

**Working Group V Meeting Notes
September 5, 2008
Location: Con Edison – 4 Irving Place**

Attendees

In Person

Co-conveners: John D'Aloia (NY DPS)
& Frank Murray (NRDC/PACE)
Judge Stein
Carolyn Sweeney (RG&E)
Erin Hogan (NYSERDA)
Janja Lupse (National Grid)
Joseph McGowan (Con Ed)
Robert Melvin (O&R)
Nancy Nugent (NY CPB)
Aric Rider (NY DPS)
Bruce Johnson (NGrid)
Larry Simpson (Everwild Enterprises)
Eric Meini (National Fuel)
Paul Belnick (NYPA)
Ron Kamen (Earthkind Energy)

By phone

Judge Stegemoeller
Michael Salony (NY DPS)
Sandra Reulet (MNYDPS)
John Smigelski (Earthkind Energy)
David Hepinstall (Association for Energy
Affordability)
Jim Rioux (Central Hudson)

Dick Brooks (GDS)
Phil Mosenthal (Optimal)

1. Review Agenda
2. Judge Stein question – What are the goal(s) of the consultant discussions in today's session?
 - Understand how the consultants derived their numbers and assumptions for NG reduction targets
 - Understand Optimal baseline data so as not to “reinvent the wheel”
 - Help build a matrix of potential NG reductions versus cost to meet various reduction targets.
3. Judge Stein – Looking for preliminary reduction targets by 10/15/08 meeting for comments by other parties.
4. Consultant discussion: Phil Mosenthal (Optimal) and Dick Spellman (GD Associates)
 - Optimal Overview (Phil)
 - Completed 2006, most work done in 2005
 - NG statewide efficiency potential by upstate and downstate (O&R, ConEd, LIPA)

- Started with EIA forecast
- Did not look at load shifting or fuel switching
- 10-year analysis 2007-2016
- Doesn't include program costs, only what could you get based on positive TRC test
- Program scenario - budgeting constraint scenario assuming \$80MM/yr. for 5 years to estimate market effects.
- Updated the analysis in late 2007 for DPS
- 10-year estimate = 28% of forecast load in 2016. Mostly residential and commercial. Industrial ~ 14%.
- Low sensitivity to low and high avoided cost scenario with 25% boundaries in each direction.
- Economic potential of 2.9 Total benefit ratio of \$40B benefits with \$14B costs (\$26B benefits) over 10 years.
- Didn't do detailed program design, just conceptual across C, I, R and low-income residential. Also looked at new construction.
 - Allocated 50% of residential spending to low income.
 - Residential split was based on sales.
- Questions to Phil Mosenthal and Dick Spellman...
 - Q - Target if assuming \$80MM expenditures? A – Could get more savings/\$ for lower cost programs.
 - Q – Footnote on update report page 9 on 28% potential...65% potential of the 28%? A – About 2/3 or 18% is realistic based on experience.
 - Q – Highest percentage savings from non-NY jurisdiction has achieved? A – Optimal doesn't know on gas side. Electric programs about 1%/year and 2% viable for incremental energy savings. VT achieved 1.8% in 2007 and on track for 2% reduction in 2008. GD Associates knows but can email to the group. GD Associates - 1%/year from the leading 20 US electric utilities. .5%-1% on NG utilities for leading 20 gas utilities.
 - Q – Savings from efficiency or additional externalities? A – Mostly from programs.

- Q- Program evaluation and M&V? A – Varies by utility, but usually hire external verification consultants.
- Q – Breakout by customer class? A – 10 utilities – Keyspan, VT Gas, PSC, SCG, NStar, etc. VT Gas was highest and achieved 1% annual savings. Low was Northwest Gas at .12%. .45% median. Don't know the breakout between low-income, R, C, and I customer classes. VT allocates funding across the customer classes, although low-income are typically more expensive. C&I typically best economic return.
- Q – Any detail on the programs on the benchmark programs versus others? A – Yes, GDS has publicly-available 2004 study that got into funding, programs, etc. across 30-some gas utilities. The utility mix includes northern states as well as southern/western states. He is currently updating this study as well. Dick will forward this document to John D'Aloia.
- Q – Are there other things that can be done to achieve energy savings beyond \$? A – Other options including Codes & Standards.
- Q – Potential savings via Codes & Standards? A – National data but no NY analysis.
- Q – Are residential and low-income rebate programs faster than C&I programs? This has been the case at National Fuel Gas. A – Agreed, C&I takes longer to work through decision cycles.
- Q – Do efficiency programs lower gas prices? A – Yes, there is a small downward price effect that benefits all ratepayers. It is very small price effect – possibly not statistically significant, although programs across the country (vs. just NY) could impact prices more substantially.
- Q - A CA study concluded 5% penetration could make a significant impact on gas prices. Solar thermal could make the biggest impact on gas prices from KEMA study. A - ConEd discussed solar thermal in their rate filing.
- Q – Does it make sense to split upstate and downstate efficiency targets? A – Probably not. Potential by % is similar.
- Q – Aren't forecasts different in Optimal study? A – Percentage is similar but magnitude is different. However, ConEd different than the balance of NY – 78% of new housing is apartments. Optimal looked at ConEd separately and forecasted 26.5% potential, similar to the rest of the state.

- Q – Differences in higher downstate load growth and the impact on downstate vs. upstate? A – More rapid growth downstate but mostly from powergen sector. Only ~ 1% load growth from ratepayer side across residential and C&I sectors.
- Judge Stein comment – WG5 should delineate powergen versus ratepayer efficiency improvements. Judge Stegemoeller also wants the group to note other significant sectors such as interruptible customers in the WG5 forecast and targets.
- Judge Stein comment – Looking for recommendations that delineate and communicate comparable versus different gas programs/measurement as compared to electric. Is this 15X15 or something different? Looking for recommendation on x% by y-year.
- Judge Stein comment - Looking at low-income retrofits may get priority at the Commission due to Gov. Patterson’s focus on alleviating heating costs this winter.
- Judge Stein comment - WG5 could provide program criteria instead of suggesting specific programs. It would enable proposers to have latitude and creativity in proposing programs.
- National Fuel Gas comment – 2 industrial customers drove 5-7% growth in demand/usage because they made such a large impact.
 - Q – How do gas utilities measure gas use, demand, or both. A – Gas use primarily. Demand was looked at on peak days in the Optimal report. Similar reductions on peak days to non-peak days.
 - Q – Were all costs considered? A - \$80MM assumed all costs including marketing. GDS ConEd survey looked at all detailed costs including marketing, implementation, etc.
 - Q – Primary differences between gas and electric? A – Optimal doesn’t see a lot of differences between gas and electric goals and process. GDS suggests similar electric efficiency process such as setting a target, updating forecasts, etc. GDS believes the biggest need to grapple with is early replacement. Burn-out programs are measured on incremental costs and therefore more cost-effective (GDS) than early replacement measured on replacement costs. If there are budget constraints start with burn-out programs (Optimal). Gas efficiency is unlikely to reach 2%/yr as 1%/yr. is about the maximum achieved elsewhere. A lot of value in integrated (gas and electric) programs.
 - Q – What % could come from “lost opportunity” (burn-out and new construction)? A – 16-17% from GDS study. Low-income programs

are typically early replacement/retrofits. Integrated gas/electric audits could provide positive returns for gas as well as electric retrofits.

- Q – Should NY include early replacement/retrofits? A – C&I sometimes hybrid projects.
- Q – Are all costs understood across ratepayer classes? A – Quite a bit of experience across the country so fairly good estimates can be made. C&I takes longer to “prime the pump”.
- Comment - Not feasible to provide detailed program recommendations by 10/15/08.
 - Q – How do Muni’s building code standards fit into “lost opportunity” or impact the forecast? A – Standards fits into new construction programs. Consultants try to look at scenarios on new impacts such as standards or carbon costs. Optimal and GDS have not tried to factor in Muni standards as it is difficult statewide, unless the Muni is NYC.
 - Q – Did Optimal TRC calculations include externalities impact? A – Didn’t include carbon, NO_x, or SO_x impacts in the Optimal report.
 - Q – Have there been “snap-back” (e.g. more efficient furnace compels a higher thermostat setting) analysis? A – Older studies do not show a big effect. CA spends \$54MM on evaluation and not showing a great deal of snap-back. National Fuel Gas has results from a survey that show a small % of customers that would increase their thermostat.
 - Q to Judge Stein – Should WG5 look at gas+electric programs such as the New Construction Program? A – Questions around equity of who is paying for the programs. Other states moving towards more integrated programs. VT expanded their programs including gas with electric. MA also moving in that direction.
 - Q – Savings discrepancies between LDC’s such as Keyspan versus Optimal study? A – Keyspan showed lower \$/therm saved initially but ended up similar to Optimal.
 - Q - Components, assumptions and sources of avoided costs? A – T&D costs included. EIA modeled monthly supply costs and Optimal did daily weighting. Looked at data from the some of the upstate gas utilities distribution costs. National Grid disagrees there would be any distribution cost savings.

5. Next steps and related issues discussion:

- a. Interim status update on forecasts next week.
- b. Setting targets discussion.

- i. Flesh out the advantages and disadvantages of various approaches to setting targets?
 - ii. Forecast
 - iii. Use realistic (e.g. < 1%/yr. benchmark) target goals
 - iv. Factor in load growth such as large industrial expansion, and market conditions, and statistical (e.g. 1-2%) changes.
 - v. Document filed programs in spreadsheet and see what the range of savings would be by program. (bottoms up forecast)
 - vi. Program mix impacts cost/therm. Is the goal income equity or maximize savings? Market transformation or short-term savings?
 - vii. Use similar % to SBC approach from electric.
 - viii. Define cost/therm on residential as well as C&I.
 - ix. Could provide the commission various spending/goal options. A high case, base case, and minimum case.
 - x. Set up a reference case scenario such as Keyspan or National Fuel Gas.
 - c. Start the write-up for 10/15 deliverable.
- 6. Actions:
 - a. Interim status update on forecasts next week.
 - b. Set up a reference case – Eric - National Fuel Gas by next week to Eric at Staff.