DPS") and has a significant impact on 2015 generation costs and electricity sector Subsidy.

Figure 16 presents the Authority estimates of 2015 MIS Subsidy by company.

### Figure 16: Subsidy Forecast - Main Interconnected System 2015

29.4
MIS
MIS
15.7
13.7
29.4
46%
n

Source: Authority calculations

The Authority's estimate of 2015 MIS Subsidy is OMR 340.5 million. This reflects total estimated economic costs of OMR 733.0 million of which 54% (or OMR 392.6 million) is expected to be recovered through customer revenues.

The Authority's 2015 MIS Subsidy estimate of OMR 340.5 million is around 59% higher than outturn 2014 Subsidy of OMR 214.1 million.

Thereafter, at the start of every subsequent year, the gas price shall be adjusted annually (on a compounded basis) using whichever is higher of the following: (i) a three per cent (3%) annual rate Figure 17 shows the underlying movement in MIS cost components, customer revenue and Subsidy between 2014 and 2015.





Figure 17: MIS costs, customer revenue and Subsidy: 2014 and 2015 estimates

The Authority's 2015 estimate of MIS costs represents a 31% increase over outturn 2014 costs. As Figure 17 shows, this is primarily the result of the 40% increase in electricity production cost that, in turn, is largely driven by the gas price increase.

### Underlying Movement in MIS Subsidy: 2006 to 2014, and 2015 estimate

Figure 18 presents the Authority's underlying measure of MIS Subsidy between 2006 and 2014 and expected MIS Subsidy in 2015. The underlying measure assumes revenue, costs and efficiencies were correctly forecasted between 2006 and 2014 so as to return zero correction factors. The 2015 estimate of MIS Subsidy reflects the 2015 MAR of PWP, OETC, MEDC, Majan and Mazoon and assumed growth in Supply of 13%.

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 e
140.5	144.5	161.2	177.6	198.3	222.5	249.6	295.4	312.0	483.0
26.5	27.9	31.5	38.5	41.4	44.0	46.9	65.2	68.6	73.6
22.8	23.8	23.9	32.3	34.9	38.8	55.8	59.2	62.6	65.5
16.6	17.8	19.6	26.0	28.0	30.8	40.8	42.1	44.4	47.9
23.0	24.2	27.6	37.5	41.2	45.2	63.3	65.8	68.5	82.7
229.6	238.2	263.8	311.9	343.8	381.3	456.4	527.7	556.2	752.7
143.1	153.9	179.8	201.5	227.1	259.9	286.4	311.2	345.9	392.6
86.5	84.3	84.0	110.4	116.7	121.5	170.0	216.5	210.3	360.1
9,194	9,778	11,317	12,714	14,122	16,374	18,502	20,021	22,098	24,932
25.0	24.4	23.3	24.5	24.3	23.3	24.7	26.4	25.2	30.2
15.6	15.7	15.9	15.9	16.1	15.9	15.5	15.5	15.7	15.7
9.4	8.6	7.4	8.7	8.3	7.4	9.2	10.8	9.5	14.4
		360.1							
170.0 2	16.5 210.3		9.4	8.6 7.	4 8.7	8.3	7.4 9.2	10.8	9.5
1, <b>1</b> 1, <b>1</b>									
2012 2	2013 2014	1 2015 e	2006	2007 20	2009	2010 2	2011 2012	2013	2014 2015
OMR						ag Cubridy Pa	/KMb		
	140.5 26.5 22.8 16.6 23.0 <b>229.6</b> 143.1 <b>86.5</b> 9,194 25.0 15.6 9.4 2012 2	144.5       144.5         26.5       27.9         22.8       23.8         16.6       17.8         23.0       24.2         229.6       238.2         143.1       153.9         86.5       84.3         9,194       9,778         25.0       24.4         15.6       15.7         9.4       8.6         170.0       216.5       210.3         2012       2013       2014	140.5       144.5       161.2         26.5       27.9       31.5         22.8       23.8       23.9         16.6       17.8       19.6         23.0       24.2       27.6         229.6       238.2       263.8         143.1       153.9       179.8         86.5       84.3       84.0         9,194       9,778       11,317         25.0       24.4       23.3         15.6       15.7       15.9         9.4       8.6       7.4         2012       2013       2014       2015 e	140.5       144.5       161.2       177.6         26.5       27.9       31.5       38.5         22.8       23.8       23.9       32.3         16.6       17.8       19.6       26.0         23.0       24.2       27.6       37.5         229.6       238.2       263.8       311.9         143.1       153.9       179.8       201.5         86.5       84.3       84.0       110.4         9.194       9,778       11,317       12,714         25.0       24.4       23.3       24.5         15.6       15.7       15.9       15.9         9.4       8.6       7.4       8.7         2012       2013       2014       2015 e       2006	140.5       144.5       161.2       177.6       198.3         26.5       27.9       31.5       38.5       41.4         22.8       23.8       23.9       32.3       34.9         16.6       17.8       19.6       26.0       28.0         23.0       24.2       27.6       37.5       41.2         229.6       238.2       263.8       311.9       343.8         143.1       153.9       179.8       201.5       227.1         86.5       84.3       84.0       110.4       116.7         9,194       9,778       11,317       12,714       14,122         25.0       24.4       23.3       24.5       24.3         15.6       15.7       15.9       15.9       16.1         9.4       8.6       7.4       8.7       8.3         360.1       9.4       8.6       7.4       8.6       7.         2012       2013       2014       2015 e       2006       2007       2006	140.5       144.5       161.2       177.6       198.3       222.5         26.5       27.9       31.5       38.5       41.4       44.0         22.8       23.8       23.9       32.3       34.9       38.8         16.6       17.8       19.6       26.0       28.0       30.8         23.0       24.2       27.6       37.5       41.2       45.2         229.6       238.2       263.8       311.9       343.8       381.3         143.1       153.9       179.8       201.5       227.1       259.9         86.5       84.3       84.0       110.4       116.7       121.5         9.194       9,778       11,317       12,714       14,122       16,374         7.4       25.0       24.4       23.3       24.5       24.3       23.3         15.6       15.7       15.9       15.9       16.1       15.9         9.4       8.6       7.4       8.7       8.3       7.4         2012       2013       2014       2015 e       2006       2007       2008       2009	140.5144.5161.2177.6198.3222.5249.626.527.931.538.541.444.046.922.823.823.932.334.938.855.816.617.819.626.028.030.840.823.024.227.637.541.245.263.3229.6238.2263.8311.9343.8381.3456.4143.1153.9179.8201.5227.1259.9286.486.584.384.0110.4116.7121.5170.09,1949,77811,31712,71414,12216,37418,50225.024.423.324.524.323.324.715.615.715.915.916.115.915.59.48.67.48.78.37.49.22012201320142015 e20062007208200920102	140.5144.5161.2177.6198.3222.5249.6295.426.527.931.538.541.444.046.965.222.823.823.932.334.938.855.859.216.617.819.626.028.030.840.842.123.024.227.637.541.245.263.365.8229.6238.2263.8311.9343.8381.3456.4527.7143.1153.9179.8201.5227.1259.9286.4311.286.584.384.0110.4116.7121.5170.0216.59,1949,77811,31712,71414,12216,37418,50220,02125.024.423.324.524.323.324.726.415.615.715.915.916.115.915.515.59.48.67.48.78.37.49.210.8300.1300.1300.1300.1300.1300.1300.1300.1170.0216.5210.39.48.67.48.78.37.49.22012201320142015200620072082009201020112012	140.5144.5161.2177.6198.3222.5249.6295.4312.026.527.931.538.541.444.046.965.268.622.823.823.932.334.938.855.859.262.616.617.819.626.028.030.840.842.144.423.024.227.637.541.245.263.365.868.5229.6238.2263.8311.9343.8381.3456.4527.7556.2143.1153.9179.8201.5227.1259.9286.4311.2345.986.584.384.0110.4116.7121.5170.0216.5210.39,1949,77811,31712,71414,12216,37418,50220,02122,09825.024.423.324.524.323.324.726.425.215.615.715.915.916.115.915.515.515.79.48.67.48.78.37.49.210.89.5360.1170.0216.5210.39.48.67.48.78.37.49.210.82012201320142015 e20062007200820092010201120122013

### Figure 18: Underlying Movement in MIS Subsidy: 2006 to 2014 & 2015 Forecast

Source: Authority calculations

Note: PWP MAR excludes costs associated with plants in the Dhofar Power System that are funded through the MIS



Between 2006 and 2014, the underlying economic cost of MIS supply increased by 142.3% and output (in the form of MWh supplied) by 140.4%. Subsidy per kWh increased by only 0.1 bz/kWh (or 1%) over the same period.

The increase in gas price from 2015 implies a significant increase in underlying Subsidy per kWh in 2015 (14.4 baiza/kWh) which is 52% higher than 2014 (9.5 baiza/kWh), reflecting a 20% increase in economic cost per kWh and no change in Permitted Tariffs.

### **Rural Systems**

Rural System production costs are unaffected by the increase in gas price, as RAEC plants utilise diesel fuel (and not gas) to produce electricity.

Figure 19: compares outturn 2014 Subsidy and our 2015 estimate of RAEC Subsidy.



### Figure 19: RAEC 2014 Outturn & 2015 Subsidy Estimate

Source: 2014 audited SCRC Statements & Authority calculations

Outturn RAEC Subsidy in 2014 was OMR 44.5 million or 63.2 baiza/kWh. This reflects total economic cost of OMR 56.8 million (80.8 baiza/kWh) and OMR 12.4 million (17.6 baiza/kWh) in Customer Revenue.

RAEC Subsidy will increase substantially in 2015 to OMR 66.5 million (82.3 bz/kWh); this is approximately 50% higher than outturn Subsidy in 2014. The increase in 2015 RAEC Subsidy reflects changes to the company's price controls to accommodate capital expenditure to fund transmission and distribution system investment in Musandam to support a 120MW gas fired power plant that when commissioned will displace expensive diesel fired generation.

RAEC is subject to similar costs pressures as MIS licensees, both with regard to employment directives, staff costs and corresponding increases in general and administrative costs.

Figure 20 presents underlying RAEC Subsidy between 2006 and 2014 and expected underlying RAEC Subsidy in 2015.





### Figure 20: RAEC Underlying Movement in Subsidy: 2006 to 2014 & 2015 Forecast

Source: 2006 to 2014 audited SCRC Statement, Authority calculations.

Please refer to Annex D for further details of the 2015 RAEC Subsidy estimate.

### **Dhofar Power Systems**

Following the Salalah electricity market restructuring, DPC (the licensed distribution and supply entity in the Dhofar Power System from 1 January 2014) is subject to the same Subsidy mechanism (prescribed under Article 18 of the Sector Law) as MIS Discos and RAEC.

Figure 21 presents the costs, revenue and Subsidy requirements pertaining to DPC.



### Figure 21: DPC 2014 Outturn & 2015 Subsidy forecast

Source: 2014 audited SCRC Statements & Authority calculations

Outturn DPC Subsidy in 2014 was OMR 28.5 million. This reflects a total economic cost of OMR 65.3 million and customer revenue of OMR 36.9 million. In 2014 DPC Subsidy accounted for 44% of the total economic cost of supply (OMR 65.3 million), the remaining 56% of costs was recovered through customer revenue.


The Authority's estimate of 2015 DPC Subsidy is OMR 41.3 million. This is 45% higher than 2014 outturn Subsidy. As with the MIS, the increase in the price of gas has a similarly significant impact on the cost of electricity generation and electricity Subsidy in the Dhofar Power System.

In addition to the increase in gas price, the increase in Subsidy also reflects:

- (i) an 13.5% growth in kWh supply to customers;
- (ii) a 9.3% growth in customer connections; and
- (iii) new price controls for DPC.

# Comparison of 2014 Subsidy by Company

Figure 22 presents a comparison of Subsidy provided to MEDC, Majan, Mazoon, RAEC and DPC in 2014. The left hand panel presents Subsidy (baiza) per kWh Supplied, the right hand panel shows Subsidy (OMR) per Customer Account.



#### Figure 22: 2014 Subsidy Comparisons by Company

Source: 2014 audited SCRC Statements & Licensee returns

Note 1: Muscat, Majan, Mazoon & RAEC Subsidy as per Article (18) of the Sector Law. DPC Salalah CA net allowance

Note 2: DPC Concession Agreement net allowances plus other Salalah purchase costs (RAEC) and PDO i/c costs

Mazoon accounts for 31.0% of the OMR 291.1 million of Subsidy provided to the companies in 2014, Majan accounts for 22.5%, MEDC 20.1%, RAEC 16.7%, and DPC 9.8%

RAEC Subsidy per kWh supplied and per account is significantly higher than other companies (and excludes RAEC electrification funding provided in accordance with Article (87) of the Sector Law), confirming the significant Subsidy support provided to customers in rural areas.

The Subsidy requirements of all companies reflect nominal increases in economic costs (to support increasing demand) and Permitted Tariffs that are not indexed to inflation and decline in real terms year on year.



# **Electricity Tariffs**

The Sector Law requires all electricity supplied by licensed suppliers to be charged at a Permitted Tariff approved by the Council of Ministers.

Table 6 presents details of the present Permitted Tariffs for different customer categories, and Permitted Tariff fees for the disconnection and reconnection of customer accounts.

#### Table 6: Permitted Tariffs

Permitted Tariff Category			Tariff Struc	ture	
Industrial <sup>1</sup>	All Re	egions except I	Dhofar	Dhofar	Region
	Septembe	r to April: 12 Bai	za per kWh	August to March:	12 Baiza perkWl
	May to A	ugust: 24 Baiza	per kWh	April to July: 24	4 Baiza per kWh
Commercial		Fla	nt rate @ 20 Baiz	a per KWh	
Ministry of Defence and the Sultan Special Force	Flat rate @ 20 Baiza per KWh				
Residential	0-3000 kWh	3001-5000 kWh	5001-7000 kWh	7001-10000 kWh	above 10000 kWh
	10 Bz / kWh	15 Bz / kWh	20 Bz / kWh	25 Bz / kWh	30 Bz / kWh
Government	0-3000 kWh	3001-5000 kWh	5001-7000 kWh	7001-10000 kWh	above 10000 kWh
	10 Bz / kWh	15 Bz / kWh	20 Bz / kWh	25 Bz / kWh	30 Bz / kWh
Agriculture &		0-7000 kWh		7001 kWł	n & above
Fisheries		10 Baiza per kW	20 Baiza per kWh		
Tourism <sup>2</sup>	0-3000 kWh	3001-5000 kWh	5001-7000 kWh		001 kWh
	10 Bz / kWh	15 Bz / kWh	20 Bz / kWh	20 Bz	/ kWh

1 Customers require a MOCI letter of recommendation and must maintain a power factor of least 0.92 Subject to Ministry of Tourism regulations and approval

# Permitted Tariff fees for Disconnection & Reconnection of accounts

B:

Disconnection fee (all types of metered accounts): 7.500 Rial Omani Reconnection fee (all types of metered accounts): 7.500 Rial Omani

No new Permitted Tariffs or tariff modifications were implemented in 2014.





# REGULATION

# Authority for Electricity Regulation, Oman

The Authority was established as an administratively and financially independent entity subject to State Audit Law by Article (19) of the Sector Law. The Authority is competent to regulate the electricity and related water sector pursuant to Article (2) of the Sector Law. Authority Members are appointed by the Council of Ministers for three year terms.

The present Members of the Authority are:

Dr Amer bin Saif Al Hinai - Chairman and non-executive Member (a part time appointment); Ayisha bint Zaher Al Mawali - non-executive Member (a part time appointment); Mohammed bin Ahmed AlShahri - non-executive Member (a part time appointment); Qais bin Saud Al Zakwani - Executive Director and Member (a full time appointment).

# **Organisation Structure & Staffing**

While Members are collectively responsible for managing the Authority's affairs and ensuring the Authority fulfils all of its statutory functions and duties, most day to day work is undertaken by four Directorates that are responsible for different aspects of regulation.

# **Authority Organisation Structure**



Excluding Members, the Authority has a total compliment of 44 Directors and staff, most of whom are Omani national. Professional staff have qualifications relevant to their respective areas of regulation: 26 staff have Bachelor's Degrees and 8 have Master Degrees.



# Members Meetings

Members met regularly throughout 2014 on the dates shown in Table 7

# Table 7: Members Meetings in 2014

	Amur Al Kiyumi	John Cunneen	Dr Amer Al Hinai	
	Chairman & Member	Executive Director & Member	Member	
Appointed for term in:	November-2011	November-2011	November-2011	
Meeting Dates				
15-January-2014	$\checkmark$	$\checkmark$	$\checkmark$	
9-February-2014	$\checkmark$	✓	$\checkmark$	
17-March-2014	$\checkmark$	$\checkmark$	$\checkmark$	
27-March-2014	$\checkmark$	✓	✓	
8-April-2014	$\checkmark$	$\checkmark$	$\checkmark$	

	Dr Amer Al Hinai	Qais Al Zakwani	Ayisha Al Mawali	Mohammed AlShahri
	Chairman & Member	Executive Director & Member	Member	Member
Appointed for term in:	May-2014	May-2014	May-2014	May-2014
Meeting Dates				
1-July-2014	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
10-July-2014	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
16-July-2014	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
26-August-2014	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
21-October-2014	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
5-November-2014	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
19-November-2014	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
24-December-2014	$\checkmark$	$\checkmark$	$\checkmark$	✓



# Funding & Regulatory Costs

The Authority recovers all of its costs through licence fees that apportion the Authority's costs on the basis of the time expected to be spent regulating each activity. Table 8 presents licence fee income by regulated activity and the number of Licence Holders by activity, for 2007 to 2015, inclusive.

Rial C	Omani	Generation	Generation & Desalination	Transmission & Despatch	Distribution & Supply	RAEC Activities	PWP Activities	PWP: Electricity	PWP: Related Water	PWP: Salalah	Generation(Re newables)	Total Fee income
2007	Fees	50,776	55,854	177,715	399,858	153,279	273,237	88,858	6,664	177,715	0	1,110,719
	# licenses	4	3	1	3	1	1					13
2008	Fees	95,284	99,087	320,669	474,590	159,345	232,225	192,401	10,359	29,465	0	1,381,200
	# licenses	4	3	1	3	1	1					13
2009	Fees	154,351	220,501	514,503	782,045	230,792	547,824	288,122	14,700	245,002	0	2,450,016
	# licenses	4	4	1	3	1	1					14
2010	Fees	112,724	125,096	259,264	428,350	120,009	329,236	206,202	10,310	112,724	0	1,374,679
	# licenses	4	4	1	3	1	1	10,310				14
2011	Fees	118,360	164,189	285,190	492,601	132,010	362,160	123,996	11,341	226,822	0	1,554,510
	# licenses	4	5	1	3	1	1					15
2012	Fees	213,048	241,359	427,785	620,676	211,216	386,074	145,075	14,176	386,074	0	2,100,158
	# licenses	6	5	1	3	1	1					17
2013	Fees	312,470	241,359	410,674	777,914	211,216	179,733	151,381	28,353	0	0	2,133,367
	# licenses	8	5	1	4	1	1					20
2014	Fees	359,341	334,117	595,477	1,127,975	306,263	283,776	227,071	56,705	0	2,000	3,008,949
	# licenses	8	5	1	4	1	1				1	21
2015	Fees	427,491	417,316	848,124	908,704	331,875	356,897	272,611	84,286	0	2,000	3,292,407
	# licenses	8	5	1	4	1	1				1	21

#### Table 8: Licence Fees 2007 to 2015

Changes in licence fees year on year reflect the changing scope of regulatory work as the electricity and related water sector market develops. For example, increased desalinated water licence fees reflect anticipated amendments to the Sector Law to bring Independent Water Projects under the purview of Sector Law regulation by the Authority; and, increased generation licence fees reflect the allocation of costs relating to the Authority's renewable energy initiatives to that regulated activity.

The cost of electricity and related water sector regulation in 2014 was around 3.2 Rial Omani per Customer account, around one tenth of one baiza per kWh Supplied and less than 0.25% of total electricity and related water sector turnover, metrics the Authority believes compare favourably to international benchmarks of regulatory costs.

#### 2015 Forward Work Programme

Article (34) of the Sector Law requires the Authority to prepare a Forward Work Programme for the coming year, and consult with Persons who may be affected by the proposed work. In December 2014 the Authority consulted on its proposed 2015 Forward Work Programme and published the programme in accordance with Article (34) of the Sector Law and is in the process of implementing all of its constituent tasks. The 2015 Forward Work programme is presented in Annex E of this report.

# مینة تنظیم الکمریا. - عبان

# Annual Report 2014

# Customer Affairs Directorate

The Customer Affairs Directorate is responsible for protecting and promoting the interests of electricity customers. The Directorate carries out these functions by resolving complaints, monitoring and ensuring performance of customer related licence obligations by distribution and supply licensees and enhancing customer awareness of the legal and regulatory framework and the standard of service to which they are entitled.

# In 2014 the Directorate:

- i. Hosted three well attended stakeholder awareness Road Shows, with representatives from Walis' offices, local and central government organisations and other key stakeholder groups, in Sur, Salalah and Muscat;
- ii. Received 91 new customer complaints and resolved 111 outstanding customer complaints;
- iii. Advised a further 115 customers on their rights and how to progress their complaints using the approved complaint handling procedure;
- iv. Worked with the Economics Directorate to set realistic revenues to cover distribution and supply business customer services activities during the period 2015-2017, including specific allowances for new senior staff to implement a Blueprint for organizational reform;
- v. Further progressed the plan for a small scale implementation of automated meter reading (AMR) for customers that consume large amounts of electricity;
- vi. Prepared a customer friendly guide to precedent determinations made by the Authority, which will be published in early 2015;
- vii. Held regular liaison meetings with distribution and supply licensees to discuss customer related issues.

#### Licences, Codes, Procedures and Charters:

In 2014 the Directorate focussed on ensuring the New Complaint Handling Procedures, Late Payment Codes of Practice and Customer Charters introduced in 2011 and 2012 are properly implemented. Furthermore the Directorate developed a series of regular monthly and quarterly monitoring reports for different activities such as complaint management and supply disconnection. Individual meetings were held with all companies to ensure that lessons are learned and in some cases follow-up actions were required to be taken.

The review of the Electricity Supply Agreement (Supply Terms) for residential customers that commenced during September 2013 was further progressed and it is expected that a new model agreement will be implemented in early 2015.

#### Automated Meter Reading for large customers

The Authority continued to progress the small scale implementation of automated meter reading for the largest 8,000 - 10,000 electricity consumers. Following the seminar held for distribution and supply licensees in October 2013 and following a structured data request issued by the Authority in November 2013 distribution and supply licensees provided information on the costs and benefits of such a programme.



The Authority, supported by its expert advisers ESBI, concluded that the information presented by licensees was not a sufficiently robust basis on which to agree the timescales, operational methods and funding necessary for the implementation of the project. As a result and reflecting the need for significant co-ordination between licensees, to support data flows and data standardization, the Authority agreed that the Electricity Holding Company be asked to appoint consultants to work with distribution and supply licensees to progress the project plan in such a manner as would permit the Authority to approve the necessary funding. The Authority has worked closely with distribution and supply licensees as part of this process and it is expected that the consultants will start work early in 2015.

# **Complaints and Determinations**

It is the Authority's policy, as set out in the approved Complaint Handling Procedure, that licensees must first be given an opportunity to resolve customer complaints. Should they fail to resolve the matter to the satisfaction of the customer, or within the timeframes specified in the Complaint Handling Procedure, the customer may refer the case to the Authority. The Authority has legal powers to determine how such complaints should be resolved.

The Authority made 69 Determinations in the period 2005 – 2012, covering all main categories of complaint. This body of precedent was sufficient to enable the Authority's staff to resolve a further 111 unresolved complaints during 2014, compared with 91 complaints received during the year. However, the Authority will continue to make further Determinations when it is necessary to set a further precedent and when a Customer does not accept the resolution of his dispute on the basis of precedent and wishes to pursue the matter in Court.

The figure of 91 complaints received during 2014 was a slight increase over the 88 complaints received during 2013, but this increase was somewhat lower than the overall increase in the number of connected customers. Figure 23 below presents an analysis of the issues that were the causes of those 91 complaints.

Copmplaint	20	13	20	14
Issue	#	%	#	%
Billing	58	66%	56	62%
Meter Reading	0	0%	0	0%
Meter Tampering	0	0%	0	0%
Landlord Tenant	1	1%	0	0%
Asset Relocation	14	16%	11	12%
Connection	11	13%	19	21%
Other	4	5%	5	5%
Totals	88		91	

# Figure 23: Categories of Customer Complaints in 2013 and 2014.



Source: Authority complaints database

The number of billing related complaints recorded in 2014 marginally decreased from 58 to 56, which is 62% of the annual total and similar to the 2013 figure. This still reflects problems experienced by licensees and their agents with meter readings and the accuracy of estimated bills. These problems are continuing to be addressed with the implementation of a new billing system which was piloted during 2014 and the introduction of a new estimation methodology approved by the Authority.

The number of complaints relating to customer connection was a little higher than in 2013 at 19 compared with 11. The Authority does not consider this increase especially significant given the relatively low numbers involved and the corresponding decrease in customer contacts relating to new connection (see below).



# **Customer Support**

In addition to formal complaints received, the Directorate also provides advice to customers who contact the Authority before raising the matter formally with their licensed supplier or before they have received a formal response from their supplier. The Authority advises customers of their rights and, where appropriate, of precedent decisions taken in similar cases, as well as the procedure to be followed.

In 2014 the Directorate provided advice to 115 customers, compared with 160 in 2013 and 102 in 2012. Of those 115 cases, 61 related to billing, compared with 77 in 2013, a decrease of 21%. Customer connections represented 13 cases, compared with 25 in 2013.



# **Economics & Financial Affairs**

The Directorate is responsible for the economic regulation of the electricity and related water sector. This includes setting and monitoring RPI-X price controls, reviewing and approving electricity and related water Bulk Supply Tariffs, and calculating licensed suppliers' annual Subsidy requirements. In 2014 the Directorate:

- Completed price control reviews of the three MIS Discos: MEDC, Majan and Mazoon
- Completed a price control review of the Rural Areas Electricity Company;
- Completed a price control review of the Dhofar Power Company;
- Reviewed the 2015 PWP and RAEC electricity and water Bulk Supply Tariff proposals submitted for approval;
- Reviewed the 2014-2020 PWP 7-Year Statement submitted for approval; and
- Undertook analysis to confirm outturn (2013) and projected (2014 and 2015) Subsidy requirements of Licensed Suppliers.

The approved 2015 PWP and RAEC Electricity and Water Bulk Supply Tariffs are shown in Table 9 & Table 10.

#### Table 9: RAEC 2015 Water Bulk Supply Tariffs

	Production Facility						
Rial/m <sup>3</sup>	AlHallaniyat	AbuMudabi	Kumzar	Masirah	Sograh	Duqm	
2015	1.500	1.500	1.500	1.500	1.500	1.500	

Source: Authority

# Table 10: PWP 2015 Electricity & Water Bulk Supply Tariffs

#### A. PWP Electricity Bulk Supply Tariff for MIS - 2015

Baiza per kWh	Off Peak	Night Peak	Weekday Day-peak	Friday Day-peak		
January to March	12.0	12.0	12.0	12.0		
April	14.0	14.0	14.0	14.0		
May to July	17.0	22.0	54.0	27.0		
August to September	16.0	17.0	22.0	21.0		
October	14.0	14.0	14.0	14.0		
November to December	12.0	12.0	12.0	12.0		
Rate Band	Day(s) / Time(s)					
Off Peak	All days : 02:00 to	13:00 and 17:00 to	22:00			
Night Peak	All days : 22:00 to	02:00 (follow ing da	y)			
Weekday Day-peak	Saturday to Thursday, 13:00 to 17:00					
Friday Day-peak	Friday, 13:00 to 1	7:00				

Source: PWP 2015 Electricity BST Leaflet for MIS



Baiza per kWh	On-Peak		Off-Peak Morning	Mid-Peak		Off-Peak Night				
	Weekday	Friday	All Days	Weekday	Friday	All Days				
January to March	12.0	12.0	12.0	12.0	12.0	12.0				
April	28.0	28.0	21.0	23.0	21.0	23.0				
May to June	50.0	28.0	23.0	36.0	21.0	23.0				
July to August	14.0	14.0	14.0	14.0	14.0	14.0				
September to October	16.0	14.0	14.0	16.0	14.0	14.0				
November to December	12.0	12.0	12.0	12.0	12.0	12.0				
Rate Band	Day(s) / Time(s)									
On-Peak Weekday	Saturday to Thurs	day : 00:00 to 04:00	) and 15:00 to 17:0	00						
On-Peak Friday	Friday : 00:00 to 0	4:00 and 15:00 to 1	7:00							
Off-Peak Morning	All days : 04:00 to	11:00								
Mid-Peak Weekday	Saturday to Thursday : 11:00 to 15:00									
Mid-Peak Friday	Friday : 11:00 to 1	Friday : 11:00 to 15:00								
Off-Peak Night	All days : 17:00 to	24:00		All days : 17:00 to 24:00						

#### PWP Electricity Bulk Supply Tariff for Dhofar - 2015 Β.

Source: PWP 2014 Electricity BST Leaflet for Dhofar

#### С. PWP Water Bulk Supply Tariffs - 2014

#### Schedule of Charges

	Rate
Fixed charge for committed Water Desalination Capacity	RO 0.374 per day per m³/day
Variable charge for Desalinated Water	RO 0.092 per m <sup>3</sup>
PWP service charge (based on committed Water Desalination Capacity)	RO 0.005 per day per m³/day
Variable charge for Distillate Water Supplied to MISC <sup>1</sup>	RO 0.3033 to 0.9796

#### Minimum Availability of Water Desalination Capacity

	Ghubrah Power & Desalination Company	ACWA Power Barka	SMN Barka Power Company	Sohar Power Company	SembCorp Salalah	Sharqiyah Desalination Plant	Muscat City Desalination Plant <sup>3</sup>
Summer <sup>2</sup>	95.0%	92.5%	92.5%	98.0%	92.5%	92.5%	92.5%
Winter	82.0%	85.0%	92.5%	85.0%	92.5%	82.0%	92.5%

Source: PWP 2015 Water BST Leaflet

1 Subject to volume

2 Summer months: April-September for Ghubrah, Sohar & Sharqiyah, May-September for ACWA Barka 3 Availability period of Muscat City Desalination Plant is April to December 2015



# **Technical Directorate**

The Technical Directorate is responsible for approving technical standards and for monitoring compliance with Industry Codes, planning and operating standards, and Oman Electrical Standards. The Directorate represents the Authority on the Grid Code and Distribution Code Review Panels and leads technical and health and safety investigations.

During 2014 the Directorate:

- (i) Conducted investigations for and provided technical support to the Public Prosecutor in relation to investigations of serious electricity related accidents, including fatalities;
- (ii) Supported the development of protection capabilities within the electricity sector utilising the expertise of Vector Power Solutions to develop a competency framework and outline training plan;
- (iii) Conducted a review of capital expenditure requirements of RAEC, DPC, Mazoon, Majan and MEDC to inform the determination of new price control allowances;
- (iv) Reviewed the 2014 system capability statements of MEDC, MJEC, MJEC, RAEC and OETC;
- (v) Undertook Health and Safety audits of OETC, OPWP and DPC
- (vi) Continued routine inspections of licensed distribution systems to ensure the safety and physical security of the networks;
- (vii) Finalised the drafts of new standards for indoor distribution substations and dry type transformers;
- (viii) Reviewed the progress of MIS Distribution licensees with regard to compliance of their networks with the Distribution Security Standards to assess level of non-compliance and determine associated penalties;
- (ix) Took the lead in the Authority's review of RAEC performance in Hamra Al Doroa (Wadi Aswad System) to secure improvements on all levels;
- (x) Undertook a high level study of technical feasibility of photovoltaic plants in specific rural areas served by RAEC;and
- (xi) Finalised and issued the investigation report into the Sur Desalination Company's complaint on the Quality of Supply (voltage) by Mazoon.

#### Salalah Blackout investigation

On 14 August 2014, the Salalah system experienced a complete blackout. The Authority commissioned an independent investigation of both the root causes of the blackout and the manner in which supplies were restored. The investigation identified failures on the part of a number of licensees, and concluded that implementation of recommendations from the investigations of the 2007 and 2012 blackouts could have prevented both the system blackout and many of the issues that hampered a quick restoration of supply. The Authority's final report was published in February 2015 and is available on the Authority's website.



# **Distribution Price Control Review**

As part of a holistic view of the investment needs of distribution licensees, including MJEC, MZEC, MEDC, RAEC and DPC, the Authority considered both the capital expenditure drivers and the technical capability of the licensees to deliver the projects. The assessment included the way in which licensees planned their investment, the way in which projects were managed, the effectiveness of training, and how the licensees were ready to take full advantage of the investments.

The review identified some areas where project delivery and training could be improved, and where some licensees needed to coordinate their activities in order to maximise the benefits of the investments that they were undertaking. The price control also identified a number of projects that had been designed in a manner that increased cost and complexity but added little if any material benefit to customers over and above the minimum schemes required by the security standards.

# Health and Safety Audit of OETC, OPWP and DPC, plus follow-up of Licensed Production Facilities

In 2014 the Authority conducted Health and Safety audits of Dhofar Power Company, Oman Electricity Transmission Company, and Oman Power and Water Procurement Company. The audit identified a number of positive actions that had been taken in response to recent accidents, and a general good level of commitment and awareness of safety related issues. The Authority intends to follow up on the recommendations in 2015.

In early 2014, repeat visits to two licensed production facilities who had not completed all corrective actions from the 2012/13 audits identified that whilst one facility had satisfactorily addressed all areas of concern, one facility remained in breach of Omani regulations. The Authority communicated its dissatisfaction with the progress to the licensee and offered them additional time to secure compliance. The Authority intends to conduct further visits in 2015 to ensure compliance.

#### **Grid Code Review Panel**

The Grid Code Review Panel (GCRP) met four times during 2014, see Table 11

Meeting	Meeting date	Chaired by	Location
GCRP 36	17-Feb-14	OETC	Muscat
GCRP 37	05-May-14	OETC	Muscat
GCRP 38	25-Aug-14	OETC	Muscat
GCRP 39	03-Nov-14	OETC	Muscat

# Table 11: Grid Code Review Panel meetings in 2014



# Distribution Code Review Panel

The Distribution Code Review Panel (DCRP) met four times during 2014, see Table 12.

# Table 12: Distribution Code Review Panel meetings in 2014

Meeting	Meeting date	Chaired by	Location
1/2014	24-Feb-14	RAEC	Muscat
2/2014	22-May-14	RAEC	Muscat
3/2014	18-Sept-14	RAEC	Muscat
4/2014	10-Nov-14	RAEC	Muscat

During 2014 the DCRP continued its efforts to improve the product and contractor approval processes and made significant improvements in its assessment of competent protection engineers, and testing and commissioning engineers. The focus on competency assessment of protection engineers has had a positive impact in the market, sending a strong message of what is expected for the highest grade contractors to provide. The revised assessment process has also facilitated a more effective assessment process of candidates considered for approval. During the year, DCRP has helped increase the number of certified competent protection engineers from 8 to 32, and it is hoped that this improvement will continue.

During 2014 DCRP enhanced its assessment and ongoing monitoring of electrical contractor. The rigorous inspection and enforcement of DCRP procedures has been applied to new and existing contractors who are registered with DCRP. By the end of 2014 there were 189 contractors holding valid DCRP registration, of which sixteen held the highest grade (Grade A) and twelve the next highest (Grade B). The DCRP efforts to improve the quality of contractors have been supported by feedback and contributions from distribution licensees and the Authority.

In 2014 DCRP also issued 13 new product approvals, and continued to support suppliers to ensure that products are designed, manufactured and tested to the appropriate standards.



# Licensing & Legal Affairs

The Directorate acts as legal counsel to Authority Members to ensure all Authority decisions comply with the requirements of the Sector Law and other applicable Laws. The Directorate is responsible for monitoring compliance with conditions of authorizations granted by the Authority and for maintain channels of communication with relevant ministries and competent authorities to ensure the Authority has the information needed to provide requisite advice to Licence Holders and Exemption Holders. The Directorate is also responsible for maintaining the public Register.

In 2014 the Directorate:

- Managed the grant of a Generation Licence effective from 1 May 2014 to the Phoenix Power Company.
- Advised on the termination of the Concession Agreement with Dhofar Power Company and the restructuring of the Dhofar Power System;
- Managed and completed the licensing process for the restructured Dhofar Power System including:
  - i. Grant of a Distribution and Supply Licence to Dhofar Power Company effective from 1 January 2014;
  - ii. Grant of a Generation Licence to Dhofar Generation Company effective from 1 January 2014;
  - iii. Modification of the Licenses granted to PWP and OETC to suit the new arrangements in Dhofar. The modification included removing PWP's responsibilities relating to the Concession Agreement and authorizing OETC to operate the electricity transmission network in Dhofar.
- Coordinated with other directorates at the Authority on the modification of the Schedule Charge Restriction Condition of Distribution and Supply Licences of Muscat Electricity Distribution Company, Majan Electricity Company, Mazoon Electricity Company, Dhofar Power Company and Rural Areas Electricity Company. The modification was required to facilitate the implementation of new Price Controls.
- Reviewed a licence application from Oman Oil Company Exploration & Production (Musandam Gas Plant and Abu Tubul Block 60(. The Authority granted the company a Licence Exemption to authorize the Generation of electricity effective from 1 May 2014.
- Reviewed two License Exemption applications for the operation of temporary diesel generation contracted by PWP to support the MIS at times of system peak demand in summer 2014. Time limited authorizations were granted to:
  - i. OFSAT LTD. Co; and
  - ii. Rental Solutions & Services LLC.
- Reviewed applications for approval for disposal or transfer of assets submitted by Licensees. The Authority granted consents for disposal of assets to Majan Electricity Company, Muscat Electricity Distribution Company, Mazoon Electricity Company and Rural Areas Electricity.





- Coordinated with relevant Directorates at the Authority on the issuance of a breach of License notice to RAEC under Article (116) of the Sector Law. The notice was issued following an investigation conducted by the Authority in relation to prolonged and reoccurring supply interruptions in Hamra Al Drooa in Al Dhahira governorate.
- Handled and represented the Authority in a number of litigation cases involving the Authority before Omani courts. The Authority handled all its cases internally without appointing any external lawyers.

The Directorate is also involved in a number of issues relating to the GCC Electricity Interconnection Project. It assisted and coordinated with PAEW in the preparation for Oman's joining to the GCC Electricity Interconnection and the execution of the General Agreement (signed by PAEW) and the Power Exchange and Trading Agreement (signed by OPWP and OETC) which were signed by the Sultanate in November 2014. The Authority intends to amend OPWP and OETC Licenses and grant the required Export and Import and the International Interconnection Licences respectively. The Directorate also participates in the Advisory Regulatory Committee of the GCC Electricity Interconnection on regular basis.



**Annex A: Audited Financial Statements** 

Authority for Electricity Regulation, Oman

Report and Financial Statements for the year ended 31st December 2014



Contents	Pages
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Statement of revenue and expenses	55
Statemenat of changes in surplus fund	56
Statement of cash flows	57
Notes to the financial statements	58-66





KPMG 4th Floor, HSBC Bank Building MBD P.O. Box 641 P.C. 112 Sultanate of Oman

Tel 968 24709181 Fax 968 24700839

# Independent Auditors' report to the members of Authority for Electricity Regulation, Oman

#### Report on the financial statements

We have audited the accompanying financial statements of the Authority for Electricity Regulation, Oman, ("the Authority") which comprise the statement of financial position as at 31 December 2014 and the statements of revenue and expenses, changes in surplus fund and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information as set out on pages 2 to 14. The financial statements of the Authority as at and for the year ended 31 December 2013 were audited by another firm of auditors whose report dated 8 April 2014 expressed an unqualified opinion.

#### Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with International Financial Reporting Standards, compliance with the relevant requirements of the Law for the Regulation and Privatisation of the Electricity and Related Water Sector ("the Sector Law"), promulgated by the Royal Decree 78/2004 and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditors' responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the Authority's judgment, including the assessment of the risks of material misstatements of the financial statements. In making those risk assessments; the auditor considers internal control relevant to the Authority's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Opinion

In our opinion, the financial statements, present fairly, in all material respects, the financial position of the Authority, as of 31 December 2014, and its financial performance and its cash flows for the year then ended, in accordance with International Financial Reporting Standards.

KPMG .

17 June 2015



# AUTHORITY FOR ELECTRICITY REGULATION, OMAN

# Statement of financial position at 31 December 2014

at 51 December 2014	Notes	2014 RO	2013 RO
ASSETS Non-current asset		no	
Property and equipment	5	163,620	209,062
Current assets Prepayments and other receivables		66,630	34,490
Cash and cash equivalent	6	494,350	350,860
Total current assets		560,980	385,350
Total assets		724,600	594,412
RETAINED SURPLUS AND LIABILITIES			
Retained surplus	7	524,345	230,875
Liabilities Non-current liability			
Provision for employees' end of service benefits	8	98,279	150,739
Current liability Accruals and other payables	9	101,976	212,798
Total liabilities	-	200,255	363,537
Total retained surplus and liabilities		724,600	594,412

The financial statements were approved and authorized for issue by the Members on 17 June 2015 and were signed on their behalf by:

Chairman and Member

Member

The notes on pages 6 to 14 are an integral part of these financial statements.

**Executive Director and Member** 





# Statement of revenue and expenses for the year ended 31 December 2014

	Notes	2014 RO	2013 RO
Licence fees	10	3,006,935	1,860,784
Finance income		2,146	3,079
Other income		2,316	
Total revenue		3,011,397	1,863,863
Salaries and employee related costs	11	(1,646,919)	(1,371,360)
Consultancy expense		(595,404)	(519,428)
General and administrative expenses	12	(403,373)	(443,374)
Depreciation	5	(72,231)	(69,983)
Total expenses		(2,717,927)	(2,404,145)
Surplus (deficit) for the year		293,470	(540,282)

The notes on pages 6 to 14 are an integral part of these financial statements.



# Statement of changes in surplus fund for the year ended 31 December 2014

	Retained surplus RO
Balance at 1 January 2013	771,157
Deficit for the year	(540,282)
Balance at 1 January 2014	230,875
Surplus for the year	293,470
Balance at 31 December 2014	524,345

The notes on pages 6 to 14 are an integral part of these financial statements.



# AUTHORITY FOR ELECTRICITY REGULATION, OMAN

# Statement of cash flows for the year ended 31 December 2014

·	2014	2013
	RO	RO
Operating activities		
Cash receipts from licensees and application fees for		
license exemptions and other income	3,008,935	1,860,784
Cash paid to employees and other suppliers	(2,840,802)	(2,248,262)
Net cash from (used) in operating activities	168,133	(387,478)
Investing activities		
Purchase of property and equipment	(26,789)	(50,444)
Interest income	2,146	3,079
Net cash used in investing activities	(24,643)	(47,365)
Net change in cash and cash equivalents	143,490	(434,843)
Cash and cash equivalents at the beginning of the year	350,860	785,703
Cash and cash equivalents at the end of the year (Note 6)	494,350	350,860

The notes on pages 6 to 14 are an integral part of these financial statements.



# Notes to the financial statements for the year ended 31 December 2014

# 1. Activities

The Authority for Electricity Regulation, Oman (hereafter referred to as the "Authority"), was established by Article 19 of the Law for the Regulation and Privatisation of the Electricity and Related Water Sector (the "Sector Law") promulgated by the Royal Decree 78/2004 issued on 1 August 2004.

The Authority is primarily engaged in the regulation of the electricity and related water sector in the Sultanate of Oman. Under the Sector Law regulating the Authority's activities, the Authority levies fees on licensee companies that will enable the Authority to recover an amount not more than its expenses. Accordingly, surpluses of income over expenditure are held for the benefit of the licensee companies as explained in Note 7 to the financial statements.

The registered office of the Authority is P O Box 954, PC 133, Al Khuwair, Sultanate of Oman.

# 2. Adoption of new and revised International Financial Reporting Standards (IFRSs)

For the year ended 31 December 2014, the Authority has adopted all the new and revised standards and interpretations issued by the International Accounting Standards Board (IASB) and the International Financial Reporting Interpretations Committee (IFRIC) of the IASB that are relevant to its operations and effective for the year beginning on 1 January 2014.

#### 2.1 Standards and Interpretations adopted with no effect on the financial statements

A number of new relevant standards, amendments to standards and interpretations are not yet effective for the year ended 31 December 2014, and have not been applied in preparing these financial statements. Management anticipates that the adoption of these standards and interpretations in future periods will have no material impact on the financial statements of the Authority in the period of initial application.



# Notes to the financial statements for the year ended 31 December 2014

# 3. Summary of significant accounting policies

#### **Basis of preparation**

The financial statements have been prepared in accordance with International Financial Reporting Standards issued by the International Accounting Standards Board, interpretations issued by the International Financial Reporting Interpretations Committee and the requirements of the Sector Law of the Sultanate of Oman.

These financial statements are presented in Rials Omani (RO) since that is the currency of the country in which the majority of the Authority's transactions are denominated.

The following are the significant accounting policies which have been applied consistently:

# Property and equipment

Property and equipment purchased are recorded at cost together with any incidental expenses of acquisition.

The cost of property and equipment is written off in equal installments over their estimated useful economic lives as follows:

	<b>y</b> ears
Furniture, fixtures and office equipment	6.67
Vehicles	5
Computers	3 - 4

Gains and losses on disposals of property and equipment are determined by reference to their carrying amount and sale proceeds and are recognised within other operating income in the profit or loss.

#### Impairment

At each statement of financial position date, the Authority reviews the carrying amounts of its assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss, if any.



# Notes to the financial statements for the year ended 31 December 2014

# 3. Summary of significant accounting policies Impairment (continued)

The loss arising on an impairment of an asset or cash generating unit is determined as the difference between the recoverable amount and carrying amount of the asset or cash generating unit and is recognised immediately in the statement of revenue and expenses.

Where an impairment loss subsequently reverses, the carrying amount of the asset is increased to the revised estimate of its recoverable amount and the increase is recognised as income immediately, provided that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised earlier.

#### Financial instruments

Financial assets and liabilities are recognised on the statement of financial position when the Authority becomes a party to the contractual provisions of the instrument.

The principal financial instruments are cash and bank balances, license fees receivable, other receivables and accruals and other payables. License fees receivable are stated at their nominal value as reduced by allowances for doubtful balances, if any. Trade and other payables are stated at their amortised cost.

#### Provisions

Provisions are recognised when the Authority has a present obligation as a result of a past event, which it is probable, will result in an outflow of economic benefits that can be reliably estimated.

# Employee benefits

Payment is made to the Pension and Gratuities Fund for Omani Government Employees pursuant to the provisions of the Law of Post Service Pensions and Gratuities for Omani Government Employees issued by Royal Decree (26/86), as amended. Provision is also made for amounts payable under the Oman Labour Law applicable to expatriate employees, and is based on current remuneration and accumulated periods of service at the statement of financial position date.

# Cash and cash equivalents

For the purpose of cash flow statement, cash and cash equivalents consist of cash on hand and bank balances maturing within three months from the date of placement.

#### Licence fees

Licence fees represent the amounts invoiced to the licensees for the year.





# Notes to the financial statements for the year ended 31 December 2014

# 3. Summary of significant accounting policies (continued)

#### **Foreign currencies**

Transactions denominated in foreign currencies entered into during the year have been translated into Rials Omani and recorded at the rates of exchange prevailing at the dates of transactions. Foreign currency monetary assets and liabilities at the reporting date are translated at the rates of exchange prevailing at that date. Exchange differences that arise are taken to the statement of revenue and expenses.

#### Taxation

The Authority is exempt from taxation as per Article (56) of the Sector Law.

#### Critical accounting judgements and key source of estimation uncertainty

In preparing the financial statements, the management is required to make estimates and assumptions which affect reported revenue and expenses, assets, liabilities and related disclosures. The use of available information and application of judgment based on historical experience and other factors are inherent in the formation of estimates. Actual results in the future could differ from such estimates.

#### Licence fees

The significant estimate in the preparation of these financial statements is primarily in respect of licence fee income to be recovered in respect of regulation by the Authority of the licensed companies.

#### Depreciation

Depreciation is charged so as to write off the cost of assets over their estimated useful lives. The calculation of useful lives is based on management's assessment of various factors such as the operating cycles, the maintenance programs, and normal wear and tear using its best estimates.

# 4. Financial risk management

Financial instruments carried on the statement of financial position comprise cash and bank balances, license fees receivable, other receivables and trade and other payables.

Financial assets are assessed for indicators of impairment at each reporting date. Financial assets are impaired where there is objective evidence that as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows have been impacted.

The classification of financial assets depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition.



# Notes to the financial statements for the year ended 31 December 2014

# 4. Financial risk management (continued)

#### Financial risk factors

#### Overview

The Authority's activities expose it to a variety of financial risks: market risk, credit risk and liquidity risk. The Authority's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Authority's financial performance.

Risk management is carried out by Accounting and Internal Audit Directorate under policies approved by the management.

#### (i) Credit risk

Credit risk is the risk of financial loss to the Authority if a licensee or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from the Authority's receivables from licensees.

#### Licence fee and other receivables

The Authority's exposure to credit risk is influenced mainly by the individual characteristics of each licensee. All licensees are based in Sultanate of Oman.

The potential risk in respect of amounts receivable is limited to their carrying values as management regularly reviews these balances whose recoverability is in doubt.

#### (ii) Liquidity risk

Liquidity risk is the risk that the Authority will not be able to meet its financial obligations as they fall due. The Authority's approach to managing liquidity is to ensure, as far as possible, that it will have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Authority's reputation.

Typically, the Authority ensures that it has sufficient cash on demand to meet expected operational expenses. This excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters.

#### (iii) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates affect the Authority's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return.

#### Foreign currency risk

The Authority's functional and presentation currency is Rial Omani and the Authority's performance is substantially independent of changes in foreign currency rates. There are no significant financial instruments denominated in foreign currency and consequently, foreign currency risk is not significant.



# Notes to the financial statements for the year ended 31 December 2014

# 4. Financial risk management (continued)

#### Financial risk factors (continued)

#### Interest rate risk

The Authority has balances with banks, which are interest bearing and exposed to changes in market interest rates.

#### **Capital management**

The Authority's objectives when managing capital are to safeguard the Authority's ability to continue as a going concern and benefit other stakeholders. The Authority is not subject to externally imposed capital requirements (Note 1).

#### Fair value of financial instruments

Fair value of the financial instruments approximate to their carrying value at the statement of financial position date.

# 5. Property and equipment

	Furniture, fixtures and office equipment	Vehicles	Computers	Total
	RO	RO	RO	RO
Cost				
At 1 January 2013	266,093	87,725	129,698	483,516
Additions	2,219	43,350	4,875	50,444
At 1 January 2014	268,312	131,075	134,573	533,960
Additions	2,049	19,700	5,040	26,789
At 31 December 2014	270,361	150,775	139,613	560,749
Depreciation				
At 1 January 2013	102,214	50,976	101,725	254,915
Charge for the year	38,619	16,182	15,182	69,983
At 1 January 2014	140,833	67,158	116,907	324,898
Charge for the year	38,910	20,624	12,697	72,231
At 31 December 2014	179,743	87,782	129,604	397,129
Carrying value				
At 31 December 2014	90,618	62,993	10,009	163,620
At 31 December 2013	127,479	63,917	17,666	209,062



# Notes to the financial statements for the year ended 31 December 2014

# 6. Cash and cash equivalents

	2014	2013
	RO	RO
Cash on hand	504	55
Cash at bank	493,846	350,805
	494,350	350,860

# 7. Retained surplus

The retained surplus represents the cumulative amount of excess or deficit of income over expenditure which will be offset against future funding requirements in accordance with Article (55) of the Sector Law.

# 8. Provision for employees' end of service benefits

At 1 January Paid during the year Charge for the year (Note 11)	150,739 (79,589) 27,129	118,980 - 31,759
At 31 December	98,279	150,739
Accruals and other payables		
Accruals Other payables	101,210 766	210,343 2,455
	101,976	212,798

# 10. Licence fees

9.

Licence fees represent the amounts invoiced to licensees for the year.

# 11. Salaries and employee related costs

Salaries and allowances Cost of end of service benefits for expatriate	1,337,534	1,188,814
employees (Note 8)	27,129	31,759
Contribution to defined contribution retirement plan Other employee related costs	107,289 174,967	85,779 65,008
	1,646,919	1,371,360



# Notes to the financial statements for the year ended 31 December 2014

# 12. General and administrative expenses

	2014	2013
	RO	RO
Rent	172,800	172,800
Insurance	49,960	46,214
Communications	15,001	15,827
Advertisement and publicity	26,205	62,804
Travelling and conveyance	40,386	42,054
Printing and stationery	14,070	20,404
Utilities	7,080	7,802
Repairs and maintenance	6,227	9,382
Miscellaneous expenses	71,644	66,087
	403,373	443,374

# 13. Taxation

The Authority is exempt from taxation as per Article (56) of the Sector Law.

# 14. Related party transactions

The Authority enters into transactions in the normal course of business with the Chairman and Members. These transactions are entered into at terms and conditions which the management believes could be obtained on an arm's length basis from independent third parties.

Such transactions comprise compensation to key management personnel which amounted to:

	2014 RO	2013 RO
Short term employment benefits	165,671	171,749
End of service benefits	6,294	10,320

# 15. Credit risk

# Exposure to credit risk

The carrying amount of financial assets represents the maximum credit exposure. The exposure to credit risk at the reporting date was on account of:



# Notes to the financial statements for the year ended 31 December 2014

# 15. Credit risk

# Exposure to credit risk (continued)

	2014 RO	2013 RO
Other receivables Bank balances	597 493,846	1,003 350,805
	494,443	351,808

Licence fees receivable at the reporting date were past due for nil days (2013: nil days)

# 16. Liquidity risk

The following are the maturities of the financial liabilities.

	201	4	201	3
	Carrying	6 months	Carrying	6 months
	amount	or less	amount	or less
	RO	RO	RO	RO
Accruals	101,209	101,209	210,343	210,343
Other payables	766	766	2,455	2,455
	101,975	101,975	212,798	212,798

# 17. Interest rate risk

At the reporting date, the Authority's interest bearing financial instruments was:

		2014 RO	2013 RO
	Fixed rate instruments Financial assets	493,845	350,805
18.	Commitments		
	Operating commitments	11,743	393,552



ANNEX B: Authorised Entities



# **Licence Holders**

Majan Electricity Company SAOC Regulated Activities: the Distribution and Supply of electricity to Premises	G
Mazoon Electricity Company SAOC Regulated Activities: the Distribution and Supply of electricity to Premises	
Muscat Electricity Company SAOC Regulated Activities: the Distribution and Supply of electricity to Premises	<b>X</b>
Oman Electricity Transmission Company SAOC Regulated Activities: the Transmission; and Dispatch of electricity	
<b>Rural Areas Electricity Company SAOC</b> Regulated Activities: the Generation and Desalination; Transmission; Dispatch; Distribution and Supply of electricity & Bulk Supply of desalinated water to Water Departments	*
Wadi Al Jizzi Power Company SAOC Regulated Activity: the Generation of electricity	
Al Rusail Power Company SAOC Regulated Activity: the Generation of electricity	atelija kal ostore
Al Ghubrah Power and Desalination Company SAOC Regulated Activity: the Generation of electricity and Desalination of water	مرغالمبره مانغواتندیک میرید AL ONUBRAH POWER B OBSILIATION COMPANY SAOC
Al Kamil Power Company SAOC Regulated Activity: the Generation of electricity	
United Power Company SAOC Regulated Activity: the Generation of electricity	
ACWA Power Barka SAOC Regulated Activity: the Generation of electricity and Desalination of water	ACWA Power Barka
SMN Barka Power Company SAOC Regulated Activity: the Generation of electricity and Desalination of water	\$
Sohar Power Company SAOC Regulated Activity: the Generation of electricity and Desalination of water	1 and the second
Oman Power and Water Procurement Company SAOC Regulated Activities: Demand Forecasting; capacity procurement; bulk supply of electricity & water and procurement of electricity and desalinated water	
SembCorp Salalah Regulated Activities: the Generation of electricity and Desalination of water	sembcorp
Al Batinah Power Company SAOC Regulated Activities: the Generation of Electricity	AL BATTAN
Al Suwadi Power Company SAOC Regulated Activities: the Generation of Electricity	(مروادي)



# **Licence Holders**

Phoenix Power Company SAOC Regulated Activity : the Generation of Electricity	Rhoenly
Dhofar Power Company SAOC Regulated Activity : the Generation of Electricity	
Dhofar Generation Company SAOC Regulated Activity : the Generation of Electricity	



# Licence Exemption Holders

Sohar International Urea Chemical Industries SAOC Regulated Activities: the Generation of electricity and Desalination of water	SIUCI
Oman Mining Company LLC Regulated Activities: the Generation; Distribution; and Supply of electricity	•
Oman India Fertiliser Company SAOC Regulated Activities: the Generation of electricity and Desalination of water	
Oman Cement Company SAOG Regulated Activities: the Generation; Distribution; and Supply of electricity	
Barr Al Jissah Resort Company Regulated Activities: the Distribution of electricity	<u>ShangriLas</u> کالیک بالجصف عالی Barr Al Jisah Resort & Spa Sultanate or coman
Oman Refineries and Petrochemicals Company LLC Regulated Activities: the Generation of electricity and Desalination of water; the Transmission; Distribution; and the Supply of electricity	<mark>ڳري</mark> Orpic
Oman LNG LLC Regulated Activities: the Generation of electricity and Desalination of water; the Distribution; and the Supply of electricity	
Petroleum Development Oman LLC Regulated Activities: the Generation; Distribution; Transmission; and Supply of electricity	
Occidental of Oman Inc Regulated Activities: the Generation and Distribution of electricity	exy
Sohar Aluminium Company LLC Regulated Activities: the Generation of electricity and Desalination of water; the Distribution and Transmission of electricity	S
Sharqiyah Desalination Company SAOC Regulated Activities: the Generation of electricity and Desalination of water	
Occidental Mukhaizna Regulated Activities: the Generation of electricity and Desalination of water; and the Distribution of electricity	<b>OXY</b>
Ministry of Defence Regulated Activities: the Generation of electricity for sale to PWP	
Oman Oil Company Exploration & Production LLC Regulated Activities: the Generation of electricity co-located with the desalination of water	

Exemption Orders granted to providers of temporary rental generation:

- 1. OFSAT
- 2. Rental Solution & Services



Annex C: Electricity & Related Water Sector Statistics


# Table 1 Electricity Customer Accounts by System, Company and Tariff Category: 2013 and 2014

			Main Interconnected System (MIS)	onnect	ed System	(MIS)			Rural Systems	tems	Dhofar System	/stem	Total Oman	Oman
2013 Accounts	Muscat	% Total	, Majan <sub>To</sub>	% Total	Mazoon	% Total	Total MIS	% Total	RAEC	% Total	DPC	% Total		% Total
Residential	199,742	76.4%	129,111 7	74.0%	242,044	76.1%	570,897	75.7%	20,054	70.9%	58,104	75.6%	649,055	75.5%
Industrial	276	0.1%	462	0.3%	228	0.1%	996	0.1%	42	0.1%	69	0.1%	1,077	0.1%
Commercial	53,509	20.5%	33,626 1	19.3%	59,297	18.6%	146,432	19.4%	5,135	18.2%	13,739	17.9%	165,306	19.2%
Agriculture & Fisheries	168	0.1%	3,147	1.8%	3,195	1.0%	6,510	0.9%	300	1.1%	97	0.1%	6,907	0.8%
Hotels / Tourism	23	0.0%	350	0.2%	44	0.0%	447	0.1%	49	0.2%	84	0.1%	580	0.1%
Government	7,538	2.9%	7,829	4.5%	13,334	4.2%	28,701	3.8%	2,662	9.4%	4,660	6.1%	36,023	4.2%
Ministry of Defence	194	0.1%	67	0.0%	40	0.0%	301	0.0%	45	0.2%	98	0.1%	444	0.1%
	<b>261,480</b>	100.0%	<b>174,592</b> 100.0%		<b>318,182</b>	100.0%	754,254	100.0%	<b>28,287</b>	100.0%	76,851	100.0%	859,392	100.0%
% or Oman	50.4%		ZU.3% 37.U% Main Interconnected System (MIS)	onnect	57.0% ed System	(MIS)	0/ 0, 10		3.3% Rural Systems	tems	0.9% Dhofar System	/stem	Total Oman	Oman
2014 Accounts	Muscat	% Total	Majan To	% Total	Mazoon	% Total	Total MIS	% Total	RAEC	% Total	DPC	% Total		% Total
Residential	216,795	76.2%	136,854 73.3%	73.3%	256,731	75.3%	610,380	75.2%	21,688	70.2%	63,750	75.8%	695,818	75.0%
Industrial	234	0.1%	496	0.3%	92	0.0%	822	0.1%	44	0.1%	71	0.1%	937	0.1%
Commercial	59,213	20.8%	37,531 2	20.1%	66,685	19.6%	163,429	20.1%	5,651	18.3%	15,101	18.0%	184,181	19.9%
Agriculture & Fisheries	174	0.1%	3,420	1.8%	3,459	1.0%	7,053	0.9%	336	1.1%	101	0.1%	7,490	0.8%
Hotels / Tourism	53	0.0%	357	0.2%	53	0.0%	463	0.1%	63	0.2%	84	0.1%	610	0.1%
Government	8,042	2.8%	7,880	4.2%	13,862	4.1%	29,784	3.7%	3,047	%6.6	4,910	5.8%	37,741	4.1%
Ministry of Defence	114	0.0%	67	0.0%	41	0.0%	222	0.0%	75	0.2%	110	0.1%	407	0.0%
% of Oman	<b>284,625</b> 30.7%	100.0%	<b>186,605</b> 100.0% 20.1%		<b>340,923</b> 36.8%	100.0%	<b>812,153</b> 87.6%	100.0%	<b>30,904</b> 3.3%	100.0%	<b>84,127</b> 9.1%	100.0%	<b>927,184</b> 100.0%	100.0%
Net Change in Accounts Annual % Change	<b>23,145</b> 8.9%		<b>12,013</b> 6.9%		<b>22,741</b> 7.1%		<b>57,899</b> 7.7%		<b>2,617</b> 9.3%		<b>7,276</b> 9.5%		<b>67,792</b> 7.9%	



Electricity Supplied to Customers by System, Company and Tariff Category: 2013 and 2014

			Main Int	erconne	Main Interconnected System (MIS)	(MIS)			Rural Systems	tems	Dhofar System	stem	Total Oman	nan
2013 MWh	Muscat	% Total	Majan	% Total	Mazoon	% Total	Total MIS	% Total	RAEC	% Total	DPC	% Total		Total
Residential	3,855,422 48.0% 2,204,486	48.0%	2,204,486	36.6%	3,633,679	60.8%	9,693,587	48.4%	301,562	46.3%	791,930	37.4%	10,787,079	47.3%
Industrial	600,450		7.5% 2,452,330	40.7%	102,884	1.7%	3,155,664	15.8%	32,976	5.1%	497,375	23.5%	3,686,015	16.2%
Commercial	2,117,690	26.4%	734,253	12.2%	1,183,225	19.8%	4,035,168	20.2%	106,399	16.3%	385,794	18.2%	4,527,361	19.9%
Agriculture & Fisheries	5,653	0.1%	104,368	1.7%	154,635	2.6%	264,656	1.3%	25,857	4.0%	8,925	0.4%	299,439	1.3%
Hotels / Tourism	2,137	0.0%	11,649	0.2%	9,180	0.2%	22,966	0.1%	21,031	3.2%	2,072	0.1%	46,070	0.2%
Government	1,394,211	17.4%	498,891	8.3%	813,449	13.6%	2,706,551	13.5%	144,645	22.2%	329,325	15.5%	3,180,521	14.0%
Ministry of Defence	49,422	0.6%	16,350	0.3%	76,599	1.3%	142,372	0.7%	18,449	2.8%	103,351	4.9%	264,172	1.2%
2013 Totals	8,024,985	100.0%	8,024,985 100.0% 6,022,328	100.0%	5,973,651	100.0%	20,020,964	100.0%	650,920	100.0%	2,118,773	100.0%	<b>22,790,657</b> 100.0%	%0.001
% of Total Oman	35.2%		26.4%		26.2%		87.8%		2.9%		9.3%		100.0%	
			Main Int	erconne	Main Interconnected System (MIS)	(SIW)			<b>Rural Systems</b>	tems	Dhofar System	stem	Total On	Oman
2014 MWh	Muscat	% Total	Majan	% Total	Mazoon	% Total	Total MIS	% Total	RAEC	% Total	DPC	% Total		% Total
Residential	4,171,574 48.0% 2,448,555	48.0%	2,448,555	36.5%	4,077,449	60.8%	10,697,579	48.4%	342,148	45.8%	919,557	39.5%	11,959,284	47.5%
Industrial	545,911		6.3% 2,988,172	44.6%	107,018	1.6%	3,641,101	16.5%	37,989	5.1%	509,739	21.9%	4,188,829	16.6%
Commercial	2,326,848	26.8%	769,391	11.5%	1,353,401	20.2%	4,449,640	20.1%	117,944	15.8%	431,245	18.5%	4,998,830	19.9%
Agriculture & Fisheries	9,847	0.1%	118,955	1.8%	174,604	2.6%	303,406	1.4%	26,191	3.5%	9,458	0.4%	339,055	1.3%
Hotels / Tourism	1,840	0.0%	11,431	0.2%	12,710	0.2%	25,981	0.1%	23,028	3.1%	2,124	0.1%	51,132	0.2%
Government	1,526,486 17.6%	17.6%	349,215	5.2%	901,563	13.4%	2,777,264	12.6%	168,156	22.5%	346,846	14.9%	3,292,266	13.1%
Ministry of Defence	106,077	1.2%	17,690	0.3%	78,964	1.2%	202,731	%6.0	31,663	4.2%	108,302	4.7%	342,696	1.4%
2014 Totals	8,688,583	100.0%	8,688,583 100.0% 6,703,410	100.0%	100.0% <b>6,705,708</b>	100.0%	100.0% <b>22,097,701</b> 100.0%	100.0%	747,119	100.0%	2,327,270	100.0%	<b>25,172,090</b> 100.0%	%0.001
% of Total Oman	34.5%		26.6%		26.6%		87.8%		3.0%		9.2%		100.0%	

2,381,434 10.4%

9.8%

96,199 14.8%

2,076,737 10.4%

732,057 12.3%

663,598 8.3%

Annual % Change

681,082 11.3%

Change in MWh

208,498



Customer Accounts, MWh Supplied and MWh per Account by System, Company and Tariff Category 2014

2014		Mair	ו Interconnec	Main Interconnected System (MIS)	IS)	Rural Systems	Dhofar System	
Tariff Category	Item	Muscat	Majan	Mazoon	Total MIS	RAEC	DPC	Total Oman
Residential	Accounts	216,795.0	136,854.0	256,731.0	610,380.0	21,688.0	63,750.0	695,818.0
Residential	MWh Supplied	4,171,574.0	2,448,555.4	4,077,449.3	10,697,578.8	342,147.8	919,557.0	11,959,283.5
Residential	MWh Supplied per Account	19.2	17.9	15.9	17.5	15.8	14.4	17.2
Industrial	Accounts	234.0	496.0	92.0	822.0	44.0	71.0	937.0
Industrial	MWh Supplied	545,911.0	2,988,172.4	107,017.6	3,641,101.1	37,988.9	509,738.6	4,188,828.6
Industrial	MWh Supplied per Account	2,333.0	6,024.5	1,163.2	4,429.6	863.4	7,179.4	4,470.5
Commercial	Accounts	59,213.0	37,531.0	66,685.0	163,429.0	5,651.0	15,101.0	184,181.0
Commercial	MWh Supplied	2,326,848.0	769,391.2	1,353,400.8	4,449,639.9	117,944.4	431,245.2	4,998,829.5
Commercial	MWh Supplied per Account	39.3	20.5	20.3	27.2	20.9	28.6	27.1
Agriculture & Fisheries	Accounts	174.0	3,420.0	3,459.0	7,053.0	336.0	101.0	7,490.0
Agriculture & Fisheries	MWh Supplied	9,847.0	118,955.1	174,603.9	303,406.0	26,190.7	9,458.0	339,054.7
Agriculture & Fisheries	MWh Supplied per Account	56.6	34.8	50.5	43.0	77.9	93.6	45.3
Hotels / Tourism	Accounts	53.0	357.0	53.0	463.0	63.0	84.0	610.0
Hotels / Tourism	MWh Supplied	1,840.0	11,430.9	12,709.7	25,980.6	23,027.6	2,124.1	51,132.3
Hotels / Tourism	MWh Supplied per Account	34.7	32.0	239.8	56.1	365.5	25.3	83.8
Government	Accounts	8,042.0	7,880.0	13,862.0	29,784.0	3,047.0	4,910.0	37,741.0
Government	MWh Supplied	1,526,486.0	349,214.7	901,563.1	2,777,263.8	168, 156.2	346,845.9	3,292,265.9
Government	MWh Supplied per Account	189.8	44.3	65.0	93.2	55.2	70.6	87.2
Ministry of Defence	Accounts	114.0	67.0	41.0	222.0	75.0	110.0	407.0
Ministry of Defence	MWh Supplied	106,077.0	17,689.7	78,963.9	202,730.6	31,663.5	108,301.6	342,695.7
Ministry of Defence	MWh Supplied per Account	930.5	264.0	1,925.9	913.2	422.2	984.6	842.0
Total Customer Accounts in 2014	its in 2014	284,625	186,605	340,923	812,153	30,904	84,127	927,184
Total MWh Supplied in 2014	2014	8,688,583	6,703,410	6,705,708	22,097,701	747,119	2,327,270	25,172,090
MWh Supplied per Account in 2014	ount in 2014	30.5	35.9	19.7	27.2	24.2	27.7	27.1
% change MWh per Account from 2013	count from 2013	-0.5%	4.1%	4.8%	2.5%	5.1%	0.3%	2.4%



# Electricity Supply & Registered Accounts by Region & Company: 2013 and 2014

2013						
Region	Company	MWh Supplied	% Oman	Accounts	% Oman	MWh Supply per Account
Al Dahirah	Majan	709,628	3.1%	41,153	4.8%	17.2
Al Sharquia North	Mazoon	799,139	3.5%	58,809	6.8%	13.6
Al Sharquia South	Mazoon	1,013,698	4.4%	56,828	6.6%	17.8
Al Wusta	RAEC	246,684	1.1%	11,537	1.3%	21.4
Burami	Majan	605,294	2.7%	30,597	3.6%	19.8
Dakhliyah	Mazoon	1,710,216	7.5%	92,278	10.7%	18.5
Dhofar	DPC	2,118,773	9.3%	76,851	8.9%	27.6
	RAEC	148,280	0.7%	4,986	0.6%	29.7
Musandam	RAEC	255,956	1.1%	11,764	1.4%	21.8
Muscat	Muscat	8,024,985	35.2%	261,480	30.4%	30.7
North Batinah	Majan	4,707,406	20.7%	102,842	12.0%	45.8
South Batinah	Mazoon	2,450,598	10.8%	110,267	12.8%	22.2
Sultanate Totals 20	13	22,790,657		859,392		26.5

# 2014

Region	Company	MWh Supplied	% Oman	Accounts	% Oman	MWh Supply per Account
Al Dahirah	Majan	790,356	3.1%	44,224	4.8%	17.9
Al Sharquia North	Mazoon	910,721	3.6%	62,634	6.8%	14.5
Al Sharquia South	Mazoon	1,179,747	4.7%	60,086	6.5%	19.6
Al Wusta	RAEC	296,148	1.2%	12,640	1.4%	23.4
Burami	Majan	669,014	2.7%	32,140	3.5%	20.8
Dakhliyah	Mazoon	1,870,177	7.4%	98,044	10.6%	19.1
Dhofar	DPC	2,327,270	9.2%	84,127	9.1%	27.7
	RAEC	162,498	0.6%	5,696	0.6%	28.5
Musandam	RAEC	288,473	1.1%	12,568	1.4%	23.0
Muscat	Muscat	8,688,583	34.5%	284,625	30.7%	30.5
North Batinah	Majan	5,244,039	20.8%	110,241	11.9%	47.6
South Batinah	Mazoon	2,745,064	10.9%	120,159	13.0%	22.8
Sultanate Totals 20	014	25,172,090		927,184		27.1
Change from 2013 (%	6)	10.4%		7.9%		2.4%



# Electricity & Related Water Production by System: 2009 to 2014

2009	Electr	icity P	roduction		Related	Water	Production	
System	Gross MWh	% Yeal	Net MWh	% Year	Gross m3	% Year	Net m3	% Year
Main Interconnected System	16,292,485	88.3%	15,718,788	88.2%	112,350,338	99.2%	112,928,995	99.2%
Rural Systems	396,011	2.1%	370,232	2.1%	912,305	0.8%	894,429	0.8%
Dhofar Power System	1,756,801	9.5%	1,734,060	9.7%				
Total for 2009	18,445,296		17,823,080		113,262,643		113,823,424	
2010	Electri	icity P	roduction		Related	Water	Production	
System	Gross MWh	% Yeal	Net MWh	% Year	Gross m3	% Year	Net m3	% Year
Main Interconnected System	17,459,139	88.1%	16,854,993	88.0%	138,167,171	99.3%	129,238,460	99.3%
Rural Systems	444,915	2.2%	412,787	2.2%	958,040	0.7%	958,745	0.7%
Dhofar Power System	1,914,609	9.7%	1,891,420	9.9%				
Total for 2010	19,818,663		19,159,199		139,125,211		130,197,205	
2011	Electr	icity P	roduction		Related	Water	Production	
System	Gross MWh	% Yeal	Net MWh	% Year	Gross m3	% Year	Net m3	% Year
Main Interconnected System	19,402,273	88.7%	18,950,279	88.7%	150,807,603	99.1%	144,565,124	99.1%
Rural Systems	513,039	2.3%	470,129	2.2%	1,413,080	0.9%	1,349,087	0.9%
Dhofar Power System	1,958,827	9.0%	1,933,682	9.1%	0	0.0%	0	0.0%
Total for 2011	21,874,139		21,354,091		152,220,683		145,914,211	
2012	Electri	icity P	roduction		Related	Water	Production	
System	Gross MWh	% Yeal	Net MWh	% Year	Gross m3	% Year	Net m3	% Year
Main Interconnected System	22,040,849	88.1%	21,619,110	88.4%	170,735,730	98.9%	166,527,747	<i>98.9%</i>
Rural Systems	605,204	2.4%	555,953	2.3%	1,985,725	1.1%	1,870,628	1.1%
Dhofar Power System	2,371,250	9.5%	2,269,347	9.3%	0	0.0%	0	0.0%
Total for 2012	25,017,303		24,444,411		172,721,455		168,398,375	
2013	Electri	icity P	roduction		Related	Water	Production	
System	Gross MWh	% Yeal	Net MWh	% Year	Gross m3	% Year	Net m3	% Year
Main Interconnected System	22,922,968	87.4%	22,558,036	87.9%	179,188,868	90.4%	174,326,659	90.2%
Rural Systems	685,004	2.6%	635,315	2.5%	2,291,035	1.2%	2,160,352	1.1%
Dhofar Power System	2,632,050	10.0%	2,467,914	9.6%	16,753,619	8.5%	16,753,619	8.7%
Total for 2013	26,240,023		25,661,264		198,233,522		193,240,630	
2014			roduction			Water	Production	
System	Gross MWh	% Yeal	Net MWh	% Year	Gross m3	% Year	Net m3	
Main Interconnected System	25,534,955		24,993,101	88.2%	184,975,345	87.7%	181,973,294	87.5%
Rural Systems	756,712	2.6%	698,134	2.5%	2,397,487	1.1%	2,236,582	1.1%
Dhofar Power System								
Bholai i Gwei Gystein	2,836,311	9.7%	2,651,663	9.4%	23,652,716	11.2%	23,652,716	11.4%
Total for 2014	2,836,311 <b>29,127,977</b>	9.7%	2,651,663 <b>28,342,899</b>	9.4%	23,652,716 <b>211,025,548</b>		23,652,716 207,862,592	11.4%



# Table 6

Electricity & Related Water Production by System and Company: 2013 & 2014

			Electricity	Production		R	elated W	ater Production	
	2013	Gross MWh %	o Oman	Net MWh	% Oman	Gross m3 9	6 Oman	Net m3 %	6 Oman
A: 1	Main Interconnected System								
1	ACWA Power Barka SAOG	2,565,912	9.8%	2,371,733	9.2%	32,676,943	16.5%	31,763,424	16.4%
1	Al Batinah PC SAOC	3,202,037	12.2%	3,100,796	12.1%				
1	Al Ghubrah SAOC	2,687,725	10.2%	2,513,586	9.8%	51,027,960	25.7%	50,022,477	25.9%
1	Al Kamil SAOG	1,688,326	6.4%	1,672,184	6.5%				
1	Al Rusail SAOG	3,486,581	13.3%	3,458,646	13.5%				
1	Al Suwadi PC SAOC	3,041,695	11.6%	3,028,412	11.8%				
F	PWP (Rental)			338	0.0%				
F	PWP purchases			559,349	2.2%				
9	SMN Barka SAOG	773,448	2.9%	649,589	2.5%	43,583,604	22.0%	43,536,256	22.5%
9	Sohar Power Company SAOG	3,797,801	14.5%	3,538,435	13.8%	51,900,361	26.2%	49,004,502	25.4%
ι	JPC Manah SAOG	1,205,183	4.6%	1,194,131	4.7%				
١	Wadi Jizzi SAOC	474,260	1.8%	470,837	1.8%				
	MIS sub-total	22,922,968	<b>87.4</b> %	22,558,036	<b>87.9</b> %	179,188,868	90.4%	174,326,659	90.2%
B: F	Rural Systems								
	RAEC SAOC	685,004	2.6%	635,315	2.5%	2,291,035	1.2%	2,160,352	1.1%
	Rural Systems sub-total	685,004	2.6%	635,315	2.5%	2,291,035	1.2%	2,160,352	
	Kurai Systems Sub-totai	085,004	2.0%	035,315	2.3%	2,291,035	1.270	2,100,332	1.1 70
C: [	Dhofar Power System								
[	DGC SAOC	619,702	2.4%	607,762	2.4%				
9	SembcorpSalalah SAOC	2,012,348	7.7%	1,860,152	7.2%	16,753,619	8.5%	16,753,619	8.7%
	Dhofar System sub-total	2,632,050	10.0%	2,467,914	9.6%	16,753,619	<b>8.5</b> %	16,753,619	<b>8.7</b> %
1	Totals for 2013	26,240,023	100%	25,661,264	100%	198,233,522	100%	193,240,630	100%
						_		ater Production	
			Electricity	Production		R	elated w	ater Production	
	2014	Gross MWh %	-	Production Net MWh	% Oman	R Gross m3 9		Net m3 %	6 Oman
	2014 Main Interconnected System		-		% Oman				6 Oman
A: 1			-		<b>% Oman</b> 9.7%				6 <b>Oman</b> 19.3%
A:	Main Interconnected System	Gross MWh %	o Oman	Net MWh		Gross m3 9	% Oman	Net m3 %	
A:   /	Main Interconnected System ACWA Power Barka SAOG	Gross MWh %	5 <b>Oman</b> 10.3%	<b>Net MWh</b> 2,746,364	9.7%	Gross m3 9	% Oman	Net m3 %	
A:   / /	Main Interconnected System ACWA Power Barka SAOG Al Batinah PC SAOC	Gross MWh % 2,989,303 3,722,410	5 <b>Oman</b> 10.3% 12.8%	Net MWh 2,746,364 3,618,816	9.7% 12.8%	Gross m3 9 40,242,806	% <b>Oman</b> 19.1%	<b>Net m3 %</b> 40,128,046	19.3%
A:       	Main Interconnected System ACWA Power Barka SAOG Al Batinah PC SAOC Al Ghubrah SAOC	Gross MWh % 2,989,303 3,722,410 2,235,115	10.3% 12.8% 7.7%	Net MWh 2,746,364 3,618,816 2,094,154	9.7% 12.8% 7.4%	Gross m3 9 40,242,806	% <b>Oman</b> 19.1%	<b>Net m3 %</b> 40,128,046	19.3%
A:       	Aain Interconnected System ACWA Power Barka SAOG Al Batinah PC SAOC Al Ghubrah SAOC Al Kamil SAOG	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347	10.3% 12.8% 7.7% 4.3%	Net MWh 2,746,364 3,618,816 2,094,154 1,238,944	9.7% 12.8% 7.4% 4.4%	Gross m3 9 40,242,806	% <b>Oman</b> 19.1%	<b>Net m3 %</b> 40,128,046	19.3%
A:         	Aain Interconnected System ACWA Power Barka SAOG Al Batinah PC SAOC Al Ghubrah SAOC Al Kamil SAOG Al Rusail SAOG	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883	10.3% 12.8% 7.7% 4.3% 12.7%	Net MWh           2,746,364           3,618,816           2,094,154           1,238,944           3,665,728	9.7% 12.8% 7.4% 4.4% 12.9%	Gross m3 9 40,242,806	% <b>Oman</b> 19.1%	<b>Net m3 %</b> 40,128,046	19.3%
A:   / / / /	Aar Interconnected System ACWA Power Barka SAOG Al Batinah PC SAOC Al Ghubrah SAOC Al Kamil SAOG Al Rusail SAOG Al Suwadi PC SAOC	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171	10.3%         12.8%         7.7%         4.3%         12.7%         11.1%	Net MWh           2,746,364           3,618,816           2,094,154           1,238,944           3,665,728           3,140,095	9.7% 12.8% 7.4% 4.4% 12.9% 11.1%	Gross m3 9 40,242,806	% <b>Oman</b> 19.1%	<b>Net m3 %</b> 40,128,046	19.3%
A:               	Aar Interconnected System ACWA Power Barka SAOG Al Batinah PC SAOC Al Ghubrah SAOC Al Kamil SAOG Al Rusail SAOG Al Suwadi PC SAOC Phoenix Power Company SAOC	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171	10.3%         12.8%         7.7%         4.3%         12.7%         11.1%	Net MWh           2,746,364           3,618,816           2,094,154           1,238,944           3,665,728           3,140,095	9.7% 12.8% 7.4% 4.4% 12.9% 11.1%	Gross m3 9 40,242,806	% <b>Oman</b> 19.1%	<b>Net m3 %</b> 40,128,046	19.3%
A:	Aar Interconnected System ACWA Power Barka SAOG Al Batinah PC SAOC Al Ghubrah SAOC Al Kamil SAOG Al Rusail SAOG Al Suwadi PC SAOC Phoenix Power Company SAOC PWP (Rental)	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171	10.3%         12.8%         7.7%         4.3%         12.7%         11.1%	Net MWh 2,746,364 3,618,816 2,094,154 1,238,944 3,665,728 3,140,095 1,542,617	9.7% 12.8% 7.4% 4.4% 12.9% 11.1% 5.4%	Gross m3 9 40,242,806	% <b>Oman</b> 19.1%	<b>Net m3 %</b> 40,128,046	19.3%
A:     / / / / / / / / / / / / / / / / /	Aain Interconnected System ACWA Power Barka SAOG Al Batinah PC SAOC Al Ghubrah SAOC Al Kamil SAOG Al Rusail SAOG Al Suwadi PC SAOC Phoenix Power Company SAOC PWP (Rental) PWP purchases	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832	5 Oman 10.3% 12.8% 7.7% 4.3% 12.7% 11.1% 5.3%	Net MWh 2,746,364 3,618,816 2,094,154 1,238,944 3,665,728 3,140,095 1,542,617	9.7% 12.8% 7.4% 4.4% 12.9% 11.1% 5.4%	Gross m3 9 40,242,806 51,234,007	6 Oman 19.1% 24.3%	Net m3 9 40,128,046 50,380,244	19.3% 24.2%
A:	Arian Interconnected System ACWA Power Barka SAOG Al Batinah PC SAOC Al Ghubrah SAOC Al Kamil SAOG Al Rusail SAOG Al Suwadi PC SAOC Phoenix Power Company SAOC PWP (Rental) PWP purchases SMN Barka SAOG	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832	5 Oman 10.3% 12.8% 7.7% 4.3% 12.7% 11.1% 5.3% 4.9%	Net MWh 2,746,364 3,618,816 2,094,154 1,238,944 3,665,728 3,140,095 1,542,617 530,198 1,247,426	9.7% 12.8% 7.4% 4.4% 12.9% 11.1% 5.4% 1.9% 4.4%	Gross m3 % 40,242,806 51,234,007 42,794,836	6 Oman 19.1% 24.3% 20.3%	Net m3 %	19.3% 24.2% 20.5%
A:	Arian Interconnected System ACWA Power Barka SAOG Al Batinah PC SAOC Al Ghubrah SAOC Al Ghubrah SAOG Al Rusail SAOG Al Suwadi PC SAOC Phoenix Power Company SAOC PWP (Rental) PWP purchases SMN Barka SAOG Sohar Power Company SAOG	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832 4,1418,843 3,753,524	5 Oman 10.3% 12.8% 7.7% 4.3% 12.7% 11.1% 5.3% 4.9% 12.9%	Net MWh 2,746,364 3,618,816 2,094,154 1,238,944 3,665,728 3,140,095 1,542,617 530,198 1,247,426 3,497,347	9.7% 12.8% 7.4% 4.4% 12.9% 11.1% 5.4% 1.9% 4.4% 12.3%	Gross m3 % 40,242,806 51,234,007 42,794,836	6 Oman 19.1% 24.3% 20.3%	Net m3 %	19.3% 24.2% 20.5%
A:	Aain Interconnected System ACWA Power Barka SAOG Al Batinah PC SAOC Al Ghubrah SAOC Al Ghubrah SAOG Al Rusail SAOG Al Suwadi PC SAOC Phoenix Power Company SAOC PWP (Rental) PWP purchases SMN Barka SAOG Sohar Power Company SAOG JPC Manah SAOG	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832 4,1,1418,843 3,753,524 1,110,785	5 Oman 10.3% 12.8% 12.8% 4.3% 12.7% 11.1% 5.3% 4.9% 12.9% 3.8% 2.0%	Net MWh 2,746,364 3,618,816 2,094,154 1,238,944 3,665,728 3,140,095 1,542,617 530,198 1,247,426 3,497,347 1,102,269	9.7% 12.8% 7.4% 4.4% 12.9% 11.1% 5.4% 1.9% 4.4% 12.3% 3.9% 2.0%	Gross m3 % 40,242,806 51,234,007 42,794,836	<ul> <li>6 Oman</li> <li>19.1%</li> <li>24.3%</li> <li>20.3%</li> <li>24.0%</li> </ul>	Net m3 %	19.3% 24.2% 20.5% 23.5%
A:   	Main Interconnected System         ACWA Power Barka SAOG         AL Batinah PC SAOC         Al Ghubrah SAOC         Al Kamil SAOG         Al Kamil SAOG         Al Rusail SAOG         Al Suwadi PC SAOC         Phoenix Power Company SAOC         PWP (Rental)         PWP purchases         SMN Barka SAOG         Sohar Power Company SAOG         JPC Manah SAOG         Wadi Jizzi SAOC	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832 4,239,171 1,544,832 3,753,524 1,4118,843 3,753,524 1,110,785 573,741	5 Oman 10.3% 12.8% 12.8% 4.3% 12.7% 11.1% 5.3% 4.9% 12.9% 3.8% 2.0%	Net MWh 2,746,364 3,618,816 2,094,154 1,238,944 3,665,728 3,140,095 1,542,617 530,198 1,247,426 3,497,347 1,102,269 569,143	9.7% 12.8% 7.4% 4.4% 12.9% 11.1% 5.4% 1.9% 4.4% 12.3% 3.9% 2.0%	Gross m3 9 40,242,806 51,234,007 42,794,836 50,703,696	<ul> <li>6 Oman</li> <li>19.1%</li> <li>24.3%</li> <li>20.3%</li> <li>24.0%</li> </ul>	Net m3 9 40,128,046 50,380,244 42,679,362 48,785,642	19.3% 24.2% 20.5% 23.5%
A:     / / / / / / / / / / / / / / / / /	Arian Interconnected System ACWA Power Barka SAOG Al Batinah PC SAOC Al Ghubrah SAOC Al Kamil SAOG Al Kamil SAOG Al Rusail SAOG Al Suwadi PC SAOC Pohoenix Power Company SAOC PWP (Rental) PWP purchases SMN Barka SAOG Sohar Power Company SAOG JPC Manah SAOG Wadi Jizzi SAOC MIS sub-total % change from 2013	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832 4,154,843 3,753,524 1,4118,843 3,753,524 1,110,785 573,741	5 Oman 10.3% 12.8% 12.8% 4.3% 12.7% 11.1% 5.3% 4.9% 12.9% 3.8% 2.0%	Net MWh           2,746,364           3,618,816           2,094,154           1,238,944           3,665,728           3,140,095           1,542,617           530,198           1,247,426           3,497,347           1,102,269           569,143	9.7% 12.8% 7.4% 4.4% 12.9% 11.1% 5.4% 1.9% 4.4% 12.3% 3.9% 2.0%	Gross m3 %	<ul> <li>6 Oman</li> <li>19.1%</li> <li>24.3%</li> <li>20.3%</li> <li>24.0%</li> </ul>	Net m3 9 40,128,046 50,380,244 42,679,362 48,785,642 181,973,294	19.3% 24.2% 20.5% 23.5%
A:     / / / / / / / / / / / / / / / / /	Main Interconnected System         ACWA Power Barka SAOG         ACWA Power Barka SAOG         AL Batinah PC SAOC         Al Ghubrah SAOG         Al Kamil SAOG         Al Kamil SAOG         Al Rusail SAOG         Al Rusail SAOG         Phoenix Power Company SAOC         PWP (Rental)         PWP purchases         SMN Barka SAOG         JPC Manah SAOG         Wadi Jizzi SAOC         MIS sub-total         % change from 2013         Rural Systems         RAREC SAOC	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832 1,418,843 3,753,524 1,418,843 3,753,524 1,110,785 573,741 25,534,9555 11.4% 756,712	5 Oman 10.3% 12.8% 12.8% 4.3% 12.7% 11.1% 5.3% 11.1% 5.3% 4.9% 12.9% 3.8% 2.0% 87.7%	Net MWh           2,746,364           3,618,816           2,094,154           1,238,944           3,665,728           3,140,095           1,542,617           530,198           1,247,426           3,497,347           1,102,269           569,143           24,993,101           10.8%           698,134	9.7% 12.8% 7.4% 4.4% 12.9% 11.1% 5.4% 1.9% 4.4% 12.3% 3.9% 2.0% <b>88.2%</b>	Gross m3 % 40,242,806 51,234,007 42,794,836 50,703,696 184,975,345 3.2% 2,397,487	<ul> <li>6 Oman</li> <li>19.1%</li> <li>24.3%</li> <li>24.3%</li> <li>24.0%</li> <li>87.7%</li> <li>1.1%</li> </ul>	Net m3 9 40,128,046 50,380,244 42,679,362 48,785,642 181,973,294 4.4% 2,236,582	19.3% 24.2% 20.5% 23.5% <b>87.5%</b>
A:   / / / / / / / / / / / / / / / / / /	Main Interconnected System         ACWA Power Barka SAOG         AI Batinah PC SAOC         AI Ghubrah SAOG         AI Kamil SAOG         AI Rusail SAOG         AI Suwadi PC SAOC         Phoenix Power Company SAOC         PWP (Rental)         PWP purchases         SMN Barka SAOG         Sohar Power Company SAOG         JPC Manah SAOG         Mai Jizzi SAOC         MIS sub-total         % change from 2013         Rural Systems	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832 3,753,524 1,418,843 3,753,524 1,110,785 573,741 25,534,955 11.4%	5 Oman 10.3% 12.8% 12.8% 4.3% 12.7% 11.1% 5.3% 11.1% 5.3% 4.9% 12.9% 3.8% 2.0% <b>87.7%</b>	Net MWh 2,746,364 3,618,816 2,094,154 1,238,944 3,665,728 3,140,095 1,542,617 530,198 1,247,426 3,497,347 1,102,269 569,143 24,993,101 10.8%	9.7% 12.8% 7.4% 4.4% 12.9% 11.1% 5.4% 1.9% 4.4% 12.3% 3.9% 2.0% <b>88.2%</b>	Gross m3 %	<ul> <li>6 Oman</li> <li>19.1%</li> <li>24.3%</li> <li>24.3%</li> <li>24.0%</li> <li>87.7%</li> </ul>	Net m3 9 40,128,046 50,380,244 42,679,362 48,785,642 181,973,294 4.4%	19.3% 24.2% 20.5% 23.5% <b>87.5%</b>
A: I ////////////////////////////////////	Main Interconnected System       ACWA Power Barka SAOG       ACWA Power Barka SAOG       AL Batinah PC SAOC       Al Ghubrah SAOG       Al Kamil SAOG       Al Rusail SAOG       Al Rusail SAOG       Al Rusail SAOG       Phoenix Power Company SAOC       PWP (Rental)       PWP purchases       SMN Barka SAOG       Sohar Power Company SAOG       JPC Manah SAOG       MIS sub-total       % change from 2013       Rural Systems sub-total       % change from 2013	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832 4,111,544,832 4,418,843 3,753,524 1,418,843 3,753,524 1,110,785 573,741 25,534,955 11.4%	5 Oman 10.3% 12.8% 12.8% 4.3% 12.7% 11.1% 5.3% 11.1% 5.3% 4.9% 12.9% 3.8% 2.0% 87.7%	Net MWh           2,746,364           3,618,816           2,094,154           1,238,944           3,665,728           3,140,095           1,542,617           530,198           1,247,426           3,497,347           1,102,269           569,143           24,993,101           10.8%           698,134	9.7% 12.8% 7.4% 4.4% 12.9% 11.1% 5.4% 1.9% 4.4% 12.3% 3.9% 2.0% <b>88.2%</b>	Gross m3 % 40,242,806 51,234,007 42,794,836 50,703,696 184,975,345 3.2% 2,397,487	<ul> <li>6 Oman</li> <li>19.1%</li> <li>24.3%</li> <li>24.3%</li> <li>24.0%</li> <li>87.7%</li> <li>1.1%</li> </ul>	Net m3 9 40,128,046 50,380,244 42,679,362 48,785,642 181,973,294 4.4% 2,236,582 2,236,582	19.3% 24.2% 20.5% 23.5% <b>87.5%</b>
A: I / / / / / / / / / / / / /	Main Interconnected System         ACWA Power Barka SAOG         ACWA Power Barka SAOG         AL Batinah PC SAOC         Al Ghubrah SAOG         Al Kamil SAOG         Al Rusail SAOG         Al Rusail SAOG         Al Rusail SAOG         Phoenix Power Company SAOC         PWP (Rental)         PWP purchases         SMN Barka SAOG         JPC Manah SAOG         Wadi Jizzi SAOC         MIS sub-total         % change from 2013         Rural Systems sub-total         % change from 2013         Change from 2013         Change from 2013         Change from 2013	Gross WWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832 1,418,843 3,753,524 1,418,843 3,753,524 1,110,785 573,741 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.4% 25,534,955 11.5%	5 Oman 10.3% 12.8% 12.8% 4.3% 12.7% 11.1% 5.3% 11.1% 5.3% 4.9% 12.9% 3.8% 2.0% 87.7% 2.6%	Net MWh           2,746,364           3,618,816           2,094,154           1,238,944           3,665,728           3,140,095           1,542,617           530,198           1,247,426           3,497,347           1,102,269           569,143           24,993,101           10.8%           698,134           9.9%	9.7% 12.8% 7.4% 4.4% 12.9% 11.1% 5.4% 1.9% 4.4% 12.3% 3.9% 2.0% 88.2% 2.5%	Gross m3 % 40,242,806 51,234,007 42,794,836 50,703,696 184,975,345 3.2% 2,397,487	<ul> <li>6 Oman</li> <li>19.1%</li> <li>24.3%</li> <li>24.3%</li> <li>24.0%</li> <li>87.7%</li> <li>1.1%</li> </ul>	Net m3 9 40,128,046 50,380,244 42,679,362 48,785,642 181,973,294 4.4% 2,236,582 2,236,582	19.3% 24.2% 20.5% 23.5% <b>87.5%</b>
A: I / / / / / / / / / / / / /	Main Interconnected System         ACWA Power Barka SAOG         ACWA Power Barka SAOG         AL Batinah PC SAOC         Al Ghubrah SAOG         Al Kamil SAOG         Al Kamil SAOG         Al Rusail SAOG         Al Rusail SAOG         Phoenix Power Company SAOC         PWP (Rental)         PWP purchases         SMN Barka SAOG         JPC Manah SAOG         Madi Jizzi SAOC         MIS sub-total         % change from 2013         Rural Systems sub-total         % change from 2013         Dofar Power System         DOCG SAOC	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832 1,418,843 3,753,524 1,418,843 3,753,524 1,110,785 573,741 25,534,9555 11.4% 25,534,9555 11.4% 25,534,9555 11.4% 25,534,9555 11.4% 25,534,9555 11.4% 25,534,9555 11.4% 25,534,9555 11.4% 25,534,9555 11.4% 25,534,9555 11.4% 25,534,9555 11.4% 25,534,9555 11.4% 25,534,9555 11.4% 25,534,9555 11.4% 25,534,9555 11.4% 25,534,9555 11.5% 25,534,9555 11.5% 25,534,9555 11.5% 25,5354 25,534,9555 25,534,9555 25,534,9555 25,534,9555 25,534,9555 25,534,9555 25,534,9555 25,534,9555 25,534,9555 25,534,9555 25,534,9555 25,534,955 26,712 26,712 26,712 26,755,712 26,755,712 26,755,754	5 Oman 10.3% 12.8% 12.8% 4.3% 12.7% 1.1.4% 5.3% 11.1% 5.3% 4.9% 12.9% 3.8% 2.0% 87.7% 2.6% 2.6% 3.3%	Net MWh           2,746,364           3,618,816           2,094,154           1,238,944           3,665,728           3,140,095           1,542,617           530,198           1,247,426           3,497,347           1,102,269           569,143           24,993,101           10.8%           698,134           9.9%           940,688	9.7% 12.8% 7.4% 4.4% 12.9% 11.1% 5.4% 1.9% 4.4% 12.3% 2.0% 88.2% 2.5% 2.5% 3.3%	Gross m3 % 40,242,806 51,234,007 42,794,836 50,703,696 184,975,345 3.2% 2,397,487 4.6%	<ul> <li>6 Oman</li> <li>19.1%</li> <li>24.3%</li> <li>24.3%</li> <li>24.0%</li> <li>24.0%</li> <li>24.0%</li> <li>1.1%</li> <li>1.1%</li> <li>1.1%</li> <li>1.1%</li> <li>1.1%</li> </ul>	Net m3 9 40,128,046 50,380,244 42,679,362 48,785,642 181,973,294 4.4% 2,236,582 3.5%	19.3% 24.2% 20.5% 23.5% 1.1% 1.1% 1.1%
A: I / / / / / / / / / / / / /	Main Interconnected System         ACWA Power Barka SAOG         ACWA Power Barka SAOG         AL Batinah PC SAOC         Al Batinah PC SAOC         Al Ghubrah SAOG         Al Kamil SAOG         Al Rusail SAOG         Al Suwadi PC SAOC         Phoenix Power Company SAOC         PWP (Rental)         PWP purchases         SMN Barka SAOG         JPC Manah SAOG         Wadi Jizzi SAOC         MIS sub-total         % change from 2013         Rural Systems         RAEC SAOC         Pofar Power System         Dofar Power System         DGG SAOC	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832 4 1,418,843 3,753,524 1,418,843 3,753,524 1,110,785 573,741 255,534,955 11.4% 756,712 756,712 10.5% 953,541 1,882,770	2.6% 3.3% 6.5% 6.5% 6.5% 6.5% 6.5% 6.5% 6.5% 6.5	Net MWh           2,746,364           3,618,816           2,094,154           1,238,944           3,665,728           3,140,095           1,542,617           530,198           1,247,426           3,497,347           1,102,269           569,143           24,993,101           10.8%           698,134           698,134           9.9%           940,688           1,710,975	9.7% 12.8% 1.4% 12.9% 11.1% 5.4% 1.9% 4.4% 12.3% 2.0% 88.2% 88.2% 2.5% 2.5% 3.3% 6.0%	Gross m3 % 40,242,806 51,234,007 42,794,836 50,703,696 184,975,345 3.2% 2,397,487 4.6%	<ul> <li>6 Oman</li> <li>19.1%</li> <li>24.3%</li> <li>24.3%</li> <li>24.0%</li> <li>24.0%</li> <li>24.0%</li> <li>1.1%</li> <li>1.1%</li> <li>1.1%</li> <li>1.1%</li> <li>1.1%</li> </ul>	Net m3 % 40,128,046 50,380,244 42,679,362 48,785,642 181,973,294 4.4% 2,236,582 3.5% 23,652,716	19.3% 24.2% 20.5% 23.5% 1.1% 1.1% 1.1%
A: 1	Main Interconnected System         ACWA Power Barka SAOG         ACWA Power Barka SAOG         AL Batinah PC SAOC         Al Batinah PC SAOC         Al Ghubrah SAOG         Al Kamil SAOG         Al Rusail SAOG         Al Suwadi PC SAOC         Phoenix Power Company SAOC         PWP (Rental)         PWP purchases         SMN Barka SAOG         JPC Manah SAOG         Wati Jizzi SAOC         MIS sub-total         % change from 2013         Rural Systems         RAEC SAOC         Rural Systems sub-total         % change from 2013         Chaffer Power System         Dofofar Power System         Dofofar System sub-total	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832 1,418,843 3,753,524 1,418,843 3,753,524 1,110,785 573,741 25,534,955 11,4% 25,534,955 11,4% 756,712 756,712 10,5% 953,541 1,882,770 2,836,311	2.6% 3.3% 6.5% 6.5% 6.5% 6.5% 6.5% 6.5% 6.5% 6.5	Net MWh           2,746,364           3,618,816           2,094,154           1,238,944           3,665,728           3,140,095           1,542,617           530,198           1,247,426           3,497,347           1,102,269           569,143           24,993,101           10.8%           698,134           698,134           9.9%           940,688           1,710,975           2,651,663	9.7% 12.8% 1.4% 12.9% 11.1% 5.4% 1.9% 4.4% 12.3% 2.0% 88.2% 88.2% 2.5% 2.5% 3.3% 6.0%	Gross m3 % 40,242,806 51,234,007 42,794,836 50,703,696 184,975,345 3.2% 2,397,487 4.6% 23,652,716	<ul> <li>6 Oman</li> <li>19.1%</li> <li>24.3%</li> <li>24.3%</li> <li>24.0%</li> <li>24.0%</li> <li>24.0%</li> <li>1.1%</li> <li>1.1%</li> <li>1.1%</li> <li>1.1%</li> <li>1.1%</li> </ul>	Net m3 9 40,128,046 50,380,244 42,679,362 48,785,642 181,973,294 4.4% 2,236,582 3.5% 2,236,582 3.5%	19.3% 24.2% 20.5% 23.5% 1.1% 1.1% 1.1%
A: 1	Main Interconnected System         ACWA Power Barka SAOG         ACWA Power Barka SAOG         Al Batinah PC SAOC         Al Ghubrah SAOG         Al Kamil SAOG         Al Rusail SAOG         Al Rusail SAOG         Al Suwadi PC SAOC         Pohonix Power Company SAOC         PWP (Rental)         PWP purchases         SMN Barka SAOG         JPC Manah SAOG         Madi Jizzi SAOC         MIS sub-total         % change from 2013         Rural Systems         RACE SAOC         Rural Systems sub-total         % change from 2013         Cofe SAOC         SembcorpSalalah SAOC         SembcorpSalalah SAOC         Phofar System sub-total         % change from 2013	Gross MWh % 2,989,303 3,722,410 2,235,115 1,252,347 3,694,883 3,239,171 1,544,832 4,418,843 3,753,524 1,418,843 3,753,524 4,418,843 3,753,524 1,410,785 11.4% 756,712 10.5% 11.882,770 2,836,311 7,8%	5 Oman 10.3% 12.8% 12.8% 12.7% 4.3% 12.7% 11.1% 5.3% 4.9% 12.9% 3.8% 2.0% 87.7% 87.7% 2.6% 3.3% 6.5% 9.7%	Net MWh           2,746,364           3,618,816           2,094,154           1,238,944           3,665,728           3,140,095           1,542,617           530,198           1,247,426           3,497,347           1,102,269           569,143           698,134           698,134           9.9%           940,688           1,710,975           2,651,663           7.4%	9.7% 12.8% 7.4% 1.2.9% 11.1% 5.4% 1.9% 4.4% 12.3% 2.0% 88.2% 88.2% 2.5% 2.5% 3.3% 6.0% 9.4%	Gross m3 % 40,242,806 51,234,007 42,794,836 50,703,696 184,975,345 3.2% 2,397,487 2,397,487 2,397,487 4.6%	<ul> <li>6 Oman</li> <li>19.1%</li> <li>24.3%</li> <li>24.3%</li> <li>24.3%</li> <li>24.0%</li> <li>1.1%</li> <li>1.1%</li> <li>1.1%</li> <li>1.1%</li> <li>11.2%</li> <li>11.2%</li> </ul>	Net m3 % 40,128,046 50,380,244 42,679,362 48,785,642 181,973,294 4.4% 2,236,582 2,236,582 3.5% 23,652,716 23,652,716 41,2%	19.3% 24.2% 20.5% 23.5% 87.5% 1.1% 1.1% 1.1% 11.4%



# Table 7

# Electricity and Related Water Production by Region: 2013 and 2014

2013	Elect	ricity P	Production		Relate	d Wate	er Productio	n
Region	MWh Gross	% Oman	MWh Net	% Oman	m3 Gross %	6 Oman	<b>m3 Net</b> 9	6 Oman
Al Dahirah	568	0.0%	520	0.0%				
Al Sharqiya	1,744,592	6.6%	1,716,065	6.7%	1,097,946	0.6%	1,068,517	0.6%
Al Wusta	166,645	0.6%	100,038	0.4%	1,032,542	0.5%	932,215	0.5%
Dakhliyah	1,205,183	4.6%	1,194,131	4.7%				
Dhofar	2,791,693	10.6%	2,620,038	10.2%	16,791,764	8.5%	16,791,685	8.7%
Musandam	301,882	1.2%	288,648	1.1%	122,402	0.1%	121,554	0.1%
Muscat	6,174,307	23.5%	5,978,992	23.3%	51,027,960	25.7%	50,022,477	25.9%
North Batinah	7,474,098	28.5%	7,713,098	30.1%	51,900,361	26.2%	49,004,502	25.4%
South Batinah	6,381,055	24.3%	6,049,734	23.6%	76,260,547	38.5%	75,299,680	39.0%
Totals for 2013	26,240,023		25,661,264		198,233,522		193,240,630	

2014	Electricity	Production	Related Wate	er Production
Region	MWh Gross % Oman	MWh Net % Oman	m3 Gross % Oman	m3 Net % Oman
Al Dahirah Change from 2013 (%)	<b>947</b> 0.0% 66.5%	894 0.0% 71.8%		
Al Sharqiya	2,871,063 <i>9.9%</i>	2,843,556 <i>10.0%</i>	1,231,519 0.6%	1,114,454 0.5%
Change from 2013 (%)	<i>64.6%</i>	<i>65.7%</i>	12.2%	4.3%
Al Wusta	177,510	160,016 0.6%	1,027,622 0.5%	986,184 0.5%
Change from 2013 (%)		60.0%	-0.5%	5.8%
Dakhliyah <i>Change from 2013 (%)</i>	1,110,785 <i>3.8%</i> <i>-7.8%</i>	1,102,269 <i>3.9%</i> <i>-7.7%</i>		
Dhofar	3,008,527 <i>10.3%</i>	2,813,456 <i>9.9%</i>	23,693,655 <i>11.2%</i>	23,693,176 <i>11.4%</i>
Change from 2013 (%)	<i>7.8%</i>	<i>7.4%</i>	<i>41.1%</i>	<i>41.1%</i>
Musandam	332,155 <i>1.1%</i>	315,131 <i>1.1%</i>	97,407 0.0%	95,484 0.0%
<i>Change from 2013 (%)</i>	<i>10.0%</i>	<i>9.2%</i>	-20.4%	-21.4%
Muscat	5,929,998 20.4%	5,774,074 <i>20.4%</i>	51,234,007 <i>24.3%</i>	50,380,244 24.2%
Change from 2013 (%)	-4.0%	<i>-3.4%</i>	<i>0.4%</i>	0.7%
North Batinah	8,049,675 27.6%	8,199,617 <i>28.9%</i>	50,703,696 24.0%	48,785,642 23.5%
Change from 2013 (%)	7.7%	<i>6.3%</i>	-2.3%	-0.4%
South Batinah	7,647,317 <i>26.3%</i>	7,133,885 25.2%	83,037,642 <i>39.3%</i>	82,807,408 <i>39.8%</i>
Change from 2013 (%)	<i>19.8%</i>	17.9%	<i>8.9%</i>	<i>10.0%</i>
Totals for 2014	29,127,977	28,342,899	211,025,548	207,862,592
Change from 2013 (%)	11.0%	10.5%	6.5%	7.6%

Note: Net electricity production includes PWP and RAEC purchases from entities in each Region



# Table 8

2013		Electi	icity Pr	oduction		Rela	ted Wa	ter Product	tion
Region	Company	Gross MWh	% Oman	Net MWh	% Oman	Gross m3	% Oman	Net m3 %	Oman
Al Dahirah	RAEC SAOC	568	0.0%	520	0.0%				
Al Sharqiva	Al Kamil SAOG	1,688,326	6.4%	1,672,184	6.5%				
	PWP (Rental)			338	0.0%				
	PWP purchases			71	0.0%				
	RAEC SAOC	56,266	0.2%	43,472	0.2%	1,097,946	0.6%	1,068,517	0.6%
Al Wusta	PWP purchases			-50,512	-0.2%				
	RAEC SAOC	166,645	0.6%	150,550	0.6%	1,032,542	0.5%	932,215	0.5%
Dakhlivah	UPC Manah SAOG	1,205,183	4.6%	1,194,131	4.7%				
Dhofar	DGC SAOC	619,702	2.4%	607,762	2.4%				
	RAEC SAOC	159,643	0.6%	152,124	0.6%	38,145	0.0%	38,066	0.0%
	SembcorpSalalah SAOC	2,012,348	7.7%	1,860,152	7.2%	16,753,619	8.5%	16,753,619	8.7%
Musandam	RAEC SAOC	301,882	1.2%	288,648	1.1%	122,402	0.1%	121,554	0.1%
Muscat	Al Ghubrah SAOC	2,687,725	10.2%	2,513,586	9.8%	51,027,960	25.7%	50,022,477	25.9%
	Al Rusail SAOG	3,486,581	13.3%	3,458,646	13.5%				
	PWP (Rental)			0	0.0%				
	PWP purchases			6,760	0.0%				
North Batina	h Al Batinah PC SAOC	3,202,037	12.2%	3,100,796	12.1%				
	PWP purchases			603,030	2.3%				
	Sohar Power Company SAOG	3,797,801	14.5%	3,538,435	13.8%	51,900,361	26.2%	49,004,502	25.4%
	Wadi Jizzi SAOC	474,260	1.8%	470,837	1.8%				
South Batina	hACWA Power Barka SAOG	2,565,912	9.8%	2,371,733	9.2%	32,676,943	16.5%	31,763,424	16.4%
	Al Suwadi PC SAOC	3,041,695	11.6%	3,028,412	11.8%				
	PWP (Rental)								
	SMN Barka SAOG	773,448	2.9%	649,589	2.5%	43,583,604	22.0%	43,536,256	22.5%
Sultanate To	tals 2013	26,240,023	2	5,661,264		198,233,522	19	3,240,630	

2014		Elect	ricity Pı	oduction		Rela	ted Wa	ter Product	tion
Region	Company	Gross MWh	% Oman	Net MWh	% Oman	Gross m3	% Oman	Net m3 %	o Oman
Al Dahirah	RAEC SAOC	947	0.0%	894	0.0%				
Al Sharqiva	Al Kamil SAOG	1,252,347	4.3%	1,238,944	4.4%				
	Phoenix Power Company SAO	C 1,544,832	5.3%	1,542,617	5.4%				
	PWP (Rental)								
	PWP purchases			201	0.0%				
	RAEC SAOC	73,884	0.3%	61,795	0.2%	1,231,519	0.6%	1,114,454	0.5%
Al Wusta	PWP purchases			1,494	0.0%				
	RAEC SAOC	177,510	0.6%	158,522	0.6%	1,027,622	0.5%	986,184	0.5%
Dakhlivah	UPC Manah SAOG	1,110,785	3.8%	1,102,269	3.9%				
Dhofar	DGC SAOC	953,541	3.3%	940,688	3.3%				
	RAEC SAOC	172,216	0.6%	161,793	0.6%	40,939	0.0%	40,460	0.0%
	SembcorpSalalah SAOC	1,882,770	6.5%	1,710,975	6.0%	23,652,716	11.2%	23,652,716	11.4%
Musandam	RAEC SAOC	332,155	1.1%	315,131	1.1%	97,407	0.0%	95,484	0.0%
Muscat	Al Ghubrah SAOC	2,235,115	7.7%	2,094,154	7.4%	51,234,007	24.3%	50,380,244	24.2%
	Al Rusail SAOG	3,694,883	12.7%	3,665,728	12.9%				
	PWP (Rental)								
	PWP purchases			14,192	0.1%				
North Batina	ah Al Batinah PC SAOC	3,722,410	12.8%	3,618,816	12.8%				
	PWP purchases			514,311	1.8%				
	Sohar Power Company SAOG	3,753,524	12.9%	3,497,347	12.3%	50,703,696	24.0%	48,785,642	23.5%
	Wadi Jizzi SAOC	573,741	2.0%	569,143	2.0%				
South Batina	ahACWA Power Barka SAOG	2,989,303	10.3%	2,746,364	9.7%	40,242,806	19.1%	40,128,046	19.3%
	Al Suwadi PC SAOC	3,239,171	11.1%	3,140,095	11.1%				
	PWP (Rental)								
	SMN Barka SAOG	1,418,843	4.9%	1,247,426	4.4%	42,794,836	20.3%	42,679,362	20.5%
Sultanate To	otals 2014	29,127,977	2	8,342,899	:	211,025,548	20	7,862,592	
	Change from 2013 (%)	11.0%		10.5%		6.5%		7.6%	





# Table 9 i

# Monthly Production by System: MIS 2009 to 2014

2009		Electr	icity Pr	oduction		Related	Water	Productio	n
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
MIS	Jan-09	697.1	4.3%	649.3	4.1%	8,229.3	7.3%	7,765.7	6.9%
MIS	Feb-09	715.6	4.4%	673.0	4.3%	8,433.0	7.5%	8,081.1	7.2%
MIS	Mar-09	1,025.5	6.3%	981.8	6.2%	9,680.2	8.6%	9,378.5	8.3%
MIS	Apr-09	1,153.2	7.1%	1,110.3	7.1%	8,920.4	7.9%	8,602.1	7.6%
MIS	May-09	1,777.2	10.9%	1,741.5	11.1%	10,857.3	9.7%	10,429.1	9.2%
MIS	Jun-09	1,898.7	11.7%	1,844.7	11.7%	10,388.5	9.2%	10,125.1	9.0%
MIS	Jul-09	1,979.9	12.2%	1,925.0	12.2%	10,582.2	9.4%	10,317.7	9.1%
MIS	Aug-09	1,925.1	11.8%	1,865.6	11.9%	10,576.5	9.4%	10,293.2	9.1%
MIS	Sep-09	1,751.2	10.7%	1,705.0	10.8%	10,057.2	9.0%	9,787.7	8.7%
MIS	Oct-09	1,476.3	9.1%	1,417.4	9.0%	9,865.6	8.8%	9,468.9	8.4%
MIS	Nov-09	1,026.8	6.3%	977.6	6.2%	7,133.8	6.3%	8,548.8	7.6%
MIS	Dec-09	865.9	5.3%	827.5	5.3%	7,626.4	6.8%	10,131.1	9.0%
2009 Totals		16,292.5		15,718.8		112,350.3	1	L12,929.0	

2010		Electr	icity Pr	oduction		<b>Related Water Production</b>			
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
MIS	Jan-10	798.3	4.6%	757.7	4.5%	10,054.9	7.3%	9,871.1	7.6%
MIS	Feb-10	771.2	4.4%	729.7	4.3%	9,479.9	6.9%	9,016.2	7.0%
MIS	Mar-10	1,151.2	6.6%	1,090.8	6.5%	11,309.7	8.2%	10,738.5	8.3%
MIS	Apr-10	1,516.2	8.7%	1,454.1	8.6%	11,626.8	8.4%	11,246.5	8.7%
MIS	May-10	1,898.1	10.9%	1,873.2	11.1%	12,722.0	9.2%	11,969.6	9.3%
MIS	Jun-10	1,845.6	10.6%	1,836.8	10.9%	12,107.4	8.8%	11,013.5	8.5%
MIS	Jul-10	2,029.6	11.6%	1,976.7	11.7%	13,147.1	9.5%	11,494.9	8.9%
MIS	Aug-10	1,964.7	11.3%	1,895.9	11.2%	12,689.1	9.2%	11,305.7	8.7%
MIS	Sep-10	1,731.3	9.9%	1,668.4	9.9%	12,004.8	8.7%	11,191.4	8.7%
MIS	Oct-10	1,651.2	9.5%	1,587.6	9.4%	11,876.5	8.6%	11,063.9	8.6%
MIS	Nov-10	1,115.0	6.4%	1,055.9	6.3%	10,732.0	7.8%	10,309.2	8.0%
MIS	Dec-10	986.6	5.7%	928.4	5.5%	10,417.0	7.5%	10,018.1	7.8%
2010 Totals		17,459.1		16,855.0		138,167.2	1	L29,238.5	



# Table 9 i

# Monthly Production by System: MIS 2009 to 2014

2011		Electri	icity Pr	oduction		<b>Related Water Production</b>			
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
MIS	Jan-11	999.0	5.1%	938.4	5.0%	10,955.2	7.3%	10,564.0	7.3%
MIS	Feb-11	957.8	4.9%	908.7	4.8%	9,743.7	6.5%	8,837.2	6.1%
MIS	Mar-11	1,162.4	6.0%	1,098.7	5.8%	11,556.4	7.7%	11,215.7	7.8%
MIS	Apr-11	1,478.1	7.6%	1,409.0	7.4%	11,956.7	7.9%	11,658.9	8.1%
MIS	May-11	2,002.3	10.3%	2,024.0	10.7%	13,696.0	9.1%	13,014.8	9.0%
MIS	Jun-11	2,140.0	11.0%	2,172.8	11.5%	13,406.0	8.9%	12,678.4	8.8%
MIS	Jul-11	2,075.8	10.7%	2,124.9	11.2%	13,867.9	9.2%	13,182.3	9.1%
MIS	Aug-11	2,120.3	10.9%	2,133.6	11.3%	13,891.3	9.2%	13,378.9	9.3%
MIS	Sep-11	2,088.0	10.8%	2,007.0	10.6%	12,828.4	8.5%	12,307.0	8.5%
MIS	Oct-11	1,912.2	9.9%	1,825.4	9.6%	13,892.7	9.2%	13,337.5	9.2%
MIS	Nov-11	1,366.7	7.0%	1,287.3	6.8%	12,276.5	8.1%	11,967.5	8.3%
MIS	Dec-11	1,099.5	5.7%	1,020.4	5.4%	12,736.8	8.4%	12,423.1	8.6%
2011 Totals		19,402.3		18,950.3		150,807.6	1	L44,565.1	

2012		Electr	icity Pr	oduction		Related	Water	Productio	n
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
MIS	Jan-12	1,218.3	5.5%	1,137.3	5.3%	11,738.6	6.9%	11,526.6	6.9%
MIS	Feb-12	1,146.7	5.2%	1,067.1	4.9%	12,223.7	7.2%	11,965.0	7.2%
MIS	Mar-12	1,417.3	6.4%	1,357.0	6.3%	13,698.0	8.0%	13,424.8	8.1%
MIS	Apr-12	1,651.9	7.5%	1,574.4	7.3%	14,348.7	8.4%	14,041.5	8.4%
MIS	May-12	2,297.6	10.4%	2,283.2	10.6%	15,379.7	9.0%	14,904.6	9.0%
MIS	Jun-12	2,361.8	10.7%	2,407.4	11.1%	15,016.5	8.8%	14,531.6	8.7%
MIS	Jul-12	2,491.1	11.3%	2,555.7	11.8%	15,302.9	9.0%	14,926.1	9.0%
MIS	Aug-12	2,453.4	11.1%	2,409.7	11.1%	15,385.1	9.0%	15,015.6	9.0%
MIS	Sep-12	2,339.4	10.6%	2,239.4	10.4%	15,196.1	8.9%	14,870.6	8.9%
MIS	Oct-12	1,828.1	8.3%	1,848.3	8.5%	14,993.7	8.8%	14,506.1	8.7%
MIS	Nov-12	1,509.4	6.8%	1,488.3	6.9%	13,972.8	8.2%	13,627.6	8.2%
MIS	Dec-12	1,325.9	6.0%	1,251.3	5.8%	13,480.0	7.9%	13,187.6	7.9%
2012 Totals		22,040.8		21,619.1		170,735.7	1	166,527.7	





# Table 9 i

# Monthly Production by System: MIS 2009 to 2014

2013		Electr	icity Pr	oduction		<b>Related Water Production</b>				
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year	
MIS	Jan-13	1,307.3	5.7%	1,234.0	5.5%	13,911.9	7.8%	13,566.7	7.8%	
MIS	Feb-13	1,222.6	5.3%	1,157.4	5.1%	12,789.1	7.1%	12,456.9	7.1%	
MIS	Mar-13	1,584.6	6.9%	1,514.9	6.7%	15,084.3	8.4%	14,693.7	8.4%	
MIS	Apr-13	1,813.3	7.9%	1,727.3	7.7%	14,554.5	8.1%	14,190.1	8.1%	
MIS	May-13	2,228.2	9.7%	2,196.6	9.7%	15,738.6	8.8%	15,338.1	8.8%	
MIS	Jun-13	2,482.2	10.8%	2,517.8	11.2%	15,759.5	8.8%	15,311.7	8.8%	
MIS	Jul-13	2,695.0	11.8%	2,643.1	11.7%	15,959.2	8.9%	15,550.4	8.9%	
MIS	Aug-13	2,502.9	10.9%	2,468.7	10.9%	15,772.8	8.8%	15,321.3	8.8%	
MIS	Sep-13	2,293.1	10.0%	2,331.0	10.3%	15,439.5	8.6%	15,003.5	8.6%	
MIS	Oct-13	2,143.7	9.4%	2,116.0	9.4%	15,331.3	8.6%	14,802.4	8.5%	
MIS	Nov-13	1,461.1	6.4%	1,427.6	6.3%	14,303.8	8.0%	13,890.6	8.0%	
MIS	Dec-13	1,188.9	5.2%	1,223.8	5.4%	14,544.5	8.1%	14,201.2	8.1%	
2013 Totals		22,923.0		22,558.0		179,188.9	1	L74,326.7		

2014		Electr	icity Pr	oduction		Related	Water	Productio	n
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
MIS	Jan-14	1,333.9	5.2%	1,257.8	5.0%	13,708.1	7.4%	13,402.7	7.4%
MIS	Feb-14	1,227.3	4.8%	1,162.2	4.7%	12,328.1	6.7%	12,039.1	6.6%
MIS	Mar-14	1,621.5	6.3%	1,542.4	6.2%	14,216.6	7.7%	13,991.2	7.7%
MIS	Apr-14	2,090.3	8.2%	2,023.7	8.1%	14,681.7	7.9%	14,457.9	7.9%
MIS	May-14	2,528.5	9.9%	2,561.9	10.3%	15,638.1	8.5%	15,374.5	8.4%
MIS	Jun-14	2,927.5	11.5%	2,913.0	11.7%	16,661.8	9.0%	16,448.6	9.0%
MIS	Jul-14	2,968.7	11.6%	2,957.2	11.8%	16,878.2	9.1%	16,591.7	9.1%
MIS	Aug-14	2,655.7	10.4%	2,693.8	10.8%	16,615.8	9.0%	16,354.3	9.0%
MIS	Sep-14	2,694.0	10.6%	2,602.9	10.4%	16,429.8	8.9%	16,189.0	8.9%
MIS	Oct-14	2,350.0	9.2%	2,268.9	9.1%	16,173.2	8.7%	15,963.9	8.8%
MIS	Nov-14	1,694.8	6.6%	1,622.0	6.5%	15,782.8	8.5%	15,567.9	8.6%
MIS	Dec-14	1,442.8	5.7%	1,387.3	5.6%	15,861.1	8.6%	15,592.5	8.6%
2014 Totals		25,535.0		24,993.1		184,975.3	1	L81,973.3	



# Table 9 ii

# Monthly Production by System: Rural Systems 2009 to 2014

2009		Electr	icity Pro	oduction		<b>Related Water Production</b>				
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year	
Rural Systems	Jan-09	17.2	4.3%	15.6	4.2%	70.0	7.7%	66.9	7.5%	
Rural Systems	Feb-09	17.9	4.5%	16.5	4.4%	69.6	7.6%	63.8	7.1%	
Rural Systems	Mar-09	24.9	6.3%	23.2	6.3%	73.1	8.0%	72.5	8.1%	
Rural Systems	Apr-09	29.9	7.5%	27.9	7.5%	73.8	8.1%	72.4	8.1%	
Rural Systems	May-09	42.9	10.8%	40.1	10.8%	83.4	9.1%	80.5	9.0%	
Rural Systems	Jun-09	42.6	10.8%	39.9	10.8%	76.4	8.4%	71.0	7.9%	
Rural Systems	Jul-09	44.4	11.2%	41.8	11.3%	72.6	8.0%	68.0	7.6%	
Rural Systems	Aug-09	44.8	11.3%	42.2	11.4%	76.0	8.3%	76.9	8.6%	
Rural Systems	Sep-09	43.5	11.0%	40.9	11.0%	76.5	8.4%	79.5	8.9%	
Rural Systems	Oct-09	37.6	9.5%	35.1	9.5%	83.4	9.1%	82.3	9.2%	
Rural Systems	Nov-09	27.6	7.0%	25.8	7.0%	78.3	8.6%	80.0	8.9%	
Rural Systems	Dec-09	22.8	5.8%	21.2	5.7%	79.4	8.7%	80.7	9.0%	
2009 Totals		396.0		370.2		912.3		894.4		

2010		Electri	icity Pro	oduction		Related	Water	Productio	n
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
Rural Systems	Jan-10	20.6	4.6%	19.1	4.6%	77.2	8.1%	78.0	8.1%
Rural Systems	Feb-10	20.1	4.5%	18.6	4.5%	70.1	7.3%	71.5	7.5%
Rural Systems	Mar-10	30.3	6.8%	28.3	6.9%	85.5	8.9%	86.4	9.0%
Rural Systems	Apr-10	39.8	9.0%	36.9	8.9%	91.9	9.6%	88.2	9.2%
Rural Systems	May-10	47.1	10.6%	44.1	10.7%	87.9	9.2%	88.3	9.2%
Rural Systems	Jun-10	46.0	10.3%	43.1	10.4%	68.8	7.2%	67.9	7.1%
Rural Systems	Jul-10	47.6	10.7%	44.4	10.8%	70.1	7.3%	67.6	7.0%
Rural Systems	Aug-10	48.9	11.0%	45.6	11.1%	76.7	8.0%	76.7	8.0%
Rural Systems	Sep-10	45.8	10.3%	42.9	10.4%	81.6	8.5%	82.0	8.6%
Rural Systems	Oct-10	44.6	10.0%	41.3	10.0%	83.8	8.7%	86.5	9.0%
Rural Systems	Nov-10	30.3	6.8%	27.4	6.6%	82.6	8.6%	82.3	8.6%
Rural Systems	Dec-10	23.7	5.3%	20.9	5.1%	81.9	8.5%	83.3	8.7%
2010 Totals		444.9		412.8		958.0		958.7	





# Table 9 ii

# Monthly Production by System: Rural Systems 2009 to 2014

2011		Electr	icity Pro	oduction		Related Water Production			
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
Rural Systems	Jan-11	23.0	4.5%	20.6	4.4%	78.7	5.6%	76.5	5.7%
Rural Systems	Feb-11	22.6	4.4%	20.3	4.3%	71.6	5.1%	69.9	5.2%
Rural Systems	Mar-11	32.4	6.3%	29.4	6.3%	82.0	5.8%	80.5	6.0%
Rural Systems	Apr-11	41.8	8.1%	38.2	8.1%	88.3	6.3%	86.1	6.4%
Rural Systems	May-11	54.2	10.6%	50.1	10.7%	130.3	9.2%	122.9	9.1%
Rural Systems	Jun-11	53.9	10.5%	49.7	10.6%	121.0	8.6%	111.9	8.3%
Rural Systems	Jul-11	54.2	10.6%	50.0	10.6%	119.7	8.5%	113.4	8.4%
Rural Systems	Aug-11	58.8	11.5%	54.4	11.6%	133.3	9.4%	126.7	9.4%
Rural Systems	Sep-11	56.2	10.9%	52.0	11.1%	137.9	9.8%	130.5	9.7%
Rural Systems	Oct-11	50.1	9.8%	46.2	9.8%	146.8	10.4%	141.4	10.5%
Rural Systems	Nov-11	35.8	7.0%	32.4	6.9%	146.4	10.4%	141.3	10.5%
Rural Systems	Dec-11	30.1	5.9%	26.8	5.7%	157.1	11.1%	148.0	11.0%
2011 Totals		513.0		470.1		1,413.1		1,349.1	

2012		Electr	icity Pro	oduction		<b>Related Water Production</b>				
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year	
Rural Systems	Jan-12	28.2	4.7%	25.0	4.5%	155.0	7.8%	143.3	7.7%	
Rural Systems	Feb-12	27.9	4.6%	24.9	4.5%	141.4	7.1%	127.0	6.8%	
Rural Systems	Mar-12	36.5	6.0%	33.1	6.0%	155.0	7.8%	142.0	7.6%	
Rural Systems	Apr-12	49.5	8.2%	45.5	8.2%	149.3	7.5%	138.8	7.4%	
Rural Systems	May-12	63.8	10.5%	58.9	10.6%	145.8	7.3%	144.0	7.7%	
Rural Systems	Jun-12	62.7	10.4%	58.0	10.4%	150.5	7.6%	144.4	7.7%	
Rural Systems	Jul-12	65.8	10.9%	60.7	10.9%	170.5	8.6%	160.9	8.6%	
Rural Systems	Aug-12	67.7	11.2%	62.7	11.3%	186.1	9.4%	175.7	9.4%	
Rural Systems	Sep-12	64.7	10.7%	60.1	10.8%	179.1	9.0%	168.6	9.0%	
Rural Systems	Oct-12	57.0	9.4%	52.7	9.5%	182.3	9.2%	172.9	9.2%	
Rural Systems	Nov-12	44.3	7.3%	40.5	7.3%	186.2	9.4%	176.9	9.5%	
Rural Systems	Dec-12	37.2	6.2%	33.8	6.1%	184.5	9.3%	176.1	9.4%	
2012 Totals		605.2		556.0		1,985.7		1,870.6		



# Table 9 ii

Monthly Production by System: Rural Systems 2009 to 2014

2013		Electr	icity Pro	oduction		<b>Related Water Production</b>				
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year	
Rural Systems	Jan-13	33.8	4.9%	30.2	4.8%	193.3	8.4%	177.3	8.2%	
Rural Systems	Feb-13	32.8	4.8%	29.6	4.7%	171.6	7.5%	167.3	7.7%	
Rural Systems	Mar-13	45.3	6.6%	41.6	6.5%	195.1	8.5%	182.7	8.5%	
Rural Systems	Apr-13	57.7	8.4%	53.6	8.4%	189.2	8.3%	179.3	8.3%	
Rural Systems	May-13	72.7	10.6%	68.3	10.7%	201.2	8.8%	189.6	8.8%	
Rural Systems	Jun-13	70.4	10.3%	66.1	10.4%	193.3	8.4%	181.8	8.4%	
Rural Systems	Jul-13	72.9	10.6%	68.3	10.7%	188.8	8.2%	181.0	8.4%	
Rural Systems	Aug-13	70.9	10.4%	66.4	10.5%	184.4	8.0%	172.2	8.0%	
Rural Systems	Sep-13	70.8	10.3%	66.2	10.4%	191.2	8.3%	179.0	8.3%	
Rural Systems	Oct-13	67.2	9.8%	62.7	9.9%	189.3	8.3%	180.6	8.4%	
Rural Systems	Nov-13	48.8	7.1%	44.7	7.0%	193.6	8.5%	180.2	8.3%	
Rural Systems	Dec-13	41.6	6.1%	37.7	5.9%	200.1	8.7%	189.2	8.8%	
2013 Totals		685.0		635.3		2,291.0		2,160.4		

2014		Electri	icity Pro	oduction		Related Water Production				
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year	
Rural Systems	Jan-14	35.9	4.7%	32.3	4.6%	193.6	8.1%	178.6	8.0%	
Rural Systems	Feb-14	35.0	4.6%	31.5	4.5%	167.2	7.0%	158.5	7.1%	
Rural Systems	Mar-14	48.2	6.4%	43.4	6.2%	198.9	8.3%	182.1	8.1%	
Rural Systems	Apr-14	64.5	8.5%	59.3	8.5%	205.0	8.5%	183.8	8.2%	
Rural Systems	May-14	78.7	10.4%	73.4	10.5%	226.9	9.5%	202.9	9.1%	
Rural Systems	Jun-14	79.1	10.5%	73.6	10.5%	217.2	9.1%	197.9	8.8%	
Rural Systems	Jul-14	83.3	11.0%	77.4	11.1%	205.4	8.6%	187.1	8.4%	
Rural Systems	Aug-14	78.5	10.4%	72.9	10.4%	202.6	8.4%	184.7	8.3%	
Rural Systems	Sep-14	78.9	10.4%	73.6	10.5%	200.8	8.4%	197.2	8.8%	
Rural Systems	Oct-14	74.6	9.9%	69.4	9.9%	201.7	8.4%	195.7	8.8%	
Rural Systems	Nov-14	54.5	7.2%	50.1	7.2%	185.8	7.7%	182.3	8.1%	
Rural Systems	Dec-14	45.5	6.0%	41.2	5.9%	192.5	8.0%	185.7	8.3%	
2014 Totals		756.7		698.1		2,397.5		2,236.6		





# Table 9 iii

Monthly Production by System: Dhofar Power System 2009 to 2014

2009		Electri	icity Pr	oduction		<b>Related Water Production</b>					
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year		
Dhofar Power System	Jan-09	95.3	5.4%	94.1	5.4%						
Dhofar Power System	Feb-09	100.3	5.7%	99.0	5.7%						
Dhofar Power System	Mar-09	133.6	7.6%	132.0	7.6%						
Dhofar Power System	Apr-09	155.8	8.9%	154.1	8.9%						
Dhofar Power System	May-09	182.4	10.4%	179.6	10.4%						
Dhofar Power System	Jun-09	181.2	10.3%	178.6	10.3%						
Dhofar Power System	Jul-09	170.7	9.7%	168.3	9.7%						
Dhofar Power System	Aug-09	160.2	9.1%	158.0	9.1%						
Dhofar Power System	Sep-09	151.2	8.6%	149.3	8.6%						
Dhofar Power System	Oct-09	155.6	8.9%	153.9	8.9%						
Dhofar Power System	Nov-09	135.5	7.7%	133.9	7.7%						
Dhofar Power System	Dec-09	135.0	7.7%	133.4	7.7%						
2009 Totals		1,756.8		1,734.1							

2010		Electri	icity Pr	oduction		Related	Water	Productio	n
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
Dhofar Power System	Jan-10	115.0	6.0%	113.4	6.0%				
Dhofar Power System	Feb-10	112.3	5.9%	110.8	5.9%				
Dhofar Power System	Mar-10	150.1	7.8%	148.3	7.8%				
Dhofar Power System	Apr-10	177.0	9.2%	174.5	9.2%				
Dhofar Power System	May-10	215.3	11.2%	211.7	11.2%				
Dhofar Power System	Jun-10	202.1	10.6%	199.8	10.6%				
Dhofar Power System	Jul-10	170.1	8.9%	168.3	8.9%				
Dhofar Power System	Aug-10	160.7	8.4%	159.0	8.4%				
Dhofar Power System	Sep-10	159.1	8.3%	157.5	8.3%				
Dhofar Power System	Oct-10	179.2	9.4%	177.3	9.4%				
Dhofar Power System	Nov-10	147.0	7.7%	145.5	7.7%				
Dhofar Power System	Dec-10	126.7	6.6%	125.2	6.6%				
2010 Totals		1,914.6		1,891.4					



# Table 9 iii

Monthly Production by System: Dhofar Power System 2009 to 2014

2011		Electri	icity Pro	oduction		Related	Water	Productio	n
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
Dhofar Power System	Jan-11	128.4	6.6%	127.1	6.6%				
Dhofar Power System	Feb-11	123.2	6.3%	121.9	6.3%				
Dhofar Power System	Mar-11	158.1	8.1%	156.4	8.1%				
Dhofar Power System	Apr-11	182.2	9.3%	180.5	9.3%				
Dhofar Power System	May-11	215.3	11.0%	213.0	11.0%				
Dhofar Power System	Jun-11	201.0	10.3%	198.9	10.3%				
Dhofar Power System	Jul-11	163.0	8.3%	161.2	8.3%	0.0		0.0	
Dhofar Power System	Aug-11	168.9	8.6%	166.8	8.6%	0.0		0.0	
Dhofar Power System	Sep-11	175.1	8.9%	172.0	8.9%	0.0		0.0	
Dhofar Power System	Oct-11	163.6	8.4%	161.6	8.4%	0.0		0.0	
Dhofar Power System	Nov-11	161.2	8.2%	157.8	8.2%	0.0		0.0	
Dhofar Power System	Dec-11	118.9	6.1%	116.6	6.0%	0.0		0.0	
2011 Totals		1,958.8		1,933.7		0.0		0.0	

2012		Electri	icity Pro	oduction		Related	Water	Productio	n
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
Dhofar Power System	Jan-12	143.4	6.0%	135.9	6.0%	0.0		0.0	
Dhofar Power System	Feb-12	144.3	6.1%	132.3	5.8%	0.0		0.0	
Dhofar Power System	Mar-12	175.0	7.4%	165.3	7.3%	0.0		0.0	
Dhofar Power System	Apr-12	208.2	8.8%	202.6	8.9%	0.0		0.0	
Dhofar Power System	May-12	232.1	9.8%	226.3	10.0%	0.0		0.0	
Dhofar Power System	Jun-12	244.7	10.3%	236.0	10.4%	0.0		0.0	
Dhofar Power System	Jul-12	217.4	9.2%	208.3	9.2%	0.0		0.0	
Dhofar Power System	Aug-12	202.9	8.6%	194.5	8.6%	0.0		0.0	
Dhofar Power System	Sep-12	213.7	9.0%	204.7	9.0%	0.0		0.0	
Dhofar Power System	Oct-12	213.9	9.0%	204.5	9.0%	0.0		0.0	
Dhofar Power System	Nov-12	189.4	8.0%	181.2	8.0%	0.0		0.0	
Dhofar Power System	Dec-12	186.2	7.9%	177.7	7.8%	0.0		0.0	
2012 Totals		2,371.2		2,269.3		0.0		0.0	





# Table 9 iii

Monthly Production by System: Dhofar Power System 2009 to 2014

2013		Electri	icity Pro	oduction		Related	Water	Productio	n
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
Dhofar Power System	Jan-13	158.1	6.0%	150.8	6.1%	106.0	0.6%	106.0	0.6%
Dhofar Power System	Feb-13	152.4	5.8%	144.9	5.9%	212.6	1.3%	212.6	1.3%
Dhofar Power System	Mar-13	200.6	7.6%	192.4	7.8%	246.7	1.5%	246.7	1.5%
Dhofar Power System	Apr-13	236.5	9.0%	225.1	9.1%	920.4	5.5%	920.4	5.5%
Dhofar Power System	May-13	281.6	10.7%	264.2	10.7%	1,978.3	11.8%	1,978.3	11.8%
Dhofar Power System	Jun-13	260.2	9.9%	244.7	9.9%	1,529.2	9.1%	1,529.2	9.1%
Dhofar Power System	Jul-13	214.7	8.2%	198.7	8.1%	1,744.4	10.4%	1,744.4	10.4%
Dhofar Power System	Aug-13	230.2	8.7%	212.8	8.6%	2,056.6	12.3%	2,056.6	12.3%
Dhofar Power System	Sep-13	239.2	9.1%	224.5	9.1%	2,009.8	12.0%	2,009.8	12.0%
Dhofar Power System	Oct-13	246.9	9.4%	229.5	9.3%	2,005.6	12.0%	2,005.6	12.0%
Dhofar Power System	Nov-13	219.6	8.3%	203.3	8.2%	1,968.8	11.8%	1,968.8	11.8%
Dhofar Power System	Dec-13	192.1	7.3%	176.9	7.2%	1,975.5	11.8%	1,975.5	11.8%
2013 Totals		2,632.1		2,467.9		16,753.6		16,753.6	

2014		Electri	icity Pro	oduction		Related	Water	Productio	n
System	Month	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
Dhofar Power System	Jan-14	172.6	6.1%	157.9	6.0%	2,020.0	8.5%	2,020.0	8.5%
Dhofar Power System	Feb-14	169.2	6.0%	155.6	5.9%	1,848.7	7.8%	1,848.7	7.8%
Dhofar Power System	Mar-14	221.0	7.8%	205.7	7.8%	2,104.4	8.9%	2,104.4	8.9%
Dhofar Power System	Apr-14	254.1	9.0%	238.6	9.0%	1,894.3	8.0%	1,894.3	8.0%
Dhofar Power System	May-14	291.5	10.3%	274.3	10.3%	2,120.0	9.0%	2,120.0	9.0%
Dhofar Power System	Jun-14	291.4	10.3%	273.9	10.3%	2,003.5	8.5%	2,003.5	8.5%
Dhofar Power System	Jul-14	241.4	8.5%	225.5	8.5%	1,980.7	8.4%	1,980.7	8.4%
Dhofar Power System	Aug-14	243.0	8.6%	228.6	8.6%	1,888.3	8.0%	1,888.3	8.0%
Dhofar Power System	Sep-14	255.1	9.0%	240.1	9.1%	1,900.8	8.0%	1,900.8	8.0%
Dhofar Power System	Oct-14	259.9	9.2%	244.2	9.2%	2,047.9	8.7%	2,047.9	8.7%
Dhofar Power System	Nov-14	231.1	8.1%	216.5	8.2%	1,838.2	7.8%	1,838.2	7.8%
Dhofar Power System	Dec-14	205.9	7.3%	190.8	7.2%	2,005.8	8.5%	2,005.8	8.5%
2014 Totals		2,836.3		2,651.7		23,652.7		23,652.7	



# Table 10 i

# Quarterly Production by System: 2009 to 2014

		Electri	icity Pr	oduction		Related	Water	Productio	n
System	Period	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
MIS	Qtr 1-09	2,438.3	15.0%	2,304.1	14.7%	26,342.4	23.4%	25,225.3	22.3%
MIS	Qtr 2-09	4,829.0	29.6%	4,696.5	29.9%	30,166.3	26.9%	29,156.2	25.8%
MIS	Qtr 3-09	5,656.3	34.7%	5,495.6	35.0%	31,215.9	27.8%	30,398.6	26.9%
MIS	Qtr 4-09	3,368.9	20.7%	3,222.5	20.5%	24,625.8	21.9%	28,148.9	24.9%
2009 Totals		16,292.5		15,718.8		112,350.3		112,929.0	
MIS	Qtr 1-10	2,720.8	15.6%	2,578.1	15.3%	30,844.6	22.3%	29,625.8	22.9%
MIS	Qtr 2-10	5,259.9	30.1%	5,164.1	30.6%	36,456.1	26.4%	34,229.6	26.5%
MIS	Qtr 3-10	5,725.6	32.8%	5,541.0	32.9%	37,840.9	27.4%	33,991.9	26.3%
MIS	Qtr 4-10	3,752.8	21.5%	3,571.8	21.2%	33,025.5	23.9%	31,391.2	24.3%
2010 Totals		17,459.1		16,855.0		138,167.2		129,238.5	
MIS	Qtr 1-11	3,119.3	16.1%	2,945.9	15.5%	32,255.3	21.4%	30,616.9	21.2%
MIS	Qtr 2-11	5,620.5	29.0%	5,605.8	29.6%	39,058.7	25.9%	37,352.0	25.8%
MIS	Qtr 3-11	6,284.1	32.4%	6,265.5	33.1%	40,587.6	26.9%	38,868.2	26.9%
MIS	Qtr 4-11	4,378.4	22.6%	4,133.2	21.8%	38,906.0	25.8%	37,728.1	26.1%
2011 Totals		19,402.3		18,950.3		150,807.6		144,565.1	
MIS	Qtr 1-12	3,782.3	17.2%	3,561.3	16.5%	37,660.3	22.1%	36,916.5	22.2%
MIS	Qtr 2-12	6,311.3	28.6%	6,265.0	29.0%	44,744.9	26.2%	43,477.7	26.1%
MIS	Qtr 3-12	7,283.9	33.0%	7,204.8	33.3%	45,884.0	26.9%	44,812.3	26.9%
MIS	Qtr 4-12	4,663.4	21.2%	4,587.9	21.2%	42,446.5	24.9%	41,321.3	24.8%
2012 Totals		22,040.8		21,619.1		170,735.7		166,527.7	
MIS	Qtr 1-13	4,114.5	17.9%	3,906.3	17.3%	41,785.2	23.3%	40,717.3	23.4%
MIS	Qtr 2-13	6,523.7	28.5%	6,441.7	28.6%	46,052.6	25.7%	44,839.9	25.7%
MIS	Qtr 3-13	7,491.1	32.7%	7,442.7	33.0%	47,171.5	26.3%	45,875.2	26.3%
MIS	Qtr 4-13	4,793.7	20.9%	4,767.4	21.1%	44,179.5	24.7%	42,894.2	24.6%
2013 Totals		22,923.0		22,558.0		179,188.9		174,326.7	
MIS	Qtr 1-14	4,182.7	16.4%	3,962.5	15.9%	40,252.8	21.8%	39,432.9	21.7%
MIS	Qtr 2-14	7,546.3	29.6%	7,498.6	30.0%	46,981.6	25.4%	46,281.1	25.4%
MIS	Qtr 3-14	8,318.4	32.6%	8,253.8	33.0%	49,923.9	27.0%	49,135.0	27.0%
MIS	Qtr 4-14	5,487.7	21.5%	5,278.2	21.1%	47,817.1	25.9%	47,124.3	25.9%
2014 Totals		25,535.0		24,993.1		184,975.3		181,973.3	





# Table 10 ii

# **Quarterly Production by System: 2009 to 2014**

		Electri	icity Pro	oduction		Related	Water	Productio	n
System	Period	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
Rural Systems	Qtr 1-09	60.0	15.1%	55.3	14.9%	212.7	23.3%	203.2	22.7%
Rural Systems	Qtr 2-09	115.3	29.1%	107.9	29.2%	233.5	25.6%	223.8	25.0%
Rural Systems	Qtr 3-09	132.7	33.5%	125.0	33.8%	225.0	24.7%	224.3	25.1%
Rural Systems	Qtr 4-09	88.0	22.2%	82.1	22.2%	241.1	26.4%	243.0	27.2%
2009 Totals		396.0		370.2		912.3		894.4	
Rural Systems	Qtr 1-10	70.9	15.9%	66.0	16.0%	232.8	24.3%	235.9	24.6%
Rural Systems	Qtr 2-10	133.0	29.9%	124.1	30.1%	248.5	25.9%	244.5	25.5%
Rural Systems	Qtr 3-10	142.3	32.0%	133.0	32.2%	228.4	23.8%	226.3	23.6%
Rural Systems	Qtr 4-10	98.7	22.2%	89.6	21.7%	248.2	25.9%	252.1	26.3%
2010 Totals		444.9		412.8		958.0		958.7	
Rural Systems	Qtr 1-11	78.0	15.2%	70.3	15.0%	232.3	16.4%	226.9	16.8%
Rural Systems	Qtr 2-11	149.8	29.2%	138.0	29.4%	339.6	24.0%	320.8	23.8%
Rural Systems	Qtr 3-11	169.2	33.0%	156.4	33.3%	390.8	27.7%	370.6	27.5%
Rural Systems	Qtr 4-11	116.0	22.6%	105.4	22.4%	450.3	31.9%	430.7	31.9%
2011 Totals		513.0		470.1		1,413.1		1,349.1	
Rural Systems	Qtr 1-12	92.5	15.3%	83.1	14.9%	451.4	22.7%	412.3	22.0%
Rural Systems	Qtr 2-12	176.0	29.1%	162.4	29.2%	445.7	22.4%	427.3	22.8%
Rural Systems	Qtr 3-12	198.2	32.7%	183.4	33.0%	535.7	27.0%	505.1	27.0%
Rural Systems	Qtr 4-12	138.5	22.9%	127.0	22.8%	553.0	27.8%	525.9	28.1%
2012 Totals		605.2		556.0		1,985.7		1,870.6	
Rural Systems	Qtr 1-13	112.0	16.3%	101.4	16.0%	560.0	24.4%	527.3	24.4%
Rural Systems	Qtr 2-13	200.8	29.3%	187.9	29.6%	583.7	25.5%	550.7	25.5%
Rural Systems	Qtr 3-13	214.6	31.3%	200.9	31.6%	564.3	24.6%	532.2	24.6%
Rural Systems	Qtr 4-13	157.6	23.0%	145.1	22.8%	583.1	25.4%	550.1	25.5%
2013 Totals		685.0		635.3		2,291.0		2,160.4	
Rural Systems	Qtr 1-14	119.1	15.7%	107.3	15.4%	559.6	23.3%	519.2	23.2%
Rural Systems	Qtr 2-14	222.3	29.4%	206.3	29.5%	649.1	27.1%	584.6	26.1%
Rural Systems	Qtr 3-14	240.8	31.8%	223.9	32.1%	608.8	25.4%	569.0	25.4%
Rural Systems	Qtr 4-14	174.6	23.1%	160.7	23.0%	580.0	24.2%	563.7	25.2%
2014 Totals		756.7		698.1		2,397.5		2,236.6	



# Table 10 iii

# Quarterly Production by System: 2009 to 2014

		Electr	icity Pr	oduction		Related	Water	Productio	n
System	Period	Gross GWh	% Year	Net GWh	% Year	Gross '000 m3	% Year	Net '000 m3	% Year
Dhofar Power System	Qtr 1-09	329.2	18.7%	325.0	18.7%				
Dhofar Power System	Qtr 2-09	519.4	29.6%	512.3	29.5%				
Dhofar Power System	Qtr 3-09	482.1	27.4%	475.5	27.4%				
Dhofar Power System	Qtr 4-09	426.1	24.3%	421.2	24.3%				
2009 Totals		1,756.8		1,734.1					
Dhofar Power System	Qtr 1-10	377.4	19.7%	372.5	19.7%				
Dhofar Power System	Qtr 2-10	594.4	31.0%	586.0	31.0%				
Dhofar Power System	Qtr 3-10	489.9	25.6%	484.9	25.6%				
Dhofar Power System	Qtr 4-10	452.9	23.7%	448.1	23.7%				
2010 Totals		1,914.6		1,891.4					
Dhofar Power System	Qtr 1-11	409.7	20.9%	405.4	21.0%				
Dhofar Power System	Qtr 2-11	598.5	30.6%	592.4	30.6%				
Dhofar Power System	Qtr 3-11	507.0	25.9%	500.0	25.9%	0.0		0.0	
Dhofar Power System	Qtr 4-11	443.7	22.7%	435.9	22.5%	0.0		0.0	
2011 Totals		1,958.8		1,933.7		0.0		0.0	
Dhofar Power System	Qtr 1-12	462.7	19.5%	433.6	19.1%	0.0		0.0	
Dhofar Power System	Qtr 2-12	685.1	28.9%	664.9	29.3%	0.0		0.0	
Dhofar Power System	Qtr 3-12	633.9	26.7%	607.5	26.8%	0.0		0.0	
Dhofar Power System	Qtr 4-12	589.5	24.9%	563.3	24.8%	0.0		0.0	
2012 Totals		2,371.2		2,269.3		0.0		0.0	
Dhofar Power System	Qtr 1-13	511.2	19.4%	488.2	19.8%	565.3	3.4%	565.3	3.4%
Dhofar Power System	Qtr 2-13	778.3	29.6%	734.0	29.7%	4,427.8	26.4%	4,427.8	26.4%
Dhofar Power System	Qtr 3-13	684.1	26.0%	636.1	25.8%	5,810.7	34.7%	5,810.7	34.7%
Dhofar Power System	Qtr 4-13	658.6	25.0%	609.6	24.7%	5,949.8	35.5%	5,949.8	35.5%
2013 Totals		2,632.1		2,467.9		16,753.6		16,753.6	
Dhofar Power System	Qtr 1-14	562.9	19.8%	519.2	19.6%	5,973.2	25.3%	5,973.2	25.3%
Dhofar Power System	Qtr 2-14	837.0	29.5%	786.7	29.7%	6,017.8	25.4%	6,017.8	25.4%
Dhofar Power System	Qtr 3-14	739.5	26.1%	694.2	26.2%	5,769.8	24.4%	5,769.8	24.4%
Dhofar Power System	Qtr 4-14	696.9	24.6%	651.5	24.6%	5,891.9	24.9%	5,891.9	24.9%
2014 Totals		2,836.3		2,651.7		23,652.7		23,652.7	



# RAEC Capacity, System Peak demands, Electricity and Water Production, and Fuel consumption by Region

I Derated (W)         Installed m3/day         Num         Ref m3/day         Num         Ref m3/day         Num         Num           1,360         4         m3/day         uits         Seate kin         marginu         Gross         Neth         Neth           1,360         4         0         0         500         310         77.2%         947         894           1,360         13         5,100         10         500         310         77.2%         947         894           1,560         13         5,100         10         500         310         77.2%         947         894           16,660         13         6,100         10         500         310         77.2%         947         804           16,660         13         6,100         10         500         310         77.2%         947         50,973           16,600         13         5,100         10         500         314         50,973         50,973           16,600         3         5,100         10         500         314         7992           2006         3         500         19,40         52,4%         8,344         7993 <th>2014</th> <th></th> <th></th> <th></th> <th>Generat</th> <th>Generating Capad</th> <th>icity</th> <th>Water Capacity</th> <th>pacity</th> <th></th> <th>Ś</th> <th>/stem Pea</th> <th>ik Demand</th> <th>ls, Product</th> <th>System Peak Demands, Production &amp; Fuel Consumption</th> <th>Consumpti</th> <th>on</th>	2014				Generat	Generating Capad	icity	Water Capacity	pacity		Ś	/stem Pea	ik Demand	ls, Product	System Peak Demands, Production & Fuel Consumption	Consumpti	on
Initiality         National         Electricity         1994         1,700         1,360         4         0         0         310         77.2%         947           Initiality         Initiality         1,700         1,360         4         0         0         310         77.2%         947           Initiality         1,700         1,360         4         0         0         0         947         947           Initiality         1,700         1,360         13         6,100         10         0         947         947           Initiality         20,323         16,660         13         6,100         10         906         6,314         1           Initiality         20,323         16,660         13         6,100         10         906         934         934           Initiality         Cogen         1985         564         467         3         506         9496         3355           Abr/Mudabi         Cogen         1985         564         400         10         90         934           Abr/Mudabi         Cogen         1985         564         3         506         9346         3346           Abr/Muda	RSNum		Type	Start Year	Installed kW	Derated kW	Num units	Installed m3/day	Num units	Ref SC	System Peak kW	Demand margin 1	Gross MWh	Net MWh	Gross 000'm3	Net 000'm3	Diesel 000'Ltrs
	Al Dah	irah															
Totals for 1 Systems in Ai India         I,700         I,360         A         0         0         A         947           Gig/3         I,700         I,360         I,360         I         6,100         I0         Soc.         I340         I947           Mastrah         Cogen         1976         Z,0,323         I6,660         I3         6,100         I0         Soc.         I340         I341         I340         I341         I         I340         I341         I         I340         I341         I         I341         I         I341         I         I341         I         I341         I         I341         I         I         I341         I         I341         I         I341         I         I         I         I341         I         I         I         I         I         I         I         I         I         I         I         I         I         <	02/020	Masrood	Electricity	1994	1,700	1,360	4	0	0	50oC	310	77.2%	947	894	0	0	306
Indicate Section 1		Totals for 1 Sy	stems in AI D	ahirah	1,700	1,360	4	0	0				947	894	0	0	306
Masimal         Cogen         1976         20,323         16,660         13         6,100         10         500c         13,400         19.6%         6,2514         1           Totals for 1         Systems in All         20,323         16,660         13         6,100         10         500c         13,400         19.6%         6,2514         1           Totals for 1         Systems in All         20,323         16,660         13         6,100         10         500c         13,400         19.6%         6,2514         1           Abuludabi         Cogen         1985         66,000         3         5,00c         3         500c         13,900         64,1%         62,514         1           Abuludabi         Cogen         1985         566         53,061         9         500c         19         90,371           Abuludabi         Electricity         2001         5,016         3         2000         3         500c         19,993         6,374           Al Khuisima         Electricity         2001         1,013         9         500c         19         90,375         24%           Al Khuisima         Electricity         2003         2,003         3	Al Sha	rqiya															
Totals for 1 Systems in A Sind Size         20,323         16,660         13         6,100         10         12         6,5,14         5           tata         20,323         16,660         13         6,100         10         12         6,5,14         5           tata         20,321         10,00         53         5         0.00         19,040         64.1%         92,371         7           AbMudabi         Cogen         1988         53,061         9         500         19,040         64.1%         92,371         7           AbMudabi         Cogen         1988         53,061         9         500         75         62,4%         9,375         7           AbMudabi         Cogen         2010         66,326         53,061         9         500         19,10         64,1%         9,2371         7           Al Khalif         Electricity         2004         5         5006         19,10         64,1%         9,3754         9,3754         9,3754         9,3754         9,3754         9,3754         9,3754         9,3754         9,3754         9,3754         9,3754         9,3754         9,3754         9,3754         9,3754         9,3754         9,3754	02/019		Cogen	1976	20,323	16,660	13	6,100	10	50oC	13,400	19.6%	62,514	50,973	1,232	1,114	17,615
Abuluudabi         Cogen         35         7         200         3         500C         99.5         99.5         7         200         3         500C         99.371         7           Abuluudabi         Cogen         1985         566         53,061         3         200         3         500C         19,040         64.1%         92,371         7           Abuluudabi         Cogen         2010         66,326         53,061         3         200C         1500         64.1%         92,371         7           Al Najuki         Electricity         2006         3         200         3         500C         19,040         64.1%         3,055           Al Najdah         Electricity         2006         1,130         9041         4         6,000         35         500C         19,040         64.1%         3,754           Al Najdah         Electricity         2003         1,760         3         2         6         0         0         0         0         3,764         3,764           Allajaiz         Electricity         2003		Totals for 1 Sy	stems in Al Sl	harqiya	20,323	16,660	13	6,100	10				62,514	50,973	1,232	1,114	17,615
AbuMudabi         Cogen         1985         669         535         7         200         3         50cc         3         50cc         3         30cc         3 <td>Al Wu</td> <td>sta</td> <td></td>	Al Wu	sta															
Sawgrath         Cogen         1998         584         467         3         250         2         500         3         500         3 </td <td>02/001</td> <td>AbuMudabi</td> <td>Cogen</td> <td>1985</td> <td>699</td> <td>535</td> <td>7</td> <td>200</td> <td>m</td> <td>50oC</td> <td></td> <td></td> <td></td> <td></td> <td>43</td> <td>42</td> <td>0</td>	02/001	AbuMudabi	Cogen	1985	699	535	7	200	m	50oC					43	42	0
Al Duqm (new)         Cogen         2010         66,326         53,061         9         6,000         3         500C         19,040         64.1%         92,371         7           Al Khaluf         Electricity         2007         2,508         3,061         3         5         6         900         3         5         6         9         5         6         9         3,055         5         3,055         5         3,055         3,054         3,055         3,054         3,055         3,054         3,055         5         3,054         3,055         3,054         3,055         5         4,948         3,794 </td <td>02/027</td> <td>Sawgrah</td> <td>Cogen</td> <td>1998</td> <td>584</td> <td>467</td> <td>m</td> <td>250</td> <td>2</td> <td>50oC</td> <td></td> <td></td> <td></td> <td></td> <td>49</td> <td>49</td> <td>0</td>	02/027	Sawgrah	Cogen	1998	584	467	m	250	2	50oC					49	49	0
Al Khaluf         Electricity $2007$ $2,508$ $2,006$ $3,056$ $5,046$ $3,055$ $5,346$ $3,055$ $3,055$ $3,055$ $3,056$ $3,056$ $3,056$ $3,056$ $3,056$ $3,056$ $3,056$ $3,056$ $3,056$ $3,056$ $3,056$ $3,056$ $3,056$ $3,056$ $3,734$ $3,724$ $3,724$ $3,724$	02/037	Al Duqm (new)	Cogen	2010	66,326	53,061	6	6,000	m	50oC	19,040	64.1%	92,371	76,804	935	895	23,675
Al Khuiaima         Electricity         2004         5,016         4,012         6         0         500c         1,910         52,4%         8,344           Alajaiz         Electricity         2006         1,130         904         4         0         0         500c         800         11.5%         2,665         3           Alajaiz         Electricity         2007         2,200         1,760         3         0         500c         970         44.9%         3,794         3,794           AlNajdah         Electricity         2003         1,760         320         2         0         0         500c         970         44.9%         3,794         3,794           AlNajdah         Electricity         1999         11,600         9,280         7         0         0         0         500c         9,400         1.9%         3,794         3,	02/005		Electricity	2007	2,508	2,006	m	0	0	50oC	755	62.4%	3,055	2,920			1,005
Alajaiz         Electricity         2006         1,130         904         4         0         0         500C         800         11.5%         2,665         2,794         2,794         2,794         2,794         2,794         2,794         2,794         2,794         2,794         2,794         2,794         2,794         2,794         3,796         3,704 <td>02/006</td> <td></td> <td>Electricity</td> <td>2004</td> <td>5,016</td> <td>4,012</td> <td>9</td> <td>0</td> <td>0</td> <td>50oC</td> <td>1,910</td> <td>52.4%</td> <td>8,344</td> <td>7,979</td> <td></td> <td></td> <td>2,386</td>	02/006		Electricity	2004	5,016	4,012	9	0	0	50oC	1,910	52.4%	8,344	7,979			2,386
AlNajdah         Electricity $2007$ $2,200$ $1,760$ $3$ $70$ $44.9\%$ $3,794$	02/008		Electricity	2006	1,130	904	4	0	0	50oC	800	11.5%	2,665	2,430			879
AlZhaiah         Electricity         2003         400         320         2         0         500C         350         -9.4%         314           Hij         Electricity         1999         11,600         9,280         7         0         0         500C         9,100         1.9%         35,506         3           Hitam         Electricity         1999         11,600         9,280         7         0         0         500C         9,100         1.9%         35,506         3           Ras Madraka         Electricity         2000         1,780         745         5         0         0         0         500C         9,100         1.9%         3,5,506         3           Surab         Electricity         2000         1,780         1,424         4         0         0         0         500C         1,365         5.3.4%         9,888         5,678	02/010		Electricity	2007	2,200	1,760	m	0	0	50oC	970	44.9%	3,794	3,692			1,252
Hij         Electricity         1999         11,600         9,280         7         0         0         500C         9,100         1.9%         35,506         3           Hitam         Electricity         2007         1,348         745         5         0         0         940         -26.2%         4,201         1           Ras Madraka         Electricity         2000         1,348         745         5         0         0         500C         940         -26.2%         4,201           Ras Madraka         Electricity         2000         1,780         1,424         4         0         0         500C         2,185         -53.4%         9,888         7,503         10,503         10,503         10,503         10,503	02/012		Electricity	2003	400	320	2	0	0	50oC	350	-9.4%	314	292			98
Hitam         Electricity         2007         1,348         745         5         0         0         500C         940         -26.2%         4,201           Ras Madraka         Electricity         2000         1,780         1,424         4         0         0         500C         2,185         -53.4%         9,888           Surab         Electricity         2006         1,760         3         0         0         500C         1,365         25.4%         9,888           Dhafrat         Electricity         2006         1,760         3         0         0         500C         1,365         25.4%         5,678         7,678           Al Khadra         Electricity         2009         1,488         4         0         0         0         500C         1,365         27.4%         3,026           Al Khadra         Electricity         2011         12,500         10,000         5         0         0         0         500C         1,080         20,039         1	02/016		Electricity	1999	11,600	9,280	7	0	0	50oC	9,100	1.9%	35,506	35,251			10,247
Ras Madraka         Electricity         2000         1,780         1,424         4         0         0         500C         2,185         -53.4%         9,888         9,678         9,678         9,5678         5,026         1,080         27,4%         3,026         3,026         1,084         20,039         1         1         1<,123         10,010         5         6,450         3,026         3,026         1<,098         20,039         1         1         1         1         1         1         1	02/017	Hitam	Electricity	2007	1,348	745	S	0	0	50oC	940	-26.2%	4,201	3,898			1,412
Surab         Electricity         2006         2,200         1,760         3         0         0         500C         1,365         22.4%         5,678         5,678           Dhafrat         Electricity         2009         1,860         1,488         4         0         0         500C         1,080         27.4%         5,678         3,026           Al Khadra         Electricity         2011         12,500         10,000         5         0         0         0         0         200C         1,080         27.4%         3,026         3,026         3,026         3,026         3,026         20,039         1         20,039         1         20,039         1         20,036         1         20,036         1         20,039         1         20,036         1         20,039         1         2<	02/025		Electricity	2000	1,780	1,424	4	0	0	50oC	2,185	-53.4%	9,888	9,676			3,061
Dhaftat         Electricity         2009         1,860         1,488         4         0         0         500c         1,080         27.4%         3,026           Al Khadra         Electricity         2011         12,500         10,000         5         0         0         500c         1,080         27.4%         3,026         3,003         1         3,026         3,003         1         3,026         3,003         1         3,026         3,003         1         3,026         3,003         1         3,026         3,003         1         3,036         3	02/030		Electricity	2006	2,200	1,760	m	0	0	50oC	1,365	22.4%	5,678	5,557			1,890
Al Khadra         Electricity         2011         12,500         10,000         5         0         0         500C         3,900         61.0%         20,039           Totals for 14 Systems in Al Wrista         110.121         87.762         65         6.450         8         188.880         16	02/045		Electricity	2009	1,860	1,488	4	0	0	50oC	1,080	27.4%	3,026	2,843			1,253
110.121 87.762 65 6.450 8 188.880	02/046	Al Khadra	Electricity	2011	12,500	10,000	S	0	0	50oC	3,900	61.0%	20,039	18,003			5,983
		Totals for 14 §	Systems in Al	Wusta	110,121	87,762	65	6,450	ø				188,880	169,344	1,028	986	53,142

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# **Table 11**

# RAEC Capacity, System Peak demands, Electricity and Water Production, and Fuel consumption by Region

System Peak Demands, Production & Fuel Consumption

Water Capacity

**Generating Capacity** 

2014

					-	•										
RSNum	Facility	Type	Start Year	Installed Derated kW kW	Derated kW	Num units	Installed m3/day	Num units	@ SC	System Peak kW	Demand margin 1	Gross MWh	Net MWh	Gross 000'm3	Net 000'm3	Diesel 000'Ltrs
Dhofar																
01/001	Al Halaniyat	Cogen	1987	1,053	842	m	198	ო	50oC	335	60.2%	1,711	1,133	41	40	517
01/002	Al Mathfa	Electricity	2002	360	288	4	0	0	50oC	228	20.8%	649	644			283
01/004	Andat	Electricity	2011	760	608	m	0	0	50oC	688	-13.2%	2,700	2,693			849
01/007	Ayun	Electricity	2000	720	576	4	0	0	50oC	182	68.4%	604	591			196
01/008	Barbazum	Electricity	2000	880	704	m	0	0	50oC	685	2.7%	3,013	2,997			006
01/012	Dhahabun	Electricity	2000	2,389	1,911	ы	0	0	50oC	1,350	29.4%	5,276	5,263			1,604
01/014	Fatkhat	Electricity	2002	542	434	4	0	0	50oC	220	49.3%	863	841			308
01/016	Hirweeb	Electricity	2001	375	300	m	0	0	50oC	860	-186.7%	3,134	3,112			1,213
01/019	Mahwice	Electricity	2002	397	318	4	0	0	50oC	220	30.8%	788	781			299
01/020	Maqshan	Electricity	2001	1,802	1,442	ъ	0	0	50oC	585	59.4%	2,386	2,344			760
01/021	Mazyunah	Electricity	2000	9,000	7,200	9	0	0	50oC	5,870	18.5%	22,698	21,315			6,305
01/023	Mitan	Electricity	2001	1,887	1,510	4	0	0	50oC	868	40.5%	3,781	3,758			1,337
01/024	Mothorah	Electricity	2006	600	480	с	0	0	50oC	350	27.1%	1,157	1,115			494
01/032	Saih Alkirat	Electricity	2006	32,400	25,920	14	0	0	50oC	13,850	46.6%	73,556	66,929			22,682
01/035	Shahb Asayb	Electricity	2000	11,000	8,800	7	0	0	50oC	7,320	16.8%	32,054	31,324			8,500
01/037	Sharbatat	Electricity	1998	3,542	2,833	ъ	0	0	50oC	1,075	62.1%	4,285	4,215			1,321
01/040	Tushnat	Electricity	2001	905	724	4	0		50oC	332	54.1%	1,352	1,328			422
01/046	Mudhai (new)	Electricity	2011	3,848	3,078	9	0	0	50oC	1,640	46.7%	6,428	5,978			1,990
01/047	Hasik (new)	Electricity	2012	50,000	40,000	9	0	0	50oC	1,393	96.5%	5,778	5,431			1,649
	Totals for 19 Systems in Dhofar	Systems in Dhe	ofar	122,460	97,968	93	198	m				172,216	161,793	41	40	51,628



# RAEC Capacity, System Peak demands, Electricity and Water Production, and Fuel consumption by Region

2014				Generati	enerating Capac	icity	Water Capacit	acity		Ś	/stem Peal	k Demands	s, Producti	System Peak Demands, Production & Fuel Consu	onsumptio	Ę
			Start	Installed Derated	Derated	N	Installed	NIIN	@ <b>0</b>	Svetam		5000	40N	5000	Not-	Diocol
RSNum	Facility	Type	Year	kW	kW	units	m3/day	units	SC	Peak kW	margin 1	MWh	MWh	000'm3	000'm3	000'Ltrs
-																
Musanda	E															

03/006	Kumzar	Cogen	1984	468	374	ч	450	с	50oC	712	-90.4%	141	111	97	95	40
03/002	Dibba	Electricity	1978	21,970	12,824	7	0	0	50oC	18,400	-43.5%	84,410	81,646			23,633
03/005	Khasab	Electricity	1982	57,400	43,520	12	0	0	50oC	47,700	-9.6%	222,818	210,242			58,580
03/007	Madha	Electricity	1982	12,270	9,040	9	0	0	50oC	5,720	36.7%	24,786	23,133			6,960
	Totals for 4	Fotals for 4 Systems in Musandam	andam	92,108	65,758	26	450	ო				332,155	315,131	97	95	89,213
Totals	for 39 RAE	<b>Fotals for 39 RAEC Production Systems</b>	Systems	346,712	269,508	201	13,198	24				756,712	698,134	2,397	2,237	211,904

note 1 Rental generation supported systems with negative demand margins.

**Production & Fuel Consumption** 

	ספוופוסר	illy capa	כונץ	delieiariiig capacity water capacity	hacity
0014 Benjinal Simmany	Installed Derated	Derated	Num	Installed	MumN
	KW	KW	nnits	то/аау	nnits
Totals for 1 RAEC System in Al Dahirah	1,700	1,360	4	0	0
Totals for 1 RAEC Systems in Al Sharqiya	20,323	16,660	13	6,100	10
Totals for 14 RAEC Systems in Al Wusta	110,121	87,762	65	6,450	8
Totals for 19 RAEC Systems in Dhofar	122,460	97,968	93	198	c
Totals for 4 RAEC Systems in Musandam	92,108	65,758	26	450	с
Totals for 39 RAEC Production System	346,712 269,508	269,508	201	13,198	24

Gross MWh	Net MWh	Gross 000'm3	Net 000'm3	Diesel 000'Ltrs
947	894	0	0	306
62,514	50,973	1,232	1,114	17,615
188,880	169,344	1,028	986	53,142
172,216	161,793	41	40	51,628
332,155	315,131	67	95	89,213
756,712	698,134	2,397	2,237	211,904



# Technical and non-technical Losses by System: 2007 to 2014

			Main	Intercon	nected S	ystem			% Changes
GWh	2007	2008	2009	2010	2011	2012	2013	2014	2013-2014
Sent out Generation:	12,367.5	13,649.0	15,530.2	16,552.4	18,385.5	21,022.7	21,998.3	24,462.9	11.2%
'Other' Purchases (note 1):	122.5	385.0	188.6	302.6	564.8	596.4	559.7	530.2	-5.3%
GWh entering systems:	12,490.0	14,034.0	15,718.8	16,855.0	18,950.3	21,619.1	22,558.0	24,993.1	10.8%
Supply to Customers:	9,757.8	11,317.4	12,713.6	14,121.6	16,374.5	18,502.2	20,021.0	22,097.7	10.4%
Total Losses %	<b>21.9%</b>	19.4%	<b>19.1%</b>	16.2%	13.6%	14.4%	11.2%	11.6%	0.3%pp

				Rural S	ystems				% Changes
GWh	2007	2008	2009	2010	2011	2012	2013	2014	2013-2014
Sent out Generation:	289.2	325.8	370.2	412.8	470.1	556.0	635.3	698.1	9.9%
'Other' Purchases (note 1):	29.5	33.5	40.2	48.7	59.9	74.7	94.3	124.7	32.2%
GWh entering systems:	318.7	359.3	410.5	461.5	530.0	630.7	729.6	822.8	12.8%
Supply to Customers (note 2):	273.0	311.5	368.0	420.1	468.9	559.4	650.9	747.1	14.8%
Total Losses %	14.3%	13.3%	10.3%	9.0%	11.5%	11.3%	10.8%	9.2%	-1.6%pp

			D	hofar Pow	ver System	ı			% Changes
GWh	2007	2008	2009	2010	2011	2012	2013	2014	2013-2014
Sent out Generation:	1,373.0	1,467.1	1,688.4	1,819.0	1,907.3	2,269.3	2,467.9	2,651.7	7.4%
'Other' Purchases (note 1):	14.5	2.1	45.7	72.4	26.4	0.0	0.0	0.0	n/a
GWh entering systems:	1,387.5	1,469.2	1,734.1	1,891.4	1,933.7	2,269.3	2,467.9	2,651.7	7.4%
Supply to Customers:	1,162.4	1,221.2	1,401.5	1,590.8	1,668.9	1,896.6	2,118.8	2,327.3	9.8%
Total Losses %	16.2%	<b>16.9</b> %	19.2%	15.9%	13.7%	16.4%	14.1%	12.2%	-1.9% pp

Note 1: MIS "Other" purchases are PWP purchases from MIS connected Exemption Holders and Rental Generation; Rural Systems Other purchases are purchases from PDO; and Dhofar Other purchases are units purchased by PWP from RAEC for sale to DPC SAOC.

Note 2: RAEC Supply includes unallocated 'Other' Supply reported in 2014 SCRC statement.



Annex D: Electricity Subsidy Calculations



# **2014 MIS Outturn Subsidy**

Maximum Allowed Supply Revenue				2014 outturn	2013 Outturn	
Rial Omani	MEDC	MJEC	MZEC	Total	Total	% Change
PC (Energy cost)	135,529,383	103,093,958	108,081,109	346,704,450	296,428,033	16.96%
TUoS (Transmission cost)	26,475,925	19,229,883	22,249,531	67,955,339	65,163,417	4.28%
DUoS (Distribution cost)	43,252,955	32,190,680	55,987,948	131,431,583	130,564,579	0.66%
SB (Supply cost)	10,474,200	7,481,633	8,625,352	26,581,185	24,868,066	6.89%
LF (Licence fee)	70,498	70,498	70,498	211,494	145,860	45.00%
KS (Correction factor)	8,589,228	(2,172,725)	6,429,316	12,845,820	(20,373,017)	-163.05%
Maximum Allowed Supply Revenue	207,213,732	164,239,378	188,585,121	560,038,231	537,542,972	4.18%

Rial Omani	MEDC	MJEC	MZEC	Total	Total	Variance
Approved Subsidy	66,738,531	64,871,757	92,351,922	223,962,210	238,577,521	-6%
Permitted Tariff (& other) Revenue	148,731,193	98,871,352	98,293,199	345,895,744	311,188,809	11%
Actual Regulated Supply Revenue	215,469,724	163,743,109	190,645,121	569,857,954	549,766,330	4%
Outturn Subsidy Requirement	58,482,539	65,368,026	90,291,922	214,142,487	226,354,164	-5%

# Subsidy per kWh

(bz/kWh)	Muscat	Majan	Mazoon	Total	Total	Variance
Economic Cost	23.8	24.5	28.1	25.3	26.8	<b>-6</b> %
Subsidy (Outturn)	6.7	9.8	13.5	9.7	11.3	-14%
Customer Revenue	17.1	14.7	14.7	15.7	15.5	1%

Source: Company SCRCs, Authority calculations

# Key:

- means the cost of bulk supply purchaces from PWP ЫС
  - **TUOS** means Transmission Use of System costs
    - **DUOS** means Distribution Use of System costs
      - means Supply Business costs SB
- means the Supply Business Licence Fees 5
- means the Supply Business Correction Factor KS

All in relevant year t

# **2014 MIS Revenue and Subsidy**





# **2015 MIS Subsidy Forecast**

Maximum Allowed Supply Revenue				2015 Forecast	2014 outturn	
Rial Omani	Muscat	Majan	Mazoon	Total	Total	% Change
PC (Energy cost)	189,770,347	145,593,620	150,682,672	486,046,639	346,704,450	40.19%
TUoS (Transmission cost)	28,218,094	21,581,561	23,697,508	73,497,163	67,955,339	8.16%
DUoS (Distribution cost)	51,653,062	37,800,276	64,417,690	153,871,027	131,431,583	17.07%
SB (Supply cost)	10,500,088	7,657,743	11,464,083	29,621,915	26,581,185	11.44%
LF (Licence fee)	56,794	56,794	56,794	170,382	211,494	-19.44%
KS (Correction factor)	8,588,692	(501,500)	2,081,712	10,168,905	12,845,820	-20.84%
Maximum Allowed Supply Revenue	271,609,693	213,191,493	248,237,035	733,038,222	560,038,231	30.89%

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Rial Omani	Muscat	Majan	Mazoon	Total	Total	Variance
Approved Subsidy	105,010,215	97,825,120	137,623,622	340,458,957	223,962,210	52%
Permitted Tariff (& other) Revenue	166,599,479	115,366,373	110,613,413	392,579,265	345,895,744	13%
Actual Regulated Supply Revenue	271,609,693	213,191,493	248,237,035	733,038,222	569,857,954	29%

# Subsidy per kWh

(bz/kWh)	Muscat	Majan	Mazoon	Total	Total	Variance
Economic Cost	28.0	27.5	33.2	29.4	25.3	16%
Subsidy (Estimate)	10.8	12.6	18.4	13.7	9.7	41%
Customer Revenue	17.2	14.9	14.8	15.7	15.7	1%

Source: Company returns, Authority estimates

# 2015 MIS Revenue & Subsidy

Key:

- means the cost of bulk supply purchaces from PWP S
  - means Transmission Use of System costs TUoS
    - **DUos** means Distribution Use of System costs
      - means Supply Business costs SB
- means the Supply Business Licence Fees 5
- means the Supply Business Correction Factor KS
  - All in relevant year t

# Forecast





# Annex D - (C): RAEC 2014 Outturn Subsidy

# MARt = Gt + TD&St + Fuelt + PCt + LFt - Kt

Where TD&St = at + (bt \* RUDt) + (ct \* CAt)

Item	t=2014
Gt (Generation Costs)	15,707,386
at	9,681,485
bt	3.44
RUDt	703,352
bt Revenue	2,419,531
ct	109.90
CAt	30,904
ct Revenue	3,396,350
TD&St (Trans, Dist & Supply Costs)	15,497,365
Fuelt	28,258,866
PCt (Electricity Purchase Costs)	1,141,690
Licence Fees	284,357
Kt (Correction Factor)	1,513,028
Other adjustments	2,540,000
MARt (Maximum Allowed Revenue)	56,836,636
Customer Revenue	12,362,210
Subsidy	44,474,426
Financial Subsidy	44,474,426
Actual Subsidy payments	44,646,000

bz/kWh	2014
Economic cost	80.8
Revenue	17.6
Subsidy	63.2
Fuel cost	40.2

Sources: RAEC 2014 SCRC, Authority calculation

# Key: MAR means Maximum Allowed Revenue Gt means Generation costs TD&S means Transmission, Distribution & Supply costs Fuel means Fuel costs PC means PDO Purchase Costs where: RUD means Regulated Units Distributed CA means Customer Accounts a, b and c are the Notified Values (NV)

All in relevent year t

# 2014 RAEC Revenue & Subsidy Outturn





# 2015 RAEC Subsidy Forecast

Maximum Allowed Electricity Revenue	2015 Forecast	2014 outturn	
Rial Omani	Total	Total	% Change
MAGR (Generation cost)	56,731,720		
MANR (Networks cost)	18,422,170		
MASR (Supply cost)	5,246,705		
LF (Licence fee)	302,901		
K (Correction factor)	173,382		
Maximum Allowed Electricity Revenue	80,530,114	56,836,636	41.7%

### **Actual Regulated Electricity Revenue**

	Total	Total	Variance
Approved Subsidy	66,452,279	44,646,000	49%
Permitted Tariff (& other) Revenue	14,077,835	12,362,210	14%
Actual Regulated Electricity Revenue	80,530,114	57,008,210	41%

### Subsidy per kWh

(bz/kWh)	Total	Total	Variance
Economic Cost	99.7	80.8	23%
Subsidy (Estimate)	82.3	63.2	30%
Customer Revenue	17.4	17.6	-1%

Note: RAEC Licence (MAR formula) was modified in 2015

Source: Company returns, Authority estimates

# 2015 RAEC Revenue & Subsidy

Key:

MAGR means the Maximum Allowed Generation RevenueMANR means the Maximum Allowed Networks RevenueMASR means the Maximum Allowed Supply Revenue

- LF means the Licence Fees
- K means the Electricity Business Correction Factor

### All in relevant year t





# 2014 Outturn & 2015 Forecast DPC Subsidy

Maximum Allowed Supply Revenue	2015 Forecast	2014 outturn		
Rial Omani	Total	Total	% Change	100
PC (Energy cost)	53,015,518	37,665,530	40.8%	5102
TUoS (Transmission cost)	8,463,712	8,124,178	4.2%	
DUoS (Distribution cost)	17,080,656	16,221,075	5.3%	
SB (Supply cost)	3,926,271	3,259,080	20.5%	
LF (Licence fee)	56,794	70,498	-19.4%	
KS (Correction factor)	(1,444,399)	0		
Maximum Allowed Supply Revenue	83,987,349	65,340,361	28.5%	

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Actual Regulated Supply Revenue			
Rial Omani	Total	Total	Variance
Approved Subsidy	41,258,489	27,040,977	53%
Permitted Tariff (& other) Revenue	42,728,861	36,870,051	16%
Actual Regulated Supply Revenue	83,987,350	63,911,028	31%
Outturn Subsidy Requirement		28,470,310	

Subsidy per kWh (bz/kWh)	Total	Total	Variance
conomic Cost	31.8	27.8	14%
ubsidy (Estimate)	15.6	11.5	36%
ustomer Revenue	16.2	15.7	3%

Source: Company returns, Authority estimates

# Key:

- means the cost of bulk supply purchaces from PWP PC
  - means Transmission Use of System costs TUoS
    - **DUos** means Distribution Use of System costs
      - means Supply Business costs SB 5
- means the Supply Business Licence Fees
- means the Supply Business Correction Factor KS

All in relevant year t



# 2015 DPC Revenue & Subsidy Forecast





Annex E: 2015 Forward Work Programme



# 2015 Forward Work Programme

The 2015 Forward Work Programme includes a number of 'high priority' areas of work:

# GP1 Customer Related KPIs

The Authority will review the data provided by supply licensees on their performance against customer related KPIs incorporated in the Distribution and Supply Price Controls introduced from January 2015. This will include both analysis of reported performance levels, including benchmarking analysis and an assessment of the robustness of the data provided. The review will form a basis for future implementation of an incentive/penalty mechanism.

# GP2 Operational & Financial Benchmarks

The Authority aims to publish baseline 'operational and financial' benchmarks to be agreed with the Ministry of Finance to increase the transparency and consistency of performance reporting and highlight trends in electricity and Related Water sector efficiency. The Authority was unable to progress this work last year and views the preparation of benchmarks as an important priority.

# GP3 Renewable Energy

The Authority will continue to promote the competitive based deployment of renewable energy in Oman and work on finalising and approving 'Agency contracts' (as defined in the distribution and supply licence) to facilitate the purchase of electricity from small scale renewable facilities. The Authority views the structure of agency contracts as an essential tool to facilitate the deployment of small-scale renewable facilities in the Sultanate.



# Other areas of work planned for 2015

In addition to the 'high priority' areas of work outlined above, the Authority expects to progress other areas of work during 2015, including:

## GP4 Employment Survey

The Authority intends to undertake a detailed employment survey as was previously conducted in 2009. The scope of the survey will gather information on Direct employment issues such as female participation, staff turnover and employment duration, skill shortages and staff training expenditures.

## GP5 Permitted Tariffs & Subsidy

The Authority proposes to undertake a study on sector subsidy, including (i) the distribution of subsidy to various customer categories, and (ii) an assessment of current Permitted Tariffs and their effectiveness in promoting efficient use of electricity.

## GP6 Price Control Review – Transmission & Dispatch

Current T&D price controls are due to expire on 31 December 2015. New price controls are therefore required to be set for 1 January 2016.

### GP7 Price Control Review – PWP

Current PWP price controls are due to expire on 31 December 2015. New PWP price controls are therefore required to be set for 1 January 2016.

# GP8 Health and Safety audits of OETC, PWP and DPC

As with previous work programmes the 2015 programme includes actions to improve health and safety standards throughout the sector, including unannounced health and safety audits of electricity installations, full company audits of PWP, OETC and DPC.

# GP9 Protection: Appropriate Person Criteria follow-up

The Authority will conduct a follow-up audit in 2015.

# GP10 Cyber Security, Undergrounding, and Incident Reporting Regulations

The Authority will issue new regulatory obligations in 2015. The new requirements will be implemented through new Licence and Licence Exemption Conditions.



# GP11 Review of Oman Electrical Standards

The Technical Directorate will re-launch a review of OES and work to update and issue revised and new OES throughout 2015.

## GP12 Safety Awareness Campaign

Following the very successful four week campaign hosted at the Children's museum in Muscat in 2013, the Authority will continue to organise safety campaigns in the Sultanate during 2015.

### GP13 Article (106) Consents

The Legal Directorate expects to receive and process several applications for Article (106) consents during 2015.

# GP14 Communication with Customers and Raising Awareness

The Authority will continue its external liaison programme to raise customer awareness by communicating with local communities and stakeholder organisations and publishing further customer information materials.

Authority for Electricity Regulation, Oman



AUTHORITY FOR ELECTRICITY REGULATION, OMAN



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