Adjusting Savings Estimates for Market

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Scope of Today's Discussion

Questions:

- How does Energy Trust deal with market effects when reporting savings?
- Are changes or clarifications needed?

Today's Discussion flow:

1. What are ET goals? How is info used?
2. What does net and gross mean?
3. Issues for general reporting
4. Issues for utility funding agreement reporting

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This is Step 1- Introduce the Issue

- CAC discussion
- Discuss with Board evaluation and policy committees
- Feedback from utility and PUC staff.
- Back to CAC
- If agreement, use in interpreting 2010 success, and in writing ensuing utility agreements

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Recommendation (details explained as we go)

- ***For most purposes***, Energy Trust should continue to report savings based on market effects (what actions Energy Trust influenced, what those actions saved)
- ***For utility funding agreements*** (1 yr), use a consistent estimate of market effects "locked in" in July of the prior year:
  - To forecast that year's savings
  - And then to assess compliance at the end of the year.

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We Wish A Goal Could Be

- Simple, Easy to Measure, Easy to Explain
- Transparent to Track
- Transparently Pertinent to Purpose
- Drives ET to purposeful activity

Any goal definition gets you more of some of these and less of others.

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Purposes of ET Savings Reporting

- ***Measure "Success"(Are We Doing Well?)***
  - Budget & action plan targets
  - PUC performance measures (1-3 year) for AMW and levelized cost
  - Strategic plan 5 year goals
- ***Decrement to utility forecast loads (***
- ***Basis of payment for ET contractors***
- ***Power Plan compliance***
- ***Benefit/cost tests (PUC test)***
  - ***Societal Benefit/Cost (gross + spillover)***
  - ***Utility system Benefit/Cost (net)***

Not yet: Basis for carbon payments

Not in Oregon: Basis for ET profit incentives

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Net vs. Gross- What do they mean?

Gross savings: savings from sites where we directly helped, regardless of whether we influenced the decision

Net savings (savings adjusted for market effects):

Gross savings - free riders +spillover

Market transformation savings= similar to net

Savings/unit x

(actual market share minus base market share)

- Base market share is best estimate of sales "without the program" forecast.
- Compare to forecasts "with program" sales trend, then true up for reality

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Example of Market Transformation

Efficient Electric Backscratcher. Savings = 20 kWh/unit

Sales:

	2010	2011	2012
With Program	10	20	25
Baseline	- 3	-4	- 6
Net Sales	7	16	19
Net KwH Saved	140	320	380

This is "net" savings measured market-wide

About a third of our electric savings are market transformation

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Market Transformation Is A Growing Part of What we Do

- NEEA is doubling in budget
- We are beginning to count the gas part of NEEA/ET initiatives- starting with new homes
- Gas furnaces
- Not so far: heat pumps?
- Under analysis: Commercial lamps, windows?
- Later- advanced commercial buildings?

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We Can Estimate Market Effects Within Reasonable Bounds

" Would the efficiency action have occurred without our marketing, assistance and $?"

- Free riders: we usually choose the middle of the range of estimates from different methods
- Spillover: less precision. Sometimes we pick a number lower than the middle of the range.

Precision is no worse than other key IRP variables (loads, gas prices, carbon prices.).

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Current Reporting is Tailored to Purposes and Audiences

Net plus Market Transformation for:

- IRP
- Annual, quartery reports, long term savings reporting
- PUC performance measures

Gross plus Market Transformation for:

- PCorp internal goals
- Washington
- Power Council

PMC goals- basis set before contract year begins.

- Prescriptive- fixed savings/measure
- Custom-gross.

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What Is Used In Other States? No Pattern

Gross:

- Connecticut, Maine, Minnesota, Texas

Net minimum, gross volume:

- California

Net:

- New York, Massachusetts, Vermont, Wisconsin

Sometimes, Unclear, Under Review:

- Idaho, Illinois, Pennsylvania

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Why Is Net Becoming More Difficult?

1. **Free rider estimates and Market Transformation are increasing**
   - Sometimes FR identify the need for changes in programs
   - Sometimes an unavoidable side effect of effective, cost-effective programs.
2. **Goals are increasing.**
3. **New Utility Contracting Framework**
   - Changes in market effects estimates during a contract period influence our ability to meet contract goals.

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Why Is Net Becoming More Important?

Changing Environment for Estimating Market Effects

- Profusion of fed, state programs
- More market impetus for efficiency.
- Ergo, baselines are changing faster, and influence of ET blurrier.

This makes attribution more difficult, but (since we are one influence among many) more critical to maintaining our focus and explaining our “added value”.

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Recommendations

Stick to existing reporting practices ***except:***

Clarify basis for utility funding agreements

- In July, “Lock in” market effects adjustments for resource acquisition programs for the following year. for
  - forecasting that year and
  - assessing contract compliance at end of year

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Recommendation (ctd)

Pro:

- Modest procedural change
- Simplifies compliance with funding agreements
- Still uses best available data for long term tracking and reporting.
- Utility/ETand ET/PMC contracts are on same basis.

Con:

- Market effects rate for used for these contracts will sometimes lag updates for planning, forecasting, other reporting.

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Questions? Comments?

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