

ADEQ EPA CLEAN POWER PLAN STAKEHOLDER MEETING SUMMARY

DATE: March 3, 2015 TIME: 9:30-11:30 a.m.

LOCATION: ADEQ, Room 315, 1110 West Washington Street, Phoenix

STAKEHOLDER ATTENDEES

ADDITIONAL ATTENDEES

(See attached) Theresa Gunn, GCI Kelly Cairo, GCI

ADEQ Staff

Eric Massey Steve Burr

AGENDA

The complete <u>agenda</u> is available online and includes:

- Welcome
- Review Agenda and Introductions
- Progress Report
- Potential Implementation Strategies
- Next Meeting

WELCOME: REVIEW AGENDA AND INTRODUCTIONS

Air Quality Division Director Eric Massey welcomed stakeholders to the meeting. Meeting facilitator Theresa Gunn reviewed the agenda. She emphasized the importance of brainstorming ideas, participation, and critiques of ideas, not individuals. Gunn facilitated attendee introductions, including approximately 15 stakeholders via conference call.

PROGRESS REPORT

Massey noted his appreciation in hearing a willingness to work together throughout Phase 1 of the EPA Clean Power Plan stakeholder meetings. With Phase 1 complete, Phase 2 will now focus on compliance strategies that will work for Arizona.

Massey provided an overview of recent EPA discussions including:

- EPA realizes the interim goal strategy asks for too much too soon and will modify this goal
- EPA understands stranded assets are an issue in Arizona. They have received compelling arguments from both Arizona and Indiana

- EPA has talked about flexibility with baseline numbers. However, this may not have much effect on Arizona
- While EPA will preserve the program deadline of one year from submission, extensions
 may be granted, such as if legislative approval is needed. Compliance plan work still
 must be completed within the original one-year time frame
- EPA understands there must be more consistency on credits for renewable energy and energy efficiency.
- The CPP is expected to be finalized by EPA in mid-summer of 2015. The timing will be close to that of a Federal Implementation Plan. The FIP is expected to propose a number of options in the initial proposal, and likely will include an opt-in trading program
- They have received approximately 3.6 million comments on the CPP proposal

Massey explained that a new Technical Advisory Group would be formed in the next month. They will meet as a separate group and provide technical justification for the plan Arizona will submit to EPA. They will convene to assist ADEQ, and are not a decision-making body.

Stakeholder comments and questions included:

- The Federal Energy Regulatory Commission is also conducting stakeholder meetings on issues similar to those discussed by this group
- Members should be selected for the Technical Advisory Group by April 7

POTENTIAL IMPLEMENTATION STRATEGIES

Gunn facilitated a brainstorming session with attendees. Conference callers were able to participate by posting live comments using Poll Everywhere software. Stakeholders were asked to write out strategies for compliance, and pros and cons of these strategies. Strategies were then read aloud, with opportunities for others to comment. Written comments are provided verbatim where possible.

Proposed implementation strategies and highlights of discussion included:

Stranded assets

- Multi-state sharing of stranded asset pain
- Trading of stranded assets

Industrial energy efficiency

- Emissions rate credit for energy efficiency programs implemented by large industrial customers
- Credits not just for power generators
- Building Block 4 strategies should be wide
- Other states do this, such as Massachusetts
- Need exploration
- How to track/trade/verify? Need a trading platform

Industrial renewable energy. Emissions rate reduction credit for RE projects implemented by large industrial customers

Natural gas plant deployment across the state

- Short lead time to construct
- Acceptable substitute for baseload needs
- Existing capacity near PV hub
- Procurement options
- Transmission needed
- Additional NG pipelines
- Price volatility of NG
- Air emissions
- Water availability
- Anticipated changes to ozone standards by EPA

This rule is really too complex and has too many significant impacts to have a simple or singular implementation strategy. One ingredient that should however be incorporated into any strategy, and which is lacking in the proposed rule, is additional time. There is little or no time allowed to strengthen energy efficiency standards, modify the renewable energy portfolio standard, or modify private contracts to increase the generation of natural gas sources (which is anticipated by the BSER), or to implement any of the other programs that will be necessary to implement the rule. The implementation speed is somewhat unprecedented and defies past experience in implementing even minor, and less impactful rules; therefore regardless of the strategy that is chosen, more time must somehow be allowed for implementation. Thus the strategy that I would recommend is to work with EPA to allow a longer implementation schedule, and to begin drafting the State's program without delay (as doing so might provide a better demonstration to EPA that the timelines are unrealistic).

A phased rollout to control the wider impacts onto the bulk electric system

Implementation schedule aligns with electrical and gas infrastructure capacity development and in line with affordability parameters for ratepayers and generation owners and investors

- More buy-in
- Permitting
- Gradual (more) cost/rate increases
- Assumes higher cost for pipes and lines
- May not be fast enough for the EPA
- Will have a start point and finish line, but need to make yearly plans
- Regional modeling based on various scenarios would be helpful. This group should select a few options for modeling now

Interstate mechanisms for accounting, verification, tracking and exchange of Renewable Energy emissions reduction credits

- ADEQ is participating in a Western Interstate Energy Board project to develop a report on modular approaches to regional CPP compliance
- Arizona is at a disadvantage with a state plan vs. regional may induce predatory behavior regarding credits
- State of Washington may be a good partner
- Political obstacles
- Can RE credits apply to both RPS and CPP?
- Not currently recognizing RE credit in plans. If a credit is retired for RPS, will it still count under CPP?
- Other states limit how credits are counted in statute
- How will credits for renewables and EE be counted over state lines?
- Timing of RE

Interstate mechanisms for accounting, verification, tracking and exchange of energy efficiency emissions reduction credits

Renewable Energy Standards need to be increased for the state

- Match California standard and require SRP as well as ACC-regulated utilities to meet it
- Air, health, and water use reductions
- Political issues. Would require ACC rule. Would require legislature or possibly ballot measure for SRP
- Time constraints
- Apply to SRP, APS, and others including businesses
- Must be measureable and enforceable
- Tax credits are currently nonexistent. Future tax credits are uncertain
- Legislature seems to discourage RE
- Regardless of build-out, RE is not enough to power the state
- Reliability is a question

Evaluate city and town master plans for additional water savings measures that would then result in a decrease in the amount of water pumped, and therefore less energy used

- Already doing this
- Get credit for pre-2020 reductions like the EE/RE schedules
- Some cities already have excellent long range plans that we might not get credit for otherwise
- Get credit for water savings or direct power usage savings for alternative remediation strategies. Remediation work plans are approved by EPA sometimes via consent decrees, administrative orders, consent, etc.
- Move baseline to coincide with city timelines
- 30 percent of power use in California is for water
- 70 percent of water use in Arizona is for agriculture
- Homeowner hot water heaters power could be generated through renewables, and reduced with changes in behavior
- Wastewater treatment efficiencies should be considered

ADEQ should determine Arizona's opportunities to reduce emissions. There are computer models (e.g. National Renewable Energy Lab has a model of the Arizona electric grid as part of WECC) that can be used to determine Arizona's "best" portfolio of energy resources based on Arizona's existing power plants, Arizona's renewable energy potential, total system cost (annual and long-term), and emissions.

New transmission infrastructure from out of state importing renewables

- Some methods for counting this strategy are already in place
- Require all new homes to be built with solar hot water systems (like Israel)
 - o Politically difficult
 - Would require city and county building code changes
 - o Provide builders with incentives for changes
 - o Using renewables is the most efficient way to make hot water
 - Less expensive than a retrofit
 - o Home rule state
- Savings from transmission and distribution upgrades that save energy, e.g. conservation voltage reduction

Energy efficiency

- Implement goals and benchmarks for utilities
- Make EE more accessible to the public
- Community outreach

Highlights of additional comments related to the meeting include:

- Will anyone from WECC be included in the Technical Advisory Group?
- May want to encourage university/student assistance in that group
- Reducing the transportation need with the use of electricity may reduce the total carbon output
- Electric vehicles may provide carbon reductions

NEXT MEETING

The next meeting will be held Tuesday, April 7, 9:30-11:30 a.m. at ADEQ in room 315. The meeting will utilize the same process to brainstorm compliance strategies. Massey will provide an update on the Technical Advisory Group. A conference call option and the opportunity to provide live online comments also will be provided.

STAKEHOLDER ATTENDEES

Sandy Bahr Sierra Club

Jason Baran SRP Will Barnow GCSECA

Andy Berger Tri State Energy

Edward Burgess ASU

Barbara Burkholder Arizona Public Health Assoc.

Rocio Castruita CHISPA AZ

Gary Crane Southwest Power

Jo Crumbaker MCAQD Pedro Cruz CHISPA AZ

Patrick Cunningham Law Office of Patrick J. Cunningham

Michelle De Blasi Gammage & Burnham

Michael Denby APS

Phillip Fargotstein Fennemore Craig P.C.

Jeff Francis Arizona Corporation Commission

Joe Gibbs City of Phoenix

Kevin Hengehold Arizona Community Action Association

Rebecca Hudson Southwest Gas

Pedro Lopez League of Conservation Voters

Dean Miller Lux Consulting LLC
Gary Mirich Energy Strategies LLC

Cheryl Moorcones Arizona Public Health Association; ASU

Michael Nazario CHISPA AZ

Nancy Nesky APS

Geoff Oldfather Arizona's G&T Cooperatives/AEPCO/SSW

Steven Olea Arizona Corporation Commission

Amanda Ormond Advanced Energy Economy

Amanda Reeve Snell & Wilmer L.L.P.

Josh Robertson SRP

Maureen Scott Arizona Corporation Commission

Barbara Sprungl Salt River Project

Jaret Sullivan Arlington Valley Energy Facility

Richard Sumner MCAQD
Losila Vargas CHISPA AZ
Lee-Anna Walker Environ Corp

Kristin Watt SRP

Todd Weaver Freeport-McMoRan Inc.

Jonathan Weisbuch Arizona Public Health Assoc.

Michael Wrapp J.D./MBA University of Notre Dame

Jeff Yockey TEP

Ellen Zuckerman Southwest Energy Efficiency Project