



# CEM Quarterly Report

(Jan - Mar 2003)

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## 1. Corporate Highlights

### **Electricity consumption support programmes**

In our quest to deliver outstanding services for our customers, we implemented the *Senior Citizen Support Programme* anticipating a benefit of 11% on the first 88 units of electricity consumption to citizens aged 65 above; and the *Storefront Advertising Support Programme*, anticipating a benefit of 20.3% on the specific consumption of the sign's installed capacity load, creating a favourable condition for storeowners to promote their businesses. We expect to contribute for the development of the economy and to improve the well being of Macau SAR citizens.

### **Signing of Contract with Free Markets Inc on Strategic e-Sourcing**

A new strategic e-sourcing was implemented on FreeMarkets QS technology platform and operation services provided by FreeMarkets. This innovative web-based solution project allows CEM to achieve savings across the organization and improve efficiency of its sourcing operation. The new practice complements CEM overall strategy to drive cost saving and efficiency enhancement, which is the base for a sustainable offer of better services at better prices.

### **Signing of Term Loan Facility with Bank of China**

A MOP150 million medium term loan facility, together with letter of credit to the amounts of EUR19 million and JPY590 million recently agreed with Bank of China, provided the external financial support for CEM to carry out the NOx and Particulate Emission Reduction Project. The project started in January 2003 and is expected to be completed by the summer of 2004. By then, the Selective Catalytic Reduction system, will significantly contribute to reduce the pollutant emissions in the area.

### **Mystery Shopper Programme**

As a continuous effort to improve customer services, the CEM Mystery Shopper Programme was organized as periodic exercise to assess the quality of front-line customer services while identifying areas of improvement. The programme started in June 2002 and ran for a period of six-month, involving Mystery Shoppers nominated by the 16 participating associations of the CEM Customer Liaison Committee. Posted as everyday customers they were required to assess CEM services performance at the Customer Contact Centre. CEM would device plans to address the identified areas for improvement in the near future.



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## 2. Electricity Sales by Classification

	1Q2002			1Q2003			Change 2003/2002	
	Number of Contracts (0s)	Sales (MWh)	Market Share (%)	Number of Contracts (0s)	Sales (MWh)	Market Share (%)	Number	Sales
<b>INDUSTRIAL</b>	<b>2,475</b>	<b>26,463</b>	<b>8.1%</b>	<b>2,447</b>	<b>25,205</b>	<b>7.8%</b>	<b>-1.1%</b>	<b>-4.8%</b>
<b>COMMERCIAL</b>	<b>17,318</b>	<b>134,516</b>	<b>41.1%</b>	<b>17,937</b>	<b>134,124</b>	<b>41.4%</b>	<b>+3.6%</b>	<b>-0.3%</b>
<b>RESIDENTIAL</b>	<b>164,958</b>	<b>104,437</b>	<b>31.9%</b>	<b>167,890</b>	<b>103,559</b>	<b>32.0%</b>	<b>+1.8%</b>	<b>-0.8%</b>
<b>PUBLIC ADMINISTRATION</b>	<b>3,189</b>	<b>61,639</b>	<b>18.8%</b>	<b>3,342</b>	<b>60,771</b>	<b>18.8%</b>	<b>+4.8%</b>	<b>-1.4%</b>
<b>TOTAL</b>	<b>187,940</b>	<b>327,055</b>	<b>100%</b>	<b>191,616</b>	<b>323,659</b>	<b>100%</b>	<b>+2.0%</b>	<b>-1.0%</b>

Although a growth of 2% of number of clients and higher temperature than average, sales are down 1%.

## 3. Monthly Peak Load

MVA	1Q2002	1Q2003	Variance (%)
Jan	239.9	238.4	-0.63
Feb	240.4	249.6	3.83
Mar	259.7	264.3	1.77

The monthly peak demand increase is mostly due to the temperature, which was 18,2°C in average, 0.8% up from last year.

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## 4. M - Index

mm:ss	1Q2002	1Q2003	Variance (%)
Jan	00:09	01:32	922
Feb	05:25	00:14	-96
Mar	00:06	00:23	283
Average	05:40	02:09	-62

$M\text{-index} = \Sigma i / \Sigma P_i$

$\Sigma i$  = Total interruption power x interruption time

$\Sigma P_i$  = Sum of installed power (kVA) for all the 10/0.4kV customer substations

**M-index represents the equivalent time of energy not supplied to the network.** The figures indicated include planned interruption.

The network availability index (ASAI) went up from 99.998% last year to 99.999% this year.

## 5. SAIDI - System Average Interruption Duration Index

	1Q2002	1Q2003	Variance (%)
Jan	0.08	0.13	62
Feb	5.66	0.12	-98
Mar	0.06	0.49	715
Average	5.80	0.74	-87

$SAIDI = \Sigma (\text{Affected Customers} \times \text{Affected Hours}) / \text{Total Customers Served}$

SAIDI represents the equivalent interruption time per customer.

**SAIDI significantly improved over last year.**

## 6. SAIFI - System Average

	2002	2002	Variance (%)
Jan	0.00	0.02	301
Feb	0.07	0.00	-93
Mar	0.01	0.02	260
YTD	0.08	0.05	-40

$SAIFI = \Sigma (\text{Affected Customers}) / \text{Total Customers Served}$

SAIFI represents the percentage of customers affected by an outage.

**SAIFI significantly improved over last year.**

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## 7. Number of Work Accidents:

Month/Year	1Q2002	1Q2003
Jan	1	0
Feb	1	0
Mar	1	1
Total	3	1

1 out of 3 in year 2002 were related to traffic accidents. In the first two months, there is no accident occurred. So all the accident index has a great drop.

## 8. WAFI - Work Accident Frequency Index

	2002	2003	Variance %
Jan	7.65	0.00	-100
Feb	8.84	0.00	-100
Mar	8.67	2.75	-68.28

WAFI significantly improved over last year.

## 9. WAGI - Work Accident Gravity Index

	2002	2003	Variance %
Jan	0.19	0.00	-100
Feb	0.11	0.00	-100
Mar	0.08	0.02	-75

WAGI significantly improved over last year.