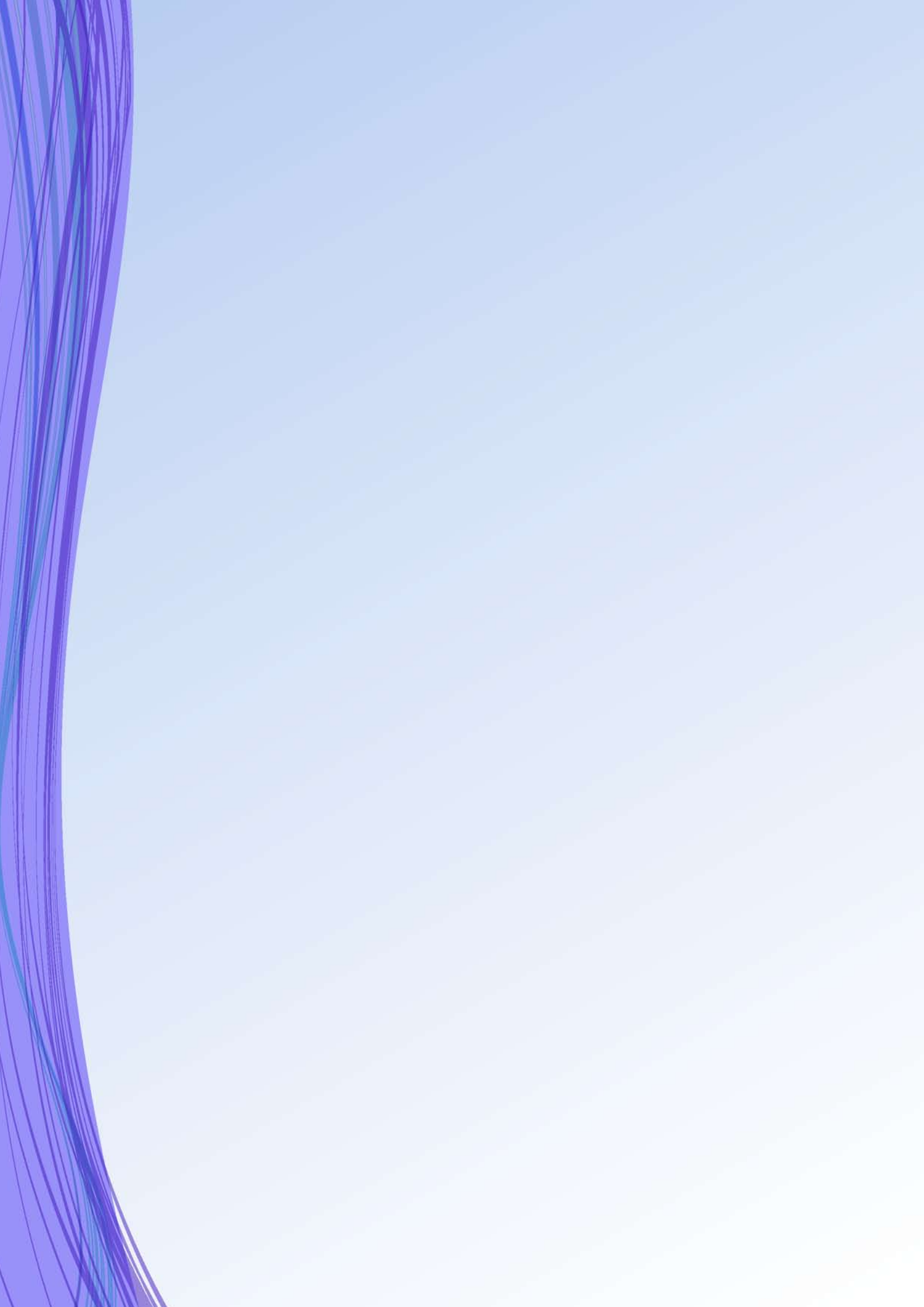


Hashemite Kingdom of Jordan



**Electricity Regulatory Commission**

Annual Report  
2008





**HIS MAJESTY  
KING ABDULLAH II BIN AL-HUSSEIN**





# Board of Commissioners

## Chairman

Dr. Hisham Khatib \*

## Vice Chairman

Mr. Adeeb Tahboub

## Commissioners

Dr. Ghaleb Ma'abrah

Dr. Kamal Al Qudah

Dr. Imad Nejdawi

\* Till 22/4/2009



## Table of contents

• Vision	7
• Mission	7
• List of Acronyms	8
• Abbreviations	9
• The Organizational Structure	10
• Executive Summary	12
• The Regulatory Framework of the Electricity Sector:	14
• Achievements of the Commission in 2008	17
• General Assessment of the Electricity Sector	19
• Performance of the Electricity Sector in 2008	22
• Development of the Electricity Sector in Jordan	32
• Statistics (List of Tables)	
• Financial Reports for 2008	56

## Measures:

MW	Mega Watt
kWh	Kilo Watt Hour
MWh	Mega Watt Hour
GWh	Giga Watt Hour
kVA	Kilo Volt Ampere
MVA	Mega Volt Ampere
KV	Kilo Volt
Kgoe	Kilogram Oil Equivalent
Toe	Ton Oil Equivalent
Km	Kilometer
Mbtu	Million British Thermal Unit
M3	Cubic Meter

## Vision

A regulatory authority that looks after customers and investors' interests organizes and develops a highly efficient electricity sector that offers a distinguished service in compatibility with the international standards.

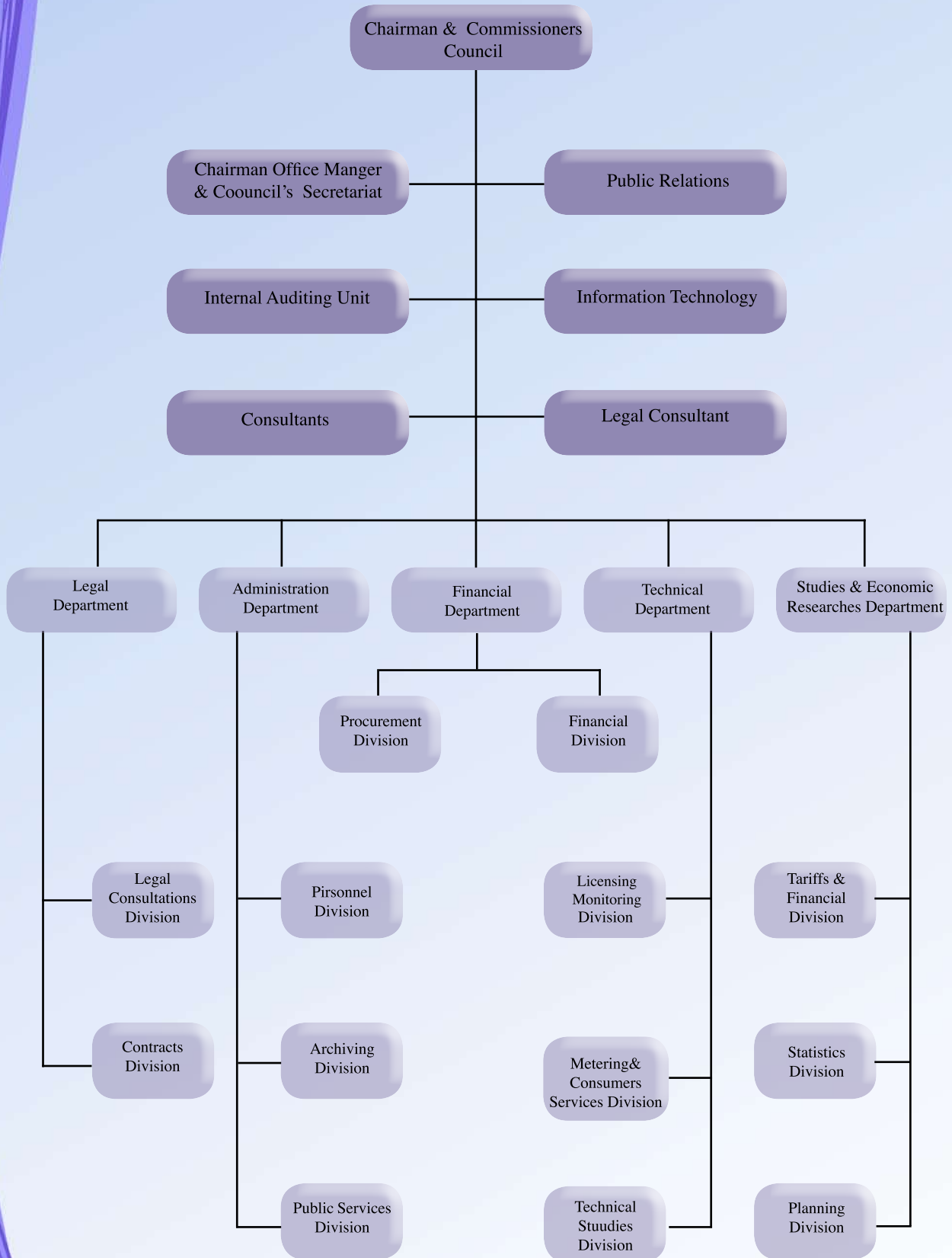
## mission

Providing the sector with a monitoring environment that insures the fair balance between the customers, and investors' interests, supports the competition in the sector, and attracts the investments in the line with the national goals through the issuance of a that fit with international standard and regulatory tools .





# The Organizational Structure



## List of Acronyms

- CEGCO - Central Electricity Generation Company
- EDCO - Electric Distribution Company
- ERC - Electricity Regulatory Commission
- IDECO - Irbid District Electrical Company
- IPP - Independent Power Producer
- JEPCO - Jordan Electric Power Company
- MEMR - Ministry of Energy and Mineral Resources
- NEPCO - National Electric Power Company
- SEPGCO - Al-Samra Electric Power Generating Company





## Executive Summary

The world has faced two international crises in 2008; the huge increment in fuel prices where the oil price has reached to an extreme of 147\$/barrel and the financial crisis that led to a downturn the world never witnessed since 1929.

Even with these crisis the Jordanian electrical sector did not face any major increase in the maximum load records or the energy consumption records, as the maximum load was recorded to be 2230 MW, with an increment percentage of 4.7% compared to 2007. It should be mentioned here that the individual energy consumption has reached to the value of 1967 KWh in 2008 compared to 1845 KWh in 2007.

One of the top priority functions the ERC maintains is monitoring the companies compliance with the performance standards required for carrying their duties, so it was showed that the national electric power company(NEPCO) which is the exclusive system operator licensee for the kingdom and through its monitoring and control center, was capable of maintaining a safe and economical operation for the electrical system based on operating the generation units according to their efficiency and their energy production costs. In addition to the major rule of the electrical interconnections connecting the Jordanian system with the Egyptian and Syrian systems that have supported the safe performance of the Jordanian electrical system in the normal and emergency operation conditions.

In the generation side, the high increase in the oil prices has led to an increment in the energy production cost in a percentage of 38%, this resulted despite the fact that eighty percent of the total fuel used for the energy production comes from the Egyptian natural gas with its relatively constant prices, giving also the fact that the natural gas combined cycle based generation units approximately provides 40% of the total power generation.

The year 2008 has also witnessed a huge increments in the heavy fuel prices, this category approximately structures the fuel used in the electricity sector, these increments led to a (38.769) million JD total losses to NEPCO excluding the losses resulted from the differences in the currency values; due to this problem the ERC kept on trying to provide the appropriate sources to cover these losses for helping the company into keeping function on the right track.

In addition, power generation has started in its first stage in the AES Jordan generation plant in August 2008. This plant is considered the first fully private power station in the Kingdom. A tender has also been issued for the construction of a second power plant financed by the private sector in the Qatraneh region.

Many construction and expansion projects have been proceeded with in the main and secondary substations and the transmission lines in addition to construction of new networks in various areas around the kingdom that can accommodate for the increasing demands and power loads.

The electrical system restructuring process continued with the finishing of the privatization for both EDCO and IDECO.

The commission has achieved a number of important tasks in 2008. In the licensing field, the commission issued licenses for the AES Jordan and SEPGCO as well as IDECO and EDCO.

On the other hand, the suggested changes in the grid code regarding the requirements for accounting the Wind Power have been approved. In the performance standards field, the bulk supply performance standards document was approved and the third annex of the bulk supply license was completed.

The commission continued its mission regarding customer service in 2008. All the disputes and complaints that were received by the commission were soundly solved implementing solutions that were satisfactory to all sides, by direct contact and official correspondence with the respective companies. In some cases, field inspection of the complaint site was done and the needed measures were taken to diagnose the problem. The total number of complaints that were filed to the commission in 2008 was 412.

On the march 14, 2008 the commission adjusted the electrical tariff side to side with the release of the oil and fuel market from supervision in order to compensate the electricity sector from the effects produced by the changes in the prices of the oil products used in power generation, especially heavy fuel oil. The tariff was raised for final consumers (retail tariff) by 23.6% on average. This was accompanied by modifications on the bulk tariff for the distribution companies and for principle consumers that are connected by the networks of NEPCO.

Due to the increase in the costs and the size of the investments in the electricity sector and to make sure that electricity can safely and stably reach all the areas in the Kingdom and still maintain a competing price leading to mutual benefit for the electrical system and the customers, the commission started a campaign through the media aiming at increasing the local awareness of the customers about the methods that can be used to reduce power usage through the media.





## **The Regulatory Framework of the Electricity Sector:**

### **Legal Framework:**

The mandate of the commission is stated in the temporary electricity law number 64 issued in 2002.

### **ERC Establishment**

The ERC is a financially and administratively independent commission, established to achieve the targets set under the abovementioned law and in line with the government's course to attract private investments and to restructure the electricity sector in order to separate its major activities. This led to giving the Ministry of Energy and Mineral Resources the policy making role, and empowering an independent commission for regulating, monitoring and assigning the role of investment and operation to the undertaking electricity companies with potential participation of the private sector.

### **ERC Objectives**

- To maintain an effective structure of the sector and its development with the aim of enhancing its economic viability and assuring that secure, stable, durable and high quality services are provided in the fields of generation, transmission and distribution of the electrical power and in the operation of the transmission system.
- To encourage investment in the electricity sector, improve operational efficiency and ensure the sale of electricity at reasonable prices. Also to ensure that enterprises operating in the sector comply with the current environment protection standards and general public safety requirements applicable in the Kingdom.
- To ensure that the supply of electric power is being provided sufficiently to consumers and that electricity prices charged by the licensee are sufficient to finance its activities and ensure a reasonable rate of return on its investments.
- To protect the interests of consumers provided that they obey the electric power supply connection terms issued by the licensee and are approved by the ERC.
- To regulate the sector on the basis of justice and balance between the interests of consumers, licensees, investors and any other related party.

### **ERC Mandates:**

- To license the entities engaged in generation, transmission, supply, distribution and operation of the transmission system.
- To organize the generation, transmission, supply, distribution and operation of the transmission system in the Kingdom so as to provide durable electrical services for consumers in an effective and efficient manner utilizing the latest technological developments.
- To determine the electric tariff, subscription fees, and the incurring allowances for services and deposits and the cost of connection to the transmission and distribution system.

- To participate in the development of standard specifications for electrical equipment and installations, in collaboration with other concerned parties, leading to such standards being issued by the Standards and Meteorology Corporation.
- To participate with the concerned parties in the development of the obligations needed to enforce environmental standards to which electrical installations ought to adhere and to have them issued in a legislative manner.
- To provide expertise and advice on any matter concerning the sector so as to achieve the ERC objectives and to recommend to the MEMR, in a timely manner, the sector's readiness to transfer from a single buyer model to a competitive market structure, and any other functions or powers regarding the ERC activities in accordance with the provisions of the General electricity Law.





## **Achievements of the Commission in 2008:**

Continuing the work the ERC aims to maintain for achieving the essential goals that are the objectives of establishing this commission in the first place, the year 2008 witnessed accomplishing many important achievements in the electricity sector, these achievements are:

### **In the Licensing Field:**

- Issued a License to AES Jordan after approving it on February 25, 2008.
- Issued a License to SEPGCO generation Company after approving it on the 1st of September, 2008.
- Issued a License to IDECO after approving it in June 30, 2008.
- Issued a License to EDCO after approving it in June 30, 2008.

### **In the Codes Field:**

- Setting a draft for the system operator performance standards and completion of the third annex of the system operator license.
- Approval of the suggested changes on the grid code that regulate the merging of wind power plants with the transmission network.
- Setting the bulk supply performance standards and completing the third annex of the bulk supply license.

### **In the Customer Service Field:**

In the year 2008 the commission received 412 inquires. These inquiries consisted of questions or information requests about the tariff issues and the methods used to calculate the bills, and questions regarding power consumed by air conditioners if used for heating or cooling and the methods of reducing electricity consumption and the costs and procedures for getting electrical connection.

Out of the 412 inquires received by the commission, 23 of which were related to NEPCO and 389 were about the three electricity distribution company, these are classified into: 79 quality of supply, 85 quality of power, 225 customer services. The commission also successfully solved many disputes and found solutions for the complaints that were satisfactory to all the sides, either by addressing the corresponding companies by phone or other official means. In some cases, field inspection was done on the site of the complaint and the necessary measurements were taken. On-the-phone complaints were addressed as seriously as written ones and were followed up with the related companies. The commission has allocated a free-call phone line (080022670) to receive customer's complaints. In most cases, the personnel in the electricity companies responded positively regarding solving these cases and in the fastest manner possible.

The total number of electricity meters that were approved in the respective centers that are under the wing of the distribution companies in 2008 was 84528 meters which constitute 99.2% of the total number of meters sent for approval. The use of the new digital meters has been started at the end of the year 2008.

## **In the Computerization Field:**

- The commission continued with its plans to computerize its main activities in 2008. Some activities were completely computerized including: Purchases and Supplies, Complaints and inside and outside memos.
- The Archiving and Documentation system was completed, which allows for mail correspondence between the commission and other departments using emails which will reduce the time needed for such exchange of information and make it easier for follow up in addition to reducing expenditures.
- An archiving system was constructed aiming at archiving all the documents and the visual resources in the commission electronically in a way that maintains the original hard copies and hastens the process of getting the needed information. Most of the documents and research papers in the commission have been already archived successfully.
- The (Data Ware House) system is being built to provide information data bases that the electricity companies in the kingdom should submit to the commission as is stated in the requirements for obtaining the licenses and the codes of standards that govern their activities, and the work on the first stage of this project was finished in the year 2008.
- The Portal (user interface) was created allowing the employees to exchange information and get access to the electronic services in the commission without the need for paperwork

## **In the Tariff Field:**

The commission changed the tariff on March 14, 2008 after the liberalization of the prices of oil fuels. The electricity sector was affected by the changes in the fuel prices, especially the heavy fuel oil. As a result, the tariff was raised on the final consumers (retail tariff) by a total of 23.6%. This was accompanied with a raise in the bulk supply tariff for distribution companies and the principle consumers that are supplied by NEPCO.

The commission, however, made sure that the first category consumers who consume

Up to 60 kWh /month are supported and not subject to any rise in the electricity tariff in order to maintain the social security which the government aims to assure.

**The tariff of March 14, 2008 included a number of modifications that can be summarized by the following:**

1. Modifying the peak load tariff so as to accommodate for the increment in the capacity charge paid by NEPCO to the generation companies.
2. Applying the large industries tariff on the principle consumers and those whose maximum load needed exceed 25 MVA and are connected to the power grid after implementing these changes in the entire kingdom.
3. Changing the minimum power factor to 0.88.
4. Merging the tariff for the commerce sector, Radio and Television and Hotels into one tariff named the commercial customer's tariff.



5. Applying the agricultural tri-tariff on all the agricultural customers whose loads exceed 100 kVA and are connected to the power grid after the application of these changes.
6. Applying the tri-tariff on Hotels that are rated as 4 stars and above and are connected to the power grid after application of these changes.

### **In the Dispute Resolution Field:**

The commission used the authority granted by the general electricity law to solve certain cases and disputes in the sector and judged in many problems that arose between licensees themselves or between licensees and consumers in matters related with provision of electricity and supplying it and quality of service and tariffs.

And even in the cases where one of the dispute parties went to the high court of justice for further proceedings, the high court of justice agreed with the commission's decision in all such cases.

### **In Training and Development Field:**

The commission participated in many conferences and workshops in the field of power and electricity in addition to workshops and the demand side management and tariff and power efficiency. Employees of the commission have participated in many training courses home and abroad in many fields that relate to the work and missions of the commission and organization and restructuring the sector.

A workshop was held under the title: Non-technical Power Loss/ Problems and Solutions. This workshop aimed at increasing the quality of electrical services provided to the customers and solving the problems faced by the licensed companies. This workshop introduced a group of recommendations that the commission is currently trying to implement in cooperation with the different related entities.

#### **A media awareness Campaign to Reduce Electrical Power Consumption:**

In its way to secure providing the different areas of the kingdom with stable, safe and high quality electrical services, the commission started a campaign through the media; including TV, Radio, Newspapers, SMS's to educated customers about the importance of reducing power consumption in addition to explaining methods to attain that. In addition to that, the commission has provided an extension to its official site ([www.erc.gov.jo](http://www.erc.gov.jo)) that is concerned with such aspects.

### **General Assessment of the Electricity Sector:**

The increase in the demand on electrical power continued in 2008 in high rates that reached as much as 7.4%, and the maximum load in the unified system reached 2230 MW with a growth rate of 4.7%. NEPCO (the system operator), however, was able to cover the demand with high efficiency through coordination with the generation companies and utilization of imported power through the interconnection lines.

Although the general performance was good, some accidents occurred that resulted in exposing customers and equipment to damages. Unfortunately, two accidents resulted in the electrocution and death of two citizens and injury of a third.

The weather conditions in January 2008 presented mainly by snowfall in the various areas of the kingdom resulted in loss of power supply to some customers for relatively long periods of time due to reasons out of control by the related electricity companies. On the other hand, one of the transformers of the gas units in Rahab's Power station underwent an electrical malfunction which caused it to become out of service. This caused the unit to stop production of power for about 6 months. This resulted in 40% reduction in power generation in that power station for the mentioned period. This pause resulted in huge operational losses as Rahab's Power station is one of the combined cycle based stations and one of the most cost-effective stations and is considered a support for the maximum generation capacity to cover the electrical demands.

The Electrical loss in the transmission and distribution networks reached 15.9% and is posing a huge pressure on the efficiency of the system which requires increased efforts from the electrical companies to reduce this percentage to the acceptable limits.

The period of interruption per customer in the Kingdom maintained in 2008 an average of approximately 7.5 hours, this was due to the snowstorm that occurred in January. Still, this figure points that the stability and continuity of supply in the kingdom is still within acceptable limits.

### **Financial Performance:**

The government proceeded with the privatization program in 2008, and to do so it has sold a 100% of its holding in EDCO shares and the 55.4% shares holding in IDECO to the Kingdom Electricity Company for Power Investments.





As for the private sector, the year 2008 was a prosperous year. All companies succeeded in yielding acceptable return that are more as just allowed according to their license or concession agreement. Unfortunately, this does not apply to NEPCO which suffered huge losses due to the unexpected increase in the heavy fuel oil prices during the mid of 2008. Table (1) shows the total assets and profits (losses) yielded by the companies of the sector in the year 2008.

Table (1)  
Total assets and profits acquired by companies of the sector in 2008

Company Name	Total assets (Thousand JDs) 2008	Profit / (loss) * (Thousand JDs) 2008
CEGCO	462,486	21,959
SEPGCO	228,965	5,977
AES Jordan	155,942	1,108
NEPCO	578,701	38,769
EDCO	433,708	17,017
IDECO	110,967	3,713
IDECO	195,393	4,045

\*Profits don't include effect of forex rates.

Table (2) shows the average of the costs of generation, transmission and distribution per 1 kWh in 2008.

Table (2)  
Average of costs of generation, transmission and distribution per 1 kWh in 2008

Sector	Item	Fils/K.W.H (2007)	Fils/K.W.H (2008)	Difference (%)
Generation	Fuel	23.6	35.4	50
	Administrative, maintenance, funding and miscellaneous	7.6	8.1	30
	Total	31.5	43.4	38
Transmission	Cost of the national network for each sold unit	4.8	4.4	-8
	Total cost of sold units	36.3	47.8	32
Distribution	Distribution costs per unit sold	7.3	8.8	21
	Total costs of sold units from distribution networks	34.6	56.6	64

## Development of the Electricity Sector in 2008:

The electricity sector experienced many changes in its framework ever since the issuing of Electricity Law number 64 in 2002, including the orientation towards privatization and encouragement of the private sector investment both in the generation sector and the distribution sector. As a result of these changes, the electricity system in Jordan is now divided according to activities into three categories: Generation represented by CEGCO, SEPGCO and AES Jordan; transmission through high-voltage lines which is done by the NEPCO, which is also responsible of the interconnection with Egypt and Syria, and the operation of the electric system; and finally distribution of electricity through medium and low voltage lines to supply end consumers which is done by JEPCO, IDECO and EDCO, each according to their area. Following in their footsteps, the commission has granted distribution licenses to IDECO and EDCO after they got privatized starting from August 2008.

### Maximum Load:

Jordan is still suffering from a huge increase in demand for electrical power due to many factors that have affected the rate in the last years, and are still affecting it. Some of these factors include population growth, naturally and due to immigrations from nearby Arabic countries in addition to the economical growth that occurred in this period and the change in the patterns of electricity consumption. The maximum load in the electricity system reached 2230 MW in 2008 in comparison to 2130 MW. In 2007 with a growth rate of 4.7%. These figures represent morning loads. Evening maximum load in 2008 reached 2200 MW with a minimum load of 950 MW. The load factor of available capacity in 2008 was 70.4% in comparison to 69.6% in 2007. Figure (1) shows a graph representing the average daily load on the electric system in 2008 in comparison to 2007. Figure (2) shows the growth in the maximum load in the period (1998 -2008)

Figure (1)

Daily load in the electric system in 2008 in comparison to 2007

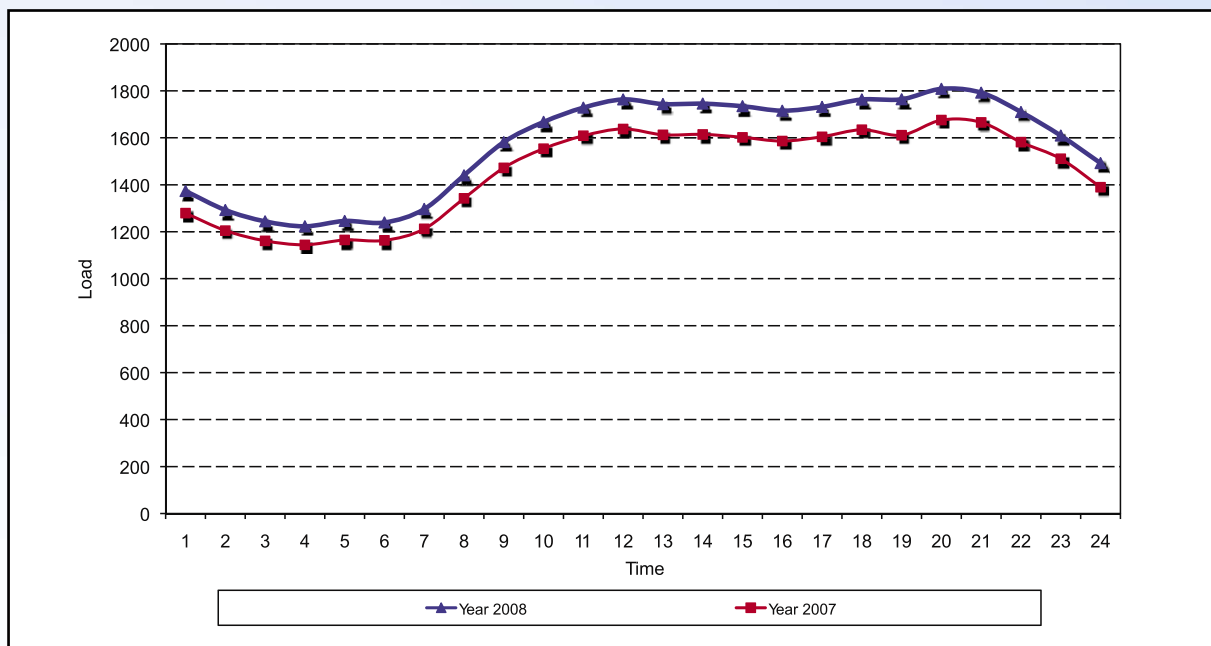
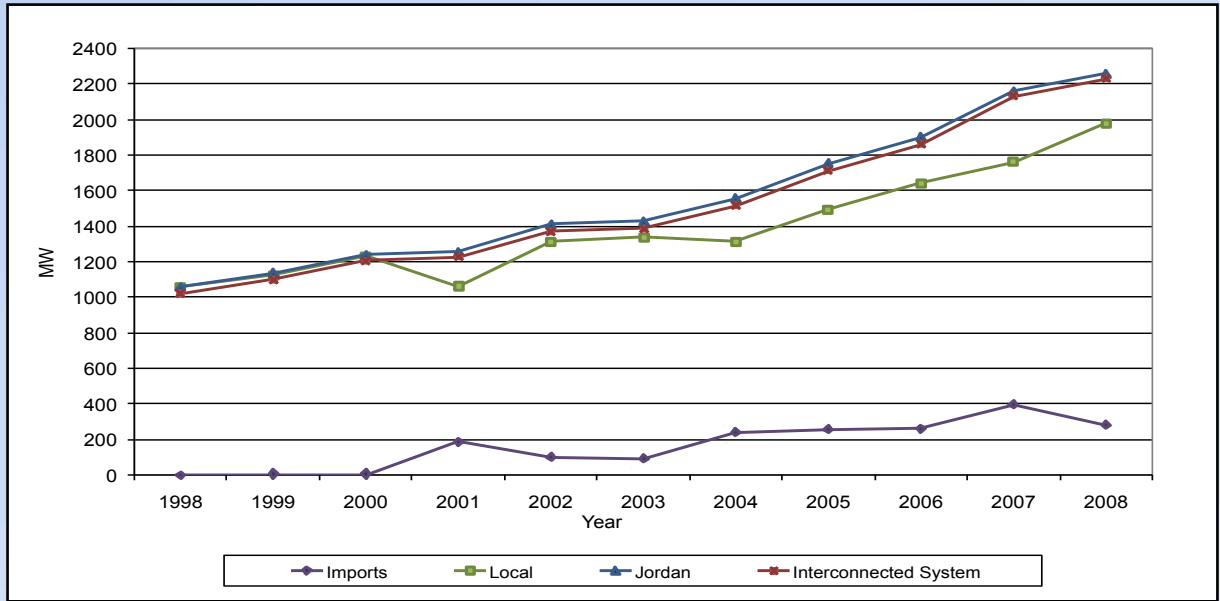


Figure (2)

Growth in the maximum load in the period (1998- 2008)

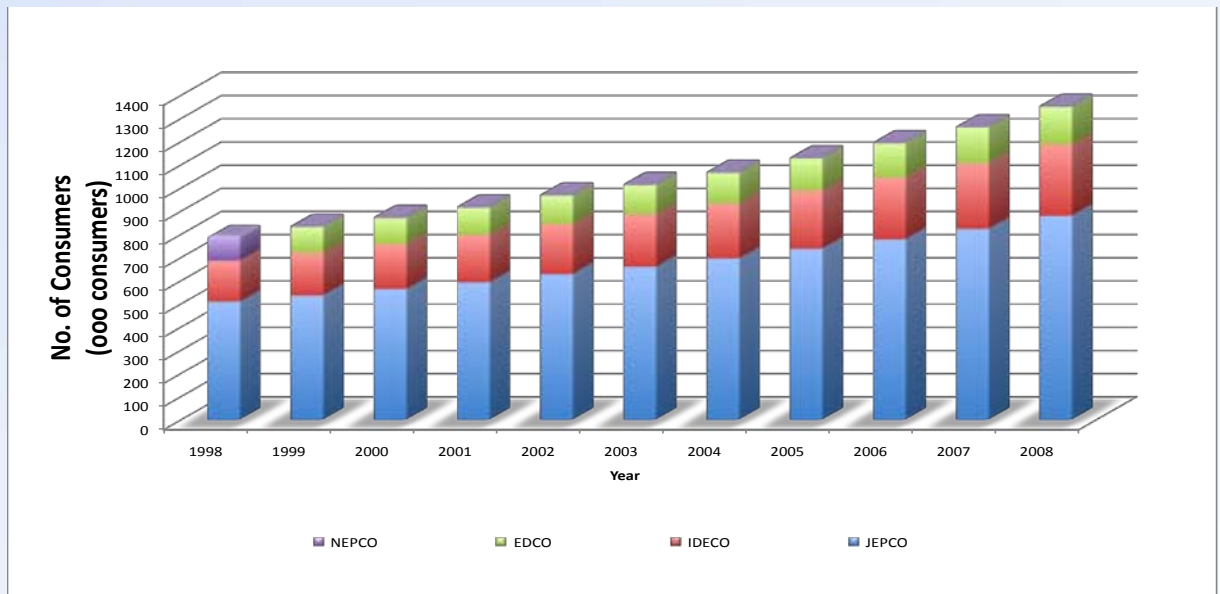


### Number of Costumers:

The number of costumers for the electricity service in 2008 reached 1.352 million in comparison to 1.263 million in 2007 with a growth rate of 7%. Most of the increment was in the residential sector. Figure (3) shows the growth of number of costumers in the period (1998-2008).

Figure (3)

Growth of number of costumers in the period (1998-2008-)

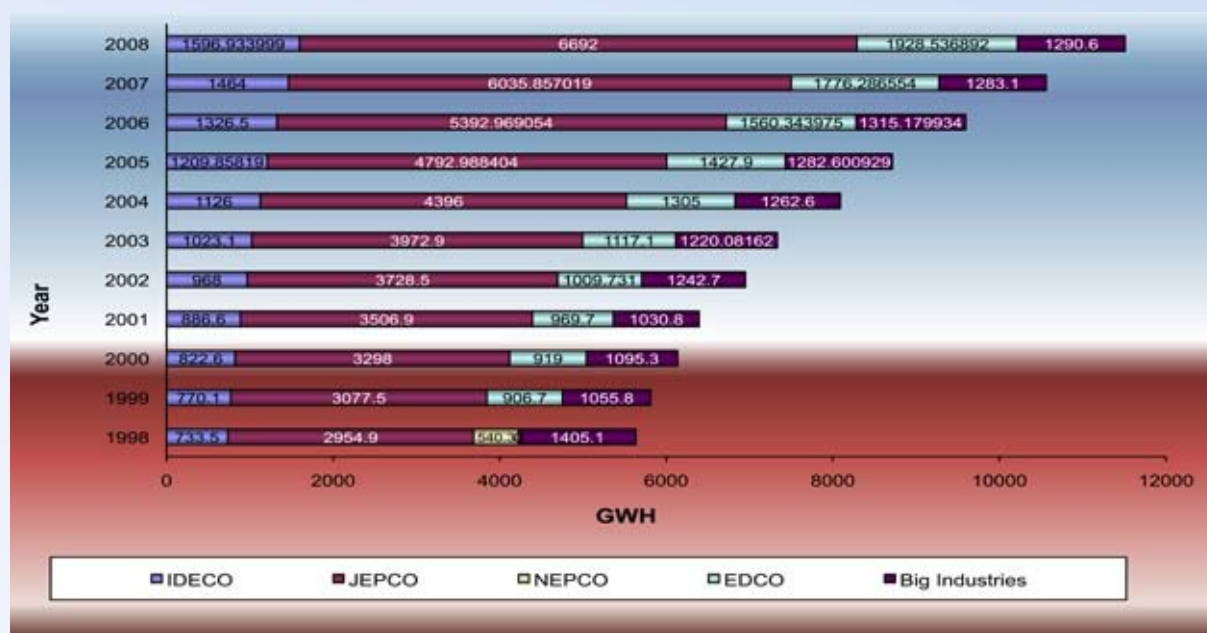


## Consumed Electrical Energy:

The amount of electrical energy consumed in the kingdom in 2008 reached 11509 GWh in comparison to 10559 GWh in 2007 with a growth rate of 9% which is a very high growth rate if compared to the international growth rate which is approximately 2.5%. The average of annual consumed electrical power per person reached 1967 kWh in 2008 in comparison to 1845 kWh in 2007 with a growth rate of 6.6%. This growth rate reflects the improvement in the level of life standards and the change in the consumption patterns represented by the increase in the power consumption. Figure (4) shows the growth in the amounts of electrical energy consumed in the period (1998- 2008).

Figure (4)

Growth in the amounts of electrical energy consumed in the period (1998-2008-)



## Electrical Loss:

The amount of power losses in the distribution system in 2008 reached 1510 GWh which represents 12.9% of the power provided by distribution companies in comparison to 1501 GWh in 2007 with a percentage of 13.9%. The total power losses in the transmission and distribution lines in 2008 was 15.9% of the total provided energy in comparison to 16.6% in 2007, these rates are still high and must be lowered. The commission in cooperation with the companies will strive to lower these rates to acceptable limits according to the performance standards.



## The Generation Sector Performance 2008:

### The Overall Installed Capacity:

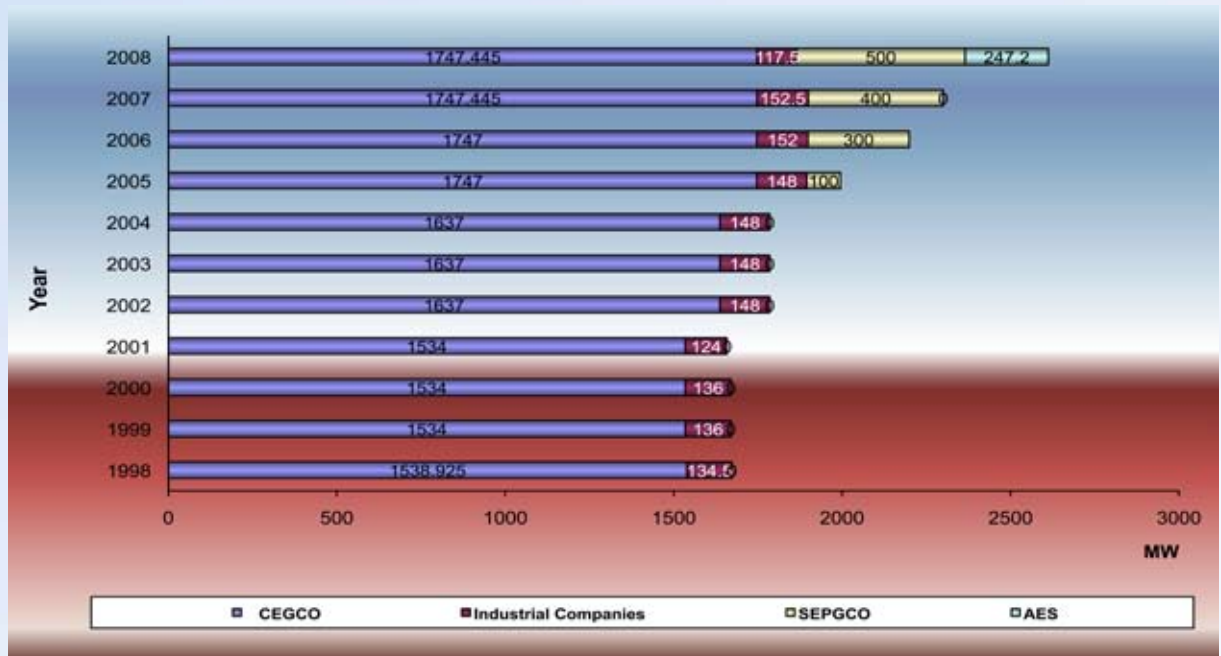
As a result to the increase in the electrical demand growth ratios in the past few years and due to the increment in the heavy oil prices, the need for new investments in the electrical sector has increased and the dependency on natural gas imported from Egypt has also increased instead of the dependency on the heavy fuel, also there was an expansion in SEPGCO through an addition of a new gas turbine with a total capacity of (100 MW) plus the start of the commercial operation of AES Jordan generation company, and also an expected launching of a new (IPPs) in ALQATRANA.

The total installed capacity of the kingdom has reached in 2008 to approximately 2612 MW, with CEGCO having 1747 MW, SEPGCO with 500 MW, AES Jordan with 147 MW, CEGCO throughout hydro generation (King Talal dam) with a capacity of 6 MW, and the industrial sector with a total capacity of 112 MW, beside what gets imported from the interconnection points with both Egypt and Syria.

Figure (5) shows the development of the total capacity in the kingdom in the period between 1998 and 2008.

Figure (5)

The development of the total capacity in the kingdom in the period between 1998 and 2008

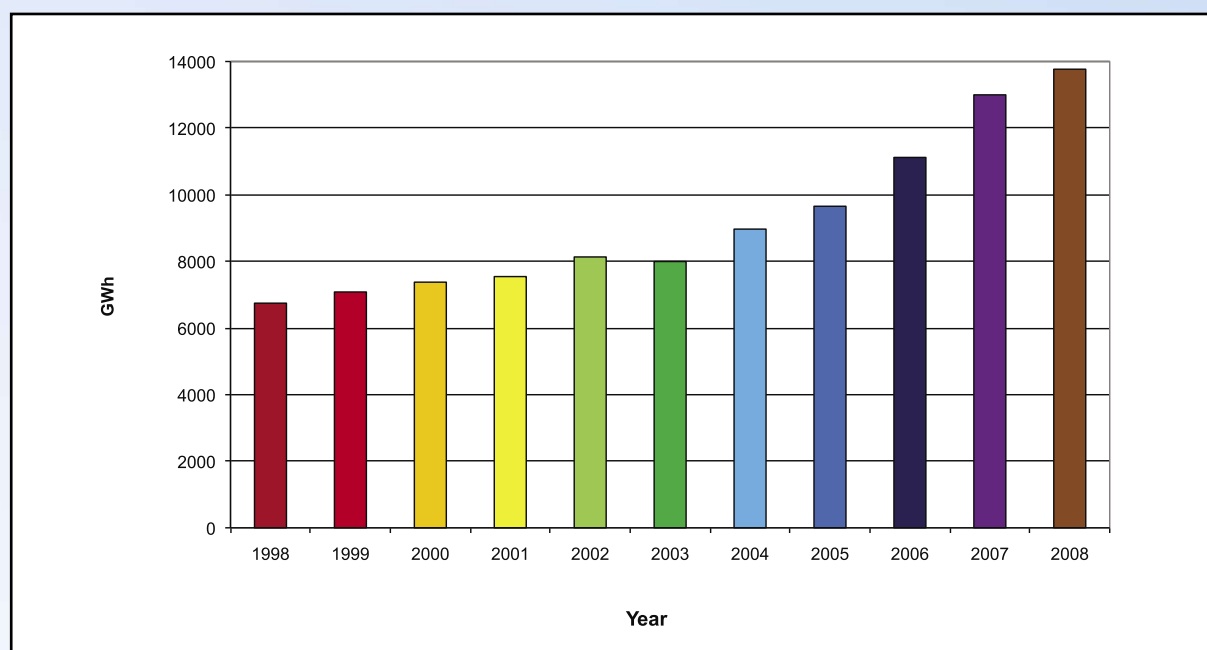


## The Generated Energy:

Due to the major economical slow down and the increase in the fuel prices, the electrical energy demand was lower than the expectations which gave the generation sector some higher flexibility in covering the overall demand in a high efficiency and continuity, this also led to reducing the amount of the energy imported from the interconnection points, this led to a safer and a more stable electrical system. From the quantities side the total generated energy in 2008 was 13768 GWh with an increment ratio of 5.9%. CEGCO structured 64.3% of this overall quantity as its net production was 8851 GWh, SEPGCO generation amount was 826 GWh, and the industrial sector has participated with 355 GWh with a ratio of 2.5%. Beside this national output there were 547 GWh imported power from the interconnection points. The total exported energy to Egypt, Syria and Ariha was 318 GWh, accordingly, the total available energy for the local consumption was 13998 GWh and with a growth of 7.4%. Figure (6) shows the development in the generated power in (1998- 2008)

Figure (6)

The development in the generated power in (1998-2008-)



## Fuel used in Electricity Generation:

The total consumed power in 2008 was approximately 3.29 million toe compared to 3.03 million toe in 2007 with a growth of 8.6%, this amount represented what is approximately 44.5% of the total power consumption in the Kingdom by the primary energy in this year. The consumed natural gas magnitude has also reached 2705 thousand toe, the heavy fuel oil 573 toe and 16 kilo toe for diesel.



## Efficiency of the Generation Units and their Production Cost:

### CEGCO:

The generation units in CEGCO have maintained their efficiency through the year 2008 compared to 2007, as the overall efficiency for the generation units has increased in a ratio of 75% in 2008 and the fuel consumption has decreased in these units in 2008 with a magnitude of 4.7 equivalent fuel Gram/kWh. Table (3) shows the efficiency indicators of the generation units.

Table (3)

The generation units> efficiency and production cost indicators

	2007	2008	Difference
Overall efficiency(%) exported	33.55	34.28	0.75
Fuel consumption rate(Gram/kWh) exported	256.2	251.5	-4.7
Fuel cost rate (fils/ kWh)	25.69	25.79	0.1
Generator overall efficiency	35.54	36.3	0.76
Fuel consumption rate (Gram/kWh) generated	241.9	237.5	-4.4

### Availability Factor:

The availability factor for the steam turbines in 2008 has reached to (95.97%) compared to (96.4%) in 2007, and the gas turbines has reached to (93.62%) compared to (92.52%) in 2007, these are very high availability factors in all international aspects.

### Forced Outage Factor:

The forced outage factor for all generation units had reached for this year to (2.76%) among (1.6%) in 2007. and the forced outage factor for the gas units has reached to (4.13%) among (2.29%) in 2007.

### Scheduled Maintenance Interruption Factor:

The scheduled maintenance Interruption factor for the steam turbines has reached for this year to (1.96%) beside (2.46%) in 2007, and the scheduled maintenance Interruption factor for the gas units has reached to (1.68%) this year among (4.04%) in 2007.

## SEPGCO:

The participation of SEPGCO in the total generated power in the Kingdom for the year 2008 was (27%) compared to (21%) in 2007. The company contributed in withstanding the increasing power demand by adding two gas turbines with a capacity of 100 MW to reach a total capacity for the station of 500 MW distributed as follows: 300 MW combined cycle and 200 MW simple cycle and with an expected added capacity of 300 MW before the end of the year 2010 so it reaches a total capacity of 800 MW in 2010. The total availability for the facility in 2008 was (98.6%) among (96.45%) in 2007. Table (4) shows the efficiency indicators for the generation units.

Table (4)

Generation units> performance indicators and the average selling prices for SEPGCO

	2007	2008	difference
Simple cycle generator-overall efficiency (%)	30.18	28.68	1.5-
Exported simple cycle-overall efficiency (%)	29.04	28.04	1-
Combined cycle generator-overall efficiency (%)	44.13	43.90	0.23-
Exported combined cycle-overall efficiency (%)	43.01	42.51	0.5-
Fuel consumption average(goe/kWh) exported	203.1	229.7	26.6
Fuel consumption average(goe/kWh) generated	198	223	25

## Financial Performance of the Generation Sector:

The average energy cost sold by CEGCO to NEPCO was 11.5 fills/KWh (excluding the fuel prices which are NEPCO's responsibility) and as a result of calculating the losses resulted by the variations in the currency prices which reached 19.6 million JD, as shown in the income statement, the company had a total losses (before tax) equal to 2.27 million JD for the financial year of 312009/12/.

The selling costs of the exported energy from SEPGCO to NEPCO was 7.2 fils/KWh (excluding the fuel prices taken by NEPCO). This average has contributed in a return of 22.89% out of the company total assets, and a returns ratio on the fixed assets equal to 5.6%.

The average price of the exported energy form AES Jordan company to NEPCO 10.8 fills/kWh (excluding the fuel prices, taken by NEPCO).



## **The Transmission Sector Performance 2008:**

### **The Exported and Imported Energy of the Transmission Network and the Electrical Losses:**

The imported energy through the transmission network in 2008 was approximately 13441 GWh, and the total exported energy through the main transforming stations to the distribution companies and the principle companies was approximately 13028 GWh and the magnitude of the energy losses on the transmission system in 2008 was 413 GWh with a ratio of 3% of the total supplied energy through the transmission network.

### **Availability of the Transmission Networks and the Interconnections:**

- transmission lines circuits: the unavailability ratio for the transmission networks in 2008 was approximately 0.258% and most of it is resulted by the scheduled disconnection for maintenance and isolators changes purposes, for that the total unavailability has decreased for the electrical system by 0.62%.
- Interconnection lines circuits: the unavailability ratios for the interconnection circuits have reached in 2008 approximately 1.106%, most of it resulted by the scheduled maintenance purposes with a ratio of 0.204%, and the compulsory interruptions with a ratio of 0.367%.
- Transmission transformers circuits: the unavailability ratio for the transmission transformers circuits for the year 2007 was approximately 0.116%, 0.092% of it goes to the scheduled maintenance interruptions and 0.18% caused by external factors.

### **Transmission Network Failures (interruption indicator/100 km circuit):**

- The transmission lines circuits: the number of the transmission line failures has reached to 534 failures. And for the distribution networks, the scheduled maintenance failures were 471 failures, the compulsory failures were 30 failures, the instructed failures were 30 failures and the external failures were 3 failures.
- The interconnection lines failures: the interconnection failures have reached to 12 failures. 73 failures were compulsory, 12 were scheduled maintenance failures, instructed failures were 39 and the external failures were 8.
- The transmission transformers circuits failures: the transmission transformers circuits failures was 314 failures. 292 were scheduled interruptions failures, 18 were compulsory failures and 3 were external failures.

### **The Unsupplied Energy:**

The magnitude of this energy was 2.26 GWh with a ratio of .029% of the total supplied energy. The compulsory interruptions caused the maximum part of this energy with an amount of 2.013 GWh.

## **Average Interruptions Duration:**

The average unavailability duration in the year 2008 was 91.2 minutes compared to 97.2 minutes in 2007.

## **The Jordanian Electricity Frequency:**

The Jordanian electricity frequency in 2008 within the operational conditions in the grid code was (49.9550.05-)Hz and the frequency range according to the electrical interconnection agreement was (49.950.10-) Hz

## **The Electrical System Voltage:**

No deviation from the normal operation voltage was recorded during the year 2008.

The records have shown that the transmission system performance was within the indicators set in the transmission performance standards expect the SAIDI and SAIFI indicators and that was due to the partial blackout occurred in October 2008. In addition to this, the transmission system succeeded in maintaining a high ratio of continuity for the electrical current.

## **Financial Performance of the Transmission Sector:**

The average purchase price for NEPCO with dominate fuel prices was 45.44 fils/kWh, while the selling price was 46.45 fils/kWh, achieving a price difference of 1.01 fils/kWh, this difference didn't enable the company to recover all its operational expenditures, this led to a total loss of (38.769) million JD in 2008, all this came as a result of the continuous increases in the heavy fuel oil prices that structures around one fifth of the total consumed fueling the electricity sector. keeping into consideration that part of these losses will be recovered throughout transferring part of the government shares in CEGCO for the year 2008 which will be given out in 2009.





## The Distribution Sector Performance in 2008:

The distribution sector is composed of three companies; JEPCO, IDECO and EDCO. The sector main function is distributing the electricity over the low and medium voltage lines. The transforming substations capacity in 2008 was approximately 9177 MVA and the distribution lines length was 46719 km.

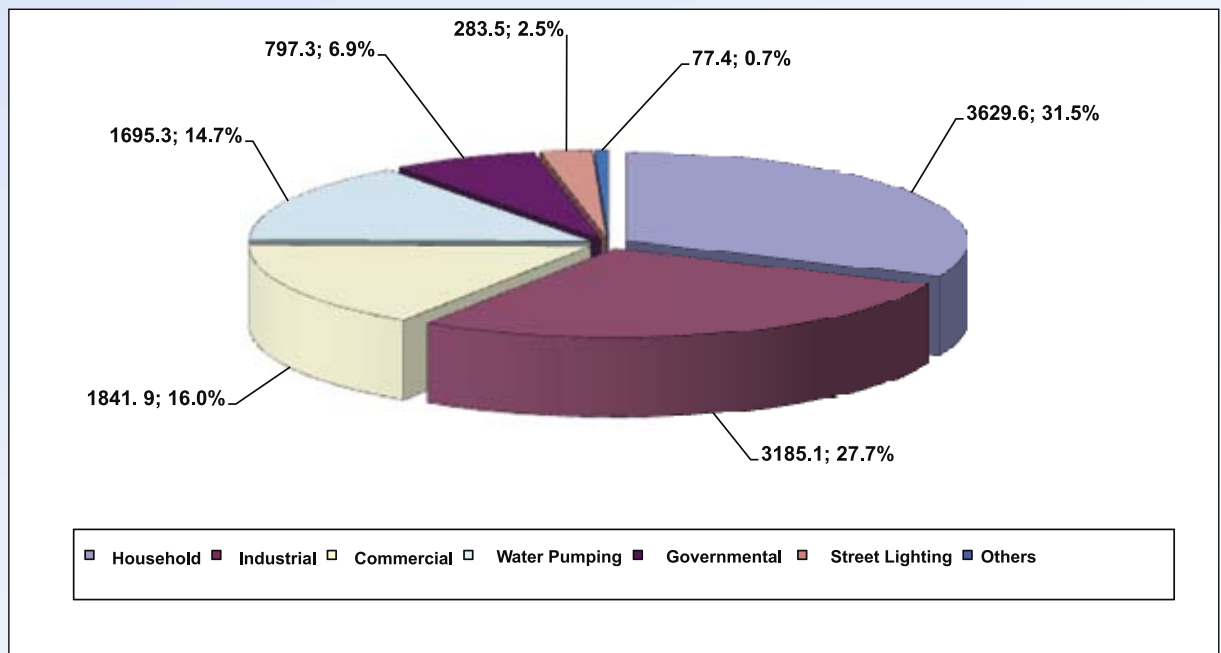
The distribution system has achieved a high level of quality as the interruption rate for the single customer was approximately 7.5 hours/year, this indicates a high level of network quality compared to all other developed countries, but still the commission is considering it as a high records and will be working hard for the sake of lowering it down in the few coming years in order to make it approach the rich counties records. Regarding the quality of the energy supplied to the customer; the records were within the permitted limits for the frequency and voltage expect in some special cases resulted by the high length of the distribution networks especially in the rural areas.

As for customer services, the number of connected customers in 2008 was 1352 million customer, with 7% generation rate, and most of this increment was in the residential sector, approximately structuring 83,9% of the overall number,1.1% for the industrial sector,13% for the commercial,0.5% for water pumping and the rest is for governmental establishments and others.

The total amount of the consumed energy in 2008 the kingdom was 11509 GWh with a growth of 9%, and the sector based distribution shows that the residential consumption was 31.5%, 27.7% industrial, 16% commercial,14.7% water pumping,6.9% for the governmental establishments,2.5% for streets lightning and 0.7% for other usages. Figure (7) shows the sector based distribution for the overall consumed energy in 2008.

Figure (7)

Sector based distribution and amount of consumed energy for 2008(GWh%)



The total energy losses on the distribution system in 2008 were 1510 GWh with a ratio of 12.9% compared to 1501 GWh with a ratio of 13.9% in 2007 out of the total supplied energy by the distribution companies. In addition, the total energy losses on the transmission and distribution lines in 2009 were 15.6% of the total supplied energy during 2008.

The distribution network interruptions for the year 2008 were 4213 interruption. JEPCO, which serves about 70% of the total number of customers, has recorded 3324 interruptions with an increment ratio of 40% only during the first quarter of the year; this mainly was due to the snow storm that affected the kingdom. And the total interruptions for IDECO were 414 interruptions and 475 interruptions for EDCO.

JEPCO average unscheduled interruptions for the year 2008 for the single customer were 678 mins/customer, and it was for IDECO 114 mins/customer and 222 minutes/customer for EDCO.

### **Financial Performance of the Distribution Sector:**

The average energy purchase prices for JEPCO were 46.1 fils/kWh, on the other hand the selling prices were 60.86 fils/kWh, achieving with this a profit of 14.76 fils/kWh. This profit helped the company into achieving a total return to the company that is equals to 24.94%, and a return to the fixed assets equal to 8.71%.

The energy purchase prices for IDECO were 39.5 fils/kWh, and the selling prices were 53.07 fils/kWh. Achieving a difference of 13.57 fils/kWh .this profit provided the company with a total return of 113.68%, and a return on the fixed assets equal to 11.46%.

The energy purchase prices for EDCO were 38.4 fils/kWh, and the selling prices were 53.75 fils/kWh. Achieving a difference of 15.35 fils/kWh .this profit provided the company with a total return of 30.44%, and a return on the fixed assets equal to 7.03%.





## Statistic Schedules

2008 – 1998

## List of Tables:



General indicators for Economic and Energy.

Employees number in the electricity sector.

Peak Load growth in Jordan and the unified system (MW)

Total capacity for the generation stations (MW)

Generated electrical energy based on the generation type (GWh)

Generated electrical energy based on the generation Source (GWh)

Electrical sector fuel consumption (ktm )

Substations capacity for the main supply points of the transmission grid (MVA)

Transmission lines length (km/circuit)

Substation capacity in the distribution networks (MVA)

Distribution lines length (km)

Electrical energy consumption (GWh)

Sector based energy consumption (GWh)

Percentage of electrical energy consumption on a sector basis (%)

Electrical energy losses in the unified electrical system (GWh)

The development in the number of customers based on the source (thousand customers)

Sector based customers> distribution (thousand customers)

The development of the electricity tariff-transmission sector (fils/kWh)

The development of the electricity tariff- distribution sector (fils/kWh)



Table No. ( 1 )  
General Indicators for Economy and Energy

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
GDP at Current Price ( million JD )	5610	5767	5992	6259	6794	7229	8091	8954	10521	11722	14190
GDP at Current Price Per Capita ( JD )	1212	1207	1234	1257	1333	1382	1512	1636	1880	2048	2426
Primary Energy Consumption ( 000 toe )	4784	4755	5056	5150	5299	5774	6489	7028	7187	7267	7400
Final Energy Consumption ( 000 toe )	3368	3430	3688	3692	3811	4080	4526	4900	4890	4855	5036
Electricity Fuel Consumption ( 000 toe )	1751	1748	1810	1820	1955	1986	2252	2393	2725	3034	3294
Primary Energy Consumption Per Capita ( Kgoe )	1034	995	1041	1035	1039	1104	1213	1284	1284	1270	1265
Final Energy Consumption Per Capita ( Kgoe )	728	718	759	742	748	780	846	895	874	848	861
Power Stations and Nominal Capacities ( MW )	1673	1670	1670	1658	1785	1785	1785	1995	2199	2300	2612
Electrical Energy Generated ( GWh )	6745	7081	7375	7544	8132	7995	8968	9654	11120	12999	13768
Electrical Energy Consumption ( GWh )	5634	5810	6135	6394	6949	7333	8090	8713	9595	10559	11509
Electrical Energy Consumption Per Capita ( KWh )	1217	1216	1263	1284	1363	1402	1512	1592	1714	1845	1967
Total Electrical Fuel Consumption to total Fuel Consumption ( % )	36	36	36	35	37	34	35	34	38	42	45
System Peak Demand in Jordan ( MW )	1060	1137	1238	1255	1410	1428	1555	1751	1901	2160	2260
System Peak Load Interconnected System ( MW )	1020	1099	1206	1225	1370	1387	1515	1710	1860	2130	2230
Population ( 000 )	4628	4778	4857	4978	5098	5230	5350	5473	5597	5723	5850
No.of Employees in the Electricity Sector	5606	6472	6501	6629	6809	6888	7042	7256	7523	7806	8084
No.of Consumers (000)	792	833	872	917	969	1014	1067	1129	1195	1263	1352

Table No. ( 2 )  
Number of Employees In the Electricity Sector ( Employee )



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
ERC				1	54	70	66	72	72	86	88
CEGCO		1571	1511	1534	1650	1473	1469	1510	1608	1621	1618
SEPGCO								132	186	233	246
AES *											48
NEPCO / JEA**	2491	728	750	807	907	900	991	1041	1084	1120	1173
JEPCO	2337	2394	2406	2490	2400	2620	2597	2534	2472	2567	2744
IDECO	778	778	774	752	800	862	921	942	992	1043	1074
EDCO		1001	1060	1045	998	963	998	1025	1109	1136	1093
<b>Total</b>	<b>5606</b>	<b>6472</b>	<b>6501</b>	<b>6629</b>	<b>6809</b>	<b>6888</b>	<b>7042</b>	<b>7256</b>	<b>7523</b>	<b>7806</b>	<b>8084</b>

\* operations have started in 25/7/2008

\*\* Nepco was divided into three companies ( Generation, Transmission and Distribution )

Table No. ( 3 )  
System Peak Demand ( MW )

year	The kingdom				interconnected system	
	local	import	total	growth rate	local peak load	growth rate
1998	1060		1060	5.7	1020	5.1
1999	1125	12	1137	7.3	1099	7.7
2000	1229	9	1238	8.9	1206	9.7
2001	1068	187	1255	1.4	1225	1.6
2002	1311	99	1410	12.4	1370	11.8
2003	1336	92	1428	1.3	1387	1.2
2004	1314	241	1555	8.9	1515	9.2
2005	1495	256	1751	12.6	1710	12.9
2006	1641	260	1901	8.6	1860	8.8
2007	1763	397	2160	13.6	2130	14.5
2008	1978	282	2260	4.6	2230	4.7



Table No. ( 4 )  
Power Stations and Nominal Capacity ( MW )

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
1- CEGCO											
Hussein Thermal Power Station	396	396	396	396	396	396	396	396	396	396	396
Aqaba Thermal Power Station	655	655	655	655	656	656	656	656	656	656	656
Aqaba Central	22	15	15	15	15	15	15	11	11	11	11
Marka	102	100	100	100	100	100	100	92	92	92	92
Amman South G.T	60	60	60	60	60	60	60	60	60	60	60
Risha	120	120	120	120	120	120	120	150	150	150	150
Karak	23	23	23	23	25	25	25	25	25	25	25
Wind Energy	1	1	1	1	1	1	1	1	1	1	1
Rehab	160	160	160	160	260	260	260	357	357	357	357
Attafilah	0	2	2	2	2	2	2	0	0	0	0
Ma'an & Other Villages	0	2	2	2	2	2	2	0	0	0	0
Total	1539	1534	1534	1534	1637	1637	1637	1747	1747	1747	1747
2- SEPGCO	0	0	0	0	0	0	0	100	300	400	500
3- Industrial Companies	0	0	0	0	0	0	0	0	0	0	247
Cement Factory	9	9	9	9	9	9	9	9	9	9	0
Refinery	16	24	24	24	24	24	24	24	24	24	22
Potash Company	23	23	23	23	23	23	23	23	23	23	18
Fertilizer Company	44	44	44	44	44	44	44	44	44	44	44
Indo - Jordan Chemicals Company	12	12	12	12	12	12	12	12	12	12	13
IDECO	6	0	0	0	0	0	0	0	0	0	0
Al-Hasa Factory	12	12	12	0	0	0	0	0	0	0	0
United Iron and Steel. Co.	0	0	0	0	21	21	21	21	21	21	0
Bio Gas co.	0	0	0	0	1	1	1	1	4	4	4
Municipalities & Others	9	9	9	9	9	9	9	9	9	10	10
King Talal Dam	4	4	4	4	6	6	6	6	6	6	6
Total	135	136	136	124	148	148	148	148	152	153	118
Grand Total	1673	1670	1670	1658	1785	1785	1785	1995	2199	2300	2612

Table No. ( 5 )  
Electrical Energy Generated Sorted by Type of Generation ( GWh )



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Steam Units	5247	6141	6478	6604	7205	6859	7592	7969	6177	6904	6057
Gas Turbines / Natural Gas	687	734	742	769	680	746	776	648	943	922	2553
Gas Turbines / Diesel	666	147	78	83	116	262	464	341	67	25	41
Diesel Units	129	42	35	42	71	78	75	73	32	13	1
Hydro Units	13	14	39	43	53	41	53	57	51	61	62
Wind Energy	3	3	3	3	3	3	3	3	3	3	3
Bio - Gas					5	6	6	5	6	10	9
Combind Cycle								558	3841	5061	5042
<b>Total</b>	6744	7081	7375	7543	8132	7995	8968	9654	11120	12999	13768

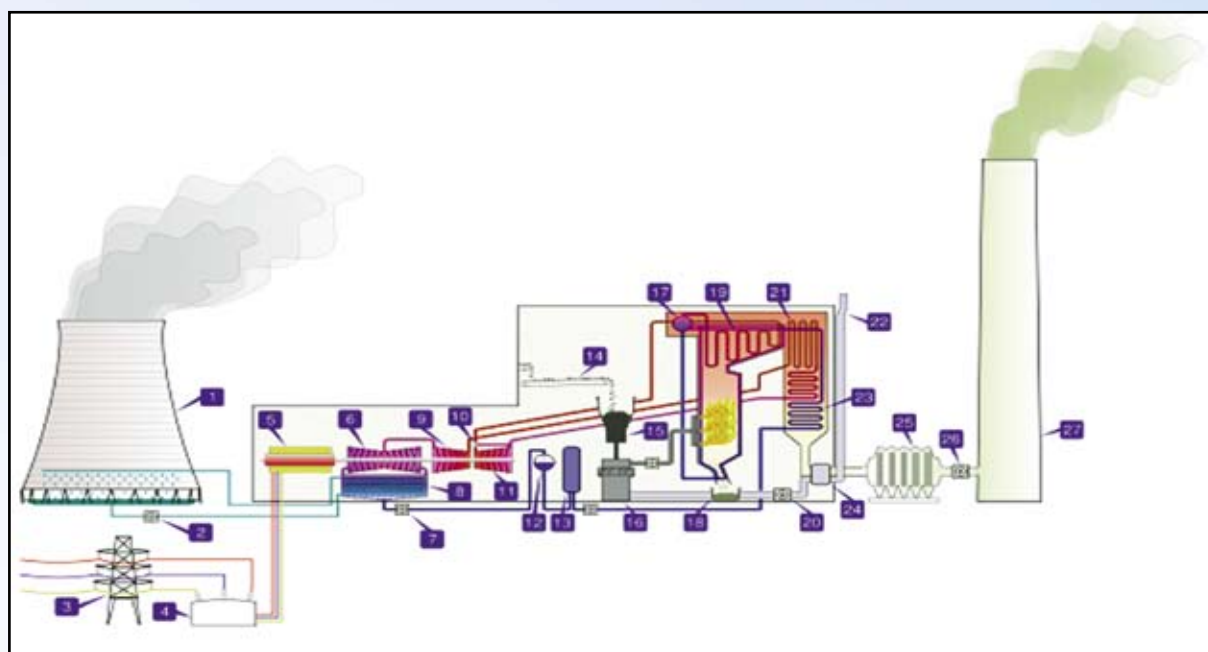




Table No. ( 6 )  
Electrical Energy Generated Sorted by to Type of Producers ( GWh )

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
1- Interconnected System	6520	6851	7122	7344	7823	7673	8652	9326	10829	12750	13551
NEPCO *	6287	0	0	0	0	0	0	0	0	0	0
CEGCO	0	6636	6934	7132	7615	7468	8448	9086	8966	9852	8851
SEPGCO	0	0	0	0	0	0	0	29	1660	2733	3736
AES	0	0	0	0	0	0	0	0	0	0	826
King Talal Dam	13	14	9	7	10	15	16	17	14	13	15
Potash Company	105	95	108	115	95	96	96	101	104	96	64
Cement Company	34	21	19	25	10	10	10	6	0	0	0
Indo - Jordan Chemicals Company	81	85	52	65	93	84	81	87	84	56	59
2 - Large Industries	223	228	253	200	309	322	316	328	291	249	218
Refinery	83	85	87	87	93	92	83	91	91	92	93
Fertilizer Company	128	130	152	97	153	156	163	166	166	136	115
Hussein Iron Factory	12	12	14	16	15	16	16	15	12	13	0
United Iron and steel Msg. Co.	0	0	0	0	43	51	48	50	16	0	0
Bio Gas co.	0	0	0	0	5	6	6	6	6	10	9
3 - Other	2	2	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>6745</b>	<b>7081</b>	<b>7375</b>	<b>7544</b>	<b>8132</b>	<b>7995</b>	<b>8968</b>	<b>9654</b>	<b>11120</b>	<b>12999</b>	<b>13768</b>
Growth Rate %	7.7	5.0	4.2	2.3	7.8	-1.7	12.2	7.7	15.2	16.9	5.9
Imported from Eygept	0	45	45	267	322	972	788	741	472	199	534
Imported from Syria	0	0	0	0	0	0	38	241	42	8	13
<b>Grand Total</b>	<b>6745</b>	<b>7126</b>	<b>7420</b>	<b>7811</b>	<b>8454</b>	<b>8967</b>	<b>9794</b>	<b>10636</b>	<b>11634</b>	<b>13206</b>	<b>14316</b>
Growth Rate %	7.7	5.6	4.1	5.3	8.2	6.1	9.2	8.6	9.4	13.5	8.4
Exported	4	7	5	1.9	1.1	3.7	3.1	0.3	13	172	318
Grand Total for Available Energy	<b>6741</b>	<b>7119</b>	<b>7415</b>	<b>7809</b>	<b>8453</b>	<b>8963</b>	<b>9791</b>	<b>10636</b>	<b>11621</b>	<b>13035</b>	<b>13998</b>
Growth Rate %	7.7	5.6	4.2	5.3	8.2	6.0	9.2	8.6	9.3	12.2	7.4

\* All power plants owned by NEPCO were transferred to CEGCO from the beginning of 1999

Table No. ( 7 )  
Fuel Consumption ( 000 toe )

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
NEPCO	1632										
CEGCO		1620	1681	1701	1803	1845	2105	2241	2178	2383	2102
SEPGCO								9	413	541	833
AES											254
Industrial Companies	119	128	129	119	152	141	147	160	134	110	105
Total Electricity Sector Consumption	1751	1748	1810	1820	1955	1986	2252	2393	2725	3034	3294
Total Jordan Energy Consumption	4784	4755	5056	5150	5299	5774	6489	7028	7186	7267	7400
Total Electricity Sector Consumption to Total Jordan Consumption %	36.6	36.8	35.8	35.3	36.9	34.4	34.7	34.1	37.9	41.8	44.5

Table No. ( 8 )  
Main Substations Capacity ( Transmission Network ) ( MVA )

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
400 / 132	1280	1280	1280	1280	1280	1280	2080	2560	2560	2560	2560
230 / 132	200	200	200	200	100	100	100	100	100	100	100
132 / 33	2149	2149	2304	2607	2670	3333	3413	3429	3679	4188	4428
132 / 6	75	75	75	75	75	75	75	75	75	75	75
132 / 11					12.5	12.5	25	25	25	25	25
<b>Total</b>	<b>3704</b>	<b>3704</b>	<b>3859</b>	<b>4162</b>	<b>4138</b>	<b>4801</b>	<b>5693</b>	<b>6189</b>	<b>6439</b>	<b>6948</b>	<b>7188</b>





Table No. ( 9 )

The length of Transmission Network Lines ( Km - Circuit )

Voltage level (kv )	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
400 k.v	670	809	809	809	809	817	817	871	871	871	871
230 k.v	17	17	17	17	17	17	17	17	17	17	17
132 k.v	2124	2200	2200	2200	2211	2512	2512	2512	2530	2535	2872
66 k.v *	17	17	17	17	17	17	17	17	17	17	17
<b>Total</b>	<b>2828</b>	<b>3043</b>	<b>3043</b>	<b>3043</b>	<b>3054</b>	<b>3363</b>	<b>3363</b>	<b>3417</b>	<b>3435</b>	<b>3440</b>	<b>3777</b>

\* Has been changed to 33 k.v

Table No. ( 10 )

Substions Capacity in the distributor network (MVA) .

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
33 / 66	10	10	10	10	10	0	0	0	0	0	0
33, 11 , 6.6 / 0.4	2600	3385	3424	3660	3930	4195	4664	4959	5435	5896	6676
11 / 6.6			3	3	3	3	3	13	13	13	13
33/ 11, 6.6	1152	1225	1304	1383	1433	1494	1715	1936	2216	2309	2464
33 / 3.3			19	19	19	19	23	25	25	25	25
<b>Total</b>	<b>3762</b>	<b>4620</b>	<b>4759</b>	<b>5075</b>	<b>5394</b>	<b>5710</b>	<b>6404</b>	<b>6933</b>	<b>7688</b>	<b>8242</b>	<b>9177</b>

Table No. ( 11 )  
The Length of distributoin network lines ( KM )

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
33 KVOHL	5322	4420	4560	6373	6971	7108	7402	7607	7846	8178	8573
11 KVOHL	650	1143	1208	1092	1135	1203	1257	1323	1376	1420	1487
6.6 KVOHL	380	1243	1243	2	2	2	2	2	2	1	1
0.4 KVOHL	17152	16586	20229	21314	21791	22841	23962	24987	25972	26958	27505
33 kv under ground cables	517	548	609	658	750	884	1036	1299	1419	1588	1840
11 kv under ground cables	920	513	544	1888	2006	2126	2249	2425	2589	2761	2963
* 6.6 kv under ground cables	871	8	8	5	5	5	5	5	5	5	5
0.4 under ground cables	1564	3221	1686	1912	2943	3318	3846	4106	4188	4268	4344
<b>Total</b>	27376	27682	30084	33244	35602	37486	39760	41752	43398	45179	46719

\* The 6.6 kv lines were converted to operate on 11 kv





Table No. ( 12 )  
Electricity Consumption ( GWh )

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Electrical Energy Consumption by Distribution Companies											
IDECO	734	770	823	887	968	1023	1126	1210	1327	1464	1597
JEPCO	2955	3078	3298	3507	3729	3973	4396	4793	5393	6036	6692
NEPCO	540										
EDCO		907	919	970	1010	1117	1305	1428	1560	1776	1929
<b>Total (1)</b>	<b>4229</b>	<b>4754</b>	<b>5040</b>	<b>5363</b>	<b>5706</b>	<b>6113</b>	<b>6827</b>	<b>7431</b>	<b>8280</b>	<b>9276</b>	<b>10218</b>
Industrial Companies											
Refinery	94	89	92	90	98	92	91	98	97	103	104
Cement Factory	163	155	130	161	195	200	205	206	226	243	232
South Cement Factory	144	139	143	173	189	182	201	204	205	199	240
Potash Company	303	291	303	289	289	290	284	275	298	299	315
Phosphate Company	85	87	80	68	71	68	69	69	68	57	46
Sheidiyah Phosphate	26	25	62	33	58	55	54	46	57	76	77
Fertilizer	171	121	166	90	142	149	158	154	156	126	107
Hussein Iron Factory	12	11	13	15	15	16	14	15	16	12	0
United Iron and steel Msg. Co. *					40	51	44	57	16	0	0
Indo - Jordan Chimcal Factory	75	79	48	59	91	47	47	47	52	37	35
Queen Alia Airport	46	45	46	44	45	45	45	47	48	51	54
Water Authority	272	0	0	0	0	0	0	0	0	0	0
Haraneh	13	12	12	7	7	6	6	5	12	11	3
Others	2	2	2	2	3	19	44	62	65	70	78
<b>Total (2)</b>	<b>1405</b>	<b>1056</b>	<b>1095</b>	<b>1031</b>	<b>1243</b>	<b>1220</b>	<b>1263</b>	<b>1283</b>	<b>1315</b>	<b>1283</b>	<b>1291</b>
<b>Grand Total</b>	<b>5634</b>	<b>5810</b>	<b>6135</b>	<b>6394</b>	<b>6949</b>	<b>7333</b>	<b>8090</b>	<b>8713</b>	<b>9595</b>	<b>10559</b>	<b>11509</b>

\* The United Iron and steel stopped generating electricity and so the electricity consumption does not include nepco sales for them.

Table No. ( 13 )  
Electricity Consumption by Sector ( GWh )

Sector	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Household	1780	1632	1763	1881	2025	2147	2345	2547	2918	3262	3630
Industrial	1902	1915	1976	2026	2295	2349	2526	2707	2839	2981	3185
Commercial	677	720	805	880	922	999	1144	1256	1457	1663	1841
Water Pumping	945	973	990	981	1042	1100	1253	1299	1392	1584	1695
Governmental		203	218	229	230	311	392	417	416	735	797
Street Lighting	148	161	173	178	190	201	213	248	263	269	284
Others	182	206	210	219	245	228	217	240	310	65	77
<b>Total</b>	<b>5634</b>	<b>5810</b>	<b>6135</b>	<b>6394</b>	<b>6949</b>	<b>7333</b>	<b>8090</b>	<b>8713</b>	<b>9595</b>	<b>10559</b>	<b>11509</b>

Table No. ( 14 )  
Electricity Consumption by Sector ( % )

Sector	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Household	31.6	28.1	28.7	29.4	29.1	29.3	29.0	29.2	30.4	30.9	31.5
Industrial	33.8	33.0	32.2	31.7	33.0	32.0	31.2	31.1	29.6	28.2	27.7
Commercial	12.0	12.4	13.1	13.8	13.3	13.6	14.1	14.4	15.2	15.7	16.0
Water Pumping	16.8	16.7	16.1	15.3	15.0	15.0	15.5	14.9	14.5	15.0	14.7
Governmental*	0.0	3.5	3.6	3.6	3.3	4.2	4.8	4.8	4.3	7.0	6.9
Street Lighting	2.6	2.8	2.8	2.8	2.7	2.7	2.6	2.8	2.7	2.6	2.5
Others	3.2	3.5	3.4	3.4	3.5	3.1	2.7	2.8	3.2	0.6	0.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* Classification has been changed from 2007





Table No. ( 15 )  
Interconnected System Network Losses ( GWh )

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Generation Losses											
Generated Energy	6520	6851	7122	7349	7828	7679	8657	9332	10835	12750	13551
Sent Out Energy	6120	6392	6636	6856	7309	7175	8073	8756	10300	11985	12807
Losses	400.1	459.4	486.1	493	519	504	584	576	535	765	744
Losses %	6.1	6.7	6.8	6.7	6.6	6.6	6.7	6.2	4.9	6.0	5.5
Transmission Losses											
Sent Out Energy to Transmission Line	5705	6270	6535	6897	7616	8123	8767	9555	10643	12191	13441
Bulk Sales	5562	6081	6321	6642	7310	7820	8446	9219	10307	11864	13028
Losses	143	189	214	255	306	304	321	336	336	326	413
Losses %	2.5	3.0	3.3	3.7	4.0	3.74	3.66	3.52	3.16	2.68	3.07
Distribution Losses *											
Sent Out Energy	4813	5336	5643	6021	6404	6922	7656	8416	9425	10777	11729
Sold Energy	4229	4758	5038	5366	5707	6113	6808	7431	8280	9276	10218
Losses	584	578	605	655	697	809	848	985	1145	1501	1510
Losses %	12.1	10.8	10.7	10.9	10.9	11.7	11.1	11.7	12.2	13.9	12.9
Total System Losses											
Generated Energy	6741	7119	7415	7809	8453	8963	9791	10636	11621	13035	13998
Sold Energy	5634	5810	6135	6394	6949	7333	8090	8713	9595	10559	11509
Losses	1107.3	1308.8	1280.2	1415	1504	1630	1702	1922	2026	2476	2489
Losses %	16.4	18.4	17.3	18.1	17.8	18.2	17.4	18.1	17.4	19.0	17.8

\* its not include consumption of large consumers

Table No. ( 16 )  
Evaluation of The Number of Consumers ( 000 consumers )

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
JEPCO	510	537	564	594	630	660	697	739	780	825	881
IDECO	177	186	195	205	216	226	237	251	267	283	308
EDCO		110	112	119	124	128	133	139	147	155	163
NEPCO	105	0.011	0.011	0.012	0.016	0.014	0.016	0.014	0.014	0.013	0.016
<b>Total</b>	<b>793</b>	<b>833</b>	<b>872</b>	<b>918</b>	<b>969</b>	<b>1014</b>	<b>1067</b>	<b>1129</b>	<b>1195</b>	<b>1263</b>	<b>1352</b>

Table No. ( 17 )  
Evaluation of The Number of Consumers by Sector ( 000 consumers )

Sector	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Household	643	686	715	756	799	836	879	933	987	1049	1134
Industrial	12	12	12	12	13	14	13	14	15	15	15
Commercial	111	113	122	124	132	138	146	153	161	169	176
Water Pumping	3	3	3	3	4	4	4	5	5	6	6
Governmental	12	10	10	10	10	12	12	13	15	16	13
Others	13	10	10	12	11	11	12	11	12	8	7
<b>Total</b>	<b>793</b>	<b>833</b>	<b>872</b>	<b>918</b>	<b>969</b>	<b>1014</b>	<b>1067</b>	<b>1129</b>	<b>1195</b>	<b>1263</b>	<b>1352</b>





Table No. ( 18 )  
Bulk supply Tariff Development ( Fils/KWh)

	from 1993/6/15	from 1996/5/1	from 2002/6/16	from 2004/1/1	from 2004/4/3	from 2005/7/9	from 2007/7/1	from 2008/3/14
NEPCO'S Tariff :	to 1996/4/30	to 2002/6/15	to 2003/12/31	to 2004/4/2	to 2005/7/8	to 2007/6/30	to 2008/3/13	
a- Distribution Companies:								
1- Night Energy								
- JEPCO	14.50	19.00	21.40	21.20	21.69	24.25	25.36	35.76
- EDCO	-	19.00	21.40	21.20	21.69	23.51	23.51	27.30
- IDECO	14.50	19.00	21.40	21.20	21.69	21.61	21.61	28.11
2- Day Energy								
- JEPCO	23.50	29.00	31.40	31.25	31.74	34.30	35.41	45.81
- EDCO	-	29.00	31.40	31.25	31.74	33.56	33.56	37.35
- IDECO	23.50	29.00	31.40	31.25	31.74	31.66	31.66	38.16
3- Maximum Load ( JD / KW / Month )	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.98
b-Large Industrial Consumers :								
Night Energy	23.00	32.00	33.50	33.50	33.50	33.50	33.50	49.00
Day Energy	45.00	47.00	48.00	48.00	48.00	48.00	48.00	65.00
Maximum Load ( JD / KW / Month )	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.98

Table No. ( 19 )  
Distribution Tariff Development ( Fils/KWh )



	From 1993/6/15	From 1996/5/1	From 2002/6/16	From 2004/1/1	From 2004/4/3	From 2004/6/1	From 2005/7/9	From
	to 1996/4/30	to 2002/6/15	to 2003/12/31	to 2004/4/2	to 2004/5/31	to 2005/7/8	to 2008/3/13	2008/3/14
Standard Domestic Tariff:								
From 1 - 160 KWh / Month	28.0	30.0	31.0	31.0	31.0	31.0	31.0	32.0
From 161 - 300 KWh / Month	52.0	52.0	55.0	55.0	57.0	57.0	59.0	71.0
From 301 - 500 KWh / Month	55.0	60.0	64.0	64.0	65.0	65.0	67.0	85.0
More than 500 KWh / Month	70.0	75.0	80.0	80.0	80.0	80.0	82.0	113.0
TV and Broadcasting	45.0	60.0	60.0	60.0	60.0	60.0	61.0	86.0
Commercial	50.0	60.0	62.0	62.0	62.0	62.0	63.0	86.0
Small Industrial Consumer	30.0	36.0	38.0	38.0	39.0	39.0	41.0	49.0
Medium Industrial Consumer :								
Night Energy	20.00	21.00	25.00	25.00	27.00	27.00	28.00	36.00
Day Energy	25.00	33.00	35.00	35.00	36.00	36.00	38.00	46.00
Maximum Load (JD / KW/ Month )	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.79
Agriculture	21.00	23.00	26.00	26.00	28.00	28.00	31.00	47.00
Three Part Tariff for Agriculture :								
Night Energy	-	-	-	-	-	-	30.00	36.00
Day Energy	-	-	-	-	-	-	20.00	46.00
Maximum Load (JD / KW/ Month )	-	-	-	-	-	-	3.05	3.79
Water Pumping	30.00	34.00	38.00	38.00	38.00	38.00	40.00	41.00
Hotels	50.00	60.00	60.00	60.00	59.00	59.00	60.00	86.00
Three Part Tariff for Hotels :								
Night Energy	-	-	-	-	-	44.00	45.00	70.00
Day Energy	-	-	-	-	-	55.00	56.00	81.00
Maximum Load (JD / KW/ Month )	-	-	-	-	-	3.05	3.05	3.79
Ports Corporation	-	-	-	-	44.60	44.60	46.60	58.00
Streets Lighting *	13.00	20.00	25.00	25.00	27.00	27.00	30.00	51.00
Jordan Armed Forces **				67.00	67.00	67.00	67.00	81.00
Mixed Tariff Commercial/ Agriculture								73.0
Minimum Charge for Domestic Consumers ( JD ) / Month	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Minimum Charge for Other Consumers ( JD ) / Month	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25

\* above 1988 Consumption level

\*\* Some Consumers have discount about 25 %



Table No. ( 20 )  
Evaluation of Fixed Assets ( 000 JD )

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
NEPCO /JEA											
Fixed Assets	255013	317640	323470	332.581	338.787	354.423	390.259	452.036	467.201	475.190	567.495
Assets Contributed by Consumers	16671	16671	25407	27.156	27.689	31.560	37.891	38.056	38.106	41.045	41.116
Rural Fils Fund Assets	0	0	0	-	-	-	-	-	-	-	-
Projects Under Construction	55627	10207	11371	14.198	26.042	36.291	38.253	20.825	36.964	65.253	29.277
<b>Total (1)</b>	<b>327311</b>	<b>344518</b>	<b>360248</b>	<b>373.936</b>	<b>392.518</b>	<b>422.274</b>	<b>466.403</b>	<b>510.917</b>	<b>542.270</b>	<b>581.489</b>	<b>637.888</b>
IDECO											
Fixed Assets	41146	43753	46763	51089	53275	56615	57345	59468	55919	58336	65708
Assets Contributed by Consumers	19196	20255	23210	24698	26172	27112	29087	31174	34654	37829	41729
Rural Fils Fund Assets	3836	6218	8517	9810	12065	14878	16512	18309	20282	22100	23247
Projects Under Construction	1418	2129	510	1036	1310	637	906	1009	823	1418	4380
<b>Total (2)</b>	<b>65596</b>	<b>72355</b>	<b>79000</b>	<b>86633</b>	<b>92822</b>	<b>99242</b>	<b>103850</b>	<b>109960</b>	<b>111678</b>	<b>119683</b>	<b>135063</b>
JEPCO											
Fixed Assets	147229	158605	169499	181847	194092	203615	219847	236956	262242	294297	339970
Assets Contributed by Consumers	41284	44738	48729	52479	57237	62995	69777	78926	94894	110695	128211
Rural Fils Fund Assets	17031	21059	22005	24831	27809	33308	36302	38075	38075	39996	39996
Projects Under Construction	2289	656	1927	1554	389	795	1132	1709	2169	1829	1700
<b>Total (3)</b>	<b>207833</b>	<b>225058</b>	<b>242160</b>	<b>260711</b>	<b>279528</b>	<b>300713</b>	<b>327057</b>	<b>355667</b>	<b>397380</b>	<b>446818</b>	<b>509877</b>
EDCO											
Fixed Assets		47062	49687	50912	53942	56005	58814	62153	68737	73499	80016
Assets Contributed by Consumers		31572	32844	35294	40128	42098	47453	57413	58943	63362	68077
Rural Fils Fund Assets		3279	5207	9032	13977	17066	20190	21899	23594	24708	26198
Projects Under Construction		5215	8004	7274	3880	5195	4848	6971	6974	6627	10497
<b>Total (4)</b>		<b>87128</b>	<b>95743</b>	<b>102512</b>	<b>111927</b>	<b>120363</b>	<b>131304</b>	<b>148437</b>	<b>158248</b>	<b>168197</b>	<b>184788</b>
CEGCO											
Fixed Assets		618948	625236	622214	625042	649147	649449	734718	737961	734853	735466
Assets Contributed by Consumers		22	22	0	0	0	0	0	0	0	0
Rural Fils Fund Assets		0	0	0	0	0	0	0	0	0	0
Projects Under Construction		3915	862	10880	28714	24535	75360	386	390	419	448
<b>Total (5)</b>		<b>622885</b>	<b>626120</b>	<b>633094</b>	<b>653756</b>	<b>673682</b>	<b>724809</b>	<b>735104</b>	<b>738351</b>	<b>735273</b>	<b>735914</b>

## Evaluation of Fixed Assets



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
SEPGCO											
Fixed Assets							229	269	127307	128209	207643
Assets Contributed by Consumers							0	0	0	0	0
Rural Fils Fund Assets							0	0	0	0	0
Projects Under Construction							6593	95449	3694	68222	167
<b>Total (6)</b>							<b>6822</b>	<b>95718</b>	<b>131001</b>	<b>196431</b>	<b>207810</b>
AES											
Fixed Assets *										75	325
Assets Contributed by Consumers										0	0
Rural Fils Fund Assets										0	0
Projects Under Construction										55355	27151
<b>Total (7)</b>										<b>55429</b>	<b>27476</b>
Grand tota - Fixed Assets	443388	1186008	1214656	1238643	1265138	1319804	1375943	1545602	1719367	1764460	1996624
Grand total Assets Contributed by Consumers	77151	113258	130212	139627	151226	163765	184207	205570	226597	252932	279133
Grand tota - Rural Fils Fund Assets	20867	30556	35729	43673	53852	65252	73003	78283	81950	86804	89441
Grand tota - Projects Under Construction	59334	22122	22674	34942	60336	67452	127092	126349	51014	199123	73619
<b>Grand total</b>	<b>600740</b>	<b>1351944</b>	<b>1403271</b>	<b>1456885</b>	<b>1530551</b>	<b>1616274</b>	<b>1760245</b>	<b>1955803</b>	<b>2078928</b>	<b>2303320</b>	<b>2438817</b>

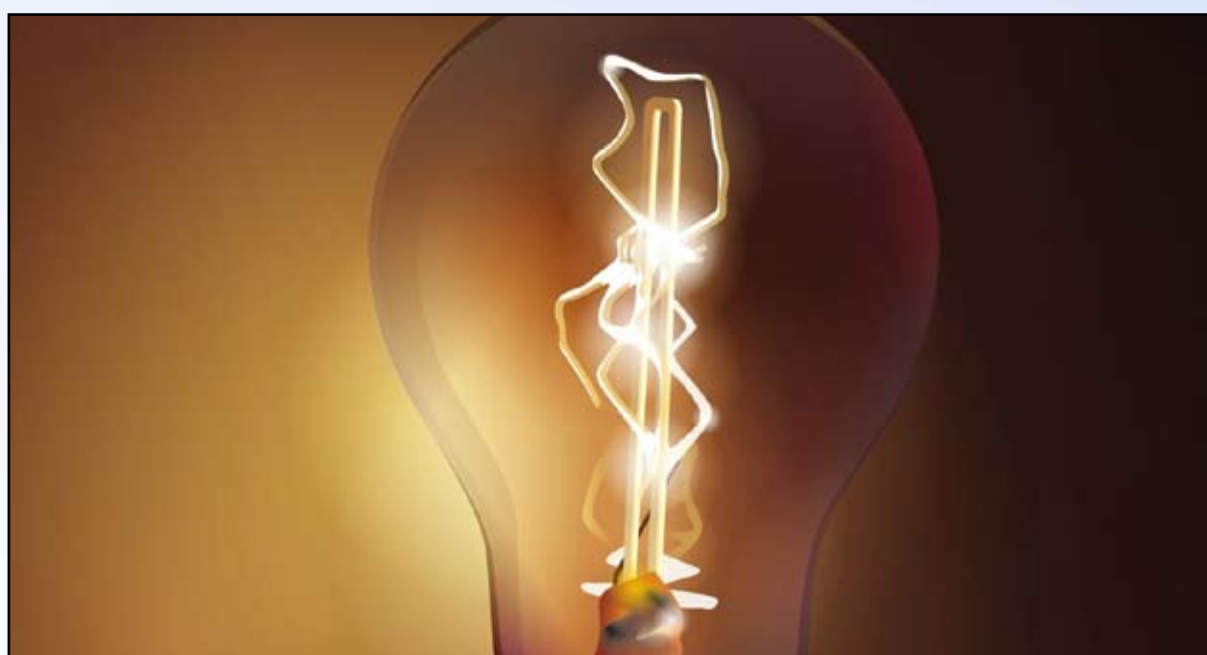


Table No. ( 21)  
Shareholders, Equity (Owners Equity ) 000 JD

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
NEPCO / JEA	533927	208.167	214.280	219.120	224.900	227.736	223.525	221.432	222.074	226.929	184.010
CEGCO	0	278.032	289.976	309.790	305.899	296.390	194.037	205.910	204.290	191.579	177.802
EDCO	0	47.190	49.417	49.979	50.589	51.180	51.413	51.409	50.017	50.233	54.211
JEPCO	27698	32.048	40.757	53.941	57.606	61.529	70.081	82.413	91.070	95.932	100.442
IDECO	4979	5.436	5.508	5.583	5.700	5.762	5.830	6.294	6.754	7.754	10.872
SEPGCO	0	-	-	-	-	-	50.916	49.895	51.800	45.399	55.841
AES										5.477	(4.333)
<b>Total</b>	<b>566604</b>	<b>570873</b>	<b>599938</b>	<b>638413</b>	<b>644694</b>	<b>642597</b>	<b>595.802</b>	<b>617.351</b>	<b>626.006</b>	<b>623.304</b>	<b>578.846</b>

\* The indicators was calculated after taken in to consideration The componsation that was paid to EDCO in the year 2000 , 2001 and the compensasion that was paid to to ideco until 2004



Table No. ( 22 A )  
Financial Indicators for Electricity Companies  
Return on Net Fixed Assets \*

Year	2004	2005	2006	2007	2008
JEPSCO	8.96%	9.35%	12.09%	7.53%	8.71%
IDECO **	2.07%	1.95%	3.53%	5.70%	11.46%
EDCO **	2.51%	0.03%	-2.53%	0.54%	7.03%
CEGCO	-0.55%	2.39%	-0.45%	-3.47%	0.71%
SEPGCO	-	-466.90%	1.57%	-5.44%	5.60%
NEPCO	0.58%	-0.82%	0.03%	-0.61%	-10.09%
AES ***	-	-	-	-	-

\* The financial indicators have been amended to be as follow: Net income/Net Fixed Assets. Numbers of the previous year have been amended according to the amendments and reclassification made by companies.

\*\* IDECO & EDCO have been privatized at 2/7/2008.

\*\* Indicators have been calculated after taking into consideration the compensation for IDECO until the year 2005.

\*\*\* AES works pursuant to the financial leasing agreement in respect of the generation units.

Table No. ( 22 B )  
Return on Capital \*

Year	2004	2005	2006	2007	2008
JEPSCO	13.91%	13.25%	17.53%	12.02%	16.14%
IDECO **	9.60%	8.34%	13.97%	20.38%	34.77%
EDCO **	2.31%	0.03%	-2.75%	0.60%	7.57%
CEGCO	-1.12%	5.15%	-0.91%	-6.76%	1.35%
SEPGCO	-	-2.03%	3.73%	-14.07%	18.78%
NEPCO	0.80%	-1.32%	0.05%	-0.91%	-22.02%
AES ***	-	-	-	-65.38%	-25.57%

\* The financial indicators have been amended to be as follow: Net income/Total Owner Equity. Numbers of the previous year have been amended according to the amendments and reclassification made by companies.

\*\* IDECO & EDCO have been privatized at 2/7/2008.

\*\* Indicators have been calculated after taking into consideration the compensation for IDECO until the year 2005.





Table No. ( 22 C )

Return on Shares \*

Year	2004	2005	2006	2007	2008
JEPCO	0.217	0.218	0.266	0.175	0.232
IDECO **	0.140	0.131	0.236	0.395	0.945
EDCO **	0.119	0.002	-0.138	0.030	0.410
CEGCO	-0.072	0.353	-0.062	-0.431	0.080
SEPGCO	-	-0.020	0.039	-0.128	0.210
NEPCO	0.008	-0.013	0.001	-0.009	-0.176
AES	-	-	-	-71.622	22.160

\* The financial indicators have been amended to be as follow: Net income/Paid-up capital. Numbers of the previous year have been amended according to the amendments and reclassification made by companies.

\*\* IDECO & EDCO have been privatized at 2/7/2008.

\*\* Indicators have been calculated after taking into consideration the compensation for IDECO until the year 2005.

Table No. ( 22 D)

Return on Capital \*

Year	2004	2005	2006	2007	2008
JEPCO	27.12%	25.78%	30.73%	19.84%	24.94%
IDECO **	16.99%	15.87%	29.59%	50.02%	113.68%
EDCO **	11.92%	1.55%	-12.05%	5.16%	30.44%
CEGCO	-4.58%	39.26%	-2.03%	-69.49%	-7.57%
SEPGCO	-	-2.03%	4.21%	-12.78%	22.89%
NEPCO	1.08%	-1.27%	0.21%	-0.70%	-17.62%
AES ***	-	-	-	-	-

\* The financial indicators have been amended to be as follow: Earning before Tax/Paid-up Capital. Numbers of the previous year have been amended according to the amendments and reclassification made by companies.

\*\* IDECO & EDCO have been privatized at 2/7/2008.

\*\* Indicators have been calculated after taking into consideration the compensation for IDECO until the year 2005.

\*\*\* AES works pursuant to the financial leasing agreement in respect of the generation units.

Table No. ( 22 E )  
Current Ratios ( NO. of Times ) \*

Year	2004	2005	2006	2007	2008
JEPCO	0.76	0.74	0.68	0.63	0.62
IDECO **	0.93	0.90	1.02	1.15	1.09
EDCO **	2.02	1.85	1.76	1.96	2.42
CEGCO	1.49	1.30	1.32	1.41	1.18
SEPGCO	-	0.56	1.56	0.96	2.09
NEPCO	0.87	0.82	0.74	0.71	0.65
AES	-	-	-	1.22	11.88

\* The financial indicators have been amended to be as follow: current assets/ Current liabilities. Numbers of the previous year have been amended according to the amendments and reclassification made by companies.

\*\* IDECO & EDCO have been privatized at 2/7/2008.

\*\* Indicators have been calculated after taking into consideration the compensation for IDECO until the year 2005.

Table No. ( 22 F )  
Coverage Ratios ( NO. of Times ) \*

Year	2004	2005	2006	2007	2008
JEPCO	14.86	20.65	32.18	24.46	9.69
IDECO**	8.43	9.66	14.42	30.25	335.52
EDCO **	68.85	66.26	38.24	234.27	1110.64
CEGCO	3.89	3.81	4.14	2.98	5.53
SEPGCO	-	-0.24	3.09	2.46	3.19
NEPCO	3.67	2.77	3.44	4.97	-0.25
AES	-	-	-	-9.04	1.30

\* The financial indicators have been amended to be as follow: Earning before Taxes, Interest, Amortization, Depreciation & Forex/Interest Expense. Numbers of the previous year have been amended according to the amendments and reclassification made by companies.

\*\* IDECO & EDCO have been privatized at 2/7/2008.

\*\* Indicators have been calculated after taking into consideration the compensation for IDECO until the year 2005.





Table No. ( 22 G)  
Debit Covarge Percent (Times ) \*

Year	2004	2005	2006	2007	2008
JEPCO	2.43	3.82	3.61	1.94	1.02
IDECO **	1.43	1.02	2.40	3.43	3.00
EDCO **	12.36	15.69	6.78	27.69	1110.64
CEGCO	1.54	0.91	0.89	0.91	1.60
SEPGCO	-	-0.24	1.03	1.63	1.92
NEPCO	0.65	0.43	0.76	0.84	-0.03
AES	-	-	-	-9.04	1.30

\* The financial indicators have been amended to be as follow: Earning before Taxes, Interest, Amortization, Depreciation & Forex/ (Interest Expense + Current portion of long term loans + Creditor Banks). Numbers of the previous year have been amended according to the amendments and reclassification made by companies.

\*\* IDECO & EDCO have been privatized at 2/7/2008.

\*\* Indicators have been calculated after taking into consideration the compensation for IDECO.

Table No. ( 22 H )  
Self Finance Percent (Times )\*

Year	2004	2005	2006	2007	2008
JEPCO	25%	28%	29%	26%	23%
IDECO	7%	8%	8%	8%	10%
EDCO	32%	31%	29%	27%	28%
CEGCO	35%	38%	39%	41%	38%
SEPGCO	-	44%	34%	22%	24%
NEPCO	58%	53%	43%	41%	32%
AES	-	-	-	9%	-3%

\* The financial indicators have been amended to be as follow: Owners Equity/ Total Assets. Numbers of the previous year have been amended according to the amendments and reclassification made by companies.

\*\* IDECO & EDCO have been privatized at 2/7/2008.

\*\* Indicators have been calculated after taking into consideration the compensation for IDECO.



*Hashemite Kingdom of Jordan  
Electricity Regulatory Commission*



*Communiqués Finance and Enumerator Jurist  
in year end to 31 December 2008*





# **Electricity Regulatory Commission**

## **Amman - The Hashemite Kingdom of Jordan**

Independent Auditors' Report

Balance Sheet as of December 31, 2007 (Exhibit A)

Statement of Revenues and Expenses for the year  
Ended December 31, 2007 (Exhibit B)

Statement of Changes in Owners' Equity for the Year  
Ended December 31, 2007 (Exhibit C)

Statement of Cash Flows for the Year  
Ended December 31, 2007 (Exhibit D)

Notes To Financial Statements



## **INDEPENDENT AUDITOR'S REPORT**

**01 09 621**

**Messers/ Electric Regulatory Commission  
Amman - The Hashemite Kingdom of Jordan**

### **Report on the Financial Statements**

We have audited the accompanying Financial Statements of the Electric Regulatory Commission which comprise the balance sheet as at December 31, 2008 and the Statement of Revenues and Expenses, Statement of Changes in Equity, and Cash Flow Statement for the year then ended. And a summary of significant accounting policies and other explanatory notes .

### **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. This responsibility includes : designing, implementing and maintaining internal control relevant to the preparation and fair presentation of Financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances .

### **Auditor's 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 auditor's judgment, including the assessing the risks of material misstatement of the Financial Statements, whether due to fraud or error; In making those risk assessments, the auditor considers internal control relevant to the entity'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 entity's 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 the Financial Statement .

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



## OPINION

In our opinion, the Financial Statements present fairly, in all material respects the Financial Position of the Electric Regulatory Commission as of December 31, 2008 and of its financial performance and its Cash Flows for the year then ended .in accordance with the International Financial Reporting Standards . the Commission maintains proper accounting books of accounts

.FOR IBRAHIM ABBASI & CO

Ahmad M . Abbasi  
License No. 710

Amman – March 26, 2009



**Electricity Regulatory Commission**  
**Amman - The Hashemite Kingdom of Jordan**

**Balance Sheet as of December 31, 2008**

Exhibit A

	Note	2008	2007
Assets		JD	JD
Current Assets			
Cash on hand and at banks	3	1,137,455	2,993,416
Accounts Receivable	4	22,372	87,470
Other receivables	5	48,941	24,195
Total Current Assets		1,208,768	3,105,081
Fixed Assets - Net	6	946,506	155,079
Other Assets - Net	7	41,271	51,142
Total Assets		2,196,545	3,311,302
Liabilities and Accumulated surplus			
Current Liabilities			
Accounts and notes payable		40,571	311,008
Other payables	8	39,895	36,233
Total Current Liabilities		80,466	347,241
Accumulated surplus			
Accumulated surplus - ending of year (Exhibit D)		1,367,879	1,464,061
Reserve for purchasing land & building	9	748,200	1,500,000
Total Accumulated surplus		2,116,079	2,964,061
Total Liabilities and Accumulated surplus		2,196,545	3,311,302

The Accompanying Notes Form an Integral Part of This Statement

Electricity Regulatory Commission  
Amman - The Hashemite Kingdom of Jordan  
Statement of Revenues and Expenses  
For the Year Ended December 31,2007



Exhibit B

	Note	2008	2007
<b>Revenues</b>		JD	JD
Licensing fees (0.075 filis per each Killowatt/hour sold)	10	2,096,116	1,902,971
Credit - Banking interest		195,456	244,560
Other Revenues		4,829	56
<b>Total Revenues</b>		2,296,401	2,147,587
<b>Expenses</b>			
General and Administrative Expenses	11	(425,692)	(391,237)
Salaries and wages		(687,560)	(625,086)
Research and Consultation		(189,702)	(351,307)
Fixed assets depreciation		(56,421)	(52,156)
Rents		(105,000)	(81,250)
<b>Total Expenses</b>		(1,464,375)	(1,501,036)
<b>Year surplus - exhibit C</b>		832,026	646,551

The Accompanying Notes Form an Integral Part of This Statement



**Electricity Regulatory Commission**  
**Amman - The Hashemite Kingdom of Jordan**  
**Statement of changes in Owners' equity**  
**For the year ended December 31 2008**

Exhibit C

Description	Accumulated Surplus	Reserve for purchasing lands and buildings	Total
	JD	JD	JD
<b>Balance as of December 31,2006 (exhibit A)</b>	2,839,377	1,500,000	4,339,377
(Year surplus (increase of revenues from Expenses	646,551	-	646,551
Amounts transfered to ministry of fainance	(2,000,000)	-	(2,000,000)
Prior years adjustments	(21,867)	-	(21,867)
<b>Balance as of December 31,2007 (exhibit A)</b>	1,464,061	1,500,000	2,964,061
Year surplus (increase of revenues from Expenses) (Exhibit B)	832,026	-	832,026
Transfered from Reserve for purchasing lands & building to Acc. Surplus	(1,690,000)	-	(1,690,000)
Amounts transfered to ministry of fainance	751,800	(751,800)	-
Prior years adjustments	9,992	-	9,992
<b>Balance as of December 31,2008 (Exhibit A)</b>	1,367,879	748,200	2,116,079

The Accompanying Notes Form an Integral Part of This Statement

Electricity Regulatory Commission  
Amman - The Hashemite Kingdom of Jordan  
Statement of Revenues and Expenses  
For the Year Ended December 31,2007



Exhibit D

	2008	2007
Cash Flows From Operating Activities	JD	JD
Year surplus	832,026	646,551
Prior years adjustments	9,992	(21,867)
Depreciation and Amortization	56,435	52,156
Operating Profit prior to Changes in Working Capital	898,453	676,840
(Increase) Decrease in Current Assets		
Other receivables	(24,746)	50,536
Accounts receivable	65,098	163,011
Increase (Decrease) in Current Liabilities		
Accounts payable	(278,860)	225,847
Other payables	12,085	(1,165)
Net Cash Provided by Operating Activities	672,030	1,115,069
Cash Flows from Investing Activities		
(Purchase) of fixed assets	(838,831)	(39,882)
Other assets	840	(841)
Net Cash (Used in) Investing Activities	(837,991)	(40,723)
Cash Flows from Financing Activities		
Transferring amounts to Ministry of fainance	(1,690,000)	(2,000,000)
Net Cash (Used in) Financing Activities	(1,690,000)	(2,000,000)
Net Increase (Decrease) in Cash Balance	(1,855,961)	(925,654)
Cash on Hand and at Banks - Year Beginning	2,993,416	3,919,070
Cash on Hand and at Banks at Year End	1,137,455	2,993,416

The Accompanying Notes Form an Integral Part of This Statement



## **Electricity Regulatory Commission Amman - The Hashemite Kingdom of Jordan Notes to Financial Statements**

### **1-Formation of Electric Regularity Commission and Activities**

a. The Commission was formed in accordance to Public Electric law No. (13) for the year 1999 stating in Article (6A) from the Law the following :

A commission was formed under the name "Electric Regularity Commission" as an independent entity whether lawfully , financially and administratively . Accordingly , under this independence , with own real estate and personal properties in order to achieve its objective in addition to conduct all legal actions including contracting accepting all aids donations and grants with the right to sue by authorizing the Public Attorney or any other attorney acting on its behalf on legal procedures .

The main head quarters of the Commission is in Amman with the right to form branches or offices within the boundries of the Hashemite Kingdom of Jordan with the dicission from the Board of Directors of the Commission .

b. The Commission aims to safely up-keep efficient structure for this sector and to develop it in order to support the economical effectivness of it , in addition to encourage the investment compitation improvement of operational effeciacy and reasonable rate of electric sales guaranting safe service providing with high quality in the field of generating , transporting distributing by taking the best interest of consumer and regulating the sector on the basis of fairness and balancing among the common interests of consumers, licensed personals , investors and any other related sectors .

c. The Commission has all the exemptions and facilities that any other Ministry, Governmental Departments, and Public Official Foundation .

d. In accordance to Article (25) from the Temporary Public Electric Law No. (64) for the year 2002 , the financial revenues are generated from the fees of licensing , renewals and returns of provided services by the Commission, in addition to the specified amounts from Public Budget on the events such of emergency and grant, aids and of any other source .

e. In accordance to article (22) from the Temporary Public Electric law No. (64) for the year 2002, all annual surpluses attained by the Commission after deductions of all expenses, will be deposited to Public Treasury .

f. Board of Ministres has decided in its Assembly dated on 4 October 2005 on the basis of the legeslation of the two articles (8 &12) from the Electric Law No. (64) for the year 2002 and its amendments to form a devoted Commission to Regulate this sector starting on 15 October 2005 .

## 2- Significant Accounting Policies

### a- Basis of Preparation of Financial Statements

In accordance to International Financial Reporting Standards and its interpretation issued concerning them .

### b- Fixed Assets and Depreciation

Fixed Assets are recorded at historical costs and are depreciated by using the straight line method with annual rates between 2.5% -15 % .

### c- Revenues Recognition

Revenues are recognized in accordance to Accrual Basis .

### d- Foreign currency translation

Foreign currency are translated into Jordanian Dinars at exchange rates prevailing at the date of each transaction . Assets and liabilities expressed in foreign currencies are translated into Jordanian Dinars at exchange rates prevailing at the balance sheet date . Exchange differences arising from these translations are included as part or the statement of income for the current year .

## 3-Cash on Hand and at Banks

This item consists of :

	2008	2007
	JD	JD
Current Account - Jordan Dinar	168,669	269,365
Fixed Deposit - Jordan Dinar	968,786	2,690,315
Current Account - American Dollar	0	33,736
Total	1,137,455	2,993,416

## 4-Accounts Receivable

This item consists of :

	2008	2007
	JD	JD
Electric Generating Co.	7,251	33,705
Electric National CO.	1,111	52,732
Al Samrah Electric Generating Co.	13,929	1,033
arab gairman insuranse	81	0
Total	22,372	87,470



## 5-Other Receivables

This item consists of :

	2008	2007
	JD	JD
Workers Recievables	1,641	723
Others	47,300	23,472
Total	48,941	24,195

## 6- Fixed Assets

This item consists of :

	2008						2007
	Cost at the Beg. of the Year	Additions	Cost at the End of the Year	Depreciation Rates	Accumulated Depreciation	Net Book Value	Net Book Value
	JD	JD	JD	%	JD	JD	JD
Vehicles	73,575	41,200	114,775	15	73,561	41,214	11,132
Furniture & Decoration	84,651	8,360	93,011	2.5-15	37,929	55,082	55,522
Machinery & Equipment and Appliance	178,796	36,119	214,915	10-15	117,781	97,134	88,425
land	0	751,800	751,800		0	751,800	0
cash safe	0	1,352	1,352		76	1,276	0
Total	337,022	838,831	1,175,853		229,347	946,506	155,079

## 7- Other Assets

This items consists of :

	2008	2007
	JD	JD
Software Computer	60,036	60,876
Accumulated Depreciation	(18,765)	(9,734)
Total	41,271	51,142

## 8- Other Payables

This items consists of :

	2008	2007
	JD	JD
Other Withholding	34,567	35,212
Workers Payables	5,328	1,021
Total	39,895	36,233

## 9- Reserve for Purchasing Lands and Buildings

In accordance to the decision by the Board of Electric Regulatory Commission No. 44/03/2002 dated 21 November 2002 , it was approved to reserve the amount of 1.5 million Dinar for the purpose of purchasing a piece of land and structuring an independent building for the Commission it was also approved by the Board of Ministers on the Public Budget of the year 2003 inclusive of the specification of 1.5 million Dinar for this purchase . The Board of Directors in the Fifth Assembly dated 20 June 2003 has approved the transfer of the above amount into a reserve to purchase land and building .

## 10- Revenues from Licensing

This items consists of :

	2008	2007
	JD	JD
Licensing fees from Central Electric Generating Co.	627,244	695,293
Licensing fees from National Electric Co.	978,366	889,956
Licensing fees from Distributing Electric Co.	146,320	124,539
Licensing fees from Al Samrah Electric Generating Co.	272,204	193,183
Licensing fees from irbed Electric Generating Co	71,982	0
Total	2,096,116	1,902,971



## 11- General and Administrative Expenses

This item consists of :

	2008	2007
	JD	JD
Social Security Share of the company	56,941	53,417
Savings fund share	37,732	36,037
Medical insurance share	44,137	42,464
Life insurance	4,591	4,038
Transportation	6,216	6,311
Remuneration	21,600	10,041
Overtime	33,660	30,937
Training and Scholarship	15,991	39,000
Cleaning	12,932	9,045
Telephone and postage	29,647	28,226
Legal consultant fees	0	3,500
Professional fees	0	1,450
Vehicle insurance	2,686	1,748
Consumed	1,418	1,840
Stationary	22,270	21,942
Maintenance	15,432	13,353
Water & Electricity	23,185	13,450
Traveling	33,252	36,758
Fuel	8,254	4,152
Other expenses	48,760	25,516
Premium of increasing	6,988	8,012
Total	425,692	391,237

## 12 - Accumulated surplus

Upon the requesting of Ministry of Finance and according to the Financial Surplus Law the Electricity Regulatory Commission was transfer amount of JD 1,690,000 to the general saving fund account .

## 13 -Comparative Year Figures

Last years' figures have been reclassified to comply with current year' figures .







# Electricity Regulatory Commission