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OPEN MEETING

MEMORANDUM

Arizona Corporation Commission

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MAR 11 2015

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AZ CORP COMMISSION
DOCKET CONTROL

TO: THE COMMISSION

FROM: Utilities Division

DATE: March 11, 2015

DOCKETED BY 

RE: RESOURCE PLANNING AND PROCUREMENT IN 2013 AND 2014 (DOCKET NO. E-00000V-13-0070)

ORIGINAL

The Utilities Division Staff ("Staff") and its consultants Global Energy & Water Consulting, LLC and Evans Power Consulting, Inc. ("Consultants") have completed the Assessment of the 2014 Integrated Resource Plans of the Arizona Electric Utilities ("Assessment") as required by Arizona Administrative Code ("A.A.C.") R14-2-704(A). The Assessment has been filed in the docket (December 19, 2014) and has also been posted on the Commission website at <http://www.azcc.gov/Divisions/Utilities/Electric/IRP2012.asp>.

Background

The Assessment represents the opinion of Staff and its Consultants. The Assessment is not an evaluation of individual electric service providers' facilities or quality of service. The Assessment does not set Commission policy or approve of any plan or specific project(s). Rather, it assesses the adequacy of the Integrated Resource Plans ("IRP" or "IRPs") to meet the requirements of the Commission's Resource Planning and Procurement Rules. The IRPs have been prepared by the four Load-Serving Entities ("LSE" or "LSEs") as defined in the Rules.¹ The LSEs are Arizona Electric Power Cooperative ("AEPSCO"), Arizona Public Service Company ("APS"), Tucson Electric Power Company ("TEP"), and UNS Electric, Inc. ("UNSE"). In addition, the second largest electric utility in Arizona, Salt River Project ("SRP"), which is not subject to these rules and regulations of the Commission and is not required to file an IRP, has voluntarily supplied certain information that is included in the Assessment.

An IRP is essentially the utility's plan to meet the future electric needs of its customers in a way that considers environmental impacts along with the concerns of customers, regulators, stockholders and other stakeholders. Within the IRP, the selection of ways to reduce, or shift electric usage (demand-side resources) are weighed in an equitable fashion against ways to increase the production of electricity (supply-side resources). The bottom line of an IRP is a schedule of demand-side and supply-side resources that will provide for the continued reliable delivery of electricity to all customers in Arizona.

The Commission's rules include certain filing requirements and require the Commission to determine whether each IRP complies with the requirements of the rules and is reasonable and in

¹An LSE is defined as "a public service corporation that provides electricity generation service and operates or owns, in whole or in part, a generating facility or facilities with capacity of at least 50 megawatts combined."

the public interest based on the information available to the Commission at the time, considering the following factors:

- A. The total cost of electric energy services;
- B. The degree to which the factors that affect demand, including demand management, have been taken into account;
- C. The degree to which supply alternatives, such as self-generation, have been taken into account;
- D. Uncertainty in demand and supply analyses, forecasts, and plans, and whether plans are sufficiently flexible to enable the utility to respond to unforeseen changes in supply and demand factors;
- E. The reliability of power supplies, including fuel diversity and non-cost considerations;
- F. The reliability of the transmission grid;
- G. The environmental impacts of resource choices and alternatives;
- H. The degree to which the LSE considered all relevant resources, risks, and uncertainties;
- I. The degree to which the LSE's plan for future resources is in the best interest of its customers;
- J. The best combination of expected costs and associated risks for the LSE and its customers; and
- K. The degree to which the LSE's resource plan allows for coordinated efforts with other LSEs.

In addition, each IRP (other than AEPCO's) must meet the requirements of the Annual Renewable Energy Requirement, the Distributed Renewable Energy Requirement, and the Energy Efficiency Standard.

The Commission's decision in the initial IRP docket (2012 IRP filings, Decision No. 73884) acknowledged the IRPs of all four load-serving entities, and required that APS, TEP and UNSE address the issues identified in the 2012 Integrated Resource Planning Assessment in their 2014 IRPs. The Decision also ordered that TEP include a coal fleet retirement scenario in its 2014 IRP. Concerning AEPCO, the Commission acknowledged the special circumstances concerning AEPCO, namely that AEPCO does not serve any retail load, and its wholesale, supply-only role has declined dramatically since 2001. Therefore, the Commission ordered AEPCO to file whatever information, data, criteria and studies it has used in its 15-year planning studies, and that future AEPCO IRPs need not be acknowledged by the Commission.

Finally, Decision No. 73884 requires that each load-serving entity with possible extra capacity resulting in a reserve margin beyond 20% over a period of two years must include an alternative scenario in its IRP, in which any incremental additions of capacity, mandated or not, that contribute to the possible extra capacity, are delayed until such additions no longer contribute to the additional capacity. The costs of this alternative scenario, including projected revenue requirements, must be included in the IRP.

The IRPs

All four LSEs filed the required 2014 resource plans in the docket on April 1, 2014. APS amended its IRP on September 7, 2014. The purpose of APS's amendment was to select a different portfolio of resources (from the original "Selected Portfolio" to the "Managed Coal Strategy"), and to request specific Commission approval of APS's decision to retire the coal-fired Cholla Power Plant Unit 2, as provided in A.A.C. Rule 14-2-704(E).

Staff held two workshops to gather stakeholder input. The first workshop was held on September 11, 2014, and the second on November 7, 2014. The comments and presentations submitted at the workshops, materials filed in the docket and with Staff, and subsequent correspondence have been reviewed and incorporated in the Assessment, where appropriate.

A total of eight parties were granted intervenor status: the Arizona Competitive Power Alliance; the Solar Energy Industries Association ("SEIA"); the Southwest Energy Efficiency Project ("SWEEP"); Western Resource Advocates ("WRA"); the Residential Utility Consumer Office ("RUCO"); Gila River Power, LP; and Freeport-McMoRan Copper & Gold, Inc. ("Freeport").

Assessment Conclusions

Staff and the Consultants believe that the 2014 Integrated Resource Plans produced by APS, TEP and UNSE are reasonable and in the public interest, based upon the information available to the Staff at the time this report was prepared and the factors set out in R14-2-704(B). Staff believes the IRPs of APS, TEP and UNSE meet the requirements of the Commission's IRP rules, and recommends that the Commission acknowledge the IRPs of these companies. However, the following issues have been identified concerning the IRPs of APS, TEP and UNSE:

APS

- Staff believes that the Ocotillo Modernization Project ("OMP") may offer a unique opportunity to add capacity at a strategic location within the Phoenix Load Pocket. In addition, existing Ocotillo site attributes such as the availability of water, natural gas, and transmission infrastructure support the redevelopment activities proposed in the OMP. Further, Staff recognizes that APS conducted a variety of economic feasibility studies which point to the economic viability of the OMP.

- Staff notes that APS has volunteered to conduct an all-resources RFP process prior to adding the additional 290 MW of capacity. Staff believes that the information derived through the RFP process may provide useful information at such time that APS seeks cost recovery of the OMP.
- Staff recommends that if APS believes such information would be useful in demonstrating the prudence of the OMP, APS be allowed to conduct an all-resources RFP prior to initiating construction, as it has volunteered to do.
- APS has requested that the Commission specifically approve the proposed retirement of Cholla Unit 2 in April of 2016. APS cites the provisions of R14-2-704(E) as the basis for this specific approval. Subsequent to the receipt of this request for specific approval, Staff issued a set of Data Requests to APS inquiring, among other things, whether APS would seek recovery of stranded costs associated with the Unit 2 retirement, and if APS understands that any Commission approval of the Cholla Unit 2 retirement under this IRP proceeding would not be considered an approval of the prudence and cost of the retirement. APS responded affirmatively to both questions.
- Based on APS's recognition that the specific approval under this IRP proceeding of the Cholla Unit 2 retirement in April 2016 is not an approval of the prudence or costs associated with the retirement, Staff recommends that the Commission grant approval of said retirement. However, this approval would not imply a specific treatment or recommendation for rate base or rate making purposes in APS's future rate filings.

TEP and APS

- The TEP and APS load forecasts appear to be optimistic in that both assume a rapid return to historical load growth. Staff recommends that TEP and APS re-examine their load forecasting techniques prior to the filing of the 2016 IRPs to ensure that TEP and APS are not forecasting high load growth that is unlikely to occur.

AEPCO

- Staff finds that the information provided by AEPCO satisfies the requirements established in Decision No. 73884.

ALL LSEs

- In its filings in this docket, Western Grid Group discussed the possibility of Arizona utilities joining an Energy Imbalance Market ("EIM"). EIMs permit generators to balance the supply of electricity with demand over a large area, and may lead to increased efficiency and may provide benefits for integrating more variable energy

resources. In particular, the California Independent System Operator's ("CAISO") EIM has been discussed as a potential market for Arizona utility participation.

APS is currently evaluating joining an EIM and its potential impacts. APS explained that while it is considering joining CAISO's EIM, it is concerned about that particular EIM's operation because it includes participants both inside and outside of CAISO's balancing area, which make its market rules uniquely complex. In its analysis, APS is evaluating and monitoring three primary issues. First are market economics, and APS states it is "reviewing production cost modeling studies and comparing operating costs within an EIM against a business as usual case." Second are internal costs, so APS is working to identify and estimate the cost (both start up and on-going) of implementing an EIM. Finally, APS is seeking to understand the extensive list of market rules, charges, workflows, timelines, and their effects on traders, transmission operators, and scheduling coordinators. APS expects its analysis to be completed by spring of 2015. APS also plans to monitor PacifiCorp's experience with CAISO's EIM, as it is one of the largest utilities in the West and joined the CASIO EIM on October 1, 2014.

On September 16, 2014, TEP filed a document in Docket No. E-00000J-13-0375 (aka "Tech Docket") regarding its evaluation of an EIM. In its filing, TEP cites its membership in the Southwest Variable Energy Resource Integration ("SVERI") group, which is comprised of several large southwest utilities, including APS and TEP. SVERI's purpose is to evaluate ways increased renewable generation can be handled across the group's combined service territories. TEP states, "As a relatively small utility, TEP is not prepared to assume a leadership position in embracing EIMs ahead of our larger regional peers. We will continue to work with SVERI and others to address the impact of intermittent renewable resources while evaluating NV Energy's [a Nevada electric utility] and PacifiCorp's upcoming experience with the California Independent System Operator's extension of an EIM for the region."

Staff believes that APS and TEP are diligently evaluating the costs and benefits of joining an EIM. Therefore, Staff recommends that each LSE be directed to include a discussion of the status of its EIM market participation deliberations in each update to its IRP and 3-Year Action Plan.

IRP Process - Staff Concerns

During 2013, APS, TEP and UNSE each made important long-term decisions that impact their IRP. APS made the decision in 2013 to carry out the OMP, which will add 290 megawatts of new capacity at the Ocotillo site. In the development of its 2014 IRP, APS has assumed that this project will go forward in all scenarios studied. TEP and UNSE made the decision in 2013 to acquire portions of the Gila River combined cycle merchant plant. In the development of their 2014 IRPs, TEP and UNSE assumed this purchase will be finalized in all cases studied.

Although these 2013 decisions by APS, TEP and UNSE may be entirely reasonable, the decisions were made outside the IRP process, and the economic consequences have not been fully vetted in the context of an IRP. Staff believes that these types resource decisions should be made within the IRP process.

Staff's experience in the processing of these IRPs, as well as prior IRPs, has led Staff to believe that the current IRP process does not properly incent participation by the utilities that are subject to the IRP rules. There is no link between the IRPs prepared under the rules to subsequent Commission approval processes for resource additions. Staff notes that the Commission's Biennial Transmission Assessment effectively incents participation in that process by offering a firm and mandatory link between a company's future transmission plans (as submitted in the required 10-year transmission plans) and the Certificate of Environmental Compliance ("CEC") that is required to implement the company's plan. There is no such link between the resource plans prepared under the IRP process and the CEC process. This disconnect could lead to the entities filing IRPs that technically meet the requirements of the IRP rules, but may not accurately reflect the entities' true plans. The Commission may wish to consider implementing a link between the IRP and CEC processes. This would likely best be pursued through legislation.

Another area of concern for Staff is the fact that the current IRP Rules only apply to four load-serving entities (APS, TEP, UNSE, and AEPSCO). These four entities account for approximately 60% of the total statewide electric generation. The Commission's IRP process does not consider the generation capacity and loads of SRP, Independent Power Producers (aka merchant generators), municipal power companies, electric service districts, or combined heat and power producers. Therefore, the Commission's evaluation considers less than two-thirds of the electric infrastructure in Arizona. Without being able to consider 100 percent of the state's generation resources, the Commission cannot complete a true statewide review and assessment.²

With the specter of EPA Rule 111(d) looming, knowledge of Arizona's total planned resource mix will only increase in importance.

To enhance the "statewide" aspects of the IRP process, the Commission may want to advocate statutorily expanding the jurisdiction of the Commission's IRP process to include 100 percent of statewide generation.

IRP Process - Stakeholder Concerns

Several stakeholders voiced concerns regarding the IRP process at the Workshop meetings and in written comments filed in the docket. The nature of stakeholder concerns covers a broad spectrum, including the following:

² A.A.C. R14-2-704(A) provides as follows: "...staff shall file a report that contains its analysis and conclusions regarding its statewide review and assessments of the load-serving entities' filings..."

APS

- Increase transparency of IRP process
- Earlier input from Commission and stakeholders

Freeport

- Overly optimistic load forecasts
- Lack of analysis regarding projected rate increases under various resource portfolio combinations
- Natural gas price forecasts in the IRPs are too high

Joint Comments – RUCO, SWEEP, SolarCity, SEIA, Western Grid Group, & WRA

- Inappropriate planning assumptions—overly optimistic load forecasts, resource costs, new technologies, future regulations, and customer preferences
- Disconnect between resource planning and resource procurement
- Insufficient Data and Analysis – need to understand and incorporate the trends shaping the industry
- Absence of independent analysis – use 3rd party analysis to improve objectivity, value and usefulness of the IRPs

SEIA

- Over reliance on natural gas in the IRPs

SWEEP

- Not enough consideration given to the premise that Energy Efficiency (“EE”) avoids investment in large baseload plants
- Capacity provided by demand side management investments from 2011-2013 is greater than recent proposed supply side additions that are comparatively more expensive
- Insufficient investment in EE in the IRP

WRA

- Not enough consideration given to future natural gas cost volatility
- The IRPs load forecasts are overly optimistic

Stakeholder Recommendations

The majority of stakeholders filing comments in this docket also offered recommendations for addressing concerns and improving the IRP process. Staff commends the stakeholders for their timely and informed comments and suggestions. The stakeholder recommendations are summarized as follows:

APS

- Conduct Utility-Specific RFIs to gather market intelligence
- Pre-Filing workshops to define utility planning assumptions and resource needs
- Approval (rather than merely “acknowledgement”) of IRPs by the Commission
- Post-Commission approval and procurement – use competitive resource acquisition RFP with oversight by an Independent Monitor.
- Expand the generation technologies subject to the CEC process

TEP & UNSE

- Implement pre-filing workshops
- Leverage the IRP process with the Biennial Transmission Assessment
- Include an evaluation of emerging grid technologies in the IRP

Joint Comments – RUCO, SWEEP, SolarCity, SEIA, Western Grid Group, & WRA

- Stakeholder workshops to define key assumptions
- Staff consultant to obtain information on costs and availability of various resources
- Staff's consultant gathers and analyzes data, then recommends portfolio scenarios for utility company analysis

- Commission approves 3-year Action Plan and acknowledges 15-year IRP
- Staff's consultant reviews and verifies Action Plans
- The Commission, consultant, and stakeholders review and comment on resource RFPs prior to release.
- Results of resource RFPs to be subject to review by an Independent Monitor and Staff's consultant

SWEEP

- Employ EE measures in excess of those required by the EE Standard

SEIA

- Use high renewable energy portfolios as base portfolio
- Focus Commission analysis on future risk and cost to ratepayers
- Update assumptions on future costs of solar
- Establish a method for quantifying the need for flexible generation resources and mandate consideration of applicable technologies to meet this need

Western Grid Group

- Add a provision to IRP Order requiring APS to join an EIM by July 1, 2015, or provide a report by that date explaining its reasons for the delay or decision not to join an EIM.

WRA

- Examine portfolios that reduce reliance on natural gas

Staff Suggestions to Improve the IRP Process Based on Staff and Stakeholder Concerns

The concerns presented by Staff and the various stakeholders offer a number of opportunities to possibly "fine tune" and improve the existing IRP process. Staff has prepared a list of suggestions that attempt to address the concerns enumerated by parties to this docket.

First, APS, TEP, and UNSE could be ordered to hold public workshops prior to commencing detailed scenario planning and analysis on their 2016 IRPs. The purpose of these "Pre-filing" workshops would be to provide stakeholders an opportunity to discuss and define key

assumptions, costs and resource portfolio concepts at a point in the resourcing planning process when study of key variables can have the most impact on the direction of future resource plans. APS, TEP, and UNSE should design these Pre-filing Workshops to be interactive and encourage discussion among a wide range of stakeholders. Due to the scope of possible subjects to be covered, the Pre-filing Workshops may require a series of meetings to adequately address stakeholder concerns and comments. The Companies should be directed to file reports of the results of these workshops in the IRP docket. These reports should, at a minimum, discuss the issues identified and debated, and provide an analysis of how stakeholder concerns will be addressed in the Company's next IRP.

Second, there could be an increased level of scrutiny on each LSE's 3-Year Action Plan which is filed as part of each LSE's IRP³. Emphasis should be placed on the accuracy, detail, and timeliness of the 3-Year Action Plans, and how the action plans implement the goals of the IRP. The LSEs could be required to file amendments to 3-Year Action Plans whenever a substantive change occurs in the near term resource plan. These amendments should include a narrative description of any substantial changes to previously filed 3-Year Action Plans and a discussion of the resource planning implications of the changes.

All proposed resource additions could be required to first appear and be discussed in the LSE's current 3-Year Action Plan as a prerequisite for filing an application with the Commission for a Certificate of Environmental Compatibility. This requirement might best be pursued through legislation.

The Commission could approve, approve with conditions, or disapprove each LSE's 3-Year Action Plan. This action would be distinct and separate from the Commission's decision to "acknowledge" or "not acknowledge" the IRP.⁴

The LSEs could be directed to place additional emphasis on the future risks and costs to ratepayers for each resource portfolio presented in the IRP. In particular, the LSEs should expand their sensitivity analyses to reduce risks associated with natural gas price volatility and of future load forecasts.

During the course of Staff's workshop meetings, there was confusion among several parties as to the meaning and intent of the resource procurement section of the IRP Rules. Specifically, some parties stated that the language in A.A.C. R14-2-705(B) regarding the requirement of an RFP process when an LSE needs to acquire bulk acquisition of energy and capacity is ambiguous. In order to clarify the intent of this Rule, the LSEs could be directed to conduct an acquisition RFP for any bulk acquisition of energy and capacity, whether the project is intended as a self-build project or not.

³ 3-Year Action Plans are required by A.A.C. R14-2-703(H). This rule states: "With its resource plan, a load-serving entity shall include an action plan...that...covers the three-year period following the Commission's acknowledgement of the resource plan."

⁴ Acknowledgment of AEPSCO's IRP is not required per Decision No. 73884

Several parties have suggested that the IRPs include a discussion of new technologies that have the potential to dramatically affect the ways in which electricity is produced, stored, and distributed. Staff agrees that a systematic review of the costs and benefits of new technologies could be appropriately discussed within the context of the IRPs. In order to accomplish this, the LSEs could be directed to include a discussion of the development status and associated costs and benefits of new technologies in each update to its IRP and associated 3-Year Action Plan.



Steven M. Olea
Director
Utilities Division

SMO:RBL:vsc\CHH

Originator: Rick Lloyd

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BEFORE THE ARIZONA CORPORATION COMMISSION

- SUSAN BITTER SMITH
Chairman
- BOB STUMP
Commissioner
- BOB BURNS
Commissioner
- DOUG LITTLE
Commissioner
- TOM FORESE
Commissioner

IN THE MATTER OF RESOURCE
PLANNING AND PROCUREMENT IN
2013 AND 2014

DOCKET NO. E-00000V-13-0070

DECISION NO. _____

ORDER

Open Meeting
April 14, 2015, and April 15, 2015
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. The Utilities Division Staff ("Staff") and its consultants Global Energy & Water Consulting, LLC and Evans Power Consulting, Inc. ("Consultants") have completed the Assessment of the 2014 Integrated Resource Plans of the Arizona Electric Utilities ("Assessment") as required by Arizona Administrative Code ("A.A.C.")R14-2-704(A). The Assessment has been filed in the docket (December 19, 2014) and has also been posted on the Arizona Corporation Commission ("Commission") website at:

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1 Background

2 2. The Assessment represents the opinion of Staff and its Consultants. The Assessment
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4 Assessment does not set Commission policy or approve of any plan or specific project(s). Rather, it
5 assesses the adequacy of the Integrated Resource Plans ("IRP" or "IRPs") to meet the requirements of
6 the Commission's Resource Planning and Procurement Rules. The IRPs have been prepared by the
7 four Load-Serving Entities ("LSE" or "LSEs") as defined in the Rules. The LSEs are Arizona
8 Electric Power Cooperative ("AEPCO"), Arizona Public Service Company ("APS"), Tucson Electric
9 Power Company ("TEP"), and UNS Electric, Inc. ("UNSE"). In addition, the second largest electric
10 utility in Arizona, Salt River Project ("SRP"), which is not subject to these rules and regulations of the
11 Commission and is not required to file an IRP, has voluntarily supplied certain information that is
12 included in the Assessment.

13 3. An IRP is essentially the utility's plan to meet the future electric needs of its customers
14 in a way that considers environmental impacts along with the concerns of customers, regulators,
15 stockholders and other stakeholders. Within the IRP, the selection of ways to reduce, or shift electric
16 usage (demand-side resources) are weighed in an equitable fashion against ways to increase the
17 production of electricity (supply-side resources). The bottom line of an IRP is a schedule of demand-
18 side and supply-side resources that will provide for the continued reliable delivery of electricity to all
19 customers in Arizona.

20 4. The Commission's rules include certain filing requirements and require the
21 Commission to determine whether each IRP complies with the requirements of the rules and is
22 reasonable and in the public interest based on the information available to the Commission at the
23 time, considering the following factors:

- 24 A. The total cost of electric energy services;
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26 have been taken into account;
- 27 C. The degree to which supply alternatives, such as self-generation, have been taken into
28 account;

1 D. Uncertainty in demand and supply analyses, forecasts, and plans, and whether plans are
2 sufficiently flexible to enable the utility to respond to unforeseen changes in supply and
3 demand factors;

4 E. The reliability of power supplies, including fuel diversity and non-cost considerations;

5 F. The reliability of the transmission grid;

6 G. The environmental impacts of resource choices and alternatives;

7 H. The degree to which the LSE considered all relevant resources, risks, and uncertainties;

8 I. The degree to which the LSE's plan for future resources is in the best interest of its
9 customers;

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11 customers; and

12 K. The degree to which the LSE's resource plan allows for coordinated efforts with other
13 LSEs.

14 5. In addition, each IRP (other than AEPCO's) must meet the requirements of the
15 Annual Renewable Energy Requirement, the Distributed Renewable Energy Requirement, and the
16 Energy Efficiency Standard.

17 6. The Commission's decision in the initial IRP docket (2012 IRP filings, Decision No.
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26 7. Finally, Decision No. 73884 requires that each load-serving entity with possible extra
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18 Assessment Conclusions

19 11. Staff and the Consultants believe that the 2014 Integrated Resource Plans produced by
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ALL LSEs

- In its filings in this docket, Western Grid Group discussed the possibility of Arizona utilities joining an Energy Imbalance Market (“EIM”). EIMs permit generators to balance the supply of electricity with demand over a large area, and may lead to increased efficiency and may provide benefits for integrating more variable energy resources. In particular, the California Independent System Operator’s (“CAISO”) EIM has been discussed as a potential market for Arizona utility participation.

APS is currently evaluating joining an EIM and its potential impacts. APS explained that while it is considering joining CAISO’s EIM, it is concerned about that particular EIM’s operation because it includes participants both inside and outside of CAISO’s balancing area, which make its market rules uniquely complex. In its analysis, APS is evaluating and monitoring three primary issues. First are market economics, and APS states it is “reviewing production cost modeling studies and comparing operating costs within an EIM against a business as usual case.” Second are internal costs, so APS is working to identify and estimate the cost (both start up and on-going) of implementing an EIM. Finally, APS is seeking to understand the extensive list of market rules, charges, workflows, timelines, and their effects on traders, transmission operators, and scheduling coordinators. APS expects its analysis to be completed by spring of 2015. APS also plans to monitor PacifiCorp’s experience with CAISO’s EIM, as it is one of the largest utilities in the West and it joined the CASIO EIM on October 1, 2014. On September 16, 2014, TEP filed a document in Docket No. E-00000J-13-0375 (aka “Tech Docket”) regarding its evaluation of an EIM. In its filing, TEP cites its membership in the Southwest Variable Energy Resource Integration (“SVERI”) group, which is comprised of several large southwest utilities, including APS and TEP. SVERI’s purpose is to evaluate ways increased renewable generation can be handled

1 across the group's combined service territories. TEP states, "As a relatively small
2 utility, TEP is not prepared to assume a leadership position in embracing EIMs ahead
3 of our larger regional peers. We will continue to work with SVERI and others to
4 address the impact of intermittent renewable resources while evaluating NV Energy's
5 [a Nevada electric utility] and PacifiCorp's upcoming experience with the California
6 Independent System Operator's extension of an EIM for the region."

7 Staff believes that APS and TEP are diligently evaluating the costs and benefits of
8 joining an EIM. Therefore, Staff recommends that each LSE be directed to include a
9 discussion of the status of its EIM market participation deliberations in each update to
10 its respective IRP and 3-Year Action Plan.

11 IRP Process - Staff Concerns

12 12. During 2013, APS, TEP and UNSE each made important long-term decisions that
13 impact their IRP. APS made the decision in 2013 to carry out the OMP, which will add 290
14 megawatts of new capacity at the Ocotillo site. In the development of its 2014 IRP, APS has assumed
15 that this project will go forward in all scenarios studied. TEP and UNSE made the decision in 2013 to
16 acquire portions of the Gila River combined cycle merchant plant. In the development of their 2014
17 IRPs, TEP and UNSE assumed this purchase will be finalized in all cases studied.

18 13. Although these 2013 decisions by APS, TEP and UNSE may be entirely reasonable,
19 the decisions were made outside the IRP process and the economic consequences have not been fully
20 vetted in the context of an IRP. Staff believes that these types of resource decisions should be vetted
21 within the IRP process.

22 14. Staff's experience in the processing of these IRPs, as well as prior IRPs, has led Staff
23 to believe that the current IRP process does not properly incent participation by the utilities that are
24 subject to the IRP rules. There is no link between the IRPs prepared under the rules to subsequent
25 Commission approval processes for resource additions. Staff notes that the Commission's Biennial
26 Transmission Assessment effectively incents participation in that process by offering a firm and
27 mandatory link between a company's future transmission plans (as submitted in the required 10-year
28 transmission plans) and the Certificate of Environmental Compliance ("CEC") that is required to

1 implement the company's plan. There is no such link between the resource plans prepared under the
 2 IRP process and the CEC process. This disconnect could lead to the entities filing IRPs that
 3 technically meet the requirements of the IRP rules, but may not accurately reflect the entities' true
 4 plans. The Commission may wish to consider implementing a link between the IRP and CEC
 5 processes. This would likely best be pursued through legislation.

6 15. Another area of concern for Staff is the fact that the current IRP Rules only apply to
 7 four load-serving entities (APS, TEP, UNSE, and AEPSCO). These four entities account for
 8 approximately 60% of the total statewide electric generation. The Commission's IRP process does
 9 not consider the generation capacity and loads of SRP, Independent Power Producers (aka merchant
 10 generators), municipal power companies, electric service districts, or combined heat and power
 11 producers. Therefore, the Commission's evaluation considers less than two-thirds of the electric
 12 infrastructure in Arizona. Without being able to consider 100 percent of the state's generation
 13 resources, the Commission cannot complete a true statewide review and assessment.¹

14 16. With the specter of Environmental Protection Agency Rule 111(d) requirements
 15 looming, knowledge of Arizona's total planned resource mix will only increase in importance.

16 17. To enhance the "statewide" aspects of the IRP process, the Commission may want to
 17 advocate statutorily expanding the jurisdiction of the Commission's IRP process to include 100
 18 percent of statewide generation.

19 IRP Process - Stakeholder Concerns

20 18. Several stakeholders voiced concerns regarding the IRP process at the Workshop
 21 meetings and in written comments filed in the docket. The nature of stakeholder concerns covers a
 22 broad spectrum, including the following:

23 APS

- 24 • Increase transparency of IRP process
- 25 • Earlier input from Commission and stakeholders

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28 ¹A.A.C. R14-2-704(A) provides as follows: " staff shall file a report that contains its analysis and conclusions regarding its statewide review and assessments of the load-serving entities filings..."

Freeport

- Overly optimistic load forecasts
- Lack of analysis regarding projected rate increases under various resource portfolio combinations
- Natural gas price forecasts in the IRPs are too high

Joint Comments – RUCO, SWEEP, SolarCity, SEIA, Western Grid Group, & WRA

- Inappropriate planning assumptions – load forecasts, resource costs, new technologies, future regulations, and customer preferences
- Disconnect between resource planning and resource procurement
- Insufficient Data and Analysis – need to understand and incorporate the trends shaping the industry
- Absence of independent analysis – use 3rd party analysis to improve objectivity, value and usefulness of the IRPs

SEIA

- Over reliance on natural gas in the IRPs

SWEEP

- Not enough consideration given to the premise that Energy Efficiency avoids investment in large baseload plants
- Capacity provided by demand side management investments from 2011-2013 is greater than recent proposed supply side additions that are comparatively more expensive
- Insufficient investment in energy efficiency (“EE”) in the IRPs

WRA

- Not enough consideration given to future natural gas cost volatility
- The IRPs load forecasts are overly optimistic

Stakeholder Recommendations

19. The majority of stakeholders filing comments in this docket also offered recommendations for addressing concerns and improving the IRP process. Staff commends the

1 stakeholders for their timely and informed comments and suggestions. The stakeholder
2 recommendations are summarized as follows:

3 APS

- 4 • Conduct Utility-Specific RFIs to gather market intelligence
- 5 • Pre-Filing workshops to define utility planning assumptions and resource needs
- 6 • Approval (rather than merely “acknowledgement”) of IRPs by the Commission
- 7 • Post-Commission approval and procurement – use competitive resource acquisition
8 RFP with oversight by an Independent Monitor.
- 9 • Expand the generation technologies subject to the CEC process

10 TEP & UNSE

- 11 • Implement pre-filing workshops
- 12 • Leverage the IRP process with the Biennial Transmission Assessment
- 13 • Include an evaluation of emerging grid technologies in the IRP

14 Joint Comments – RUCO, SWEEP, SolarCity, SEIA, Western Grid Group, & WRA

- 15 • Stakeholder workshops to define key assumptions
- 16 • Staff consultant to obtain information on costs and availability of various resources
- 17 • Staff's consultant gathers and analyzes data, then recommends portfolio scenarios for
18 utility company analysis
- 19 • Commission approves 3-year Action Plan and acknowledges 15-year IRP
- 20 • Staff's consultant reviews and verifies Action Plans
- 21 • The Commission, consultant, and stakeholders review and comment on resource RFPs
22 prior to release.
- 23 • Results of resource RFPs to be subject to review by an Independent Monitor and
24 Staff's consultant

25 SWEEP

- 26 • Employ EE measures in excess of those required by the EE Standard

27 SEIA

- 28 • Use high renewable energy portfolios as base portfolio

- 1 • Focus Commission analysis on future risk and cost to ratepayers
- 2 • Update assumptions on future costs of solar
- 3 • Establish a method for quantifying the need for flexible generation resources and
- 4 mandate consideration of applicable technologies to meet this need

5 Western Grid Group

- 6 • Add a provision to IRP Order requiring APS to join an EIM by July 1, 2015, or
- 7 provide a report by that date explaining its reasons for the delay or decision not to join
- 8 an EIM.

9 WRA

- 10 • Examine portfolios that reduce reliance on natural gas

11 Staff Suggestions to Improve the IRP Process Based on Staff and Stakeholder Concerns

12 20. The concerns presented by Staff and the various stakeholders offer a number of
 13 opportunities to possibly “fine tune” and improve the existing IRP process. Staff has prepared a list of
 14 suggestions that attempt to address the concerns enumerated by parties to this docket.

15 21. First, APS, TEP, and UNSE could be ordered to hold public workshops prior to
 16 commencing detailed scenario planning and analysis on their 2016 IRPs. The purpose of these “Pre-
 17 filing” workshops would be to provide stakeholders an opportunity to discuss and define key
 18 assumptions, costs, and resource portfolio concepts at a point in the resource planning process when
 19 study of key variables can have the most impact on the direction of future resource plans. APS, TEP,
 20 and UNSE should design these Pre-filing Workshops to be interactive and encourage discussion
 21 among a wide range of stakeholders. Due to the scope of possible subjects to be covered, the Pre-
 22 filing Workshops may require a series of meetings to adequately address stakeholder concerns and
 23 comments. The Companies should be directed to file reports of the results of these workshops in the
 24 IRP docket. These reports should, at a minimum, discuss the issues identified and debated, and
 25 provide an analysis of how stakeholder concerns will be addressed in the Company’s next IRP.

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1 22. Second, there could be an increased level of scrutiny on each LSE's 3-Year Action
2 Plan which is filed as part of each LSE's IRP.² Emphasis should be placed on the accuracy, detail, and
3 timeliness of the 3-Year Action Plans and how the action plans implement the goals of the IRP. The
4 LSEs could be required to file amendments to 3-Year Action Plans whenever a substantive change
5 occurs in the near term resource plan. These amendments should include a narrative description of
6 any substantial changes to previously filed 3-Year Action Plans and a discussion of the resource
7 planning implications of the changes. All proposed resource additions could be required to first
8 appear and be discussed in the LSE's current 3-Year Action Plan as a prerequisite for filing an
9 application with the Commission for a Certificate of Environmental Compatibility. This requirement
10 might best be pursued through legislation.

11 23. The Commission could approve, approve with conditions, or disapprove each LSE's
12 3-Year Action Plan. This action would be distinct and separate from the Commission's decision to
13 "acknowledge" or "not acknowledge" the IRP.

14 24. The LSEs could be directed to place additional emphasis on the future risks and costs
15 to ratepayers for each resource portfolio presented in the IRP. In particular, the LSEs should expand
16 their sensitivity analyses to reduce risks associated with natural gas price volatility and of future load
17 forecasts.

18 25. During the course of Staff's workshop meetings, there was confusion among several
19 parties as to the meaning and intent of the resource procurement section of the IRP Rules.
20 Specifically, several parties stated that the language in A.A.C. R14-2-705(B) regarding the requirement
21 of an RFP process when an LSE needs to acquire bulk energy and capacity is ambiguous. In order to
22 clarify the intent of this Rule, the LSEs could be directed to conduct an acquisition RFP for any bulk
23 acquisition of energy and capacity, whether the project is intended as a self-build project or not.

24 26. Several parties have suggested that the IRPs include a discussion of new technologies
25 that have the potential to dramatically affect the ways in which electricity is produced, stored, and
26 distributed. Staff agrees that a systematic review of the costs and benefits of new technologies could

27
28 ² 3-year Action Plans are required by A.A.C. R14-2-703(H). This rule state; "With its resource plan, a load-serving entity shall include an action plan...that...covers the three-year period following the Commission's acknowledgment of the resource plan."

1 discussion of the development status and associated costs and benefits of new technologies in each
2 update to its IRP and associated 3-Year Action Plan.

3 CONCLUSIONS OF LAW

4 1. Arizona Public Service Company, Tucson Electric Power Company, UNS Electric,
5 Inc., and Arizona Electric Power Cooperative are Arizona public service corporations within the
6 meaning of Article XV, Section 2, of the Arizona constitution.

7 2. The Commission has jurisdiction over Arizona Public Service Company, Tucson
8 Electric Power Company, UNS Electric, Inc., and Arizona Electric Power Cooperative, and over the
9 matters raised herein.

10 3. The Commission, having reviewed the 2014 Integrated Resource Plans of Arizona Public
11 Service Company, Tucson Electric Power Company, UNS Electric, Inc., and Arizona Electric Power
12 Cooperative; Staff's Assessment of the 2014 Integrated Resource Plans, dated December 19, 2014;
13 and Staff's Memorandum, dated March 11, 2015, finds that the subject Integrated Resource Plans
14 meet the requirements of the Commission Resource Planning and Procurement rules.

15 ORDER

16 IT IS THEREFORE ORDERED that the 2014 Integrated Resource Plans of Arizona Public
17 Service Company, Tucson Electric Power Company, and UNS Electric, Inc. are hereby acknowledged.

18 IT IS FURTHER ORDERED that the 2014 Integrated Resource Plan of Arizona Electric
19 Power Cooperative satisfies the requirements established in Decision No. 73884.

20 IT IS FURTHER ORDERED that the proposed retirement of Arizona Public Service
21 Company's Cholla Unit 2 is approved as provided in A.A.C. Rule 14-2-704(E) and that Arizona Public
22 Service Company is hereby put on notice that this approval does not imply a specific treatment or
23 recommendation for rate base or ratemaking purposes.

24 IT IS FURTHER ORDERED that Arizona Public Service Company and Tucson Electric
25 Power Company re-examine their respective load forecasting techniques prior to filing its 2016
26 Integrated Resource Plans to ensure that the resource plans are not forecasting high load growth that
27 is unlikely to occur.

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IT IS FURTHER ORDERED that the Load Serving Entities shall include a discussion of the status of their EIM market participation deliberations in the update to their respective IRP and 3-Year Action Plans.

IT IS FURTHER ORDERED that this decision shall become effective immediately.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

CHAIRMAN	COMMISSIONER	
COMMISSIONER	COMMISSIONER	COMMISSIONER

IN WITNESS WHEREOF, I, JODI JERICH, Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this _____ day of _____, 2015.

JODI JERICH
EXECUTIVE DIRECTOR

DISSENT: _____

DISSENT: _____

SMO:RBL .vsc/CHH

1 SERVICE LIST FOR: RESOURCE PLANNING AND PROCUREMENT IN 2013 AND 2014
2 DOCKET NO. E-00000V-13-0070

3 Mr. Bradley S. Carroll
4 Tucson Electric Power Company
88 East Broadway Boulevard, MS HQE9 10
5 P.O. Box 711
Tucson, Arizona 85702

6
7 Ms. Lisa Malagon
Arizona Public Service Company
8 Mail Station 9712
P.O. Box 53999
9 Phoenix, Arizona 85072-3999

10 GALLAGHER & KENNEDY, P.A.
11 Mr. Michael M. Grant
2575 East Camelback Road
12 Phoenix, Arizona 85016-9225
Attorneys for Arizona Electric Power

13 Mr. Timothy Hogan
14 514 West Roosevelt
Phoenix, Arizona 85003

15
16 Mr. Greg Patterson
Munger Chadwick
17 916 West Adams -3
Phoenix, Arizona 85007

18 Mr. Giancarlo Estrada
19 3030 N. 3rd Street., Suite 200
Phoenix Arizona 85012

20
21 Mr. Patrick Black
Fennemore Craig, P.C
22 2394 E. Camelback Rd, Ste 600
Phoenix Arizona 85016

23
24 Mr. C. Webb Crockett
Fennemore Craig, P.C
25 2394 E. Camelback Rd, Ste 600
Phoenix Arizona 85016

26 Mr. David Berry
27 Western Resource Advocates
P.O. Box 1064
28 Scottsdale, Arizona 85252-1064

- 1 Mr. Jeff Schlegel
1167 West Samalayuca Drive
- 2 Tucson, Arizona 85704-3224

- 3 Mr. Steven M. Olea
4 Director, Utilities Division
Arizona Corporation Commission
- 5 1200 West Washington Street
Phoenix, Arizona 85007

- 6 Ms. Janice M. Alward
7 Chief Counsel, Legal Division
Arizona Corporation Commission
- 8 1200 West Washington Street
Phoenix, Arizona 85007

- 9
10 Ms. Lyn Farmer
Chief Administrative Law Judge,
11 Hearings Division
Arizona Corporation Commission
- 12 1200 West Washington Street
Phoenix, AZ 85007

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