Program Administrator Materials for Review at EEAC Webinar on Carbon Compliance Matters

September 9, 2011

Summary of PA Position

- New avoided costs -- without any carbon compliance externality value -- have significant impact on benefits of gas programs; they have little or no impact on benefits of electric programs
  - See slide 7 for illustration of impacts on benefits
- PAs believe there are risks in rushing to include compliance values that may require additional vetting in the 2012 MTM for the purposes of improving cost effectiveness
  - PAs acknowledge that the GWSA and DPU 08-50 provide the legal and regulatory basis for considering carbon compliance costs
- As an alternate to inclusion of compliance costs, to mitigate impact of the 2011 AESC on programs, we recommend considering “grouping” of certain low-income programs
  - PA will utilize 2011 AESC with RGGI and future Federal cap and trade already internalized; no extra carbon compliance value
  - PAs do not expect to alter program offerings in 2012 as a result of avoided costs
- In parallel, we recommend immediately kicking off a process to determine an appropriate compliance cost for inclusion in the 2013-2015 Energy Efficiency Plan
  - PAs have concerns with the use of the proposed carbon compliance figure and propose that these issues be reviewed in a separate, focused process that is not linked to finite 2012 matters
  - This approach will allow for a more streamlined 2012 MTM process and appropriate focus on carbon compliance matters

Maintenance of Current Offerings

- In order to preserve current offerings, which would provide continuity of core energy efficiency initiatives in 2012, the PAs recommend considering consolidating the currently existing gas residential low-income and multi-family low-income retrofit programs
  - Offerings will be cost effective - albeit potentially lower - even without a carbon compliance externality and with the application of updated EM&V values
- This consolidation would increase administrative efficiency, increase flexibility to respond to in-the-field demand, and will give all parties a "do and learn" experience with consolidating programs

The GWSA's Scope Goes Well Beyond Energy Efficiency

- GWSA's scope goes well beyond Energy Efficiency to include, and compliance is also being achieved through,
  - Transportation
  - Electric power
  - Residential, Commercial & Industry

- Assumptions that are too aggressive and/or not adequately vetted can undermine Energy Efficiency
  - AESC process treats carbon cost adder as an externality
  - AESC also characterized $80/ton as "long term" and discretionary
  - AESC internalized RGGI and anticipated Federal Cap & Trade

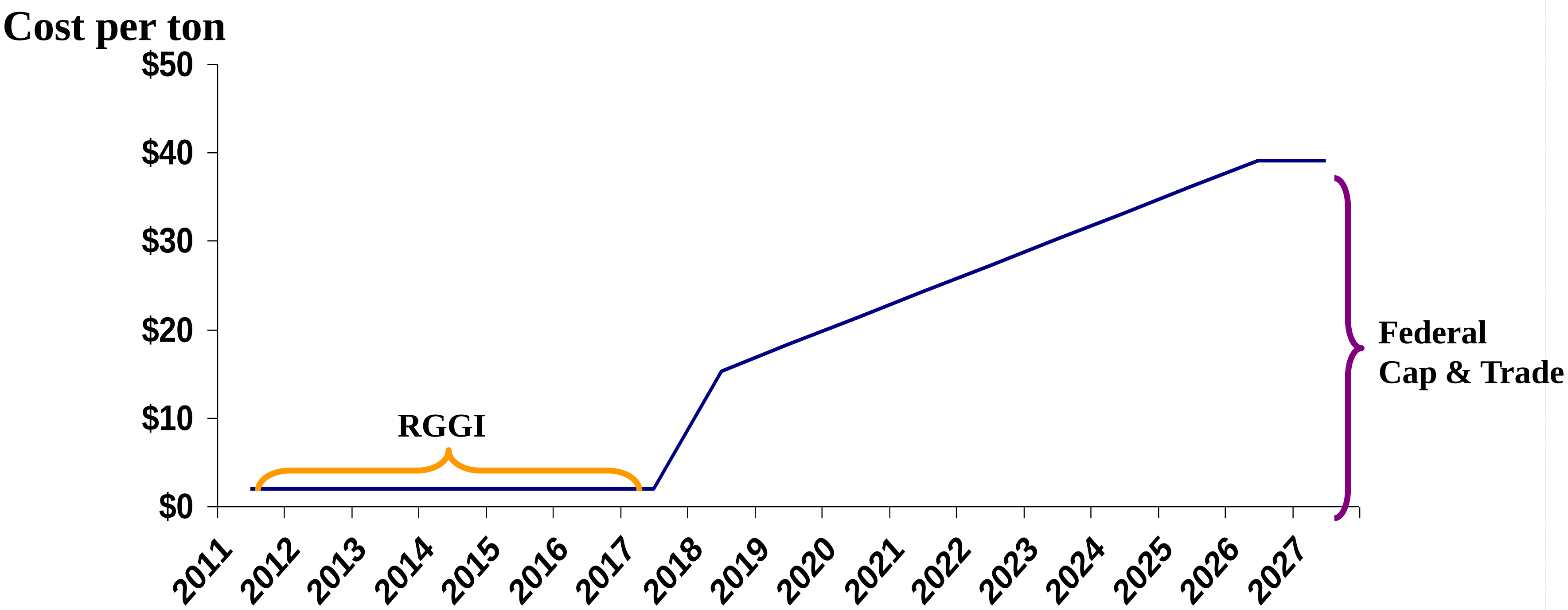
Effect of avoided costs – Illustration of Impact on 2012 Benefits*

2012	Original 2012 Index (based on 2009 Avoided Cost)	Impact of 2011 Avoided Cost Study	Impact of $80/ton Carbon Compliance Cost	Impact of $112/ton Carbon Compliance Cost
Electric	•100%	•~100%	•~124%	•~140%
Gas**	•100%	•~68%	•~106%	•~117%

* High level planning analysis (using original NSTAR numbers)
** Includes "Some Avoidable Retail Margin"

AESC 2011 Already Addresses Carbon Costs

- AESC 2011 appropriately includes and internalizes carbon cost
  - RGGI costs till 2017 ($1.86/ton)
  - Anticipated Federal cap and trade costs beyond 2017 ($15/ton in 2017, escalating to $39/ton by 2026)
  - Similarly treated in AESC 2009



Characterization of Carbon Mitigation Value in AESC Study

- “$80/ton is long run marginal cost of abatement” (pg. 6-88)
- “By 2026, 49% of value will be internalized” (pg. 6-88)
- “States that have established targets for climate mitigation … or that are contemplating such action, could view the $80/ton long term abatement cost as a reasonable estimate of the societal cost of carbon emissions” (pg. 6-99)

Broader Potential Implications of $80/ton Compliance Cost

- Impact of effectively doubling energy prices?
  - 2011, 2012 wholesale cost will additionally increase by 4 cents/kWh
    - Current projected wholesale cost at 5 cents/kWh
- Possible unintended consequences?
  - Windfall for out of state generators?
  - Implications for how generation is dispatched?
  - Other cost adders on supply purchases at this dollar level?

Uncertainties Regarding GWSA Compliance to be Addressed

- There is legitimate uncertainty about what <u>additional</u> cost of compliance should be incorporate into EE
  - Both the 2009 and 2011 AESC have treated CO_2 emissions as an externality
  - AESC already internalizes some costs
  - While reasonably foreseeable costs of compliance are to be considered per DPU 08-50 Order, externality costs prohibited to be included per 1994 SJC decision
  - There have been no regulations promulgated implementing the GWSA, or studies specifically conducted to estimate the cost of compliance
  - Consider relative timing and contribution of energy efficiency to meeting emissions targets
  - Need to consider real market dynamics and unintended consequences.

mass save
Savings through energy efficiency

Conclusion

- PAs recommend immediately kicking off a broader, separate process to properly evaluate energy efficiency's role in helping MA to meet the goals of the GWSA and determine appropriate compliance numbers for inclusion in the next three year plan.
- The process should address:
  - The GWSA and how it applies to Energy Efficiency
  - What is an appropriate compliance number
  - What are the broader implications of using such a number
  - It should focus solely on compliance costs