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BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

Arizona Corporation Commission

DOCKETED

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IN THE MATTER OF ARIZONA PUBLIC
SERVICE COMPANY - APPLICATION
FOR APPROVAL OF ARIZONA WIND
POWER PURCHASE AGREEMENT

DOCKET NO. E-01345A-10-0314

DECISION NO. 72058

ORDER

Open Meeting
December 14 and 15, 2010
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Arizona Public Service Company ("APS") is certificated to provide electric service as a public service corporation in the State of Arizona.

2. On July 26, 2010, APS filed an application with the Arizona Corporation Commission for approval of a Wind Purchase Power Agreement ("Perrin Ranch PPA" or "PPA"). A complete version of the PPA was provided to Staff under a confidentiality agreement. The proposed PPA would be established with Perrin Ranch Wind LLC ("Perrin Ranch") to purchase the full output of a proposed 99 megawatt ("MW") wind facility ("Perrin Ranch Wind Project" or "Project") over a 25 year period. Perrin Ranch would build, own, and operate the facility, and APS would contract with Perrin Ranch to purchase the energy produced by the facility and renewable energy credits ("RECs") associated with the generation.

3. Perrin Ranch is a subsidiary of NextEra Energy Resources LLC ("NextEra"). The application states that NextEra is the largest generator of renewable energy from wind and solar resources in North America, with approximately 90 facilities and more than 18,000 MW of

1 renewable and conventional generation in operation. NextEra is one of two principal subsidiaries
2 of NextEra Energy, Inc., along with Florida Power & Light.

3 4. The Perrin Ranch facility will be located approximately 13 miles north of Williams
4 in Coconino County. The Project will use wind turbine generation to produce approximately 99
5 MW of renewable energy when producing at full capability. Energy will be generated by 62 wind
6 turbine generators, located over approximately 20,000 acres. The Perrin Ranch Wind Project is
7 forecast to provide approximately 282,000 megawatt-hours ("MWh") of renewable energy each
8 year.

9 5. Power produced by the Perrin Ranch facility would help APS meet requirements in
10 the Renewable Energy Standard and Tariff ("REST") rules. The REST rules require utilities to
11 obtain certain portions of the total energy they supply from renewable resources such as wind.
12 APS selected the Perrin Ranch project as a potential source of renewable energy following a
13 competitive process that involved the issuance of a request for proposal ("RFP") and an analysis of
14 bids. APS calculates that the price proposed for energy supplied by the Perrin Ranch Wind Project
15 would be approximately 16 percent greater than the cost of the conventional resource alternative,
16 but is competitive with other renewable energy projects.

17 6. The PPA that APS proposes to establish with Perrin Ranch for purchase of the
18 output from the wind facility includes safeguards in the form of penalty payments to APS should
19 Perrin Ranch fail to deliver energy to APS according to certain requirements. These measures
20 would mitigate risks to APS such as delay of the facility's construction or a shortfall in anticipated
21 output from the facility.

22 **APS' Request**

23 7. In its application, APS has specifically requested that the Commission make the
24 following findings:

25 a. The Perrin Ranch Wind PPA was selected through a fair and competitive
26 procurement process and fulfills the requirements of Section 15.2 of the Settlement Agreement;

27 b. The Perrin Ranch Wind Project is an eligible Renewable Energy Resource pursuant
28 to RES Rule R14-2-1802, and the generation from the Project applies towards APS' obligation to

1 acquire new renewable energy resources under Section 15.1 of the Settlement Agreement, as well
2 as the Renewable Energy Standard;

3 c. All reasonable and prudent expenses incurred by APS for the Perrin Ranch Wind
4 Project will be recoverable pursuant to Section 15.7 of the Settlement Agreement; and

5 d. In any subsequent inquiry into the prudence of the Perrin Ranch Wind PPA, the
6 expense of renewable energy purchased under the PPA should not be deemed imprudent because
7 the expense is greater than that of conventional generation, or because it exceeds the RES
8 requirements.

9 **REST Requirements**

10 8. The PPA would allow APS to procure the output of the Perrin Ranch facility. The
11 energy obtained from the Perrin Ranch facility would meet certain requirements contained in the
12 REST rules. The REST rules require that electric utilities procure energy from renewable
13 resources such as solar, wind and geothermal generation. The following are excerpts from the
14 rules that describe eligibility:

15 R14-2-1802(A)

16 *“Eligible Renewable Energy Resources” are applications of the following defined*
17 *technologies that displace Conventional Energy Resources that would otherwise be*
18 *used to provide electricity to an Affected Utility’s Arizona Customers.*

19 R14-2-1802(A)(11)

20 *“Wind Generator” is a mechanical device that is driven by wind to produce*
21 *electricity.*

22 9. The REST rules require that a portion of an electric utility’s retail kilowatt-hour
23 (“kWh”) sales be generated from renewable resources. The rules allow utilities to meet the
24 requirement through a combination of self generation, purchase of renewable energy, or purchase
25 of RECs from other entities. The PPA that APS describes in this application would provide
26 renewable energy to comply with the requirements of the REST rules. Since energy produced
27 from the Project facility would be generated from wind and because wind resources are included
28 as Eligible Renewable Energy Resources in the rules, Staff believes that the Perrin Ranch PPA is
an Eligible Renewable Energy Resource pursuant to R14-2-1802.

1 Requirements of Settlement Agreement

2 10. Under the Settlement Agreement approved by Decision No. 71448, APS is required
3 to obtain additional renewable energy resources, over and above the requirements of the REST
4 Rules. Specifically, Section 15.1 of the Settlement Agreement requires APS to "...make its best
5 efforts to acquire new renewable energy resources with annual generation or savings of 1,700,000
6 MWh to be in-service by December 31, 2015,... These new resources shall be in addition to
7 existing resources or commitments as of the end of 2008...." In addition, Section 15.2 of the
8 Settlement Agreement requires APS "...to issue a new request for proposals for in-state wind
9 generation within 90 days of Commission approval of the Agreement. After evaluating potential
10 projects, APS will file a request for Commission approval of one or more projects, within 180 days
11 of issuance of the RFP."

12 APS' Implementation of Settlement Agreement Requirements

13 11. The Settlement Agreement was approved by the Commission on December 30,
14 2009. APS issued a request for proposal ("RFP") for Arizona Wind Generation Resources on
15 January 27, 2010, well within the Commission's 90-day time frame requirement. A total of seven
16 different entities submitted responses which included 11 distinct projects / sites and 33 options.
17 APS evaluated the responses to the RFP and selected the Perrin Ranch proposal as a finalist for
18 further consideration. APS completed negotiations with the Perrin Ranch developers and
19 subsequently submitted the project for Commission approval on July 26, 2010.

20 12. Merrimack Energy Group, Inc. ("Merrimack") was hired by APS as an Independent
21 Monitor of the RFP and bidder selection processes. Merrimack's involvement began during the
22 development of the RFP and continued through the final selection of the preferred resources. In its
23 report detailing its oversight of APS' procurement process, Merrimack concluded that "...the bid
24 evaluation and selection process was undertaken by APS in a fair, consistent and comprehensive
25 manner. The implementation of the solicitation process was effectively managed by APS, was
26 conducted in conformance to the schedule outlined in the RFP, and should lead to benefits by
27 consumers".

28 ...

1 13. Based on Staff's review of the RFP, the Merrimack report, discussions with APS,
2 and the quantitative and qualitative results of the selection process provided to Staff, Staff believes
3 that the Perrin Ranch PPA was selected through a competitive bid procurement process. Staff
4 concludes, based on this review, that considering the alternative proposals available to APS, the
5 Perrin Ranch PPA is a reasonable means of meeting APS' REST requirements, as well as the
6 requirements of the Settlement Agreement.

7 **Detailed Description of Proposed Facility**

8 14. The Perrin Ranch facility will be developed on an approximate 20,000-acre (31.25
9 square miles) site located in Coconino County, Arizona, approximately 13 miles north of the City
10 of Williams. Approximately 60 percent of the site is under private ownership (Perrin Ranch, LLC)
11 with the remaining 40 percent owned by the Arizona State Land Department. The project
12 developer will lease the site from the owners for the life of the project, except for the proposed
13 switchyard property that will be purchased. The site is presently used for cattle grazing and
14 ranching, which uses will continue during construction and during operation of the facility.

15 15. The Project will deploy 62 General Electric wind turbine generators along hilltop
16 ridges across the site. The turbines will capture wind resources and generate electricity which will
17 be gathered at a new substation to be constructed at the central point of the wind turbine array.
18 From this new substation, electrical energy will be conducted along a new 230 kilovolt ("kV")
19 generation tie transmission line ("Gen Tie Line"). The approximate 3.5-mile long Gen Tie Line
20 will terminate at a new 230/500 kV switchyard adjacent to the existing Navajo 500 kV
21 Moenkopi/Yavapai transmission line. The wind generator array has a nameplate rating of 99.2
22 MW, with an annual output of approximately 282,000 MWh.

23 16. The significant presence of wind generation in APS' resource mix adds supply
24 diversity to APS' generation portfolio. Constraints to other fuels or to fossil fuels in general can
25 be mitigated by the added generation the Perrin Ranch facility would supply. Staff notes that fuel
26 stock for the Perrin Ranch facility, the wind's energy, would not be purchased from either foreign
27 or domestic vendors, will not deplete, is not subject to supply or transportation constraints other
28 than atmospheric conditions, and produces no waste product that is taxed or requires disposal.

1 **Detailed Description of the PPA**

2 17. APS has entered into a 25-year PPA with Perrin Ranch. Perrin Ranch will
3 construct, own, and operate the Perrin Ranch facility in order to generate electric energy to deliver
4 under terms of the PPA. APS will receive the energy produced by the Perrin Ranch facility at the
5 high side of the step-up transformer on the APS 500 kV system located between the 500 kV
6 Yavapai substation and the 500 kV Moenkopi substation. The price of the energy (with associated
7 RECs) will be fixed for the 25-year life of the PPA.

8 18. Under terms of the PPA, APS anticipates receiving 282,000 MWh of electric
9 energy per year. This annual production quantity is based on the facility's nameplate rating
10 multiplied by the number of hours in a year multiplied by the facility's anticipated capacity factor.
11 The capacity factor is a measure of the expected energy production by the facility over the course
12 of an entire year. Capacity factor is the annual expected total energy production from the facility
13 divided by the energy that would be produced should the facility run at full output over the year.
14 Capacity factor for a wind energy facility is primarily an indication of how robust the wind
15 resource at the site is expected to be.

16 19. The PPA contains several contractual provisions, including security provisions and
17 performance guarantees, designed to mitigate APS' risks.

18 20. The PPA defines the minimum amount of electric energy the Project must deliver to
19 APS and provides for payment of monetary damages to APS for any availability shortfall. APS
20 has the right to terminate the PPA should the availability shortfall continue beyond a prescribed
21 date.

22 21. The PPA defines an overall Project schedule with specific dates for the achievement
23 of certain Project Milestones.

24 22. Staff recommends that, at any time APS collects or pays damage payments pursuant
25 to the terms of the PPA, that it include in the next annual REST implementation plan filing
26 information describing the amount collected or paid, cause for the collection or payment, and how
27 the amount was calculated. The filing should also make a recommendation for the disposition of
28 the proceeds, and if applicable inform the Commission of the measures APS intends to take in

1 order to comply with REST requirements in light of the existing circumstances. Information
2 deemed competitively confidential may be redacted in the filing. Staff makes this
3 recommendation in order to ensure proper use of such proceeds and to ensure that the Commission
4 is sufficiently informed of the disposition of the Perrin Ranch PPA and APS' efforts to comply
5 with the requirements of the REST rules.

6 **Energy Cost Analysis**

7 23. APS conducted an analysis of the PPA to estimate the value of the PPA compared
8 to APS' projected cost of energy for a conventional resource alternative. This analysis concluded
9 that Perrin Ranch-generated energy is approximately 16 percent more costly than the conventional
10 resource alternative (assuming a January 1, 2012 Commercial Operation Date).

11 24. National carbon tax legislation has been proposed that would place a tax on fuels
12 that produce carbon dioxide when used. Generation of energy from fuels such as coal, natural gas
13 and other fossil fuels that produce carbon dioxide would become more costly should such a tax be
14 implemented. Cap-and-Trade legislation has also been proposed which would place limitations on
15 the emission of a variety of greenhouse gases including carbon dioxide. Cap-and-trade legislation
16 would make generation of electricity more expensive for generators needing to purchase credits in
17 order to exceed emission caps. Overall, such measures would make generation of energy from
18 fossil fuels more costly. The Perrin Ranch facility would not produce carbon dioxide or other
19 greenhouse gasses as a byproduct of generation of electricity. Implementation of carbon taxes or
20 cap-and-trade measures if implemented would raise the cost of generation avoided by Perrin
21 Ranch generated energy. APS estimates that the energy procured by the PPA will help to avoid
22 carbon dioxide emissions by an average of approximately 148,200 metric tons per year.

23 **Typical Bill Analysis**

24 25. The instant application contained billing impact calculations for the various APS
25 rate classes. Billing impact calculations were provided for both a January 1, 2012, and a January
26 1, 2013, Commercial Operation Date. Under both operation date scenarios, billing impact
27 information was provided for the year the wind facility first comes online, and for the fifth and
28 tenth years of operation. The following Table 1 summarizes these billing impacts.

1 **Table I. Billing Impact Summary**

2	3	Average Monthly Bill Impact		
		2012	2017	2022
4	5	January 1, 2012 COD		
		\$0.54	\$ 0.29	\$ 0.07
		0.398%	0.214%	0.052%
6	7	Commercial (Rate E-32, 0-20 kW)		
		\$1.82	\$ 0.97	\$ 0.22
		0.899%	0.478%	0.109%
8	9	Commercial (Rate E-32, >20 kW)		
		\$19.90	\$ 10.59	\$ 2.41
		0.280%	0.149%	0.034%
10	11	Industrial (Rate E-34/35)		
		\$59.71	\$ 31.76	\$ 7.24
		0.022%	0.012%	0.003%
12	13	January 1, 2013 COD		
		2013	2018	2023
		\$ 0.33	\$ 0.08	\$ 0.02
		0.243%	0.059%	0.015%
14	15	Commercial (Rate E-32, 0-20kW)		
		\$ 1.10	\$ 0.26	\$ 0.06
		0.545%	0.128%	0.031%
16	17	Commercial (Rate E-32, >20kW)		
		\$12.07	\$ 2.84	\$ 0.69
		0.170%	0.040%	0.010%
18	19	Industrial (Rate E-34/35)		
		\$36.21	\$ 8.53	\$ 2.06
		0.013%	0.003%	0.001%

14 **Other Regulatory Matters**

15 26. In addition to Commission approval of the subject application, the Perrin Ranch
 16 project must also obtain a Certificate of Environmental Compatibility ("CEC") from the
 17 Commission for the 3.5-mile 230 kV Gen Tie Line.

18 **Staff Findings and Recommendations**

19 27. Based on Staff's review of the information provided by APS, the RFP, a report on
 20 the matter issued by Merrimack Energy Group, Inc., discussions with APS, the quantitative and
 21 qualitative results of the selection process, and considering the alternative proposals available to
 22 APS, the Perrin Ranch Wind PPA was selected through a fair and competitive procurement
 23 process and fulfills the requirements of Section 15.2 of the Settlement Agreement.

24 28. The energy provided through the Perrin Ranch project is an application of "Wind
 25 Generation" as that term is used in the REST Rules. The Perrin Ranch project, as described in the
 26 PPA, would displace conventional energy resources that would otherwise be used to provide
 27 electricity to APS' customers. Under these circumstances, the Perrin Ranch proposal would meet
 28 the requirements of an Eligible Renewable Energy Resource pursuant to R14-2-1802 and the

1 generation from the Project applies toward APS' obligation to acquire new renewable energy
2 resources under Section 15.1 of the Settlement Agreement, as well as the Renewable Energy
3 Standard.

4 29. Staff's recommendations in this matter do not address the prudence of the PPA or
5 otherwise address its ratemaking treatment, except that all reasonable and prudent expenses
6 incurred by APS for the Perrin Ranch Wind Project should be recoverable pursuant to Section 15.7
7 of the Settlement Agreement.

8 30. We acknowledge that one potential mechanism for recovering the costs associated
9 with the wind project is the APS REST adjustor mechanism. However, because the Perrin Ranch
10 project is essentially a generation plant and is of significant size, the Commission believes that it
11 would be appropriate for APS to examine various options for cost recovery for the Perrin Ranch
12 project. We believe that the Company should request cost recovery of the project in its next rate
13 case, through the Company's Power Supply Adjustor mechanism or some other appropriate
14 method of cost recovery.

15 31. In any subsequent inquiry into the prudence of the Perrin Ranch Wind PPA, the
16 expense of renewable energy purchased under the PPA should not be deemed imprudent only
17 because the expense is greater than that of conventional generation, or because it exceeds the
18 REST requirements.

19 32. Staff recommends that, at any time APS collects damage payments pursuant to the
20 terms of the PPA, it include in the annual REST implementation plan filing information describing
21 the amount collected, cause for the collection, and how the amount was calculated. The filing
22 should also make a recommendation for the disposition of the proceeds, and if applicable inform
23 the Commission of the measures APS intends to take in order to comply with REST requirements
24 in light of the existing circumstances.

25 CONCLUSIONS OF LAW

26 1. Arizona Public Service Company is an Arizona public service corporation within
27 the meaning of Article XV, Section 2, of the Arizona Constitution.

28 ...

1 if applicable inform the Commission of the measures APS intends to take in order to comply with
2 REST requirements in light of the existing circumstances.

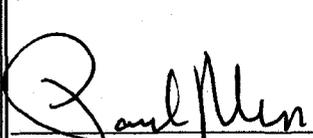
3 IT IS FURTHER ORDERED that this Decision is not intended to address approval of the
4 PPA.

5 IT IS FURTHER ORDERED that this Decision shall become effective immediately.

6
7 **BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION**

8 
9 CHAIRMAN

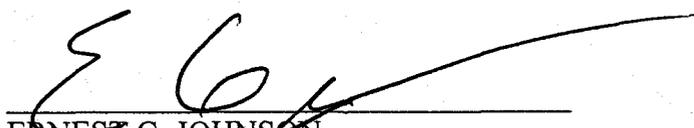

COMMISSIONER

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12 COMMISSIONER


COMMISSIONER


COMMISSIONER

13
14 IN WITNESS WHEREOF, I, ERNEST G. JOHNSON,
15 Executive Director of the Arizona Corporation Commission,
16 have hereunto, set my hand and caused the official seal of
17 this Commission to be affixed at the Capitol, in the City of
18 Phoenix, this 6th day of JANUARY, ~~2010~~
2011

18 
19 ERNEST G. JOHNSON
20 EXECUTIVE DIRECTOR

21 DISSENT: _____

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23 DISSENT: _____

24 SMO:RBL:lh\CH
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