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AZ CORP COMMISSION
DOCKET CONTROL

April 1, 2015

Docket Control
Arizona Corporation Commission
1200 W. Washington
Phoenix, AZ 85007

RE: Arizona Public Service Company's ("APS") 2016 Resource Planning Work Plan
Docket No. E-00000V-15-0094

Pursuant to A.A.C. R14-2-703(G):

A load-serving entity shall by April 1 of each odd year, file with Docket Control a work plan that includes: An outline of the contents of the resource plan the load-serving entity is developing to be filed the following year as required under subsection (F); The load-serving entity's method for assessing potential resources; The sources of the load-serving entity's current assumptions; and An outline of the timing and extent of public participation and advisory group meetings the load-serving entity intends to hold before completing and filing the resource plan.

Arizona Public Service Company has enclosed the Work Plan for APS's 2016 Resource Plan. We look forward to continuing to work with the Commission and stakeholders regarding any potential changes to the process while fulfilling APS's resource planning obligations and associated customer needs.

If you have any questions regarding this information, please contact Gregory Bernosky at (602)250-4849.

Sincerely,

Lisa Malagon
LM/sb
Attachment

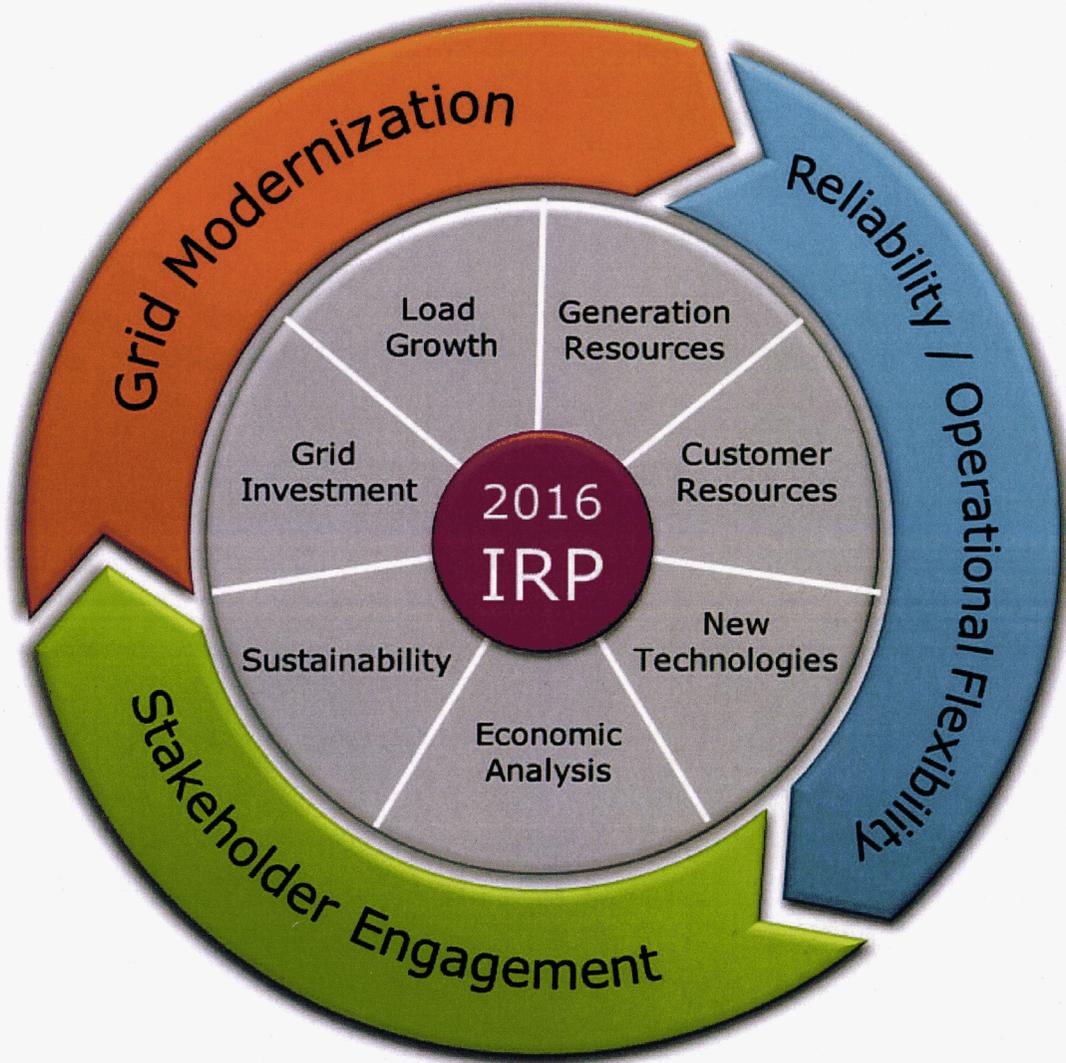
cc: Terri Ford
Steve Olea
Brian Bozzo
Barbara Keene

Arizona Corporation Commission
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KM	PC

2016 IRP - Work Plan



April 1, 2015

Filed in Compliance with A.A.C. R14-2-703(G)

2016 IRP - Work Plan

REQUIREMENT OVERVIEW

The Arizona Corporation Commission's Resource Planning Rules require load-serving entities to file a work plan in April of odd-numbered years. The components of this filing requirement are: ¹

- An outline of the contents of the resource plan the load-serving entity is developing to be filed the following year;
- The load-serving entity's method for assessing potential resources;
- The sources of the load-serving entity's current assumptions; and
- An outline of the timing and extent of public participation and advisory group meetings the load-serving entity intends to hold before completing and filing the resource plan.

Arizona Public Service Company ("APS" or the "Company") is providing this Work Plan, which describes the framework for the integrated resource planning ("IRP") process that will be used to develop APS's 2016 Resource Plan.

CONTENT OF THE 2016 RESOURCE PLAN

APS anticipates the contents of its 2016 Resource Plan will include the following:

- Executive Summary - Key areas will be highlighted, such as energy and capacity mix, resources that contribute to meeting growth in energy and capacity, expected improvements in environmental performance, an abbreviated loads and resources table, a review of relevant planning process criteria, and an action plan for the subsequent three years following Commission acknowledgement of the IRP.

Energy trends and their impact on APS may also be discussed, including:

- Infrastructure Upgrades - As stated in the 2014 IRP, as more variability is introduced in the energy mix, more flexibility will be required to support it. APS is already taking proactive steps to achieve a modern, reliable grid to accommodate 2-way power flows, but more innovation will be needed in the next few years. APS plans to explore several options such as additional flexible generation units, smart inverters, microgrids, energy storage, demand response (DR) programs, energy efficiency (EE) programs and updated pricing models - all with the

¹ Arizona Administrative Code ("A.A.C.") R14-2-703(G).

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intent of reducing the impact of variable generation as we integrate more of these resources into the portfolio mix.

- Industry Drivers - As in previous IRPs, a discussion of the trends driving the future direction of the energy industry may include, but are not limited to, natural gas pricing, the cost of environmental regulations, increases in various forms of self-dispatching solar generation and the impact of new technologies.
- Forecast of Future Customer Requirements – The expected changes in both energy consumption and peak demand will be provided, before and after the effects of energy efficiency and distributed energy.
- Description of Current Resources – A comprehensive review of APS's existing portfolio of resources used in meeting our customers' current electricity needs will be included, along with other relevant information regarding those resources such as uncertainties due to changing environmental regulations.
- Assessment of Available New Resources – Available resource technologies and solutions that could potentially be used to meet the future needs of our customers will be discussed and analyzed. An extensive array of conventional and renewable resources, as well as energy efficiency measures, demand response programs and emerging technologies will be included in this assessment.
- Analysis of Alternative Future Portfolio Solutions – Alternative resource portfolios that combine current and potential asset additions to meet future customer electricity needs will be developed and analyzed. Complex factors such as the reliability of the Phoenix load pocket, customer-owned solar photovoltaic penetration, and uncertainty of the coal fleet due to stringent environmental requirements will be considered when developing alternative portfolio solutions. Key variables in the analysis, such as load forecast, natural gas prices, and carbon costs, will be varied to objectively evaluate how resource portfolio combinations will perform under a variety of future conditions. After this rigorous series of analytics is completed, a specific resource plan will be selected which establishes a direction that balances reliability, cost, environmental impacts, and risk factors in meeting the future needs of APS's customers.
- Action Plan – An overview of the actions that will be needed to implement APS's proposed 2016 Resource Plan for the three years following the Commission's acknowledgement will be provided. This may include future resource procurement activities pertaining to development, acquisitions and implementation timelines. The Action Plan may also include (a) a discussion of Requests for Proposals (RFPs); (b) a discussion of APS's Energy Imbalance

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Market (EIM) participation deliberations ²; and (c) a discussion of potential future technology options.

METHOD FOR ASSESSING POTENTIAL RESOURCES

APS will evaluate a wide range of resources for consideration in its Resource Plan by conducting a screening analysis of resource solutions. This comprehensive process incorporates data such as capital cost, fixed O&M, variable O&M, heat rate, ramp rate, reliability, intermittency, capacity factor, water consumption, emissions, and capacity value, and a discussion of how such resources integrate with load projections and existing resources. In order to ensure its information is up to date and valid, APS uses independent sources including major equipment manufacturers, market participants, customer data from field implementations and industry organizations.

SOURCES OF CURRENT ASSUMPTIONS

Resource Planning is a constantly evolving process that uses many data sources and assumptions to arrive at a comprehensive plan that balances reliability, cost, environmental impact and risk. As a starting point, sources of key data and assumptions are listed below. Additionally, should the Commission make any modifications to how APS and other utilities value and procure resources, or to the IRP process, such changes will be reflected in the next resource plan to the extent feasible. All data is subject to change as future uncertainties become clearer.

² March 11, 2015 - Proposed Order in the matter of Resource Planning and Procurement in 2013 and 2014 (ACC Docket No. E-00000V-13-0070)

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Inputs	Sources of Assumptions
Load Forecast:	Bureau of Labor Statistics; U.S. Census Bureau; Bureau of Economic Analysis; National Weather Service
Environmental Regulations:	Environmental Protection Agency; Arizona Department of Environmental Quality
Energy Efficiency Programs:	Energy Efficiency Standard compliance; APS; Navigant Consulting (program evaluation contractor)
Renewable Energy:	Renewable Energy Standard compliance; market data
Resource Costs:	APS; major equipment vendors; market data acquired through RFP and/or RFI solicitations; industry organizations; customer data from field implementations
Integration Costs:	Solar Photovoltaic Integration Cost Study Wind Integration Cost Impact Study
Fuel Forecast:	Market, fuel contracts
CO ₂ :	Market

PUBLIC PARTICIPATION

As in previous IRP processes, APS is planning to hold pre-filing workshops to promote discussion and dialogue between the Company and its key stakeholders on important resource planning issues. The workshops will focus on key assumptions, in addition to new and/or revised technology-specific analytics and will allow stakeholders to comment on those issues and other resource portfolio concepts. The workshops will also include a discussion of portfolios that may be included in the 2016 Resource Plan.

The 2016 IRP will include a summary of these workshops, highlighting topics that were covered.

CONCLUSION

As required by the Resource Planning Rules, APS's 2016 Resource Plan will provide comprehensive data and analyses for the 15-year planning period (2016-2031). A

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wide range of resources will be considered to serve customers' future electricity needs that promote technology diversity within the portfolio while balancing cost, reliability and risk in an environmentally sensitive manner. APS is aware that the ACC is looking at process changes in the 2014 IRP docket. We look forward to continuing to work with the Commission and stakeholders regarding any potential changes while fulfilling APS's resource planning obligation and associated customer needs.