# The Jordanian Electric Power Co. (JEPCO) 74 Years of Development



## History



- Established in 1938 by a group of businessmen.
- Converted into a share-holding company in 1947 and received a concession to generate and distribute electricity in Amman and its suburbs

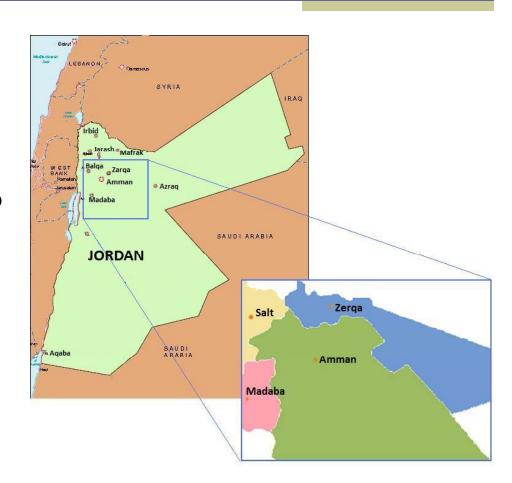




#### **Concession Area**



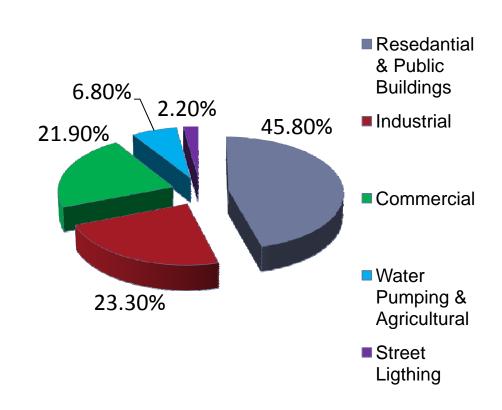
- In 1962 the concession was renewed for fifty years.
- The concession area was extended in the renewed concession to cover four main cities in the central part of Jordan (Amman, Zerqa, Salt & Madaba).
- The service area covers approximately 7000 sq. km



#### Customer Base



- Today, JEPCO distributes and retails electricity to about 1,050,000 customers; an equivalent to 65% of the electricity customers base in the country.
- It is estimated that JEPCO's service area has a resident population of 3.6 million.



## Consumption Base



# JEPCO'S Allocation Share Compared To The Distribution Sector

Description	Energy/ GWh %	Customers%
Residential	68.4%	64.6%
Commercial	76.0%	70.2%
Industrial	51.8%	67.7%
Water Pumps	25.8%	22.0%
Street lighting	50.0%	59.2%
Total	58.7%	65.1%

#### Maximum Demand of JEPCo

Year	M.D (MW)	Growth
2003	738.3	6.1%
2004	803.0	8.8%
2005	924.4	15.1%
2006	1112.0	20.3%
2007	1237.7	11.3%
2008	1335.8	7.9%
2009	1399.0	4.7%
2010	1498.10	7.1 %
2011	1634.74	9.1%
2012	1691.82	3.4%

#### Key Statistics For The Year 2011



Paid-Up Capital: 75.6 MJD

Revenues: 569.5 MJD

Net Profit: 9.4 MJD

■ Total Fixed Assets: 401 MJD (After Depreciation)

Electricity lines (M.V): 25,500 Km

No. of Primary S/S (33/11kV): 88

No. of Distribution S/S: 8,475

Energy Sold: 8008 GWh

Employees: 2,676



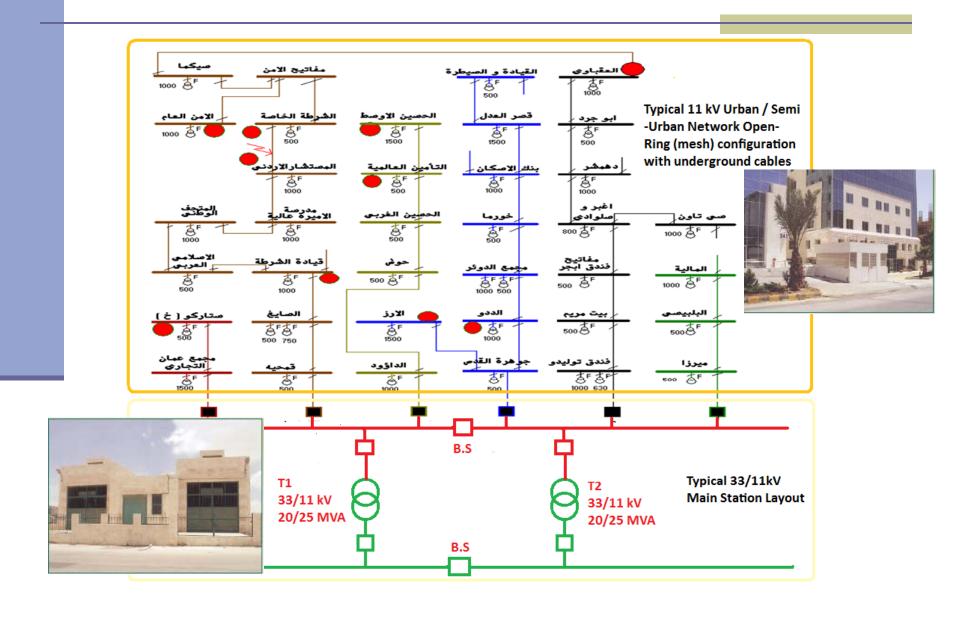




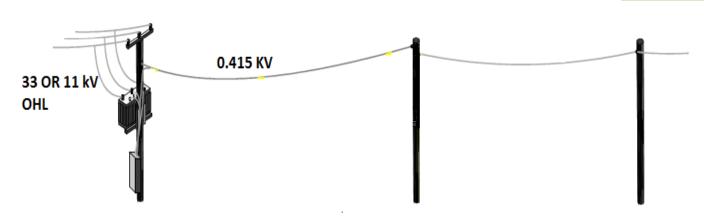
### Technologies Used at JEPCo

- 1) SCADA Center:
- Controlling & Monitoring 33 KV System & 11 KV Feeders at 33/11 KV S/S.
- Increasing Reliability and Reduce Outages' Durations.

#### Urban / Semi-Urban Distribution Network



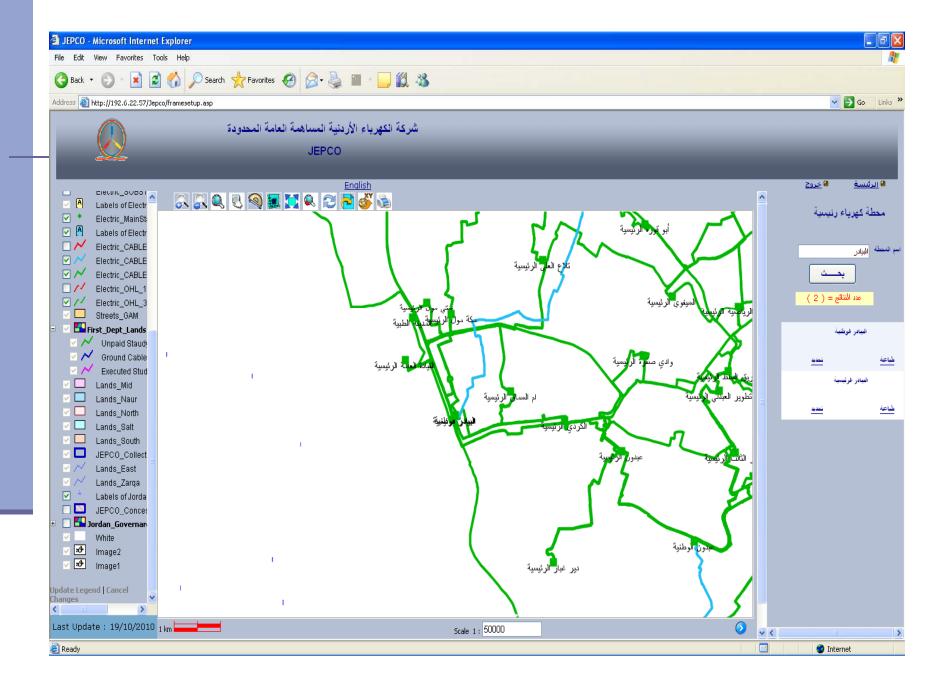
## Rural Distribution Network





2) GIS: (Geographical Information System)

- For 33 ,11 KV & 0.4 KV System.
- Useful In Planning ,Studies, Maintenances,
   And New Costumer Installation.



3) Call Center:

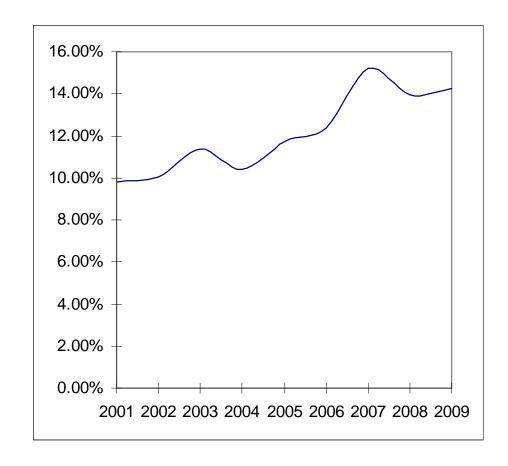
Follow Up The Customer Complains In Order to Reduce The Outages Duration, And Facilitate The Communication.

- 4) Meter Testing Center:
- Testing the new meters before installation on the costumer premises.
- Testing old meters and calibrating.

## **Energy Losses**

# Energy Losses (Technical & Non-Technical) went up:

Year	Energy Losses
2003	11.38%
2004	10.41%
2005	11.75%
2006	12.41%
2007	15.21%
2008	13.98%
2009	14.27%
2010	14.00%
2011	13.20%



## Improvements in the system.

- Increase the cross-section of MV cables (300-240/to 500 & 400)mm<sup>2</sup>.
- Replacements of old meters, high error percentage).
- Adding low and medium voltage capacitors.
- Replacement of old LV networks to ABC.
- Using digital meters instead of mechanical.
- Increasing the staff in the Meters Inspection's Department.

#### Energy Efficiency and Load Shedding.

- JEPCo understands the importance of EE procedures
- JEPCo is ready to cooperate with all parties(ERC, Consumers... etc) to promote the EE program
- During the past five years JEPCo has performed a considerable number of Loads Shedding requested by the National Control Center (NCC)
- Loads Shedding have increased the duration of Interruption/customer from (20 to 80) minutes/month/customer in July 2012

# SUMMARY OF INTERRUPTION DURATIONS/CUSTOMER DURING SUMMER

Type of Interruption Year	Load shedding	Unscheduled
2010	95 min/customer	70 min/customer
2011	10 min/customer	62 min/customer
2012	68 min/customer	50 min/customer

#### Conclusion

- JEPCo's Customers are affected by complete outages for a considerable periods during the year because of loads shedding.
- EE programs might help to reduce the durations of these outages

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