MEETS™
ACCELERATOR COALITION

Metered Energy Efficiency

A NEW PATH TO DEEP ENERGY EFFICIENCY

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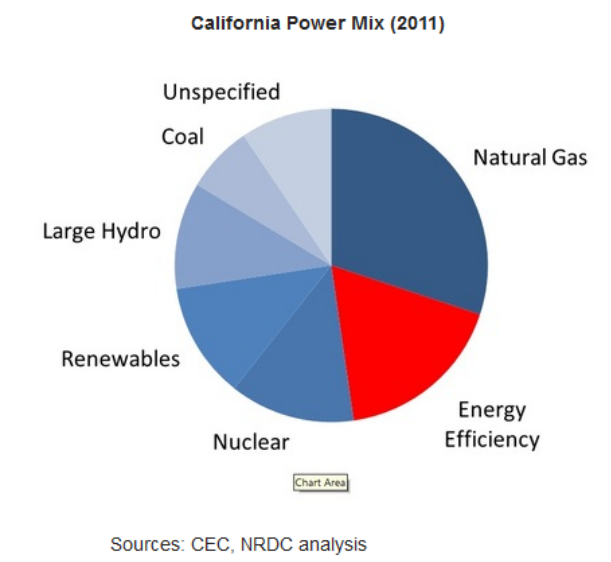
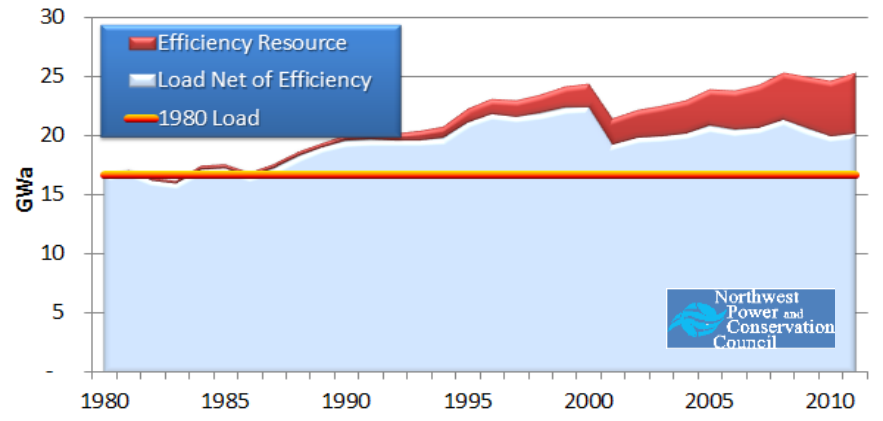
MEETS Coalition appreciates EnergyRM's and Equilibrium Capital Group's assistance in the development of this document.

Deep EE is Not (currently) Scalable

1. Undermines utility business model
2. Split incentives destroy the economics

Problem: Utility Economics





Energy efficiency currently represents utility red ink

Utilities earn on *investments* like generation

Traditional EE = Negative sales
= Lost revenue
= Lost investment

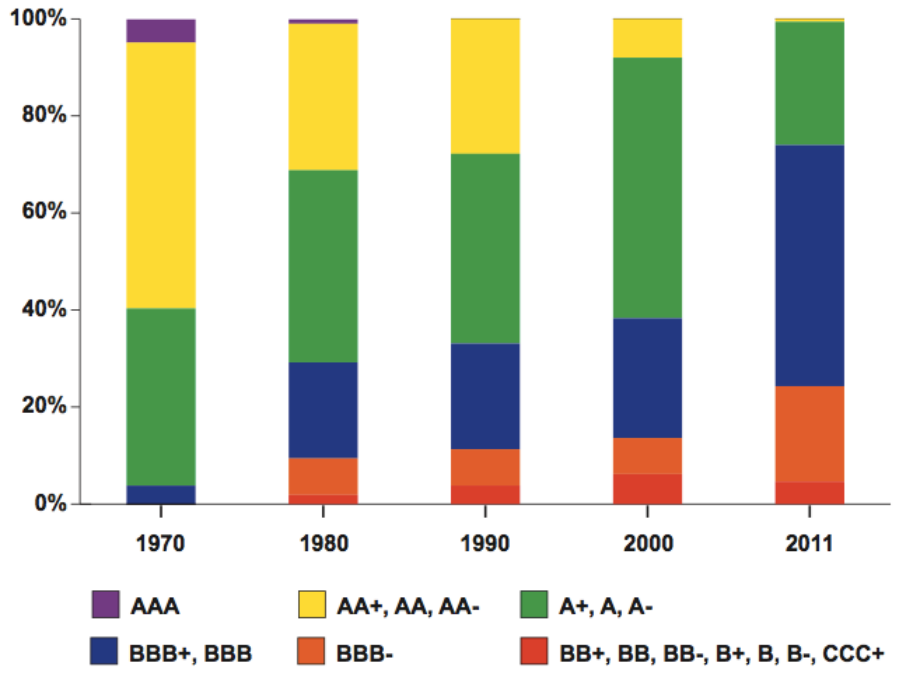
Problem: Utility Economics (credit)

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

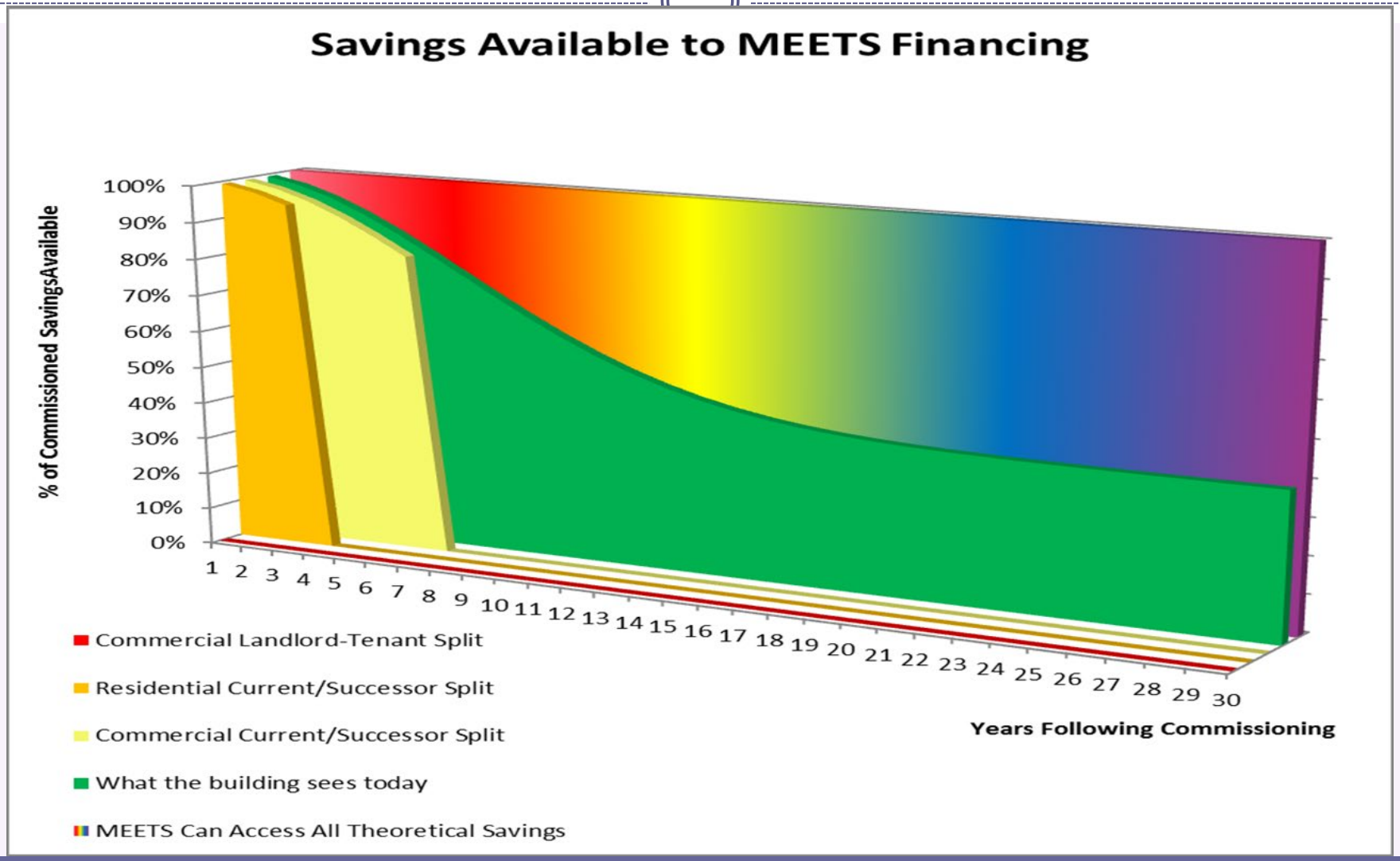
Utility Economics: Result

1. Utilities resist EE (particularly deep EE)
2. Can't allow it to scale without changes to EE policy

Building Owner Economics

- Building owners are asked to invest
- Tenants keep the savings
- Result: Short-term paybacks if anything

Problem: Traditional EE Is All Split Incentives



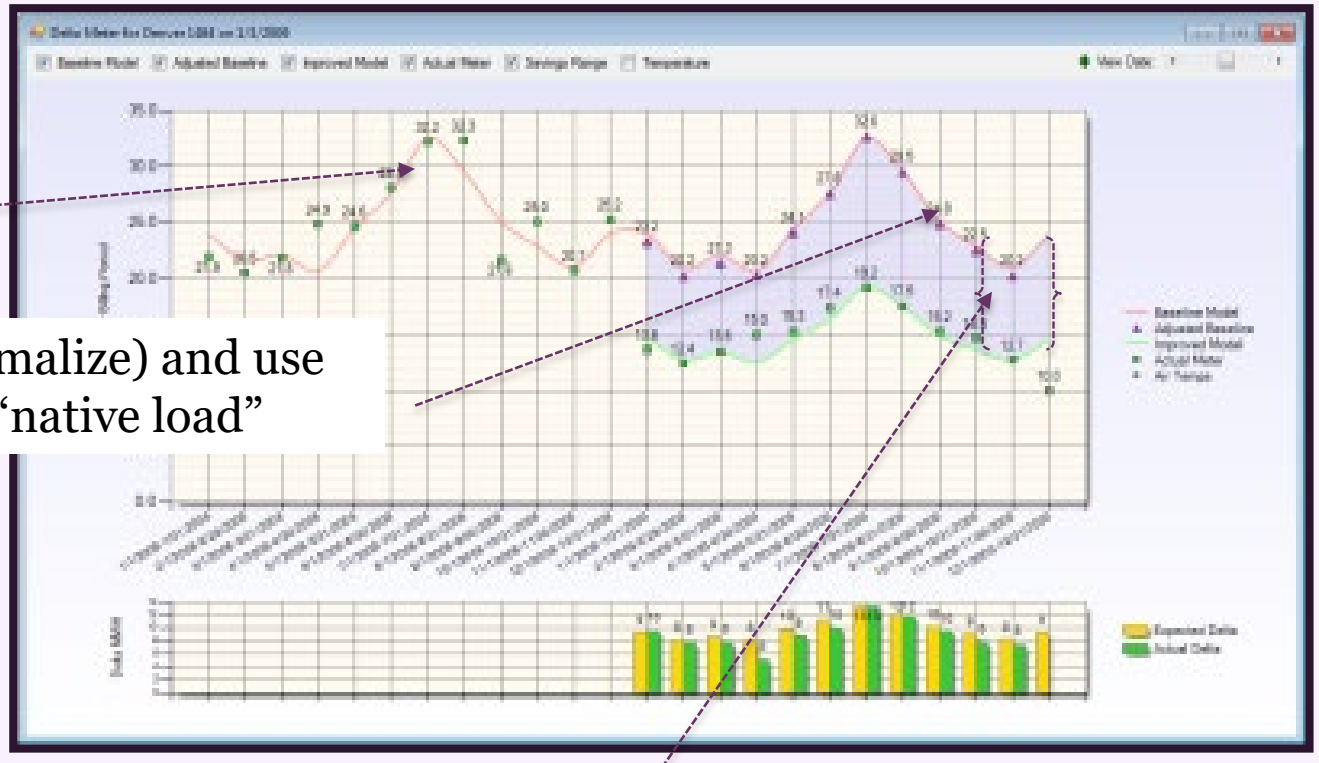
Solution: Make EE = Generation

1. Meter it efficiently and accurately over long periods of time
2. Buy and sell it just like generation

The Meter Calculates Normalized Metered Whole-Building Energy Consumption Based on Current Measurements

Baseline derived from prior use

Calibrate (normalize) and use it to calculate "native load"



Efficiency is the difference between native load (normalized baseline), and supplied energy

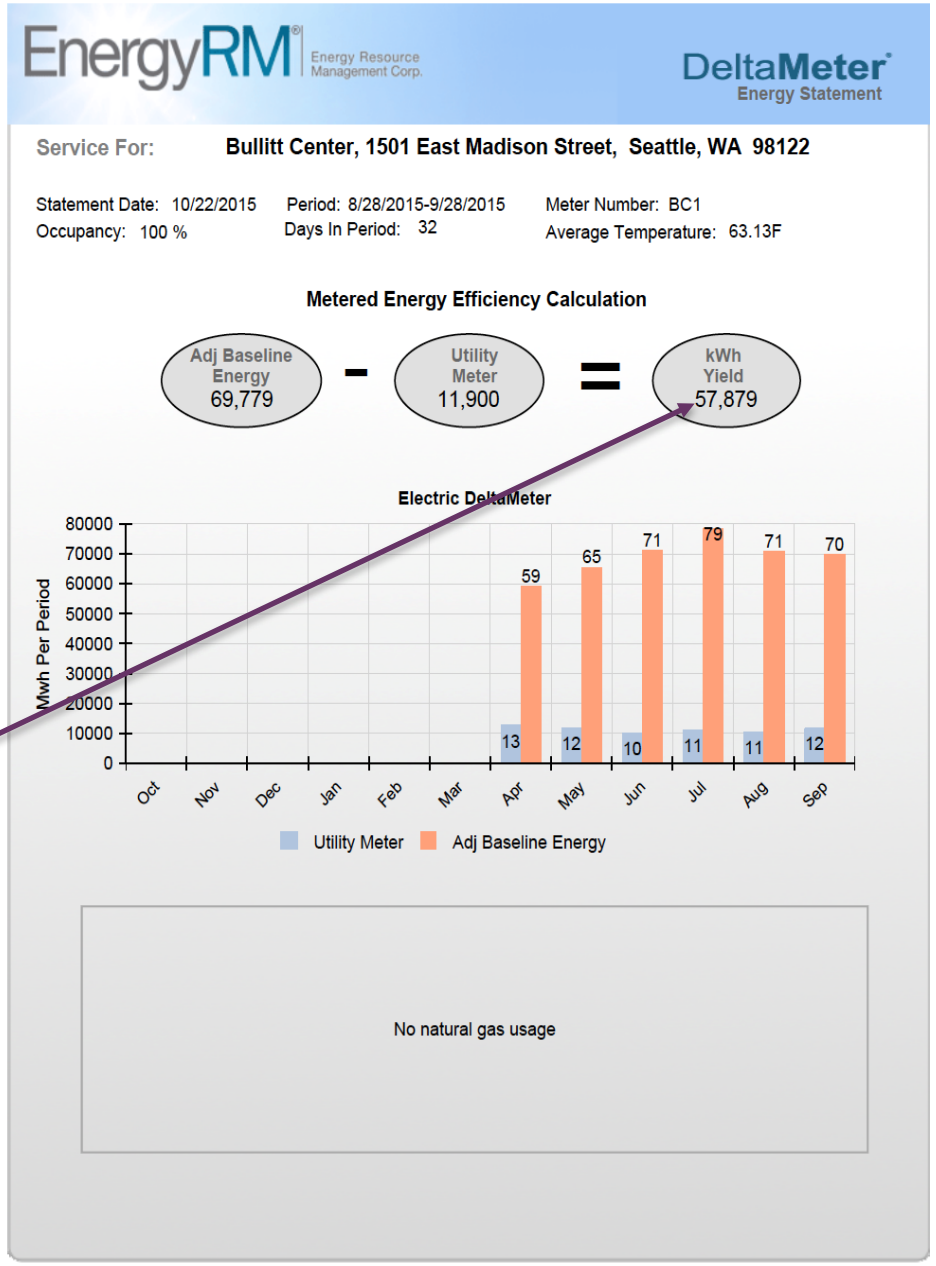
(Meter was accurate = 0.8% during 1st year)

Slide courtesy of Equilibrium Capital Management

Bullitt Center Monthly EE Statement

Result is *energy units* of EE.

Once we have a meter reading, we can *transact*.



The Metered Energy Efficiency Transaction Structure (MEETS)

MEETS is a *structure*, not an incentive

- Designed to use the *savings* value that is currently given away to tenants
- The savings value is often worth 4-20 times the 'incentive' value.

MEETS

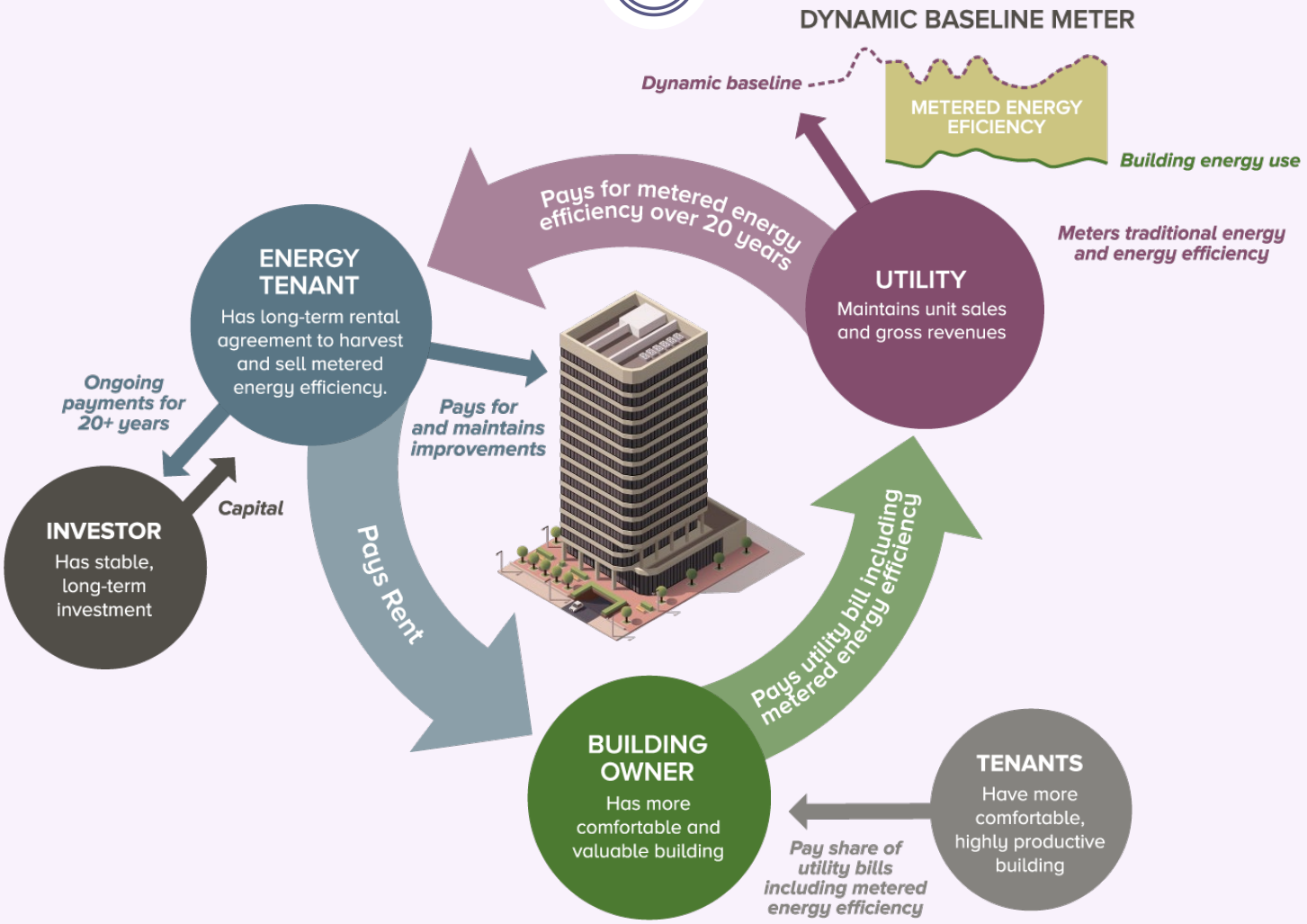
EE is *Metered*

- against a dynamic baseline
- and sold to the *utility*
- under a long-term power purchase agreement

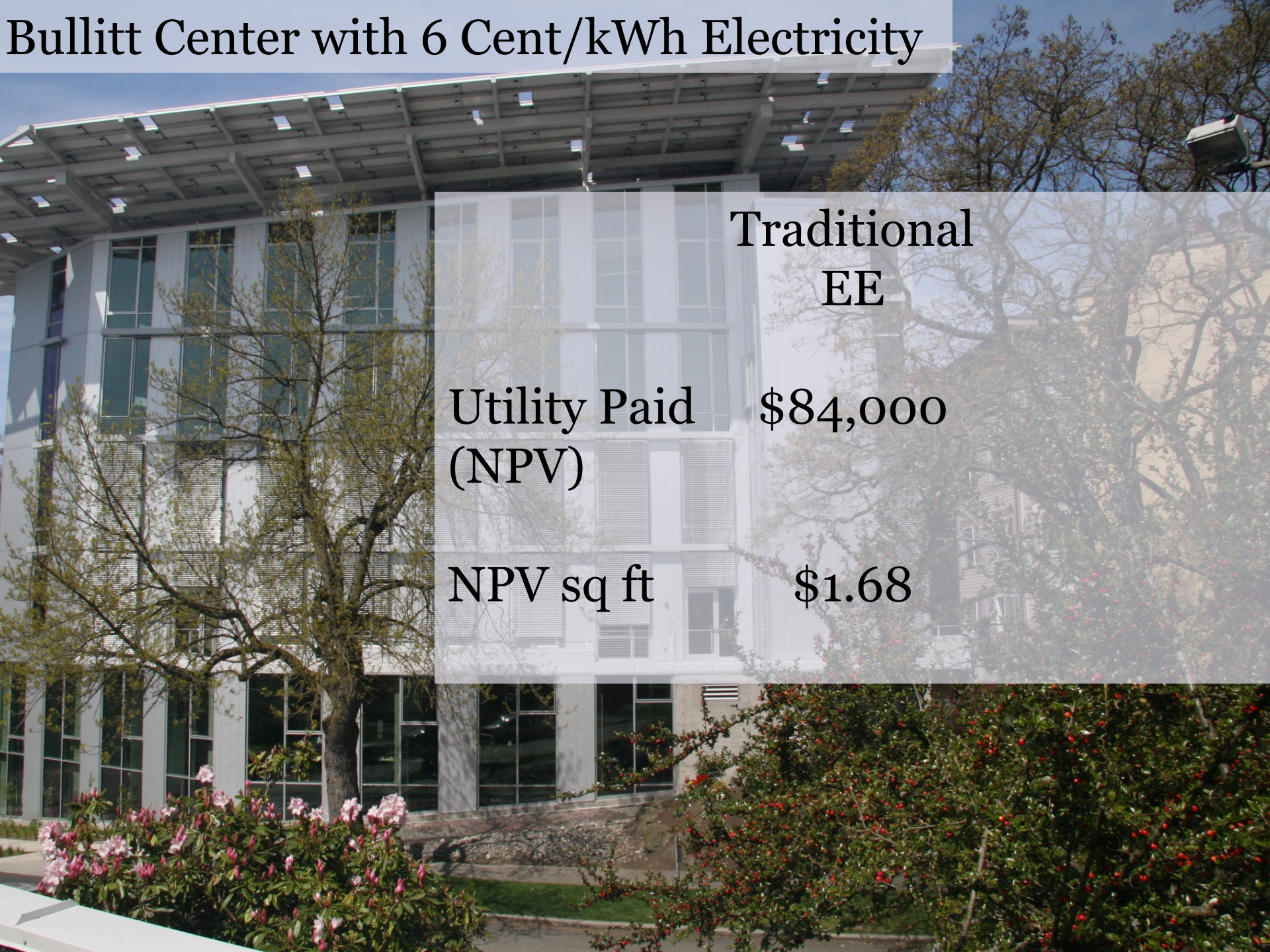
MEETS

- Utility bills the building for the EE
  - On the common area bill
  - in energy units
  - at retail rates
  - eliminating the split incentive
- The building is paying for delivered EE on its energy bill
- The building owner allocates the cost in the same way they do now

How MEETS Works



Bullitt Center with 6 Cent/kWh Electricity



	Traditional EE
Utility Paid (NPV)	$84,000
NPV sq ft	$1.68

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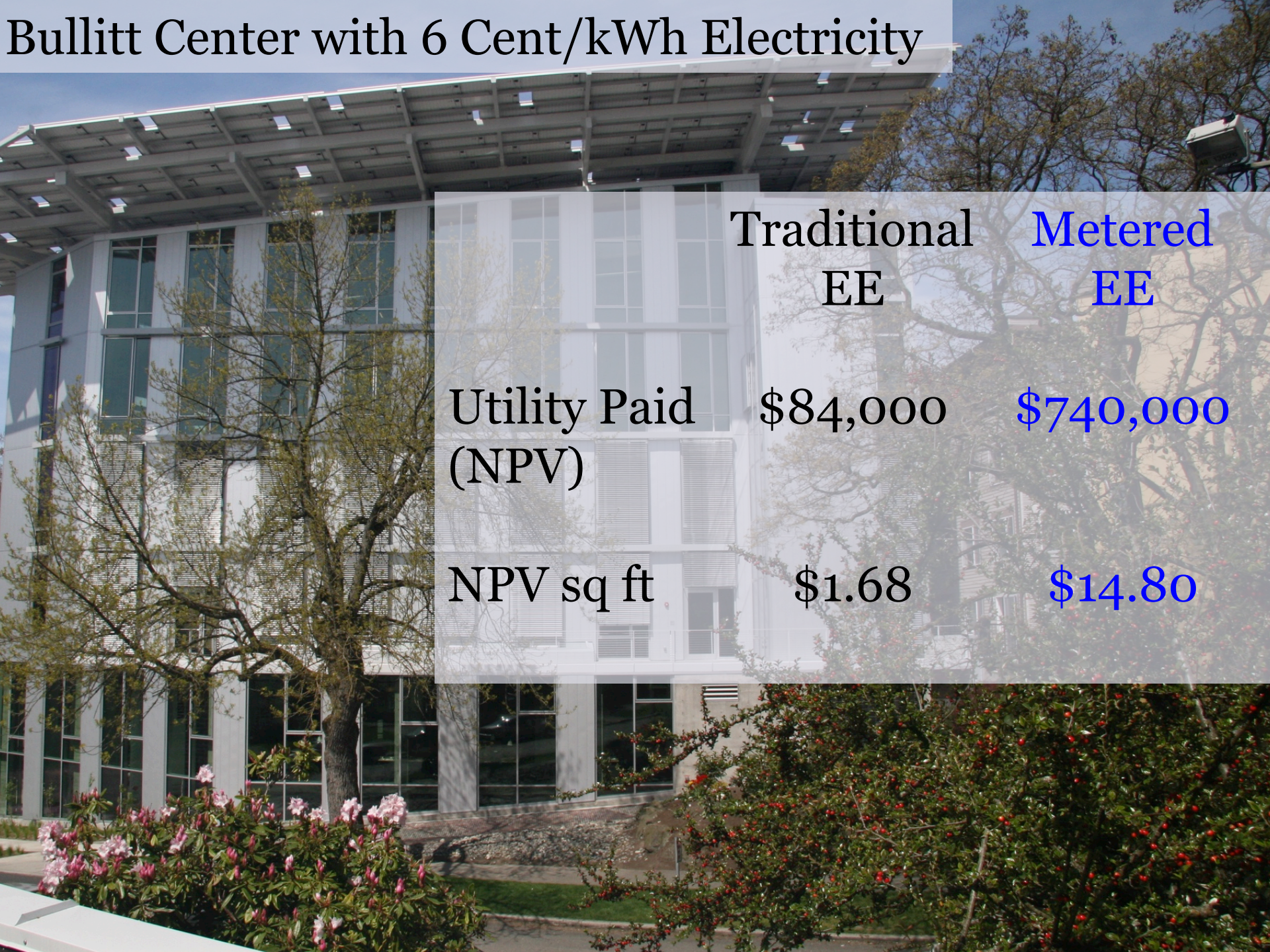
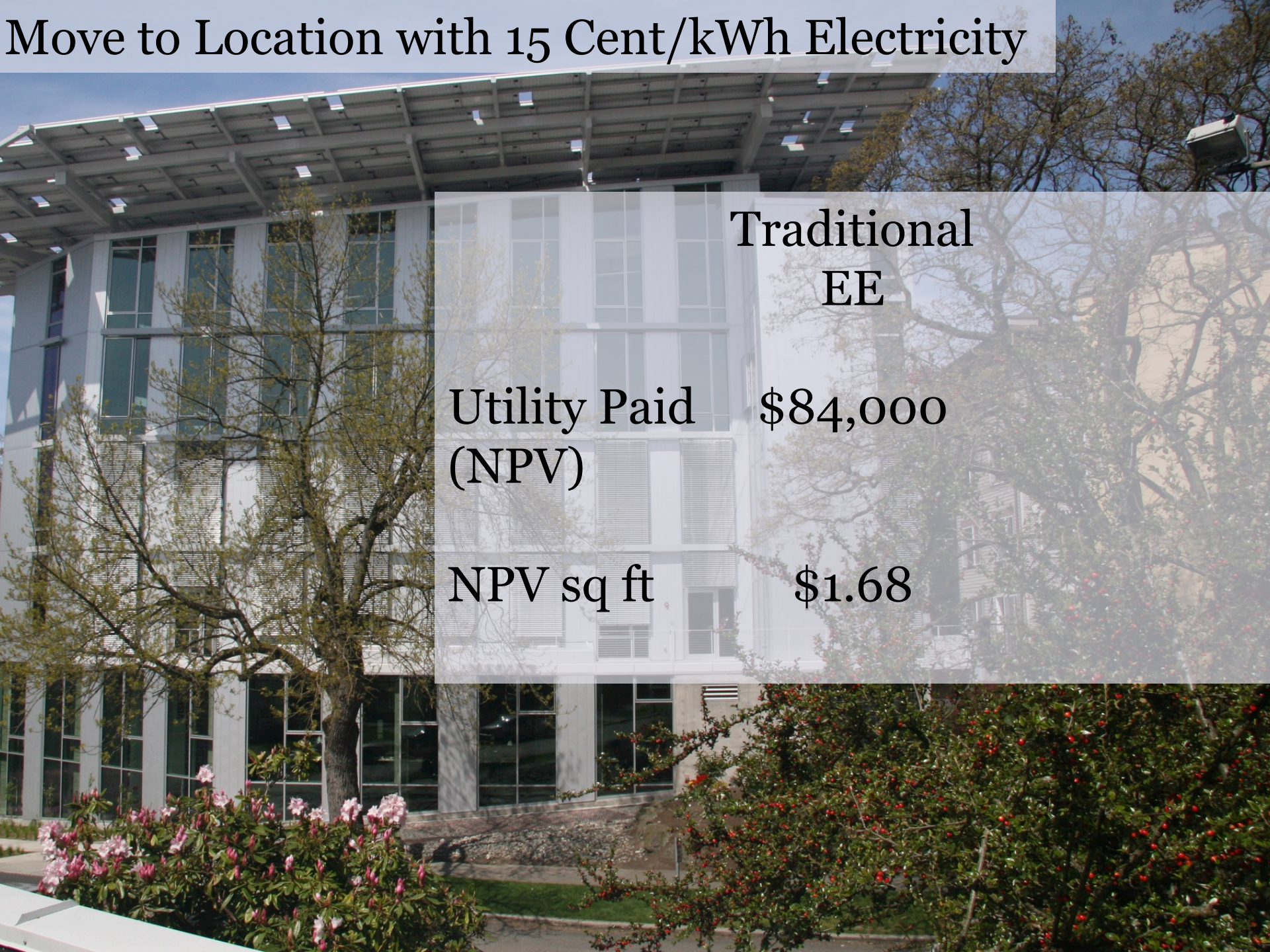


	Traditional EE	Metered EE
Utility Paid (NPV)	$84,000	$740,000
NPV sq ft	$1.68	$14.80

Move to Location with 15 Cent/kWh Electricity



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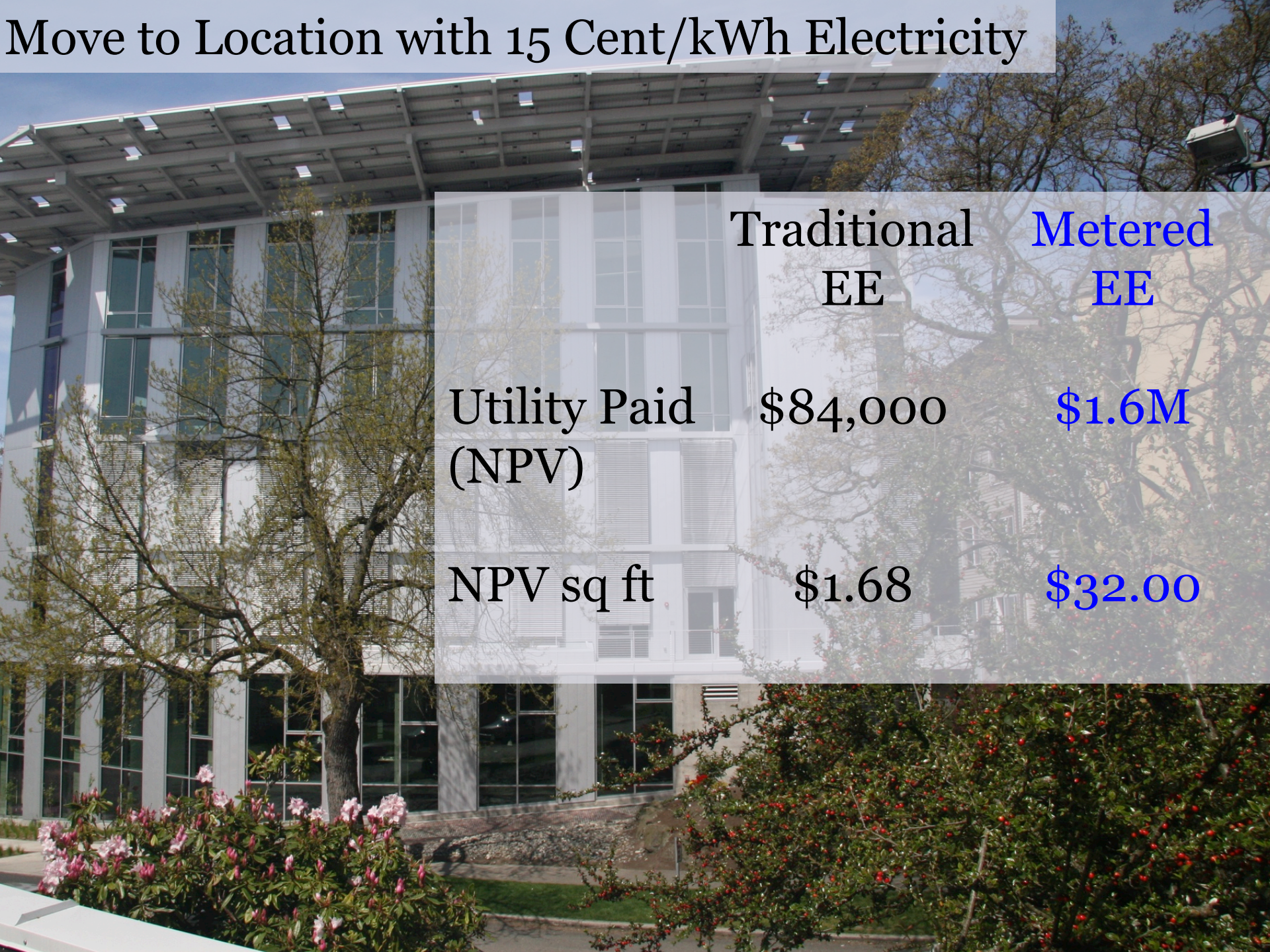

	Traditional EE	Metered EE
Utility Paid (NPV)	$84,000	$1.6M
NPV sq ft	$1.68	$32.00

MEETS Benefits

Utility

New Load Management Resource
Location-Specific and Reliable
Only Pay for Units Received
Rate-baseable: Earnings Opportunity
No Gross Revenue Loss
No Unit Sale Loss

Building Owner

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

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
No Incentives Required

Contact Information

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www.MeetsCoalition.org

Supplemental Slides Follow

MEETS & PACE

Issue to Address	PACE	MEETS
Split Incentive Addressed?	✔ if tenants pay property taxes in CAM	✔ assuming tenants pay energy bill
New Revenue to Building Owner	✘	✔
Senior Mortgage Holder Signoff	Probably required	Not required
Viable Counterparty	✔ - Taxing Authority	✔ - Utility
Metered EE	✘ - Could be added	✔
Transaction Type	Loan/lien	Energy Sale
Utility Unit Erosion Solved?	✘	✔
Utility Gross Revenue Loss Solved?	✘	✔
Utility Load Management	✘	✔

Why MEETS Matters

50,000 Square Foot Bullitt Center with Retail Energy Price of 6 cents/kWh

	Traditional Incentive Structure	MEETS
Total Dollar Value of Utility Payments for EE	$84,000 (incentive)	$1.22 million (PPA)
Total Utility Collections from Building for Saved Energy	$0	$1.25 million
Ratepayer Cost or (Benefit)	$84,000	($33,000)
NPV Dollar Value of Payments to Building (5% Discount Rate)	$84,000	$740,000
$NPV per Square Foot	$1.68	$14.80
Utility Payment per kWh	2.5 cents (deemed & paid upfront)	8.41 cents with escalator, as delivered for 20 years

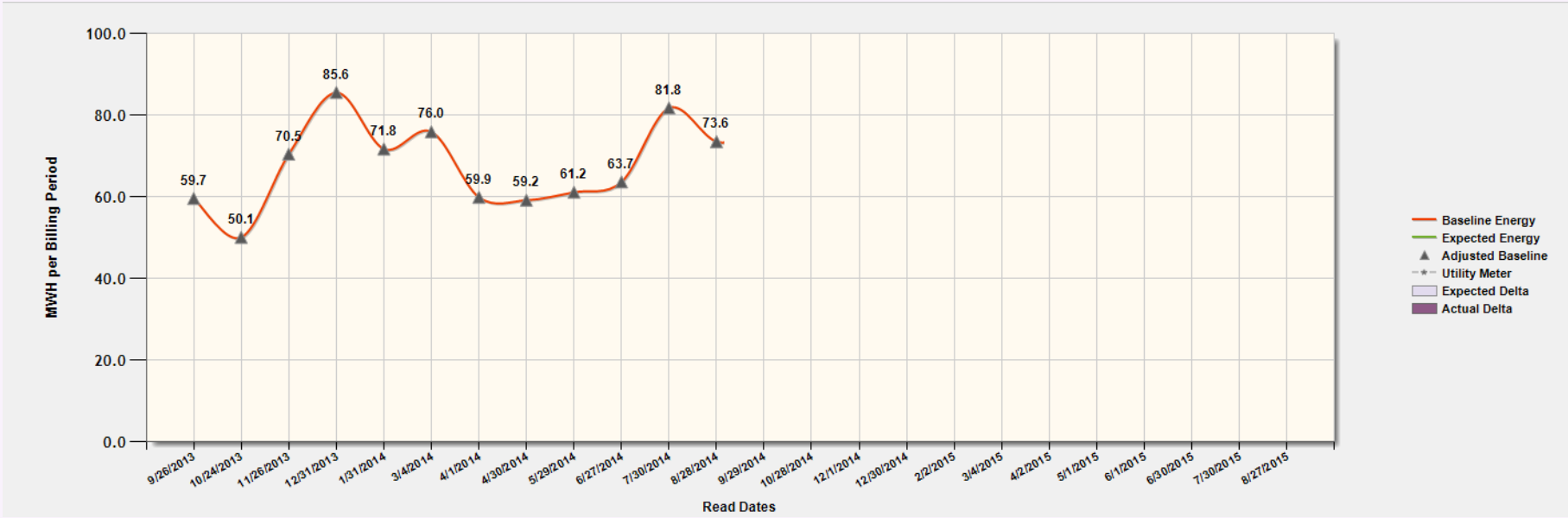
Why MEETS Matters

50,000 Square Foot of Office Building with Retail Energy Price of 15 cents/kWh

	Traditional Incentive Structure	MEETS
Total Dollar Value of Utility Payments for MEETS Energy	$84,000 (incentive)	$2.6 million (PPA)
Total Utility Collections from Building for Saved Energy	$0	$3 million
Ratepayer Cost or (Benefit)	$84,000	($353,000)
NPV Dollar Value of Payments to Building (5% Discount Rate)	$84,000	$1.6 million
$NPV per Square Foot	$1.68	$32.00
Utility Payment per kWh	2.5 cents (deemed & paid upfront)	17.5 cents with escalator, as delivered for 20 years

Dynamic Baseline Meter

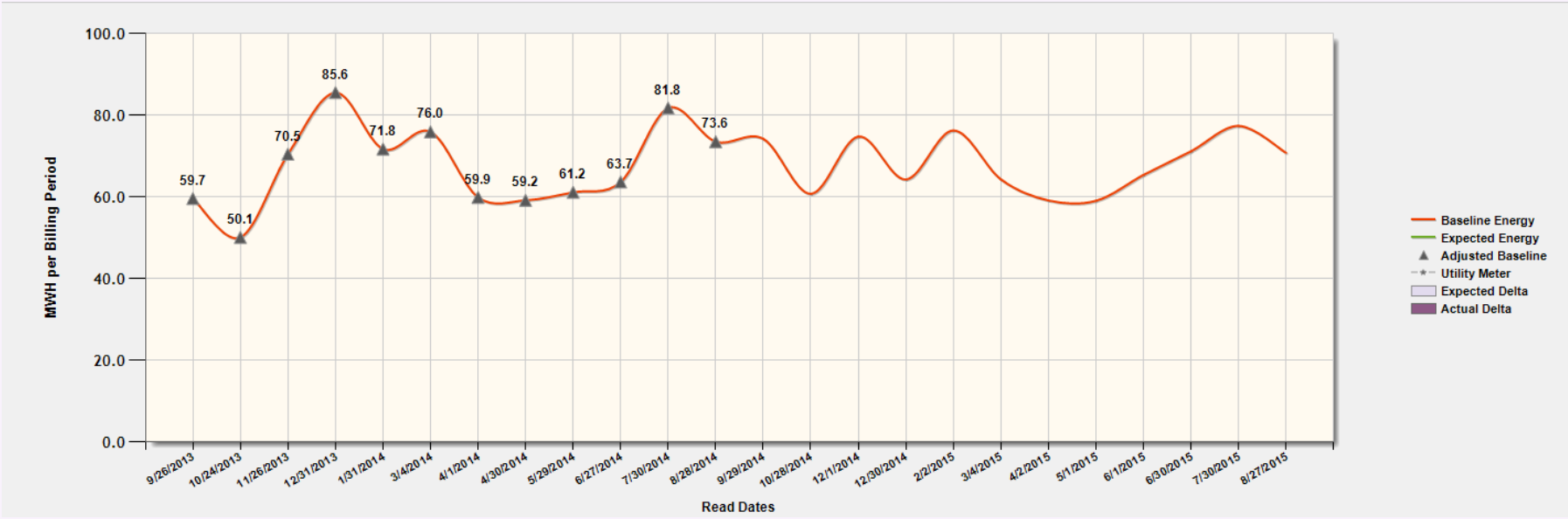
(EnergyRM's DeltaMeter®)



Create historical baseline using Option D modeling

Dynamic Baseline Meter

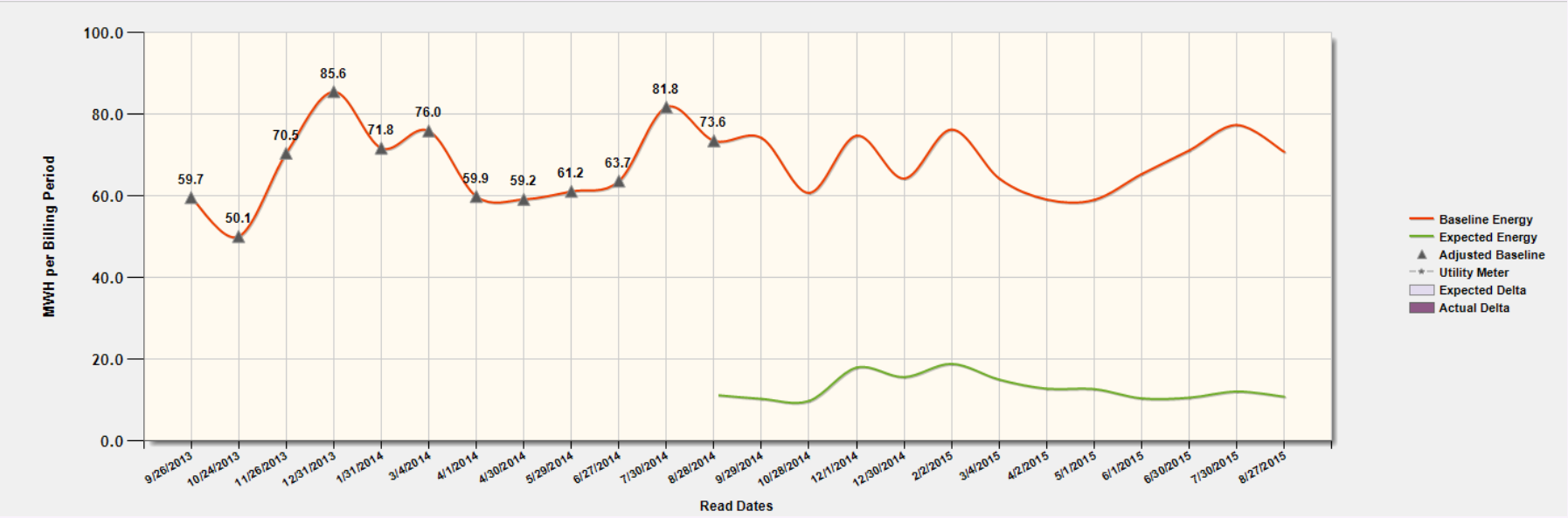
(EnergyRM's DeltaMeter®)



Project baseline forward using standard meteorological year

Dynamic Baseline Meter

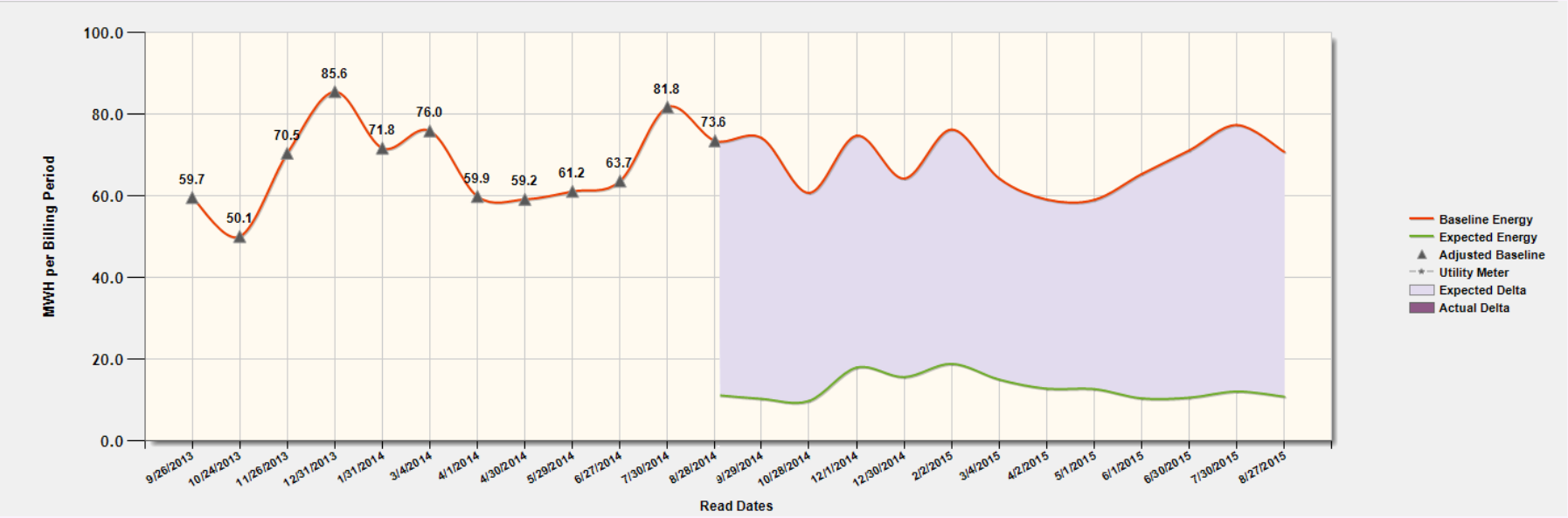
(EnergyRM's DeltaMeter®)



Estimate energy use post-retrofit design and TMY (green line)

Dynamic Baseline Meter

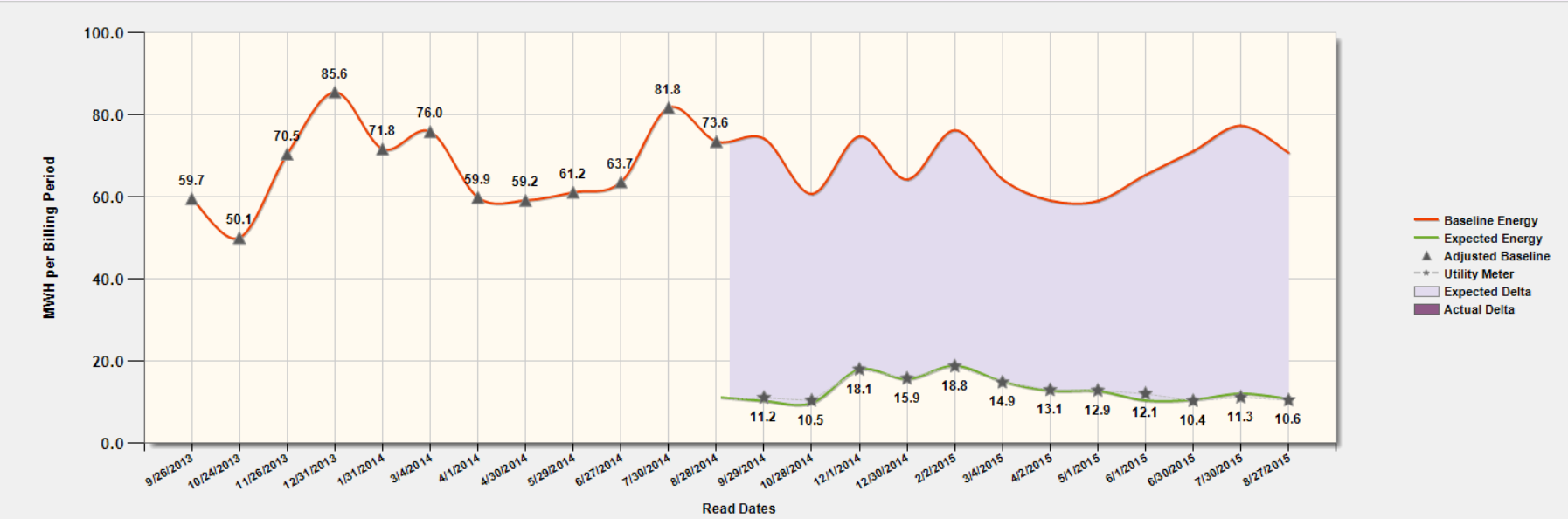
(EnergyRM's DeltaMeter®)



Calculate estimated EE "yield" from retrofit (purple shaded area)

Dynamic Baseline Meter

(EnergyRM's DeltaMeter®)



Input utility meter readings as they become available (numbers near green line)

Dynamic Baseline Meter

(EnergyRM's DeltaMeter®)

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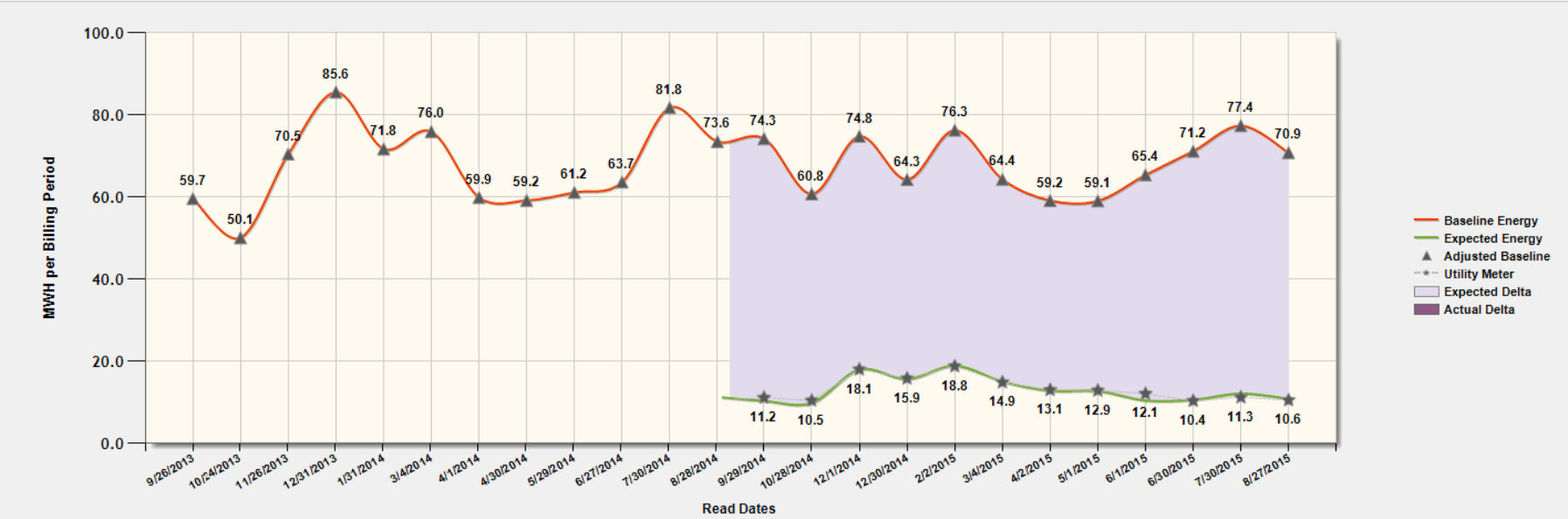
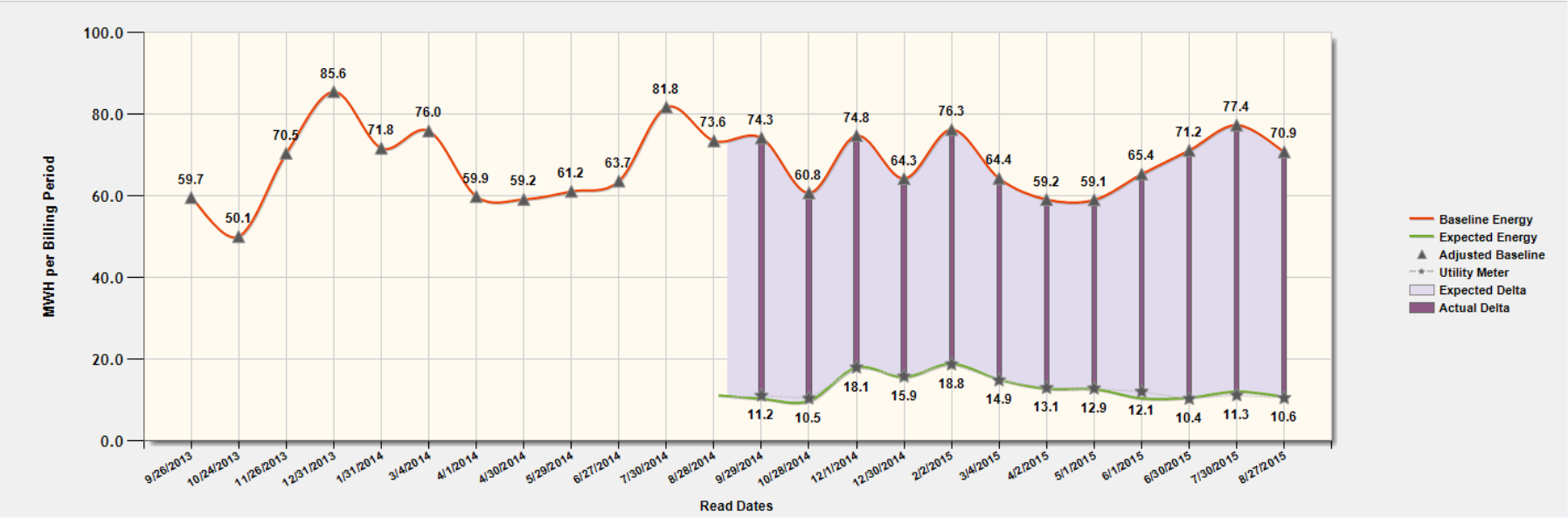


Adjust *dynamic* baseline for routine and non-routine changes (numbers near red line)

Dynamic Baseline Meter

(EnergyRM's DeltaMeter®)



Utility pays the *difference* between the utility meter read and the adjusted dynamic baseline (purple bars)