Market Transformation Indicator Workshop Meeting, October 17, 2011-11-07 Facilitator: Eric Kaufman

Companies Present:

PG&E Navigant consultant PGCI CPUC Horowitz Consulting Kema SCE Edison Insight Sky Energy SDG and E Tide and Associates California Energy PECI Building performance Institute NYSERDA NEEA California Building Contractors Association Alliance to Save Energy

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Main Objectives:

Create MTI framework Review proposed MTI indicators Use this group for collaborative thinking

- Three Breakout Groups (Non-Residential, Residential, Cross-Cutting) will review proposed market indicators and report back on two core questions: Are they willing to adopt the metric (MTI)? If no, why not? What changes would be needed? If time allows review LTPPM A)
- 1)
- 2) and SPI as well.

Ralph Prahl, consultant to ED Ken Keating, consultant to ED

Planning and evaluation Market Transformation: What the Industry has Learned, and Possible Implications for California (.ppt presentation)

Questions:

- Phil Kelip with Navigant: Market transformation in one state larger, so it's almost 4 states, so what are criteria for how MTI can be transferable to other stats such as Wisconsin?
- Ken Keating: NEEP, coordinated program efforts and joint research is key. CA has worked with the Northwest on major initiatives. It's an institutional issue that needs to be worked on.

Phil Kelip, Navigant: asking on transferability of all aspects.

NEEP: translation will be an issue, but program designs are transferrable and lessons learned on how we share data. Will present later and address this.

James Tilia, HVAC program area, PG and E: What do you mean by programs there? Are we talking about a broader program regarding all actors? Or just IOU programs?

Ralph Prahl: Talking about 2 aspects of market transformation and non MTI, should be targeted for all market actors and

Ken Keating: May involve multiple markets

Carmen Best: Will do my best to address that.

Ed Vine, CIEE: MTI is optimal when there is an objective. Doesn't mean other programs shouldn't be addressed if they do not have a market transformation strategy incorporated in those plans, than non MTI and if it is not as explicit.

Ken Keating: that is what we are suggesting.

- Ralph Prahl: Initiatives that are designed to transform specific markets, not everything can be a market transformation program, but everything can be an acquisition program and look for market effects.
- Ken Keating: we are not arguing that you should not do MTI studies, we are just suggesting people to be careful.

- Duane Larson, PG and E: along with clothes washers and windows, CFL and others are in the 5 biggest EE savings. Is this a MTI as a result of energy savings that is MTI?
- Ken Keatings: Where are people going to spend money on their effort? Pick different target.
- NEEA: On the topic of television, it is important is to measure the actual effect, the risk of being able to measure the influence without any degree of certainty.
- Lisa Paula, CPUC: These MTI programs should be focused on the larger market structure. The key question with that approach is how, how do we target the larger market sector with limited resources the best way to use sector strategies?
- Ralph Prahl: Market assessment would address that.
- Ken Keating: Resource issues are tied to limiting the market.
- Lisa Paulo: strategic plan was an effort to address big pieces and identifying those lessons learned and where does the effort need to be tweaked?
- Navigant: In the Northwest, the windows market was changed according to how businesses did it.
- Chris, DRA: Is it possible for resource acquisition programs to actually be harmful for the market? Do you have any examples?
- Ralph Prahl: Yes, in theory. The acquisition programs causes market to drop money on technologies, and not allow the market to move. Want the acquisition strategy to address the market.
- Chris Ann D.: Where/when in this workshop we are going to address where are the savings?

Carmen Best, CPUC: good flag, but please hold for after presentation.

Carmen Best, CPUC

Energy Division Proposal: Framework for indicators for assessing achievement of long term energy efficiency objectives.

Questions:

Jason, NEEA: I want to make a clarification, you mentioned NEEA's work in the northwest is MTI, but we work with utilities in program acquisition.

Carmen Best, CPUC: But NEEA focuses on MT.

Jason, NEEA: Agreed.

Chris, DRA: What is underlying from DRA's perspective on MTI is the struggle in the institutional frame. Somehow you have to have a dialog of do we have the appropriate institutional structure to reach objectives. So how you foresee that discussion happening if we don't change the institutional structure?

Lisa Paulo and Carmen: Your question is out of scope, but relevant in the larger picture.

- Lisa Paulo, CPUC: The utilities started the commenting period to suggest direction in future efforts.
- Craig Taylor, Taylor and associates: AS we move forward and implement more of a MTI focus in the next cycle, what tools do we need to decide how we allocate the money? I have not heard much from the MT communities how tools are used to allocate budget across programs.

Carmen Best: I will not comment on that.

- Ken Keating: It should be driven by market assessment. Big market, substantial allocation to that market.
- NEEA: Our EE savings have to be described by TRC, and same metrics for resource acquisition. Pretty good body of knowledge for every MT initiative, what are the costs associated with it, what are the savings, measured and validated and how does that come together?

Craig Taylor: So it all comes back?

- Carmen Best: There will be a workshop pending on MTI, that Joy M. is leading, on Thursday of this week.
- Athena Bessin: To follow up on the discussion on the MTI cost effectiveness, since trajectories are longer than typically. How does NEEA look at it in the long term perspective? How do we distribute savings across that trajectory.
- NEEA: there are first year savings, what is the unit of adoption, how many units in the market and what is the forecast for how that will work out. In the mean time, we are looking for the actual sales and discuss counterfactual, what are the baselines are we assuming and does it still seem reasonable. What is the savings per unit at that given time. For each initiative there is information on savings over time due to retirement, its' a complex modeling effort.

- Chris Ann: Could we flip back to prior slide? The dividing line on slide, I feel like in the excel spreadsheet with the indicators and this figure, where does the market transformation leading to savings and if so how much and how do we know if we got that savings? How does total market gross sits on one side and there isn't a linkage with energy savings goals.
- Carmen Best: I have to argue, it's a dotted line. Craig Taylor was saying that perhaps the triangle does need an arrow that is feeding one another. You are right Chris Ann, but we don't at present a good handle on how that is happening.
- Chris Ann: An indicator says change the commercial market by 1%, but there has to be at least a guess on what the savings are, why would you want to change that. I don't see a framework that attempts to ask that.
- Carmen Best: Thank you for your comment, I would appreciate it if you submit a comment next week.

Rob Russell, NEEA

Maximizing Energy Efficiency

Questions:

Duane Larson, PG and E: Fantastic presentation. The difference in resource acquisition programs, we measure them differently then you do. We measure resource, NEEA measures market effects.

Rob Russell: International.

- PG and E: what it is you are trying to achieve, slide 23, how did you know that working with EPA would be a post program evaluation?
- Rob Russell: We have a codes program that supported initiative. Always part of program logic.
- Conrad Asper, CBCA: how important are contractors as stakeholders? And how did you implement them in this initiative?
- Rob Russell: Depends on initiative. There is an iterative process, it depends on barriers, and initiatives.
- Ed Vine, CIEE: when do you know when the market has been transformed and you can switch to something else. Where have the incentives gone away, or are you still transforming your market.

- Rob Russell: Good question, there is a time period when NEEA dollars are effective, if intervention went away, what is your intention, what is it that you would do? Then stop support. This should not be a surprise. Example, desktop power supply, became part of the market, so NEEA stopped being crucial.
- Lara Edison, NRDC: How all the players work together, what is the interaction to get the final product.
- Rob Russell: Expectation management to help reach resource acquisition goal. Depends on the initiative and can be contentious.
- Jason: WE have evaluation groups, decide which programs go forward and which need more work. There is a lot of collaboration that goes on.

John Williams and Jennifer Meissner, NYSERDA

NYSERDA Market Transformation Indicators: Policy Context, Development and Application

Questions:

Carol Yen, Insight: Can you give us an idea of how you worked with program partners in energy innovation change, what you did and what was good. How did you work in each of those steps.

John Williams: Are you referring to what is the nature of the steps?

Carol Yen: Who worked with whom, who provided sales data, etc?

- John W.: It can be a very involved process, when you are working to create a partner ship with upstream individuals, it's an on going partnership, there has to be discussion of the value proposition. We do have programs with various management actors. We have to demonstrate customer satisfaction, customer loyalties, and sales data. But getting to review new data already collection, it's an ongoing challenge with the program. Once partner ship is put in place, it involves negotiation. It's very much a dialog that needs to be established, and a continuous relationship and partnership with various market actors.
- Chris Ann: Thanks for the presentation, how does NYSERTA track market transformation progress towards it's goal?
- Jennifer M.: it's a whole suite of indicators, many MTI programs, we are looking for more changes in awareness, perception, practices by consumers and by mid-market actors. Over time at NYSERTA when programs split to resource acquisition and market transformation so a broad range of indicators that captured traditional market indicators affects to quantify Energy savings as a result.

John W.: Until recently, the level of program activity in NY state vs. the entire state and growth rates experienced in the last 10 years, there is minimum growth, so was not highest priority in NY. But now aggressive near term growth, program activities and approaches have changed, policy changed, works with NY ISO with utilities companies, so when measuring impacts, measuring with high level of statistical rigor that is high and being realized in this system. Can talk off line re protocols.

Lunch Break

Break out groups

Residential – Carmen

Name	Organization	
Linda Joyner	PG&E	
Brenda Gettig	SDG&E/SoCalGas	1
Ralph Prahl	ED Consultant	
Andy Fessel	PG&E	
Lara Ettenson	NRDC	
Chris Lingson	DRA	
Marian Brown	SCE	
Michelle Thomas	SCE	

Non-

Residential – Valerie	
Name	Organization
Valerie Kao	CPUC – ED
Shae Dibble	PECI
Edwin Huestis	PG&E
James Tuleya	PG&E
Laura Kimes	SCE
Vanessa Anderson	PG&E
Robert Kasman	PG&E
Christine Torok	Itron
Valerie Richardson	Kema

Cross-Cutting – Devla

Name	Organization
Carol Yin	Yinsight Inc.
Ted Howard	CPUC
Devla Singh	CPUC
Ken Keating	ED Consultant
Derek Jones	PG&E
Linda Lopez	PG&E
Brenda Hopewell	PECI
Renee Lafrenz	Alliance to Save Energy

Jo Tiffany	Alliance to Save Energy
Laura Ettenson	NRDC

Breakout Group Presentations

Main Questions:

1) Are you wiling to adapt 4385 now?

- 2) If not, why not?
- 3) What changes would be needed?

Discuss:

- points of agreement
- disagreement
- gaps
 - How large -> submit

1) Residential

Short list of indicators.

1) Are you willing to adopt 4385 now?

Yes generally, but not overwhelming yes or no.

Overarching feedback on indicators, a lot of indicators look at demand side indicators and NEEA's look at supply side indicators. Could not pin point what the source of this was, possibly the portfolio.

What's the point at looking at any of these at the end of the cycle? Good question, the take always from previous conversations should center around where we want to attack the market and as an add on, it is a challenge.

What we would like to see for the bridge year, we want to be more specific about which programs that address Market Transformation. And further understand how they work together or don't work together. For the next portfolio cycle, it would be good to have studies in place that does some of the market characterization work and have evaluation strategies built into that.

2) Non Residential

We are assuming that the first questions, some of the MTIs where reworded versions so we answered that in first question. There was general agreement that the MTIs themselves if the number came back 33 will not tell you the market transformation itself, it is a data point, there has to be additional analysis or interpretation of what it means. One of the metrics itself was not answering the question why, and the why is really important for determining if market transformation was addressed.

Some of the data collection itself was a concern, questioned measurement accurately and can it be closely guarded.

Overarching comment was on HVAC, there are 4 MTIs, they all survived yes, some can be adopted, but few specific edits suggests making it tighter and more meaningful in the context of HVAC.

- 1) general agreement yes with understanding that results is data points,
- 2) Specific validity changes that would make it more useful.

3) Cross Cutting

Has only 1 MTI.

- 1) yes
- 2) not applicable
- 3) None.

Number of jurisdictions in IOU. Service territories implementing CEC reach codes in res major commercial building

Questions for further discussion in another venue:

- A) rethink Mite's within the clarified concepts of LIPP and MTI differences beyond MTI's discussed today
- B) Need guidance on how MTI's should or shouldn't be linked to IOU programs. How evaluated?

Next Steps

- 1. Summary of workshop + slides and documents
- 2. Written submittal of comments, try to extend to 11-21-11
- 3. Edits to MTI's edits Edits to framework
 - How to fill gaps? Bridge cycle and evaluation plans that call for a strategy for MTIs.

Carol Yin, Yinsight: ED should start a study group on MT. Chris, CPUC: What are the MT for the bridge year and possibility the next cycle. That way we have to flush out the indicators. It will be less challenging if we dissect and categorize. CPUC recommends MT's early in the year, break MTI from resource acquisition.

Carol Yin, Yinsight: WE need to talk about long term indicators, NEEA and ISERTA uses different languages, NEEA Market transformation indicators, and ISERTA uses business results and that might have an affect on CA users.

Ken Keating: Keep your mind open to other aspects that NEEA does and actually doing, which is the research and development aspect of your portfolio and infrastructure. There are programs and operations that are being covered by current portfolio that are addressing acquisition programs and MT programs. If you try to force everything into just MT or acquisition, there will be issues.

Jason: If there is something additional that the utilities or the Commission needs that will help in this process, we would be willing to do that.

Chris Ann: Is it within the realm of possibility that these indicators are going to be linked to energy savings. Not the programs, the indicators.

Carmen Best: AT this time, I don't think anybody has been focusing on that.

Rob Russell, NEEA: I don't think we would ever do that at Northwest, but I understand why people would want to do that. MT wants to know if change is good and sustainable.

Chris Ann: Whole chunk of savings in the state presumably occurring due to market and price effects. If we can't save it transforming markets that is contributing to effects that are being observed in demand forecasts, but I am surprised that these linkages are not made. We should try to forge this link.

Ken Keating: Before you can approve a program, we need to know what the savings will be in a mature market cost. And they are in fact counted against the forecast and against the targets for efficiency in that forecast. Linking each of your progress indicators to a specific amount is different from linking from a successful and mature MT in filling a gap in your need, which is being done.

Carmen Best: We can initiate in the discussion, the information in tracking that is coming out in MTI will presumably flow back in analysis of goals and potential which is a big piece of future demand forecast. That could be a potential interplay of where that could happen.

Chris Ann: Another column in that spread sheet, if we transform this market by a certain year by 1% percent etc. I understand that is not perfect. Just one column.

Carmen Best: I would love to see an updated spread sheet in your comments. Procedurally, it will not happen in the resolution. 10-10-033 will discuss load forecasting. Any other discussion of how we can imbed indicators?

Ken Keating: Market Sector, not really market.

Jo Tiffany, Alliance to Save Energy: Are you suggesting what you are trying to lay out is during the bridge period? That makes sense to me because the programs in the EM&V ideally would be the other way around. Programs need to developed and designed in a way that needs to be evaluated.

Carmen Best: Evaluations like to mull over the programs and design programs from the opposite way you where talking about. WE are obliged to submit a plan, not sure how detailed yet.

Jo Tiffany: Some way it ties into what Ken was talking about, the programs adapt itself to the indicators or the other way around. I think at least it makes most sense that the indicators are there first and the programs are designed to reach indicators.

Marianne Brown, Edison: Where are the opportunities where the market transformation indicators will make sense.

Rob Russell: Adaptive management makes sense. New indicators should be in the plan as we know more. WE are a learning organization and we adapt to achieve.

Chris, DRA: Market transformation programs are not really geared for measurements, but rather more technologies, rob could you comment on that?

Rob Russell: if you define a market sufficiently, than can be done successfully.

Chris, DRA: Let's say market was tenants of multi unit residential buildings in EE. Is that enough of a segment.

Rob Russell: Do the tenants reference each other in terms of EE.

Chris, DRA: don't know

Rob Russell: if the tenants reference each other, than yes. Jeffrey Moore model, reference of each market, as long as it's done carefully. Needs to be a referencable market.

Lisa Paulo: Ken mentioned this morning the history of market transformation in CA, for NEEA, have you guys done any analysis or is anything out there that helps us put a value on the MT itself?

Rob Russell: Best work in progress where NEEA has been working with McKinsey to determine different value markets, the energy savings are not attributed to us, is it still useable? Yes, we are struggling with right now.

Carmen Best: We spoke earlier this morning about working on MT cost effectiveness.

Carol Yin: Where do we find out about that?

Simon Baker, CPUC: Internal within CPUC, but there is an October 24th scoping memo, 11-09-04, 2 phase cost effectiveness update that will affect bridge. For phase 2, ruling on process of ED to come up with a proposal that will come out for comment on 4th quarter of this year, and accept comment for market transformation benefits, this will come out 2nd quarter of next year. Navigant is the consultant working on this. Internal briefings will occur this week.

Chris, DRA: question for NEEA, would you say the ultimate value for market transformation will occur after intervention is completed? Stop intervention and continue going.

Rob Russell, NEEA: The case of building operator certification, we have stopped funding the 2 providers in the region to track certifications. Net certification for savings. May end of supporting the program in according to initiatives. Want to still be involved with retailers, and this relationship is based on long term incentive payment.

Wrap up:

Comments due on November 14th Carmen will e-mail judge to confirm this.

If we don't get extension, that for the resolution process, there will be additional opportunities to work on Market Transformation.