





GSA Center for Energy Management

Understanding your building's electric bill

How to analyze it, and why is it
important that we do?



Lariza Sepulveda

August 4, 2008



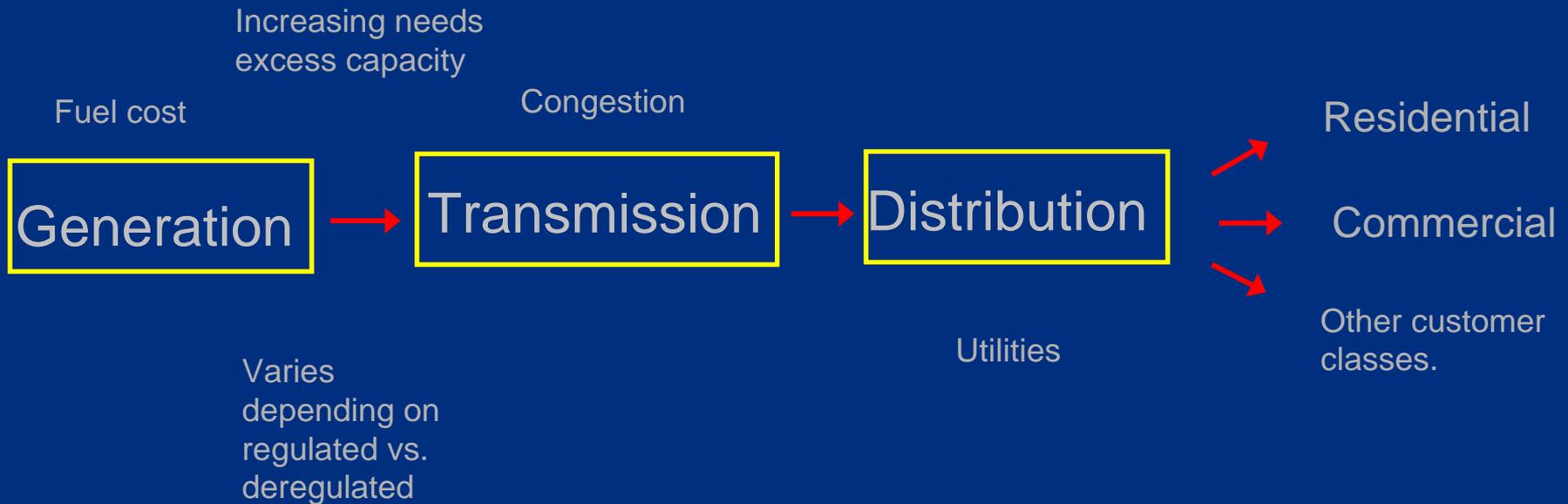
Understanding the Nature of Electricity

- Electricity is a vital service, not an ordinary commodity.
- The electric network is a remarkably demanding system that must be kept in perfect balance in real time.
- There are no substitutes for it, it is not storable, and it is essential to health, safety and the economy.



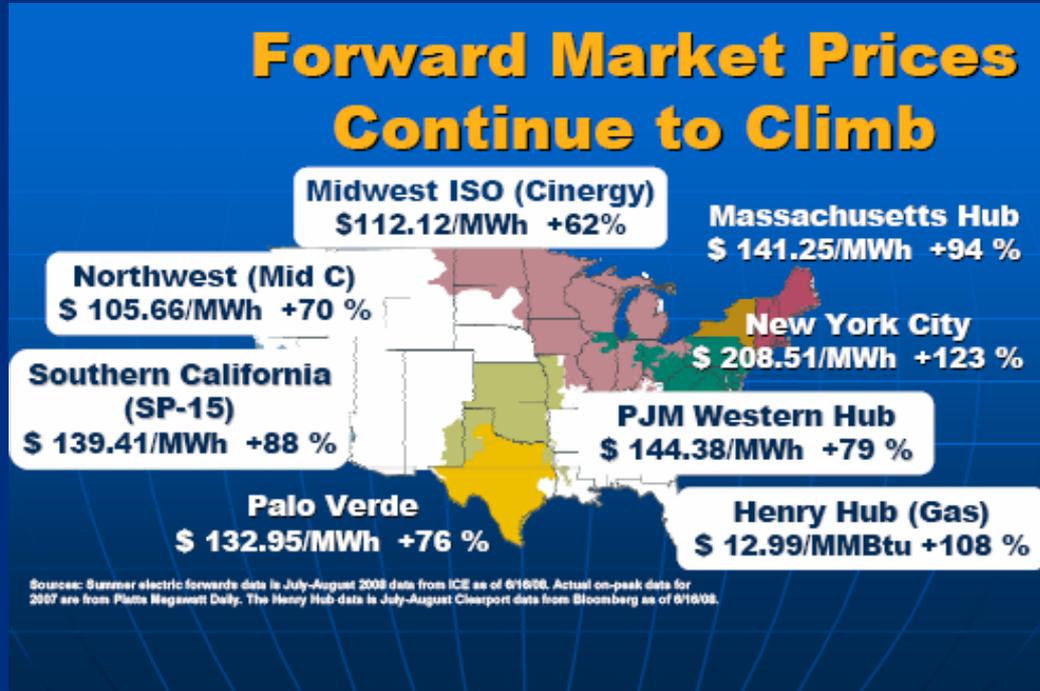
Structure of the Electric Network

- The electric system consist of three main components:





Why is it important?



There are many factors contributing to the increases in the cost of new generation for every type of power plant from nuclear power to wind generators.

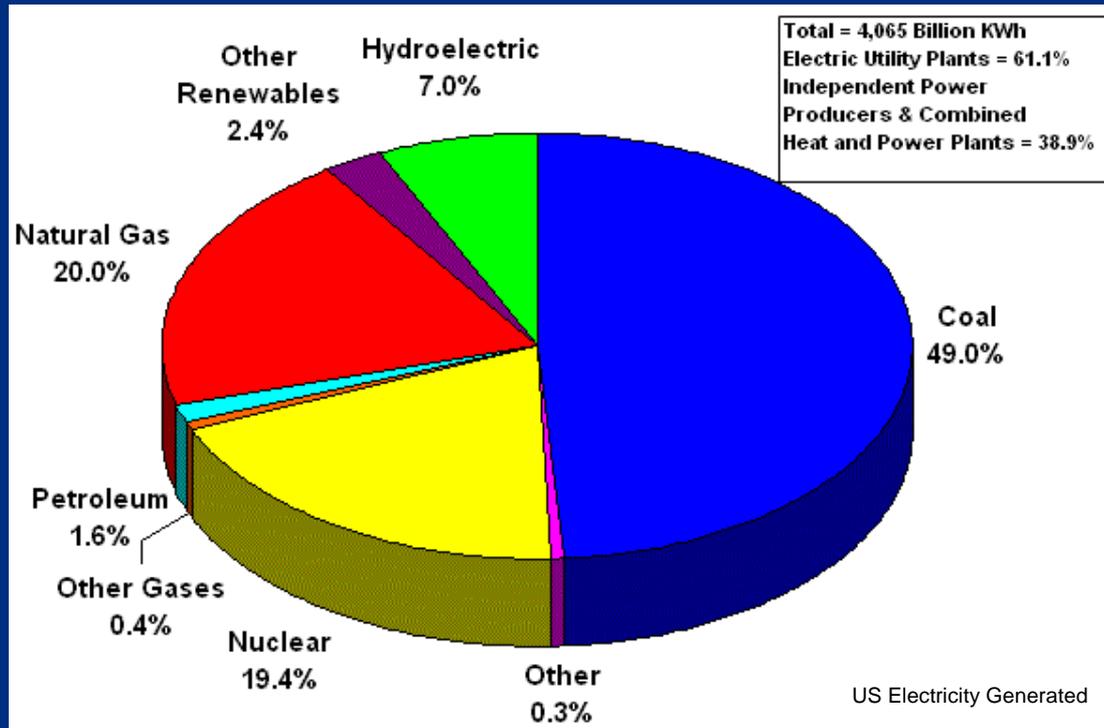


Key factors affecting increases.

- A primary factor for the electric power price increases this year is high fuel prices.
- A second major factor is the increasing cost of new construction.
- A third factor affecting the market is the Climate Change Debate and Policy decisions.



Higher fuel costs





Increasing capital cost

- Demand in most regions has gradually caught up with the capacity.
 - need to build more generation plants.
- Construction cost of power plants has increased significantly due to rising global demand for basic materials
 - iron, steel, concrete, copper, nickel...etc.
- Labor costs are also increasing.
 - utility labor and construction labor.



Policy

- National uncertainty about carbon policy.
- Uncertainty carbon dioxide emissions is lively and it affects how companies think about investments.
- The debate between Regulation vs. Deregulation.



Bottom line

- We are observing a changing energy industry.
- There are limited resources and recourses, and it is going to take time to build new projects.
- Efficiency is going to be a key factor, at least in the short run.
- Understanding our electric bill can help us plan for future consumption. Future contracts depend on present pattern of usage – if we decrease capacity (KW usage) today...



How analyzing your bill can help:

- It sums up the energy cost for your building.
- Can help you see how efficient your building is compared to other buildings.
- It calculates how much you can save if you could make your building more efficient.
- It helps you to set up a baseline to measure the buildings future energy savings.

Taking a look at your actual bill

pepco A PEI Company

GSA,NCR 3037 DC0309ZZ
88537207 P1121101
PO BOX 17128
FORT WORTH TX 76102-0128

Account No: 0100 3740 24
Bill Issue Date: Nov 19, 2007

Service Address: 400 C ST SW

pepco Telephone Contacts:
Customer Care - 7am-8pm 202-833-7500
Power Outages - Available Anytime 1-877-737-2662
Life Threatening Emergencies - Available Anytime 202-872-3432
Hearing Impaired (TTY) - 7am-8pm 202-872-2369
Habla Español - 7am-8pm 202-872-4641
Toll-Free Numbers (within our service territory) - 7am-8pm 1-800-424-8028
Miss Utility (call before you dig) - Available Anytime 202-265-7177

THIS BILL CONTAINS YOUR CHARGES FROM BOTH PEPCO AND YOUR ELECTRIC ENERGY SUPPLIER.

Meter Summary

Meter No.	Description	Previous Reading	Present Reading	Multiplier	KWH Used
575U	Kilowatt Hour Meter	4967	5090	600	318900
576U	Kilowatt Hour Meter	7135	7976	600	492360
D 11	CE Peak	433814	368849	1	361649
D 08	Intens Peak	212962	391172	1	201172
D 05	On Peak	274691	248321	1	248321

Total KWH Billed: 811342 Non-Residential-GT

The present reading is an actual reading.
Your next scheduled meter reading is December 14, 2007.

Account Summary

Prior Balance Pepco	\$21,670.45
Payments Received Pepco	\$21,670.45
Balance Forward Pepco	\$0.00
Current Charges This Period Pepco	\$27,267.93
Total Pepco	\$27,267.93
Prior Balance PowerChoice	\$101,066.87
Payments Received PowerChoice	\$101,066.87
Balance Forward PowerChoice	\$0.00
Current Charges PowerChoice	\$80,178.02
Total PowerChoice	\$80,178.02
TOTAL AMOUNT DUE	\$107,445.95

If you are moving or terminating service for any reason, call Pepco in advance. For an actual reading for your final bill, you must provide at least three days advance notice. You are responsible for payment for all service rendered through the date you notify Pepco that you want your account closed.

14-0000115 PLEASE DETACH HERE AND RETURN THIS PART WITH YOUR PAYMENT OR PAY ONLINE AT WWW.PEPCO.COM

Service Address: 400 C ST SW

Please make your payment payable to Pepco
Write your Account No. 0100 3740 24 on your payment

AMOUNT PAID \$

Due Dec 10, 2007 \$107,445.95
Due After Dec 10 \$107,445.95

GSA,NCR 3037 DC0309ZZ
88537207 P1121101
PO BOX 17128
FORT WORTH TX 76102-0128

80100374024000000000107445953210070107445950000100374024

- 1 The return portion of your bill
- 2 Service provider contact information
- 3 Account Number
- 4 Total amount due and Account Summary
- 5 Meter summary
- 6 Account Details
- 7 Energy Usage History

Taking a look – Distribution charges



A PFI Company

GSA_NCR_3037 IX 0309ZZ

Account No: 0100 3740 24
 Bill Issue Date: Nov 19, 2007

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Additional Contact Information

PEPCO CUSTOMER SERVICE CENTERS

Washington, DC Hours/
 731 Ninth Street, NW 8:30 am - 5:15 pm
 2406 Martin Luther King, Jr. Ave., S.E. 9:00 am - 5:00 pm

Maryland

500 West Thurgood Drive 10:00 am - 2:00 pm
 Rockville, Maryland
 5300 Old Marlboro Pike* 10:00 am - 2:00 pm
 Fortoville, Maryland

* The customer's window at this location is open to receive payments on Mondays, Wednesdays and Fridays only.
 Information regarding site schedules and how to verify the accuracy of your bill will be mailed upon request.

PAYMENTS

PEPCO
 P.O. Box 4863
 Trenton, NJ 08650-4863

WRITTEN INQUIRIES

PEPCO, Customer Service Section
 701 Ninth Street, NW
 Washington, DC 20004-0901

Notice About Electronic Check Conversion: When you provide a check as payment, you authorize us either to use information from your check to make a one-time electronic fund transfer from your account or to process the payment as a check transaction. When we use information from your check to make an electronic fund transfer, funds may be withdrawn from your account as soon as the next day we receive your payment, and you will not receive your check back from your financial institution.

PEPCO is regulated by the Public Service Commission of the District of Columbia. You may contact the commission regarding your inquiries at (202) 626-5100 or on their website at www.dcpsc.org.

Public Service Commission Office of People's Counsel
 1333 H Street, NW (202) 721-3671
 2nd Floor, West Tower
 Washington, DC 20005

PEPCO's Taxpayer Identification No. 53-0127880
 Visit our website at: www.pepco.com

Account Details

Services for Oct 15, 2007 to Nov 13, 2007:

Water rates in effect

Distribution Services:

Customer Charge		20.93
On-Peak Energy	248523 KWH x 0.0102900	2,551.28
Off-Peak Energy	201172 KWH x 0.0102900	2,070.06
Off-Peak Energy	361649 KWH x 0.0102900	3,721.77
Minimum Demand	2117.9 KWH	88,164.48
Reliability Energy Trust Fund	at 0.0011100 per KWH	900.59
Public Space Occupancy Surcharge	at 0.0021900 per KWH	1,776.84
Delivery Tax	at 0.0071000 per KWH	6,247.33
Administrative Credit	at 0.0003500 per KWH	210.95 CR

Total Charges - Distribution 27,247.93

Other Services:

CEO Online Monthly Subscription 20.00
 Total Charges - Other 20.00

CURRENT CHARGES THIS PERIOD \$27,267.93

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Account Details (regulated portion)

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Energy Usage History

Energy Usage History

	Nov 06	Dec 06	Jan 07	Feb 07	Mar 07	Apr 07	May 07	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07
DAYS	28	31	34	27	31	31	29	30	32	29	30	32	29
KWH	726606	871756	946273	1174843	1009235	836461	786492	849060	965833	919906	914597	921487	811342
ON PK	221751	252227	246706	309826	310763	258357	258589	268211	278497	291183	285185	274691	248521
INT PK	175866	220136	210590	391258	259341	207426	199394	211533	229818	228781	222563	212962	201172
OFF PK	328949	399393	487978	583860	439131	372676	330509	369316	457518	399341	406849	433814	361649
KW-MAX	1953.8	2597.9	2061.9	2554.3	2605.1	2119.6	1931.2	1947.0	1929.5	2044.7	1985.9	1939.5	2117.6
KW-ON PK	1927.0	2409.4	1964.3	2516.0	2498.9	2043.1	1931.2	1939.6	1929.5	2044.7	1982.2	1939.5	2027.9

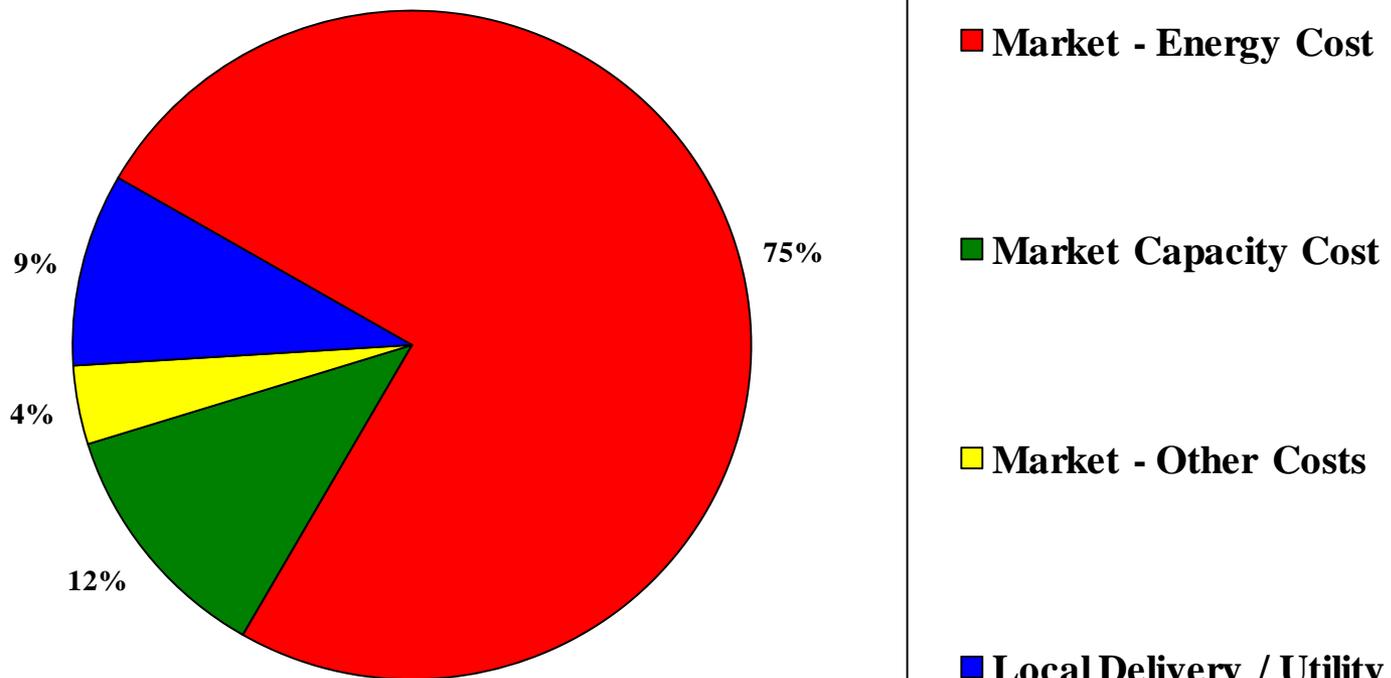
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Taking a look – Deregulated charges.

 A PHL Company	Account No: Bill Issue Date:	0100 3740 24 Nov 19, 2007	Page 3 of 3
GSA/NCR 3037 DC0309ZZ			
Supplier Contact Information	Account Details (continued)		
Pepeco Energy Services Inc PowerChoice 1300 North 17th St, Suite 1600 Arlington VA 22209 800-213-7719 www.pepco-services.com	Services by PowerChoice for Oct 16, 2007 to Nov 13, 2007:		
	OCT 07-UCAP & NETWORK TRANSMISSION COST PASS THRU GENERATION - 811,342 KWH TOTAL @ 1.236-CENTS/KWH	13193.62 62284.40	
	Charges This Period PowerChoice	\$80,178.02	6

6 Account Details
(deregulated portion)

Electrical Cost Component -- average user



PJM - Mid Atlantic



For More Information

- Lariza Sepulveda
- GSA Center for Energy Management
- 301 7th Street, SW, Room 4004
Washington, DC 20407-0001
(202) 205-5057
- lariza.sepulveda@gsa.gov

Don't forget to fill out and drop off your session evaluations!