

**ARIZONA CORPORATION COMMISSION  
MEETING MINUTES**

DATE: June 22, 2007

TIME: 10:00 a.m.

PLACE: Department of Environmental Quality, 1110 West Washington Street,  
Room 250, Phoenix, AZ

ATTENDANCE: See list of attendees in Attachment 1. No quorum of Commissioners.

TOPIC: RESOURCE PLANNING WORKSHOP (NON-PROCUREMENT ISSUES)

**MATTERS DISCUSSED:**

Ernest Johnson, Utilities Division Director, welcomed the participants and introduced other Staff members present, including Bing Young, analyst with the Utilities Division; Barbara Keene, Manager in the Telecom and Energy Section; Kevin Torrey of the Legal Division; and Elijah Abinah, Assistant Director of the Utilities Division. Mr. Johnson explained that this was not a Resource Procurement workshop, which was to be held in July. The participants introduced themselves.

Mr. Young presented a brief overview and history of integrated resource planning (IRP) in Arizona, indicating that in 1988 and 1989 the Commission adopted resource planning rules, which required the electric utilities to file, simultaneously, resource plans every three years. Resource plans were filed and heard by the Commission in the 1990-1991 period and in 1992-1993. In 1995, resource plans were filed, but by the time the cases came to hearing in 1997, Arizona was moving toward electric competition and restructuring. The Commission suspended the IRP proceedings temporarily until 1999, when they indefinitely suspended the resource planning rules, except for the rules requiring the filing of historic data. As part of the Arizona Public Service Company (APS) Settlement Agreement in 2005, it was agreed that there would be workshops to consider resource planning issues, and that shortly thereafter, the Commission Staff held its first two workshops in this docket. This workshop is a continuation of that process that was begun in 2005.

Thirteen parties had filed comments in response to a series of questions Staff had attached to the April 26, 2007, Notice. Ms. Keene asked the parties to summarize their comments in five minutes or less.

The first party to provide oral comment was APS, represented by Pat Dinkel. Mr. Dinkel stated that APS felt this was an important process, and that the objective of the workshop should be to set the procedures and rules, and get the right issues on the table, so that we can all get through the present growth cycle. APS believes that resource planning should be a "holistic" approach, so that we are looking at renewables, demand-side management, demand response,

and supply-side issues all together, in an integrated manner. APS knows that the simple “least cost” approach will no longer suffice; it is too narrow and not holistic enough, but a workable approach should be found. Mr. Dinkel said there are complexities through the evolution of wholesale markets and the related negotiation processes. One of the challenges is how to set things up so that things are best for the customers in a manner that is not so prescriptive that the Commission is involved in the negotiations 24/7. APS has seen how other states have done things, and thinks that Arizona can do resource planning as well, if not better, than other states.

The next party to provide comments was David Berry of Western Resource Advocates (WRA). Dr. Berry said he would talk about “the good, the bad, and the ugly” since he had been involved in resource planning efforts throughout the West, and there were good aspects of resource planning in some states, and very misguided aspects in other states. Dr. Berry's first point was that the Commission has to be serious about resource planning, since there are going to be a lot of decisions that will be made over the next few years that will impact Arizona utilities and ratepayers for the next 50 years. Dr. Berry believes that the Commission needs to think of these issues prospectively and not after the fact. Secondly, Dr. Berry believes that the process needs to be a public process and not merely a process where the public comments on something after the utilities have made their final decisions. The public needs to be involved long before the utilities make their final plans. There also should be a public process for Commission review. Third, we should be focused on the large issues with innovation and imagination. Dr. Berry said he has seen resource plans where the parties get focused on very narrow, technical issues and completely miss the big problems which are occurring. Lastly, we need to realize that we are dealing with a very uncertain world. We can't even do a “least cost” plan if we want to, since we don't know what the future will bring with regard to fuel costs, carbon taxes, etc. The big theme throughout this entire process should be how to manage risk. Dr. Berry indicated that there seemed to be broad consensus from the parties on many of the issues that had been addressed by the group.

John Wallace, from the Grand Canyon State Electric Cooperative Association, provided comments on behalf of Arizona Electric Power Cooperative (AEPSCO). AEPSCO believes that the prior resource planning rules and process should not be reinstated. However, if the Commission believes an IRP procedure is needed, an alternative would be to have the utility make a filing every three to four years, which could be treated in a manner similar to the Commission's Biennial Transmission Assessment (BTA).

The next party to provide comments was Dan Austin for Comverge, who said that their main interest was in looking at demand response resources and demand-side management resources within the planning process.

Pat Black, representing Gila River Power, said that their comments mainly focused on competitive procurement, but that with regard to resource planning generally, it should be a collaborative forum that includes market stakeholders to get together and identify all resource technologies that are available, or expected to be available during the planning horizon, and that the planning horizon should be approximately three years. Gila River Power agrees that you can't necessarily find the “least cost” resource, but that the resource portfolio should be flexible enough so that it can change to market conditions within the three-year planning horizon.

The next party to provide comments was Tom Alston, on behalf of the Solar Advocates. The first thing they want to point out is what California has done as part of a resource planning-like process. The Solar Advocates believe that we can pull elements from part of that process. California set forth six goals that they wanted to accomplish. The ones which are most applicable to Arizona are the goals of developing utility and customer joint-owned generation and upgrading transmission and distribution infrastructure in order to reduce the time for facilities to be brought on line. Mr. Alston also wanted to highlight the question of whether resource planning should consider transmission as well as generation resources. He said that it was a big issue for the Solar Advocates. Distributed generation (DG) is really a major way to reduce the need for transmission and relieve some of the stress on continually expanding the distribution and transmission infrastructure.

Ken Jacobs spoke on behalf of Southwest Gas (SWG). SWG comments focus on whether there should be an IRP process for gas utilities. SWG believes that the existing regulatory reporting process and regulatory pre-approval processes are fully adequate and that there should be no formal process added to that. Any further processes would be expensive and time consuming for the utility, the Commission, and the Staff. However, should there be a desire to pursue IRP for gas utilities, SWG believes that it is best to do that following the adoption of processes for the electric side. The gas industry has major differences from the electric industry and should be dealt with separately.

The next party to provide comments was Valerie Rauluk, on behalf of SunEdison. SunEdison believes that the objective is to integrate existing Commission policies on renewables and demand-side measures into resource planning. They also want to reiterate that cost is important, but other factors such as energy security, independence, economic development, and water use should be included. They recommend a 20-year planning horizon. With regard to demand reduction, they believe that efficiency improvements can come from demand response programs and customer-sited generation technologies. To that end, they believe that the key to customer-sited generation are appropriate and adequate net metering and smart metering policies. They also believe that the supply-side plan should include a review and analysis of existing resources, including net supply-side resources. Additionally, fuel diversity is a key point and element to consider in resource planning.

Jeff Schlegel provided comments on behalf of the Southwest Energy Efficiency Project (SWEET). SWEET welcomes the increased emphasis on resource planning, and filed comments on some of the overall issues, objectives, purpose, timing and need. SWEET supports all of WRA's comments. SWEET also submitted comments related to an additional DSM question, where the DSM approved by the Commission in various dockets should be included in and counted in the resource planning process. Those programs should not be undone, and the energy efficiency standards that SWEET has proposed in other dockets should be incorporated within the IRP process. SWEET filed details on how energy efficiency should be addressed in resource planning. They filed a Lawrence Berkeley National Laboratory document on energy efficiency in Western Utility Resource Plans, which includes 14 specific recommendations on how energy efficiency should be addressed in the Western resource plans, including Arizona's. SWEET has one criterion for assessing the effectiveness of the resource planning process. If resources that are more expensive than energy efficiency continue to be procured, then SWEET would assert

that the resource planning process is broken. Mr. Schlegel believes that this is unfortunately the situation in Arizona today. SWEEP believes that there is limited public input into the process, and there is significant underinvestment in energy efficiency. Resource planning today is essentially on the front page of the business section of the newspapers. Mr. Schlegel indicated, that in reading the comments of other parties, there appears to be consensus on 80 percent of the issues, and that the parties should be able to work out solutions to the remaining issues quickly.

The next party to provide comments was Tucson Electric Power and UNS Electric (TEP/UNSE), who were represented by Mr. Leland Snook. TEP/UNSE believes that IRP is important, and it is something that they have continued to do internally, despite the fact that the public process had been discontinued. TEP/UNSE is very interested in the need to support transmission, because of the need to site generation outside of the load centers, and transport the power in to the load center. They agree with other parties that transmission needs to be part of the process. TEP/UNSE supports a process similar to the BTA. IRP should be a holistic process that considers the entire range of resources—renewable resources, demand resources, etc., and looks at the whole picture. Like WRA mentioned, the plan is largely about managing and assuming risks.

Bud Annan spoke on behalf of the Annan Group. Mr. Annan said that there were many dockets open on various strategies and technologies, and advocates that the results of those dockets automatically become “best practices” under IRP. Mr. Annan is tired of having dockets opened and decisions made, and then ignored. Mr. Annan sees research and development falling by the wayside as we have gone forth in many areas. An IRP process should reinstate, with vigor, a strong R&D process, that lets new technologies come to the forefront. As more and more people move to the Valley, we should be looking for new ways to serve these new customers, such as using micro-grids, rather than bringing in power from a Wyoming coal plant.

The next party to provide comments was Greg Patterson on behalf of the Arizona Competitive Power Alliance. Mr. Patterson divided his comments into the first six letters of the alphabet (A-F). “A” would refer to the various detailed “ad hoc” activities the Commission is engaged in being brought together; “B” and “C” would refer to the planning process being “broad based and comprehensive” so that we can look at the big picture items such as transmission, fuel, credit, renewables, prudence issues, and comprehensive long-term solutions such as natural gas storage, pipelines, LNG, transmission, energy efficiency, distributed generation, etc. We need to have a comprehensive forum to bring all of these things together that too often are only looked at separately and with a lot of detail; “D”, “E”, and “F” stand for “Disclose Everything Fully.” There is frustration that parties don’t always know what the utilities are doing with regard to procurement, what the utilities’ long-term plans are, or if the parties even have the ability to influence those plans. The original IRP processes which occurred in the early 1990s were intended to be transparent, so you had an idea what the utilities were going to do in the next five to ten years, so you could see if the utility’s long-term plans included things such as adequate demand-side management, renewables, distributed generation, over-reliance on a single fuel type, etc.

John La Sueur, policy advisor and aide to Commissioner Gary Pierce, stated that their office was very interested in this discussion and what comes out of this process. Mr. La Sueur

stated that in 1992 and 1994 there was a working group established with regard to IRP that studied externalities related to energy generation. They are looking at those documents and are interested in hearing the outcome of these discussions and particularly discussion of externalities.

Ms. Keene then asked if there was anyone who wanted to comment on the comments that had been made by others.

Gary Mirich of Arizonans for Electric Choice and Competition (AECC), representing industrial and commercial customers, indicated that they were interested in the process, and first hoped that the process would not become extremely costly and time consuming, so much that it inhibits the stakeholders to implement resources in a timely and cost-effective fashion. Secondly, though it had been stated by several parties that “least cost” planning is not the way to go, AECC believes it should remain a goal and that we should not give up trying to find the most cost-effective solutions, even in areas such as renewables.

Mr. Johnson then made the point that whenever we deal with ratepayer dollars, costs are always an issue. So whether we characterize things as the “least cost” option, or the “preferred” option, or the most “holistic” option, the bottom line always will be what is the impact on the end-use customers? We also need to get a better idea of the “whole” cost of a resource.

Mr. Johnson stated that he was concerned about reinventing the wheel and asked if there are any models of IRP elsewhere that should be considered for Arizona. He noted that Nevada’s process has been mentioned as an example of one that should be considered.

Dr. Berry indicated that he really didn’t consider Nevada’s process to be a good one; it may look good on paper, but it is a very closed process, hostile to public participation, and the answer is often known before the process begins. He indicated that a more successful model to look at would be Colorado, or even Utah. New Mexico has a new rule that looks good on paper, but it hasn’t been tested yet.

Mr. Dinkel stated that what he thought Nevada does well is focusing on comprehensive planning, as opposed to just looking at a few specific transactions. It is important to be able to have constructive discussions in the planning arena several years ahead of the important transactional decisions, so that parties know ahead of time what types of resources will be procured in the future. Mr. Dinkel stated that whatever we use as a model, we need something which will allow for good planning, and then have a specific “action plan” in which the long-term plan is actually implemented. Arizona has the benefit of being able to learn from the way other states have implemented resource planning.

Mr. Schlegel said that it is more important to get something going than waste more time trying to get a perfect process in place. He wouldn’t spend more than four person hours trying to get views of how they do things in other states. He would amend the current rules or have one round voluntarily and then amend the rules. He is also concerned that we not get into so much detail that we prescribe how each and every resource is obtained; resource plans should have ranges. We shouldn’t wait until we have everything completely defined. Mr. Schlegel then said he was in favor of “least cost” and we should always keep the costs in mind.

Ms. Rauluk of SunEdison commented that it is prudent to think about least cost, but it is important to consider the nature of accounting systems. Some resources have not been definitively defined. Some costs and benefits don't typically show up in an accounting of traditional utility plans, such as externalities which include environmental impacts and the benefits of distributed systems. We need to look at "net least cost" that includes externalities.

Mr. Patterson said that the Commission really needs to take a look at the degree of scrutiny it will provide with prudence determinations. The resource planning process should be partially about eliminating prudence risks at some point for the utilities.

Mr. Annan stated that he would like to see resources broken down by peaking, base load, and intermediate. People are always talking about peaking, and that is what we seem to focus on. But are requirements for peaking different than for base load? There are alternatives to peak power needs that are not available for base load.

Mr. Black stated that "least cost" means "least economic cost." He argues that the Commission has already defined what the externality costs are, and they have done so by adopting the renewable portfolio requirement, DSM programs, and distributed generation programs. So these externalities which have been recognized by the Commission should be reflected in the planning process.

Mr. Dinkel commented that "set asides" effectively carve out the fact we are going to have so many renewables, but don't tell us how to value those resources. An example of this issue would be carbon, which no one thought of accounting for 10 years ago, but now is a major risk for the future. He wants an evaluation where all options are put next to each other. Risk analysis is critical. The resource planning rule should say that externalities should be considered. Mr. Dinkel said that there are some factors that the utility can put a "hard" number on and quantify, and other types of externalities that they can not put a value on, such as the benefit to a school or community from having a plant. We need to consider what is best for ratepayers long-term.

Mr. Schlegel commented that he did not view DSM as an environmental policy. The most important reason SWEET promotes DSM, he said, is that it reduces costs for ratepayers. Mr. Black responded that we should start with a baseline on DSM of programs already in place. Ms. Rauluk views current DSM and renewables as a minimum. The programs that are in place are the result of a political process, and are not necessarily an optimum mix.

Mr. Dinkel said that from the utility's perspective you need both capacity and energy. Any time you look too narrowly and only see one for one role or in one application, we are missing it. A current example is what has happened to gas prices, and the potential for a carbon tax. Because of the inflated prices, distributed resources, DSM, and peaking resources all take a different perspective when compared with coal. Mr. Dinkel doesn't think that base load, intermediate, and peaking resources can be or ought to be separated as had been proposed, or we may miss opportunities.

Mr. Johnson then posed the question of how do we know the “true cost” of resources (with externalities considered) so we can do a true apples to apples comparison?

Mr. Berry responded by saying that much of this is happening anyway as state and federal mandates are already internalizing externalities. An example is sulfur dioxide, for which we now can go to the market and buy allowances. Other issues, such as water, will have to be site specific. You have to look at competing uses for the water and the values of those competing uses.

Mr. Schlegel added that specific values for externalities should not be prescribed in rules. The draft DSM rules contain language about meeting and determining numbers that can be changed later. We know that zero is not the right number to use.

Ms. Rauluk stated that there are other cost areas to be considered. We need to assess the benefits of distributed generation and look at actual transactions in the marketplace.

Mr. La Sueur provided further commented that it would be a mistake to rely on federal programs and rules. Federal rules allow more than zero sulfur emissions. To the extent that the market price is set by the government setting a value of emissions, there is no level playing field between solar and sulfur emissions. Also, the Commission's renewable mandate is either too high or too low. The IRP process would be the best place to determine the appropriate level of renewables.

Mr. Berry indicated that other states have grappled with the same issues. New Mexico invited experts from outside the state to come in and summarize how other states have dealt with these issues. He encouraged us to do the same in Arizona. With regard to assigning values to externalities, he mentioned that there have been attempts for decades to try to estimate the environmental damage in dollars due to power production.

Mr. Dinkel suggested that the resource planning rules identify the types of information that utilities should include in their plans. There should also be an action plan that includes the specific issues that need to be addressed, not just how much of what should be obtained. He also stated that the same valuation process used in resource planning would be used in RFP evaluation.

Mr. Patterson said that from a pure economics point of view, a depreciated coal plant is the best option. But if we need to look at macro issues such as carbon pollution and its environmental impacts, these macro changes could make power more expensive.

Mr. Patterson stated that we need to look at a utility's whole portfolio, not just with the next 100 MW. Mr. Schlegel agreed and added that we should look at tools that others have used to determine the costs of uncertainties and externalities. Mr. Mirich said that, based on his experience in working in resource plans in other states, it is important to get agreement on uncertainties at the beginning of the process.

Mr. La Sueur said that externalities are not just environmental. Externalities also include diversification and distributed generation (to the extent that it provides a stable grid). Mr. Alston mentioned that the issue of whether resources come from unstable places in the world should be addressed in any discussion of externalities.

Mr. Johnson brought up the topic of prudence for discussion. Why should a regulator presume prudence?

Mr. Dinkel responded that the important thing is to give regulators the information they need at the right time. As with a board of directors, you go to the board in advance with an overall direction you want to go. You may not have the specific budget or numbers, but you need to make sure you are on the right page. As things get closer, you go to the board again and report about more specific things that are developing and make sure the board continues to be with you; and if they are not, you figure out where they are. It is unrealistic to ask the Commission to give specific approval for things that are going to happen in three years, but it is realistic to ask the Commission three years ahead of time for general approval that they are headed in the right direction. Prudence is a “sliced” concept. In the old days, prudence was only determined once, as an after the fact matter, once some thing was built and ready to be added to rate base. But this system puts far too much risk on the utility and its investors and customers who wind up having to pay for this huge amount of risk. Mr. Dinkel believes that everyone is better off if the prudence issue is looked at several times: once to get approval for general guidance, then throughout the development and construction process to make sure that the project is developing as had been represented. A good prudence system would not question the large decisions, which would have been brought before the Commission, but would allow for the management of those decisions to be scrutinized.

Mr. Patterson commented that prudence decisions should be made when the main decision is made, given the information that is available at the time. The Commission sometimes puts itself in a bad position by continually reserving the right to decide on prudence later, but the delay is monetized because of the regulatory risk. A decision to buy a power plant should be deemed prudent if the RFP process was transparent, unless it is later determined that, for example, fraud was involved in the process. The utilities would benefit, the companies selling to the utilities would benefit, and ultimately consumers would benefit.

Ms. Keene then indicated that there were two PURPA standards identified in the Energy Policy Act of 2005 that we were planning to address as part of this resource planning process, and that addressing these two issues is a priority. Those standards are (a) fuel diversity and (b) fossil fuel generation efficiency. Ms. Keene indicated that Staff would issue questions on those standards and that those issues would be addressed at a future workshop.

Mr. Johnson next asked what we should do in a subsequent meeting. Part of what he was hearing was that we should use the existing rules as a baseline and add to them as we need. On the other hand, he heard from others that there might be value in inviting experts from other jurisdictions to come and make presentations.

Mr. Annan said that expert presentations wear you out; there is not much value in it. Mr. Dinkel said that we could have some discussion of the framework and composition of the rules before drafting. At the next workshop, we could look at sections in the current rules; not word smithing, but see if things are missing.

Mr. Schlegel said that, at the next workshop, we should look at the current rules to see what is good and what is missing. He wondered if the electric companies would be willing to do resource plans in the meantime. The rule would then be based on recent experience. He feels that we should only bring in experts on aspects on which we need more information. He also said that resource planning on natural gas should wait until after one round of electric resource planning.

Peter Lund of Transcanada Power stated that it is a very important to bring the issue of reliability into this process. He also thinks there should be a process that does not encumber utilities or participants to engage in early development activities of long-term projects that are going to need to be built to meet the demands of this market.

Mr. Johnson then said that the next workshop could focus on the existing rules, including applicability and data needs. He also encouraged the utilities to look at how they can go forward. He then indicated that anyone can docket comments on anything discussed in this meeting.

Barbara Klemstine of APS suggested that we need to have a vision of what we want to accomplish with resource planning before amending or developing rules. The old IRP generated a lot of paper and had a consistency finding requirement, but the Commission never made any findings as part of the process that ever put the utilities forward. We should have a concept of what kind of IRP we want and what we want to accomplish, because the utility will likely base its direction and plans upon the way the IRP is developed. It does not make much sense to start going through the rules before we know just what we are trying to accomplish in the process, and what our vision is of the end goal of the IRP.

Mr. Johnson stated that it would help if comments are filed on the vision and on the rules. While today was a broad discussion, we need to be more focused in the next workshop. Ms. Keene stated that when we go through the rules, we can address some of the “vision” issues. We also don’t have to go through the rules in the exact order that they are in. Staff will send out a link to a website where the parties can find the existing rules.

Barbara Keene  
Bing E. Young  
Utilities Division

**Note: The above minutes summarize the discussions in the workshop but are not intended to represent a verbatim transcript.**

Attachment 1

Attendees at the Resource Planning Workshop  
June 22, 2007

Name	Organization
Anita Hart	Southwest Gas
Barbara Keene	Commission Staff
Barbara Klemstine	Arizona Public Service
Bill Darmitzel	Tucson Electric Power
Bing Young	Commission Staff
Brian O'Donnell	Southwest Gas
Bud Annan	Annan Group
Dan Austin	Comverge
Daniel Musgrove	Universal Entech
David Berry	Western Resource Advocates
Deb Scott	Arizona Public Service
Elijah Abinah	Commission Staff
Ernest Johnson	Director, Utilities Division, Commission Staff
Erinn Andreasen	Arizona Public Service
Gary Mirich	Arizonans for Electric Choice and Competition
Greg Patterson	Arizona Competitive Power Alliance
Ian Quinn	Mohave Electric and Navopache Electric
Jana Brandt	Salt River Project
Jeff Schlegel	Southwest Energy Efficiency Project (SWEEP)
Joe McGuirk	Sun Miner
John LeSueur	Aide and Policy Advisor to Commissioner Pierce
John Wallace	Grand Canyon State Electric Cooperative Association
Ken Jacobs	Southwest Gas
Kevin Torrey	Commission Staff
Leland Snook	Tucson Electric Power/UNS Electric
Michael Bowling	Tucson Electric Power
Michael Newton	Sierra Southwest Cooperative (AEPCO)
Pat Dinkel	Arizona Public Service
Patrick Black	Fennimore Craig (Gila River Power)
Peter Lund	Transcanada Power
Ray Williamson	Commission Staff
Stephen Mellentine	Salt River Project
Ted Roberts	Sempra
Tim Coley	Residential Utility Consumers Office
Tom Alston	Solar Advocates
Tom Wray	Southwestern Power Group
Valerie Rauluk	SunEdison and Venture Catalyst
Victor Aguirre	Tucson Electric Power