



# Meeting Summary

---

## ADEQ EPA CLEAN POWER PLAN STAKEHOLDER MEETING SUMMARY

**DATE:** September 10, 2014  
**TIME:** 9 a.m. – 12 p.m.;  
**LOCATION:** Wyndham Garden Phoenix Midtown, 3600 N. Second Avenue, Phoenix

### STAKEHOLDER ATTENDEES

(See attached)

**ADEQ Staff**  
Eric Massey  
Steve Burr  
Tai Wallace

### ADDITIONAL ATTENDEES

Theresa Gunn, Gunn Communications  
Kelly Cairo, Gunn Communications

### AGENDA

The complete [agenda](#) is available online and includes:

- Introductions
- Review Agenda
- Arizona's Goal
- Action Items and Next Steps

### INTRODUCTIONS

Eric Massey thanked stakeholders for attending the meeting. He explained that the purpose of the meeting would be to create a list of issues to be considered for inclusion in ADEQ comment letters to EPA. Not all comments received will be part of ADEQ's comment letters. All comments will be posted on [ADEQ EPA Clean Power Plan web page](#).

Massey noted that topics considered "off the table" will be captured. However, the focus of this meeting would be to gather information that can assist the department in commenting on goal setting.

### REVIEW AGENDA

Meeting facilitator Theresa Gunn reviewed the agenda, reminded participants about the resources available on the project web page, and facilitated introductions of attendees. She encouraged stakeholders to complete the meeting evaluation on the reverse of the agenda following the meeting. (See attached.)

## **ARIZONA'S GOAL**

Gunn prompted stakeholders to brainstorm concerns regarding the proposed Arizona goal and comments the department can provide to EPA to enhance the rule. Stakeholders were asked to print comments on note cards, which were then posted according to topic by ADEQ staff. Approximately 80 comment cards were received and are attached by topic. (See the [ADEQ EPA Clean Power Plan web page](#) for the complete Issues Matrix.)

### **Highlights of stakeholder questions and comments:**

#### Cost

- Stranded investment in newer coal facilities
  - Balance with societal health costs
  - Impact to lower income ratepayers in Arizona and Tri-State area
- Cost of inaction
- Other environmental cost of natural gas/solar/nuclear
- Co-op concerns, if significant increase in rates:
  - Low income consumers
  - Harsh climates (summer/winter)
  - Cost is important to economic development -- Arizona would have a bigger change in portfolio than other states
  - Nonprofit - costs \$32 million to convert to natural gas (narrow margin)
  - Only one asset - there would be a high cost to convert
  - Need glide path
- Need to look at long term cost impact
- May need federal rule changes to allow other organizational structures for power development
- Remaining life calculations
- Significant improvements of facilities
- Generation side as well as transmission
- Effect on water prices-- transporter is the largest power user
- EPA cost model: is it accurate and does it reflect transmission issues

#### Air Quality and Health Effects

- Increasing heat from CO2 affects changes in air chemistry
  - Impact to cardiac and respiratory disorders
  - Ozone compliance
- Don't fight the rule. Reduce as much as feasible by working together
- Federal funding for transportation is affected by air quality compliance
- Asthma data for emergency care: half the cost is paid through public tax dollars, and increases to 62% for youth
- Look at how air quality impacts low income communities, which is where the higher public costs are (hot spot analysis)
- Short/long term cost benefit analysis

## Non-Attainment

- Changes to generators are subject to new source permits (NSR).
  - Offsets to emissions will be needed
  - Lack of available offsets
  - Other manufacturers seeking offsets
- Increase in emissions from existing units
- May reduce the need to redispach or new generation through energy efficiency
- Has EPA captured permit limitations?
- Modeling doesn't reflect monitored emissions, not final determination of emissions
- Explore energy efficiency requirements instead of voluntary participation, e.g. Reno prohibited wood-fired fireplaces

## General Goal Setting

- Hydro and different nuclear percentage should get more credit.
  - 6% may hurt if Palo Verde Nuclear Generating Station is out for six months
  - Not sure adding simple cycle exclusions help
  - Tribal plant inclusion may not help
  - Storage
- Want goal to remain and not be lowered. We should discuss how to meet the goal
- Possibility that new combined cycle can help meet the interim goal
- Interim goal for 2020 isn't necessary. Without the interim goal, there would be more flexibility
- The interim goal is necessary, but it should be open to change and offer flexibility, also focus more on energy efficiency
- End goal will create massive change and expense
- An interim goal prevents a crisis at the end
- End goal is wrong
- Structure the goal along a logical glide path without a large interim goal
- If Arizona is committed and working together toward a goal, EPA can accommodate our needs
- Keep as balanced an energy portfolio as possible. Look at all the environmental impacts of all sources, not just greenhouse gases
- Each source has different attributes. Trade-offs include reliability/base/infrastructure
- Existing nuclear power situation -- credit in 2012 and future impact
- The EPA formula results in one of the most aggressive end goals for Arizona
  - Do the EPA assumptions reflect true current climate conditions?
  - Do the assumptions reflect the natural gas existing capacity?
  - Do the assumptions reflect Arizona's complexity and uniqueness?
- How and who will decide the Arizona end goal?
- A nuclear incentive already exists. It may not need to be included in the plan and could be treated as hydroelectric
- Were all states' goals comparable?
  - Compare CO2 per capita

- May need flexible compliance strategies instead of a one size fits all approach
- Are we including the correct assumptions about future generating technologies?

### Building Block #1

- Arizona does not receive credit for BB1 because the assumption is redispatch BB2.
- Heat rate improvement percentage triggers 111(b)

### Building Block #2 (Redispatch)

- Transmission
- Monthly vs. annual for goal -- consider a seasonal calculation
- Market effects for natural gas/gas transport/supply/competition/price. Kinder Morgan says capacity is going quickly
- Single asset generators' ability to redispatch issues: permit limitations; cost/price volatility; lack of supply; transmission; debt purchasing
- Consider natural gas supply for redispatch; seasonal use

### Infrastructure and Reliability

- Unique method/strategies; incentives for solar
- Transmission -- coal retirement creates capacity, increase transmission efficiencies
- Water supply
  - Increased capacity requires more water
  - Location of the redispatch may not have water available
  - Recycling water at sites; dry cooling

### Building Block #3

- Healthy Forests -- use as a creative offset;
- Consider other sources of energy: biomass and landfills
  - Transportation is a concern with others
  - Other carbon sources, not just power sources
- Does not coordinate with BB4 if distribution/generation are separate. Can distribution energy efficiency measures apply to generation?
- Arizona can do more with BB3 and BB4. This is the low-hanging fruit. Should not be voluntary
- Energy efficiency for low income
- Arizona is doing well. Can the 1.5% reduction continue through 2030?
- Arizona has already done a lot, is it still low-hanging fruit?

### Building Block #4 (Energy Efficiency)

- Role of energy efficiency relative to CO2 reductions
- How will building blocks 3 and 4 be addressed in the state plan?
- Energy conservation strategies should be required statewide

### Enforcement

- Need reliable base load

- ADEQ needs to be clear
- Need collaboration, but someone must be responsible
- We have various organizations - some with constitutional powers; a quasi-public utility; and, department reporting to the governor
- Multi-tier
- Enforcement for power users vs. incentives
- Is there governance authority?
- Practicality/legality of operating BB2 at 70%?
- How does it work in Arizona without central dispatch?

### **ACTION ITEMS AND NEXT STEPS**

Massey encouraged stakeholders to continue to submit ideas and comments. The next meeting will be held September 24<sup>th</sup> and will follow this same stakeholder-driven format. Topics will include tribal sources/multi-state, roles, and alternatives. Any additional comments on topics covered are welcomed. Legal comments will be available for review, but will be considered placed in the parking lot.

Massey thanked the group for their thoughtful participation and for producing numerous comment cards.

Gunn reminded attendees to complete the meeting evaluation forms.

## STAKEHOLDER ATTENDEES

Talonya Adams	Arizona Senate
Keith Alexander	(not provided)
Sandy Bahr	Sierra Club
Jason Baran	SRP
Stan Barnes	Copper State Consulting Group
Philip Bashaw	Grand Canyon State Electric Power Cooperative Association
Andy Berger	Tri state energy
Steven Bloch	Capitol Strategies
Edward Burgess	ASU
Barbara Burkholder	Arizona Public Health
Gary Crane	Southwest Power
Jo Crumbaker	MCAQD
Michelle De Blasi	Gammage & Burnham
Todd Dillard	Robert S. Lynch & Associates
Phillip Fargotstein	Fennemore Craig, P.C.
Richard Gertee	ACC
Charlie Gohman	Arizona Home Performance with ENERGY STAR
Bryan Hawthorne	Burns & McDonnell Engineering Company, Inc.
Kevin Hengehold	Arizona Community Action Association
Lon Huber	AZRUCO
Suzanne Kennedy	Geosyntec
Sharon Langford	Arizona State Senate
Mark Laubon	ACC
Cheryl Lombard	(not provided)
Lori Lustig	Arizona Corporation Commission
Maren Mahoney	ASU Energy Policy Innovation Council
Megan Martin	House of Representatives
Dean Miller	Lux Consulting, LLC
Gary Mirich	Energy Strategies, LLC
John Moody	Peters, Cannata and Moody PLC
Geoff Oldfather	Arizona's G&T Cooperatives/AEPCO/SSW
Steve Olea	Arizona Corporation Commission
Wayne Porter	Citizens' Climate Lobby
Amanda Reeve	Snell & Wilmer L.L.P.
Julie Reid	Arizona Lung Association
Tom Savage	Arizona House of Representatives
Jessica Scott	Vote Solar

Maureen Scott	Arizona Corporation Commission
Grant Smedley	SRP
Barbara Stockwell	(not provided)
Ed Stoneburg	ACC
Mark Suehl	CEC Inc.
Richard Sumner	MCAQD
Todd Weaver	Freeport-McMoRan Inc.
Jonathan Weisbuch	Arizona Public Health Assoc.
Gary Yaquinto	Arizona Investment Council
Jeff Yockey	TEP

## ISSUES/COMMENTS RECEIVED ON COMMENT CARDS

### Air Quality and Health Risks

- Air quality and health risks (asthma, heart disease, etc.)
- Concern that coal generation capacity being proposed to shutdown in attainment areas will be replaced with N.G. generation primarily in the Maricopa County non-attainment area thereby exacerbating the local air quality problems
- Effects on health/air quality
- Environmental impacts to Arizona -- should it be forced to completely phase out coal and significantly shift energy portfolio?
- Global weather change
- Large reduction in carbon emissions needed to prevent urban heat increase that will raise ozone levels
- Public health impacts of higher CO2 -- drought, wildfires, agriculture, vector-borne disease
- Respiratory diseases will increase with ozone pollution related to higher ambient temperatures. Need deep reduction in CO2 emissions
- Responsibility to protect the commons

### Alternatives

- Arizona should implement a tax on carbon

### BB1

- If BB1 is fully realized on all affected EGUs, what could be the total CO2/Mwh that could be realized and what would the total cost be for the heat rate improvements?
- It's high time for coal-burning sources of emissions to adopt Best Technical Practices -- no more delays
- Technical infeasibility of Building Block #1

### BB2/Redispatch

- Coal retirement
- Concern with peaking capacity with redispatch to NG CCTs
- Impracticality of BB2
- System dispatch: EPA fails to reflect the second-to-second load and generation balancing when "redispatching" the system to displace load with NGCC based upon annual capacity factor

### BB3/Renewable Energy

- Arizona should create incentives for alternative energy installation especially solar and clean vehicles
- Biomass credits -- healthy forests

### BB4/Energy Efficiency

- Energy conservation strategies should be required statewide
- How will building blocks 3 and 4 be addressed in the state plan?
- Role of energy efficiency relative to CO2 reductions

## Cost

- Costs to businesses and consumers
- Economic analysis re: how regulations will impact Arizona
- Effects on single-asset utilities
- Energy use and production costs/benefits
- EPA appears to have failed to consider the impact of stranded investment resulting from premature replacement of coal generation
- Fails to consider remaining useful life of coal plants
- Federal support to help solve the major costs to the industry
- Financial hit on utilities?
- G & T co-ops -- co-op model (not for profit, member owned) -- building blocks
- G & T co-ops -- rural consumers and economies -- rate impact and ripple effect
- G & T co-ops remaining useful life of the plant -- interim goal
- How much will it cost to meet goals?
- Impact to electricity rate-payers outside Arizona, due to EPA's proposal for Arizona
- Low-income impacts -- cost of possible stranded assets?
- Low-income impacts -- opportunities for increased EE/DR, targeted at households with the highest energy burdens?
- Rate impact for rural poor
- Remaining useful life of coal-fired units
- Stranded debt especially for the rural electric cooperatives
- Stranded investment -- how to treat?
- Stranded investments in electricity infrastructure
- Strategies to minimize costs
- What are the expected benefits of the CPP, and how will those benefits be allocated across customer classes/income levels?

## Enforcement

- Cross-state energy production/uses
- Enforcement of state EE and renewable standards
- How will ADEQ address the issue of governance between the ACC and ADEQ when creating/enforcing requirements of building blocks 3 and 4?
- How will ADEQ, ACC, and SRP ensure that renewable and energy efficiency provisions are enforceable in Arizona's plan?
- How will in-state resources and out-of-state resources be quantified?

## General Goal Setting

- Energy sustainability and consistency in meeting the goal proposed by EPA
- EPA's calculations determining Arizona's goal
- Final goal is based upon a lot of inaccurate assumptions for Arizona
- How can Arizona's plan be made more flexible to incorporate greater EE/DSM?
- How will pre-2017 reduction be factored into the plan? Will ADEQ request that pre-2017 efforts such as DSM be included into the EPA calculations?

- If Arizona goals are raised (with others) will result in national goal falling below 30%. Is an increase in goals realistic?
- Penalizes states with diversified generation portfolios -- of which Arizona is one of the more diversified
- What can the public do to support/oppose this rule?
- What is a "glide path"? How would it be implemented if allowed?
- What is the process/plan for correcting EPA's inaccurate assumptions affecting Arizona?
- Will ADEQ request that some of the "excluded" plants be included into the "included" plants in order to reduce the reduction requirements of the Arizona goal?

#### Infrastructure/Reliability

- Balanced and diverse energy portfolio
- Concern transmission connectivity throughout state
- Reliability
- System reliability EPA's analysis fails to evaluate the reliability impacts of displacing coal with NG. Electric transmission and gas pipeline
- Technological feasibility of meeting the EPA target for Arizona
- Transmission Constraints

#### Legal

- Building blocks: which building blocks are considered to be "outside the fence"?
- Enforcement outside the fence
- EPA overreach in terms of BBs 3 & 4 (regulation beyond actual CO2 regulation by required or allowing for RE & EE standards and programs)
- Need to respect jurisdiction of the federal and state agencies
- Outside the fence raises serious EPA authority issues
- Regulation should be a state responsibility
- What is the status of legal issue comments? Is the Attorney General's office heading up that effort?

#### Other Clean Air Act Programs

- Any concerns with the increased natural gas use, increasing ozone and the possibility that EPA may change the ozone standards?
- Interaction of changes to generation assets and nonattainment NSR (lack of offsets).
- The impact the Clean Power Plan will have on current EPA FIPs/ADEQ SIPs for EGUs regarding regional haze and SO2, etc.

#### Roles

- IPP potential
- What is the role that IPPs (new source) have in helping the state meet the CPP goals?
- What is the role that transmission developers have in bringing in renewables to help the state meet the CPP goal?

### Tribal Sources and Multi-State

- Has ADEQ contacted neighboring states to attempt to work on a multi-state plan?
- Implications for existing EGUs located in the Navajo Reservation and Ft. Mohave Reservation
- When will ADEQ decide regarding regional vs. state? NGS?

## **ADEQ STAKEHOLDER MEETING EVALUATION RESULTS**

Thirteen stakeholders returned meeting evaluation surveys. Some stakeholders did not answer all questions.

### 1. Please rate the following:

Meeting was a valuable use of my time

0-Strongly Disagree / 0-Disagree / 8-Agree / 5-Strongly Agree

Clear and understandable information was presented

0-Strongly Disagree / 0-Disagree / 9-Agree / 3-Strongly Agree

Stakeholder process will provide me an opportunity to participate

0-Strongly Disagree / 0-Disagree / 6-Agree / 7-Strongly Agree

ADEQ wants to hear my input will it make a difference

0-Strongly Disagree / 0-Disagree / 6-Agree / 6-Strongly Agree

The hotel was a good venue for the meeting

1-Strongly Disagree / 0-Disagree / 9-Agree / 3-Strongly Agree

### 2. What was the best thing about the meeting?

- Hearing different view points.
- I appreciate being able to participate in this most important discussion. The power, intellectual, fiscal and political around the table, if drawn together to pull in the same direction, can result in a solid enforceable plan.
- Input from various stakeholders.
- Interaction.
- The collaboration -- ability for all to speak. The post it note exercise in beginning.
- The open discussion regarding the issues with the plan and what steps need to be taken for compliance.

### 3. What should be changed before the next meeting?

- Keep up the good work.
- More table seatings. It was also cold!
- Tables! (Like the first meeting.)
- The temperature of the meeting room "too cold."