EPA’s Clean Power Plan and Energy Codes

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SWEEP

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Overview of EPA Proposal

- EPA has issued a proposed rulemaking, entitled the Clean Power Plan—these regulations fall under the §111(d) authority
- The Clean Power Plan is intended to reduce CO$_2$ emissions from existing power plants (EGUs)
- EPA has proposed reduction targets for the states
- State targets are based on existing emissions (2012 baseline) and estimated reductions based on four “building blocks”
  1. Increased efficiency of coal units
  2. Increased efficiency and utilization of certain gas units
  3. Increased utilization of renewable energy
  4. Increased implementation of efficiency policies/programs
Level of Energy Efficiency

- EPA’s proposal ramps up savings to 1.5% per year, starting at 2012 level of savings in 2017 with incremental increases of 0.2% per year—utility EE programs only
- EPA requested comment on ramping up to 2% per year savings with 0.25% per year annual increases
- We support the higher values based on savings potential from non-utility programs such as building/energy codes, tax incentives, financing and CHP
- The higher values are also supported by a shift from net to gross savings (net equal .85-.9 of gross)
Gross versus Net Savings

- EPA proposes using net savings, with free ridership and spillover effects accounted for in EE program evaluations and crediting.

- Recommend shifting to gross savings for both the contribution of block 4 to the goals and for determining EE credits from policies/programs.
  - Gross savings yield emissions reductions.
  - Net-to-gross (NTG) ratios are uncertain and vary from utility to utility for similar programs.
  - Little or no experience measuring NTG ratios for building energy codes and other state and local policies/programs.
  - Allowing inclusion of spillover effects invites mischief.
  - For utility programs as a whole, NTG ratios are typically 0.85-0.90, meaning small increase in building block 4 if EPA shifts to gross savings.
Targets in the Region Served by SWEEP

Energy Efficiency is expected to account for 21-33% of emissions reductions—energy codes may account for .25%/year in the region.

<table>
<thead>
<tr>
<th>State</th>
<th>Total Reduction from Baseline</th>
<th>Block 4 Reduction from Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZ</td>
<td>52%</td>
<td>14%</td>
</tr>
<tr>
<td>CO</td>
<td>35%</td>
<td>10%</td>
</tr>
<tr>
<td>NM</td>
<td>34%</td>
<td>11%</td>
</tr>
<tr>
<td>NV</td>
<td>35%</td>
<td>11%</td>
</tr>
<tr>
<td>UT</td>
<td>27%</td>
<td>9%</td>
</tr>
<tr>
<td>WY</td>
<td>19%</td>
<td>4%</td>
</tr>
</tbody>
</table>
Role of Non-Utility Policies and Programs

- We support the proposed approach of allowing states to receive credit for non-utility programs and policies, if in state plans.

- Allow wide array of programs to qualify including:
  - state or local building energy codes or retrofit ordinances
  - tax incentives or financing programs
  - public sector efficiency programs
  - State-based industrial efficiency and CHP support
  - state appliance efficiency standards
  - regional market transformation programs

- Do not allow savings credits for federal standards or state programs that are federally funded.
Inclusion of Energy Efficiency in State Plans

- We support proposed portfolio approach where states have ability to adopt and enforce measures, and allow EE measures to be complementary to EGU limits but not directly enforceable
- Support not requiring EE measures to be evaluated or enforceable if states adopt mass-based limits
- Allow state to modify EE policies and programs within state plans during implementation phase
- Allow wide array of EE measures and programs including energy codes, behavior change, T&D system upgrades, CHP...as long as they are part of policies/programs in state plans
- Exclude pricing policies due to uncertain savings
Early Action Credits

- EPA proposes allowing EE energy savings credits starting in 2020 but from measures installed during 2014-2019, not just in 2020 and beyond.

- Support allowing credits for measures installed starting in 2017, not 2014 as this is consistent with the building block 4 calculation and waits until the rule is finalized, EM&V requirements are defined, and state plans are prepared before measures start getting counted.

- EPA proposes no credit for energy savings occurring prior to 2020. We support this approach and do not believe it will hamper EE efforts prior to 2020 (as many states and utilities will claim).
Evaluation, Monitoring and Verification (EM&V)

- EPA plans to issue further guidance on EM&V around the time of the final rule; encourage EPA to provide this guidance as soon as possible.
- Support EPA indicating which EM&V protocols are acceptable; e.g., DOE Uniform Methods Project protocols, IPMVP, and SEE Action impact evaluation guides.
- Allow utilities to implement EM&V studies with states certifying that EPA guidance was followed when claiming energy savings credits.
- Fill in gaps where EM&V protocols don’t yet exist; e.g., for building codes or CHP support programs.
Evaluation, Monitoring and Verification (EM&V), Cont.

- Require states to establish and implement rules to avoid double counting of energy savings credits across different types of policies and programs.

- RECO example:
  - Regulation
  - Rebates
  - Financing

- Require evaluation of all EE programs at least once every three years following EPA rules and approved EM&V protocols.

- Require retroactive true-up of savings assumptions and credit values after EM&V is completed.
Electric Vehicles and other Types of Beneficial Electrification

- EPA’s proposal does not offer adjustments for technologies such as EVs that increase electricity use and electric sector emissions, but reduce total CO$_2$ emissions across sectors.

- At a minimum, recommend that EPA allow states to adjust either their rate-based or mass-based goals to not penalize adoption of EVs and possibly other forms of “beneficial electrification” that reduce CO$_2$ emissions broadly.

- Suggest that EPA also consider credits based on the net CO$_2$ emissions reduction of EVs or other technologies, considering a utility’s or state’s carbon intensity of electricity generation.
Next Steps and Issues

Next steps:
- Comments due 12/01
- Final rule: 6/2015
- Initial state plans: 2016
- Final state plans: 2017 or 2018
- Implementation and annual reporting: 2020-2029

Potential issues:
- Likely litigation regarding authority and other issues
- Funding of implementation efforts at the federal and state levels
Sweep:
Dedicated to More Efficient Energy Use in the Southwest

Resources available online at:
www.swenergy.org

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