



# “The Internet of Things” - Opportunity or Threat for the Utility Sector?

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# Meter Energy Efficiency: Ending the Utility Death Spiral

Rob Harmon  
President and CEO  
EnergyRM



# Problem: Utility Economics (IOUs)

**THE WALL STREET JOURNAL.**

Companies Unplug From the Electric Grid,  
Delivering a Jolt to Utilities

**citi**

**ENERGY DARWINISM**

The Evolution of the Energy Industry

Halving of the addressable market over the next 2 decades

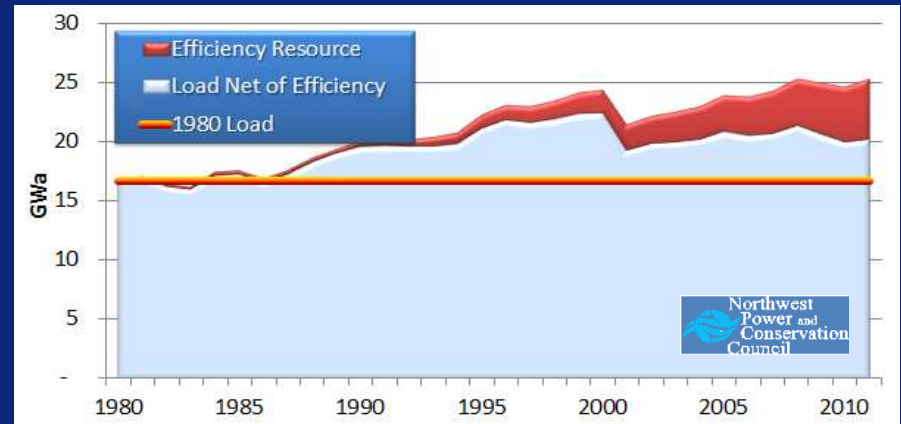
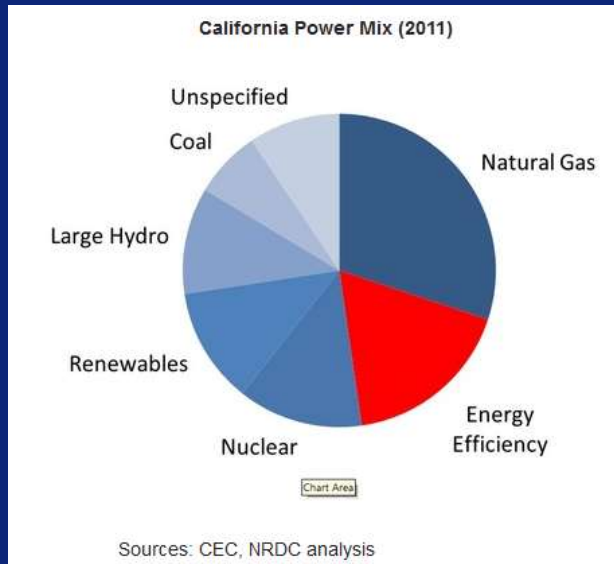
**Forbes**

Time To Short  
Your Electric Utility?



Image: [australianinvestmanteducation.com.au](http://australianinvestmanteducation.com.au)

# Problem: Utility Economics (cont.)



Energy efficiency currently represents utility **red ink**

Utilities earn on *investments* like generation

Traditional EE = Negative sales  
= Lost revenue  
= Lost investment

# Problem: Utility Economics (IOUs)



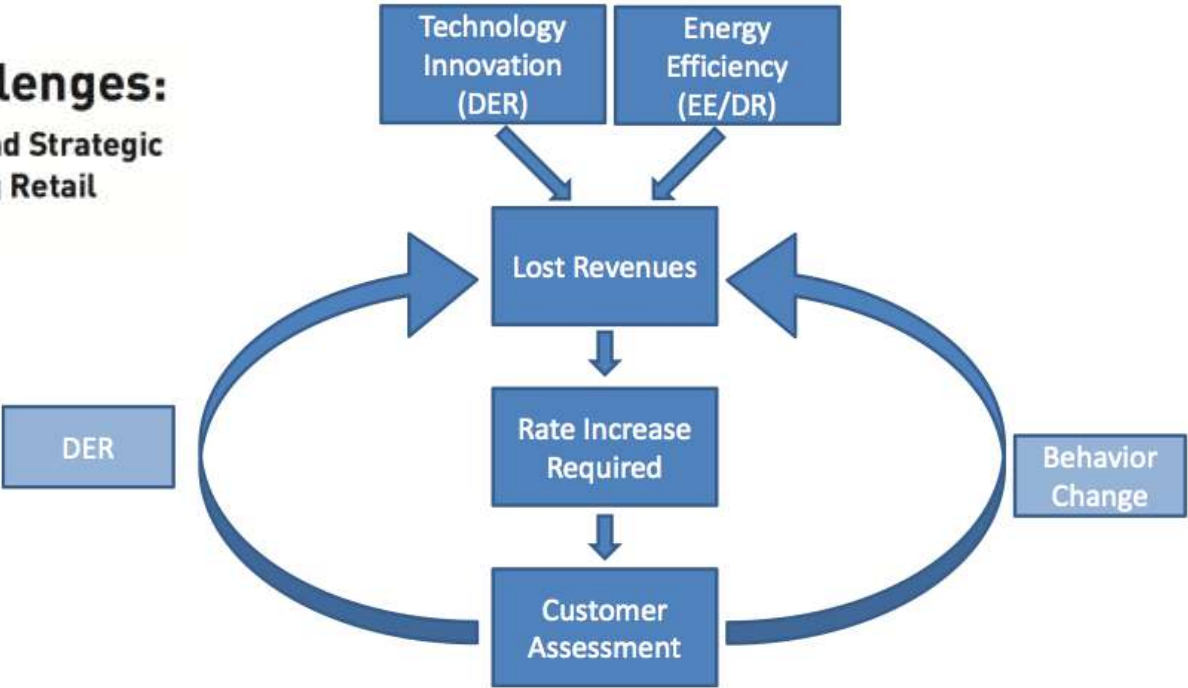
Edison Electric  
Institute

*Power by Association<sup>SM</sup>*

## Disruptive Challenges:

Financial Implications and Strategic Responses to a Changing Retail Electric Business

Exhibit 3  
Vicious Cycle from Disruptive Forces



# Problem: Utility Economics (IOUs)



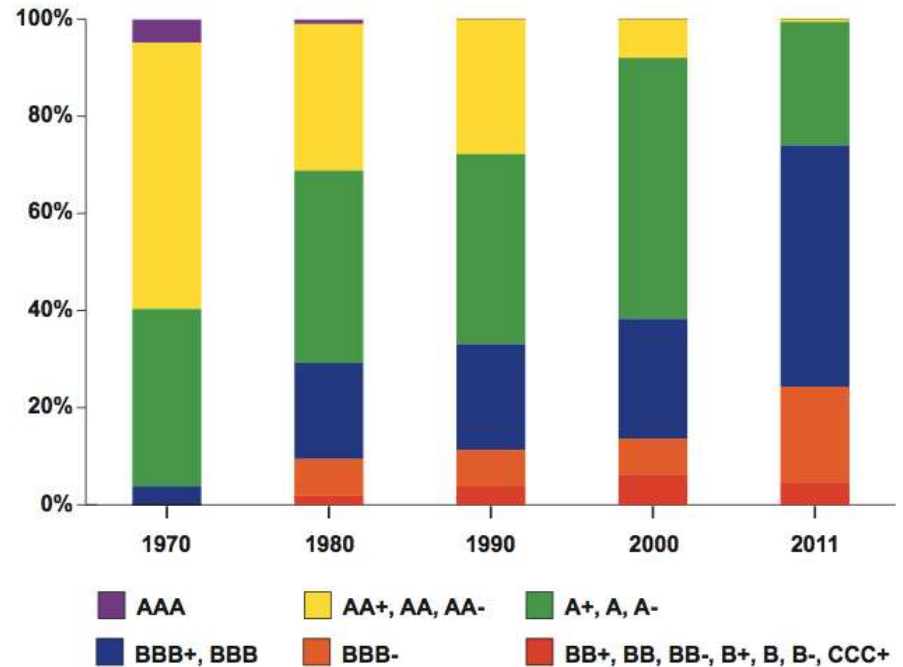
Edison Electric  
Institute

Power by Association™

Energy Efficiency and  
Distributed Generation

*“Could have a major  
impact on  
-realized equity returns  
- required investor returns  
&  
-credit quality”*

**Exhibit 2**  
**Electric utility industry credit ratings distribution evolution**  
(S&P Credit Ratings Distribution, U.S. Shareholder-Owned Electric Utilities)

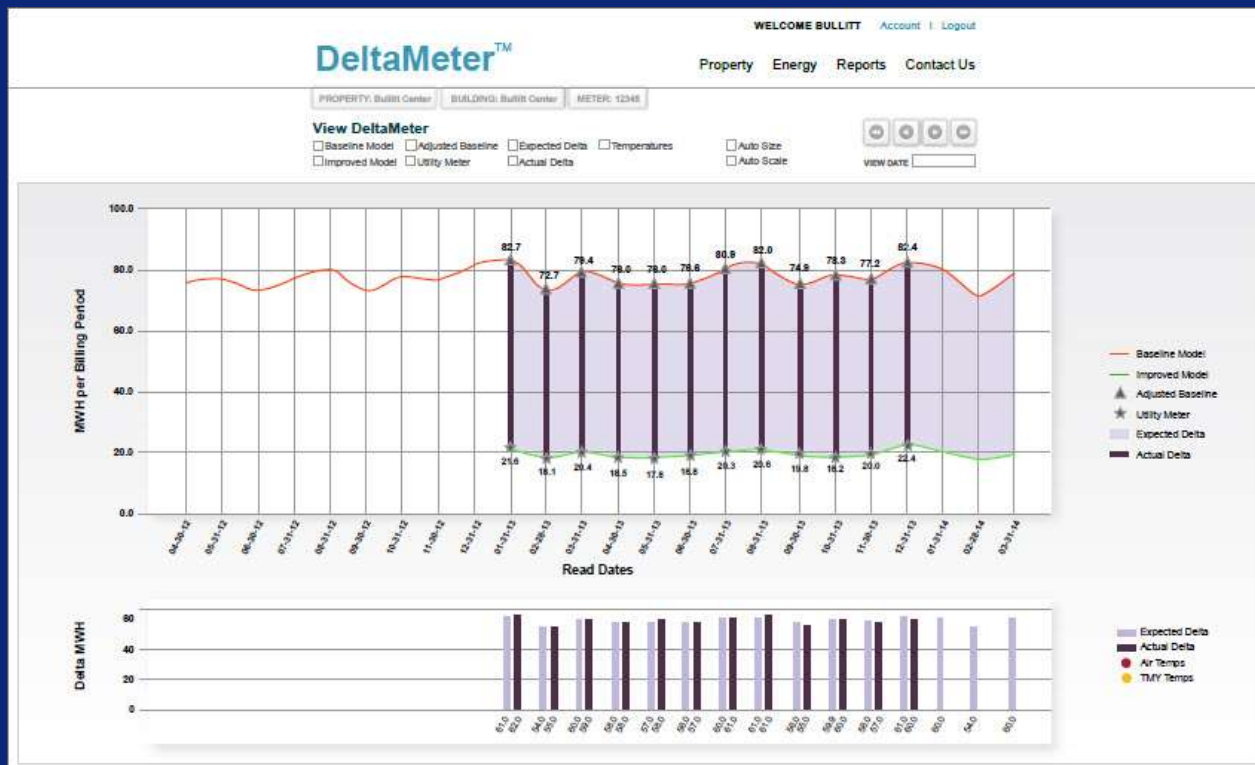


Source: Standard & Poor's, Macquarie Capital

# Solution: Make EE = Generation

1. Meter it

2. Buy and sell it *just like generation*



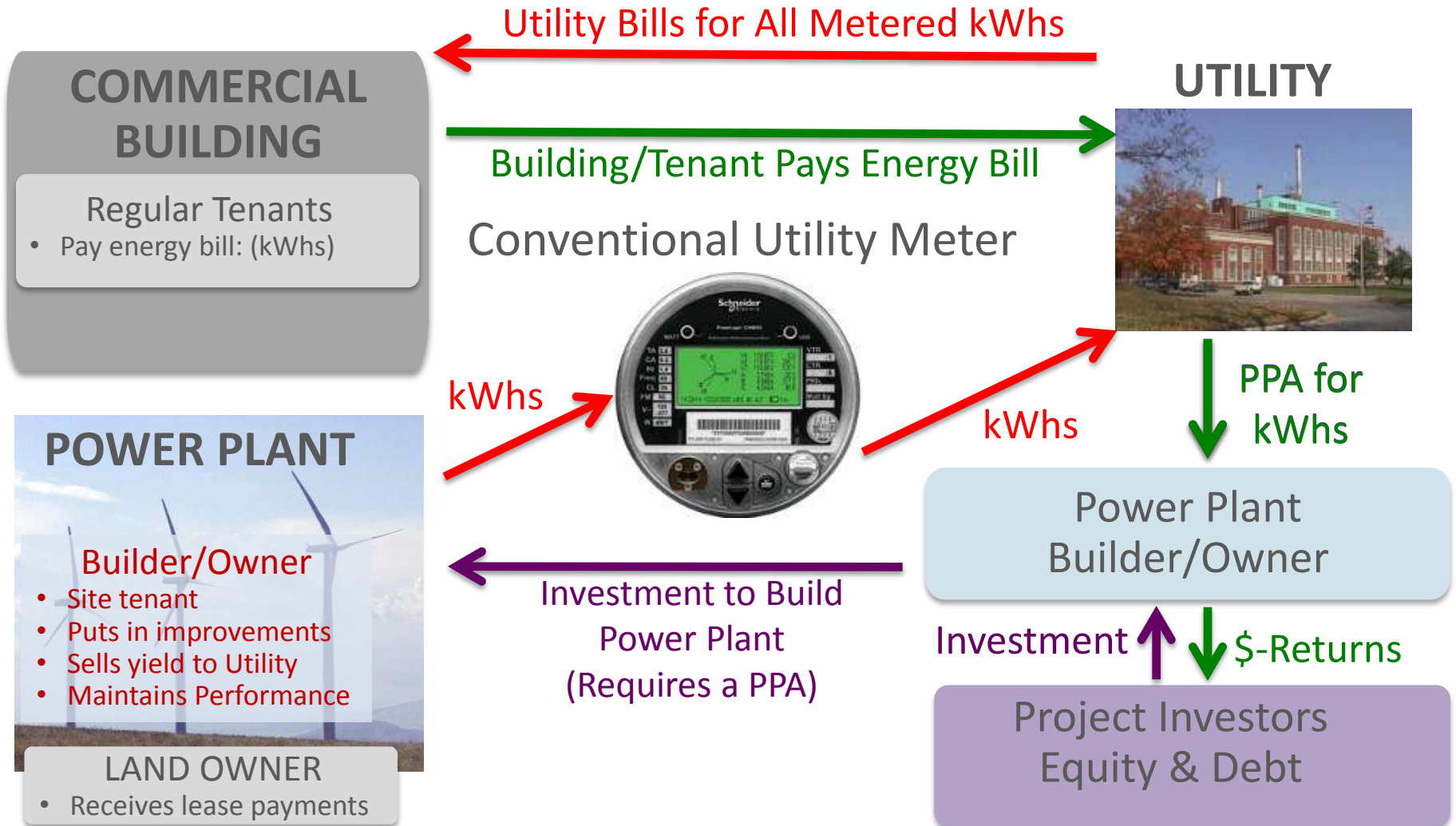
# A New Approach

- The Metered Energy Efficiency Transaction Structure:

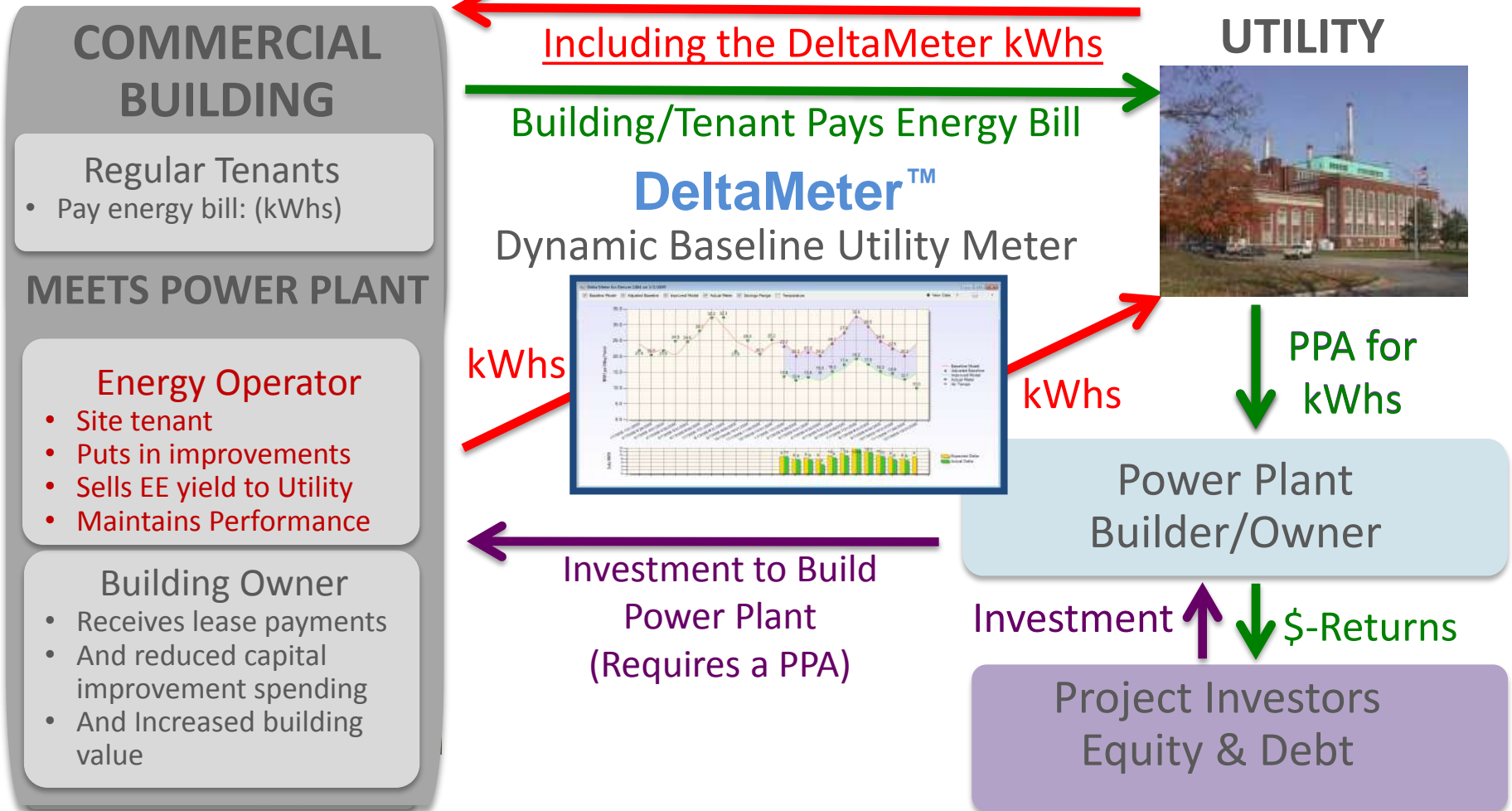
*MEETS*



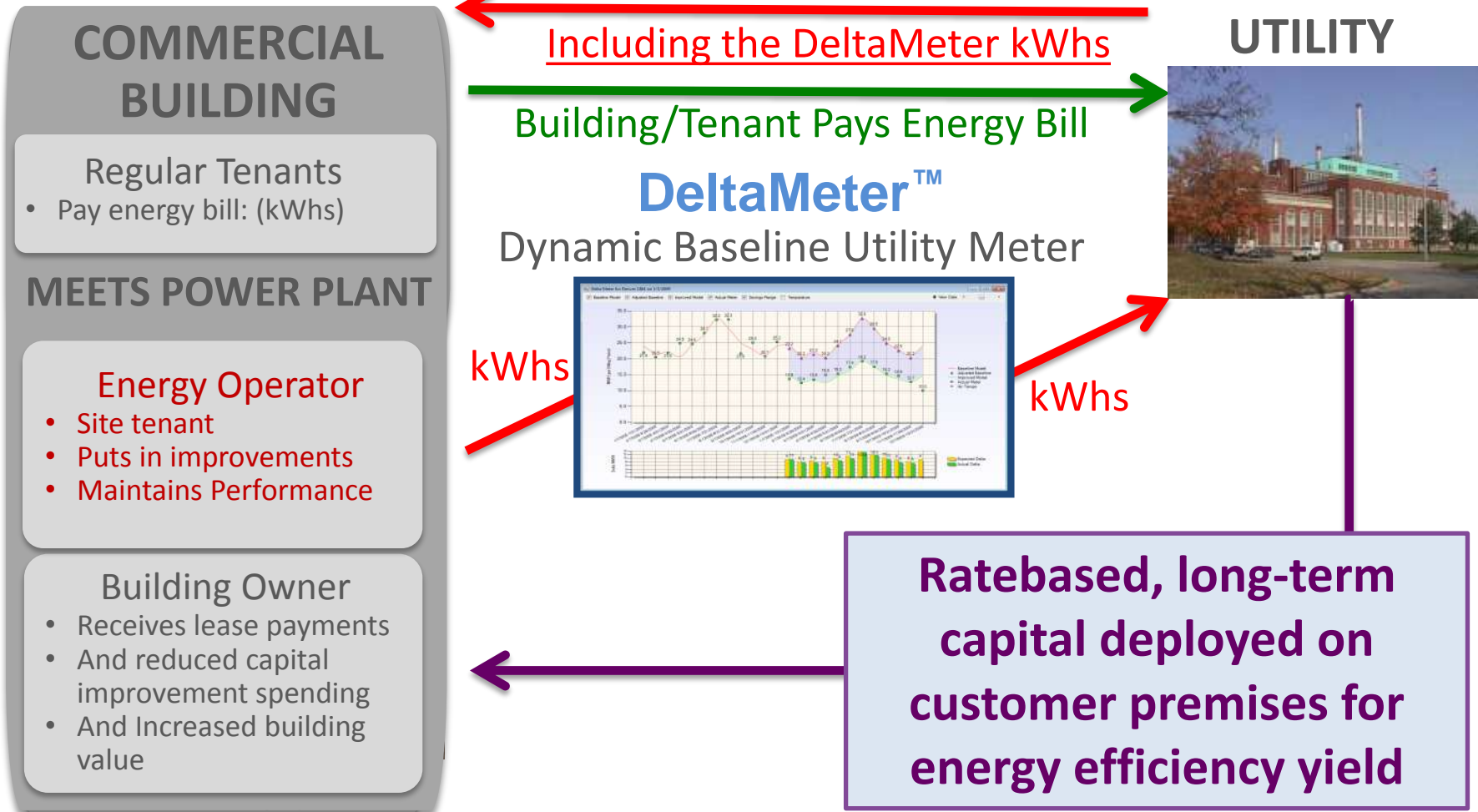
# ..... a Power Plant

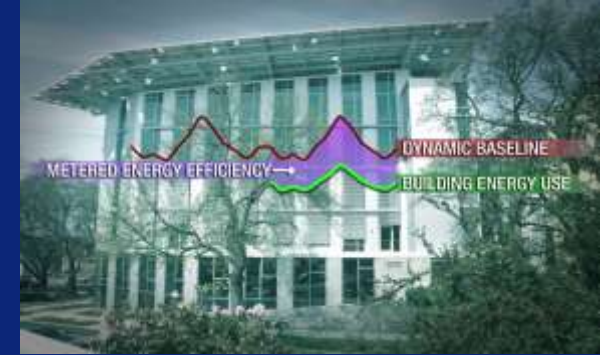


# MEETS: A Building is a Power Plant



# MEETS: A Building is a Power Plant





# Seattle City Light Pilot

## Bullitt Foundation Building – Living Building Challenge

- Funding Support for
  - Baseline and meter process: NW Energy Efficiency Alliance
  - Billing interface (automated) – OregonBEST
- Terms
  - 20 year agreement
  - PPA price is retail plus standard incentives
  - Building pays retail (for both used and “saved” units)
  - Energy yield from efficiency metered by DeltaMeter
- Parties:
  - Bullitt Foundation is Investor and EnergyTenant™
  - Bullitt Subsidiary is Building Owner/Master Tenant
  - Commercial Tenants Occupy Most of the Building
  - Seattle City Light: Jorge Carrasco
  - Bullitt Foundation: Denis Hayes

# MEETS Benefits

## Utility

New Load Management Resource  
Location-Specific and Reliable  
Only Pay for Units Received  
Rate-baseable: Earnings  
Opportunity  
No revenue loss

## Building Owner

New 20 to 30 Year Tenant  
New Revenue Stream  
Increased Building Value  
Frees Up Capital  
Owner Stays Out of Energy Business

DeltaMeter™

## Investors

Finance Based on Utility PPA  
Strong Counterparty  
Lower and Rated Payment Risk  
Well-Understood Instruments  
Scale Through Aggregation

## Society

Domestic Jobs  
Environmental Benefit  
Enhanced Building Stock  
Price Stability  
No Tax Dollars Required

# More information

- MEETS
  - The Metered Energy Efficiency Transaction Structure
- MEETS AC
  - The MEETS Accelerator Coalition
    - [www.MeetsCoalition.org](http://www.MeetsCoalition.org)

EnergyRM<sup>®</sup> | Energy Resource  
Management Corp.

[www.en-rm.com](http://www.en-rm.com)



Questions?





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