



“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
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Problem: Utility Economics (IOUs)

THE WALL STREET JOURNAL.

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

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ENERGY DARWINISM

The Evolution of the Energy Industry

Halving of the addressable market over the next 2 decades

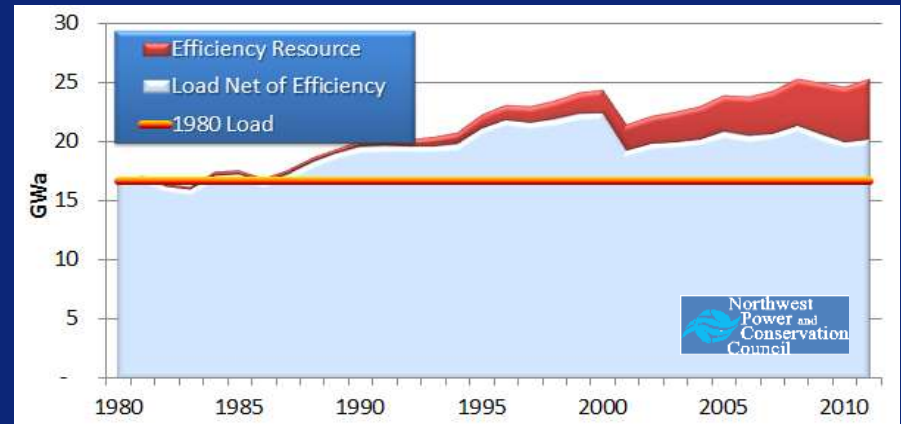
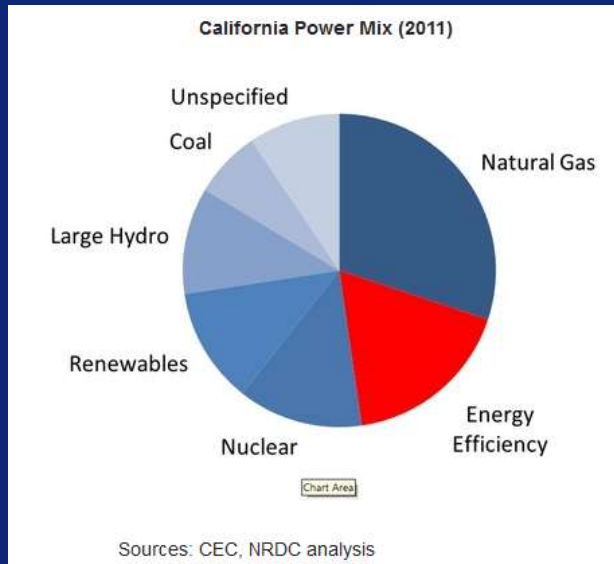
Forbes

Time To Short
Your Electric Utility?



Image: australianinvestmanteducation.com.au

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)



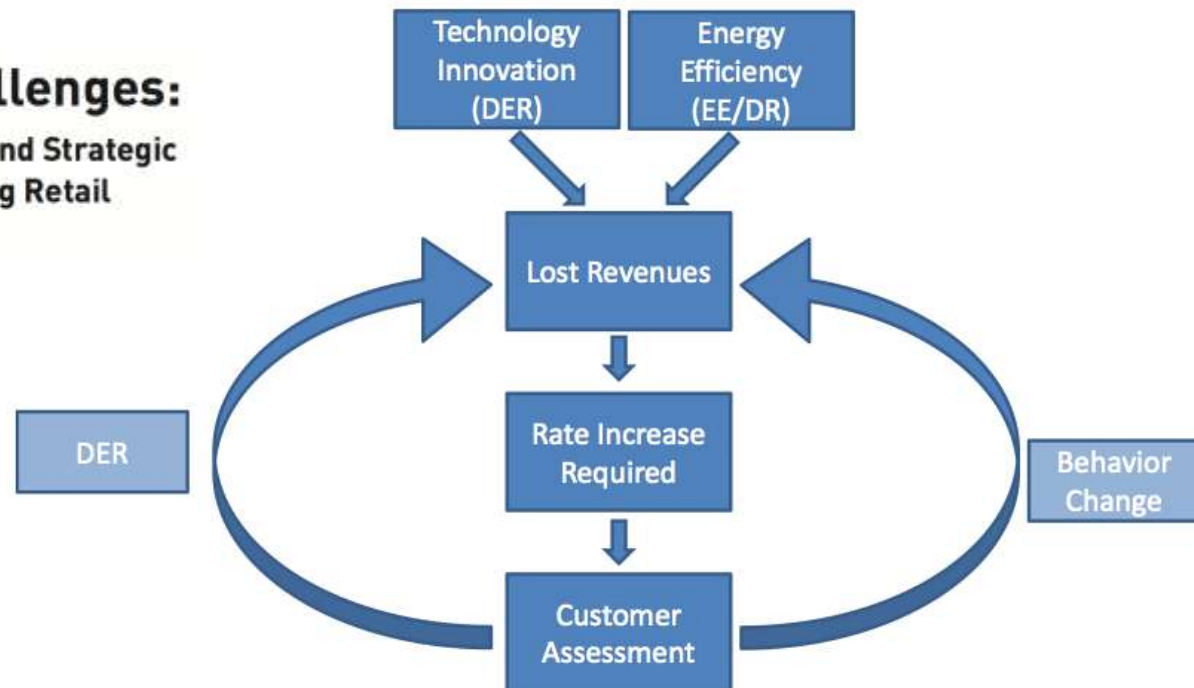
Edison Electric
Institute

Power by AssociationSM

Disruptive Challenges:

Financial Implications and Strategic
Responses to a Changing Retail
Electric Business

Exhibit 3
Vicious Cycle from Disruptive Forces



Problem: Utility Economics (IOUs)



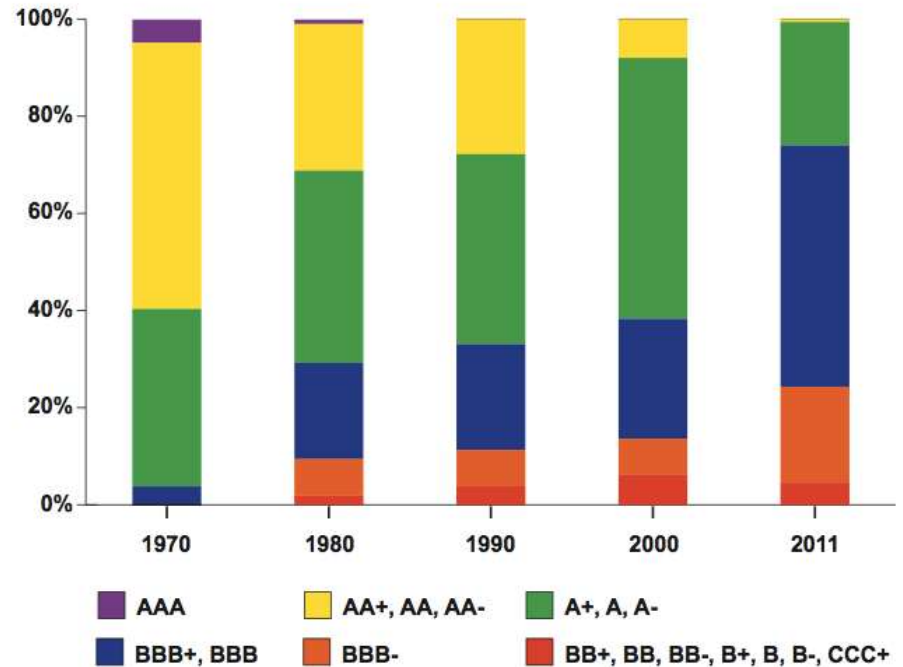
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Energy Efficiency and
Distributed Generation

*“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)

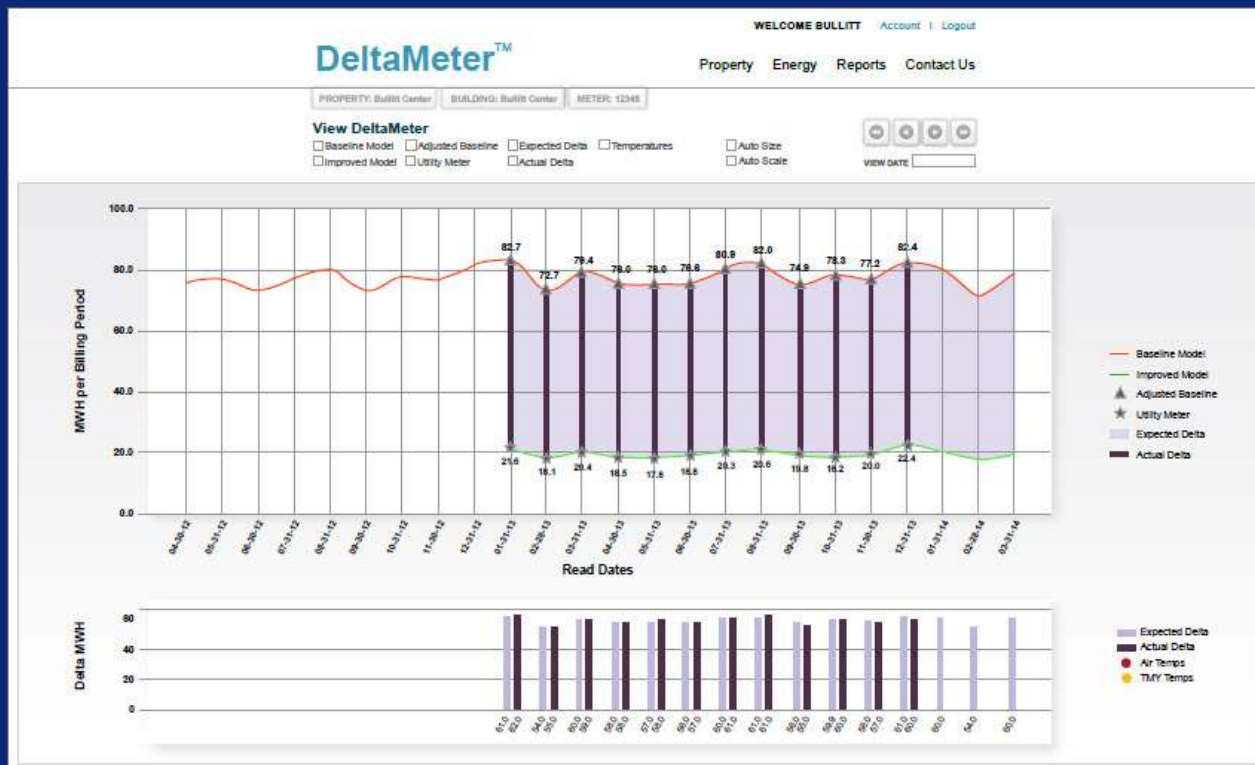


Source: Standard & Poor's, Macquarie Capital

Solution: Make EE = Generation

1. Meter it

2. Buy and sell it *just like generation*

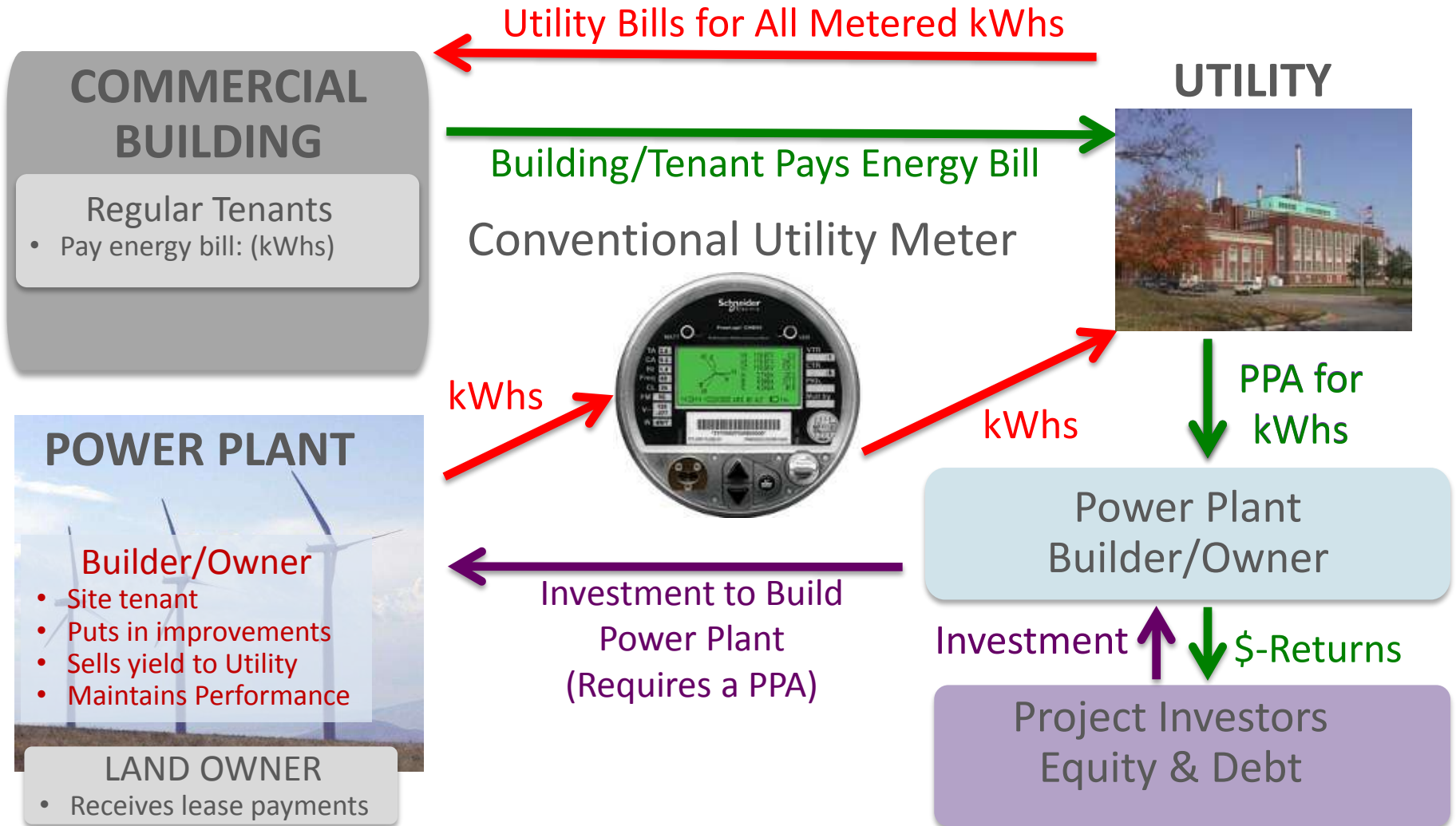


A New Approach

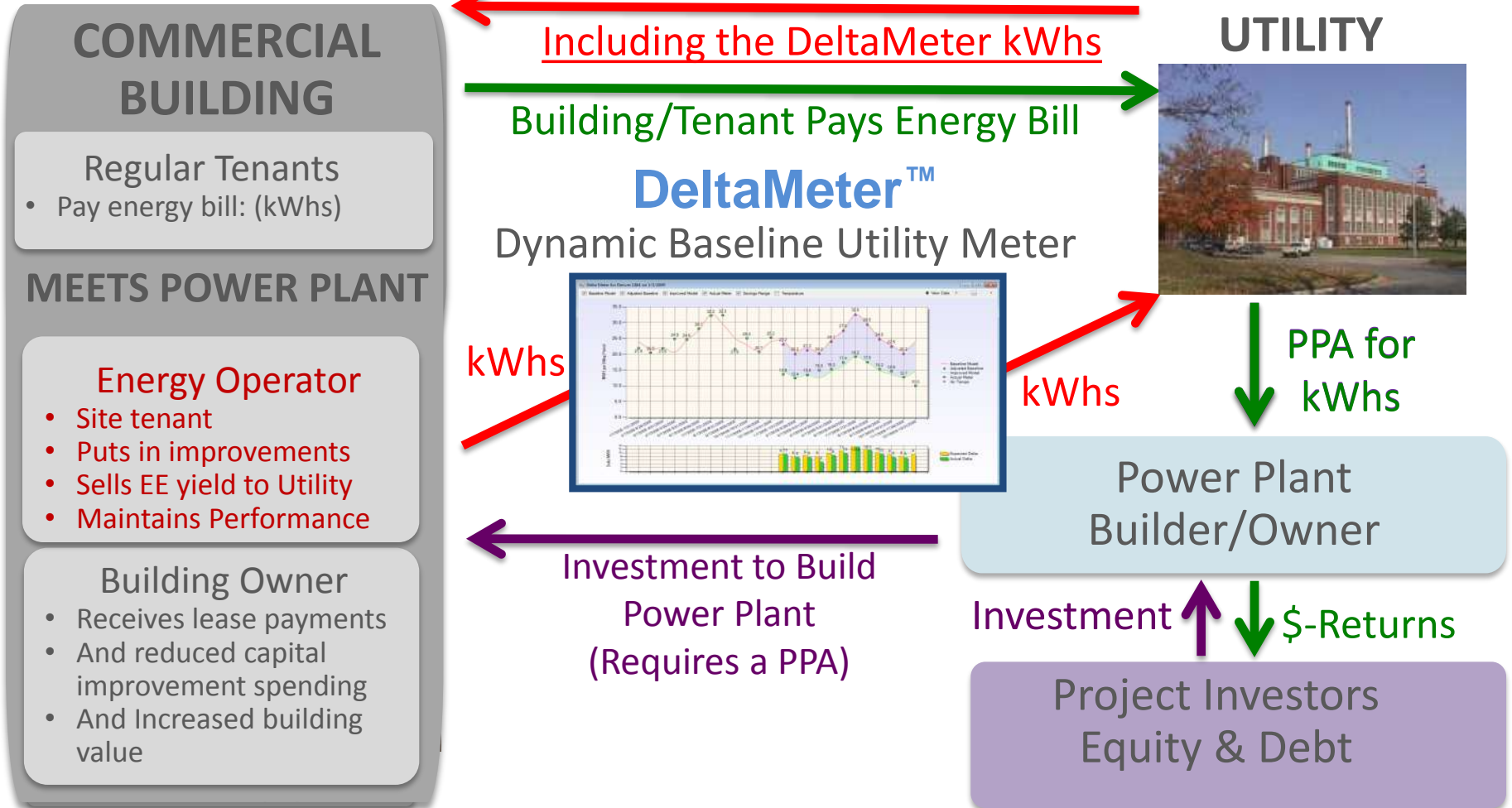
- The Metered Energy Efficiency Transaction Structure:

MEETS

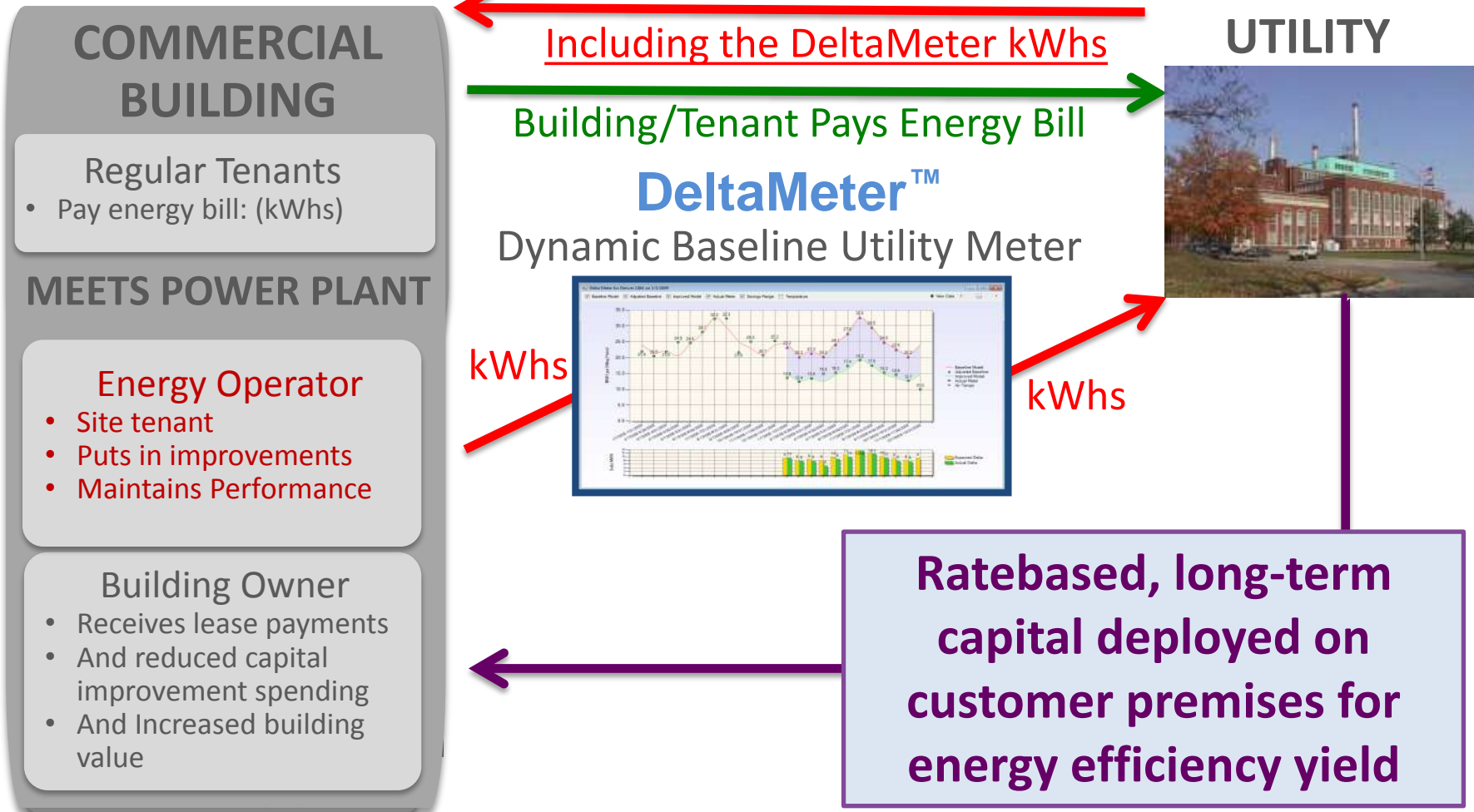
..... a Power Plant



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

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Management Corp.

www.en-rm.com



Questions?



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