

ORIGINAL

OPEN MEETING



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MEMORANDUM

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Arizona Corporation Commission

DOCKETED

SEP 9 2010

TO: THE COMMISSION

2010 SEP -9 P 3: 03

FROM: Utilities Division

ARIZONA CORPORATION COMMISSION
DOCKET CONTROL

DATE: September 9, 2010

DOCKETED BY	
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RE: ARIZONA PUBLIC SERVICE COMPANY – APPLICATION FOR APPROVAL OF A SOLAR ELECTRICAL SUPPLY AGREEMENT (DOCKET NO. E-01345A-10-0113)

Introduction

On March 29, 2010, Arizona Public Service Company (“APS”) filed an application for approval of a solar electric supply agreement (“Solar Agreement”) with Freeport-McMoRan Bagdad Inc. (“Freeport-McMoRan”). On April 1, 2010, APS waived the 30-day time clock provision referenced in Arizona Revised Statutes § 40-367.

The proposed Solar Agreement stems from APS’ Request for Proposals for Distributed Resources, issued August 14, 2008. APS provided Staff with an unredacted version of the agreement under a confidentiality agreement.

Freeport-McMoRan currently purchases all of its electric power from APS. Freeport-McMoRan now wishes to utilize solar energy as a source for a portion of its electric requirements at the Bagdad Mine.

APS’ Renewable Energy Standard and Tariff (“REST”) Implementation Plan for 2010, approved by the Commission on January 11, 2010, in Decision No. 71459, included a new transaction model for non-residential distributed energy (“DE”). Under the Renewable Energy Credit (“REC”) and Energy Contract Model, renewable energy systems would be installed by a developer at the customer’s facility, APS would purchase all of the energy and associated RECs generated by the system, and the customer would contract with APS to purchase all of the renewable energy. APS stated that such a model provides a more economic way to integrate solar power for very large energy users and anticipates that implementation of this model will reduce program costs for RECs.

Distributed Energy Models

The PBI model

Currently, most non-residential projects are eligible for and utilize Production Based Incentives (“PBIs”). Under the PBI model, customers purchase renewable energy and RECs from a renewable energy developer over the term of the contract, which is generally 10 or 20 years. The costs associated with construction and operation of a renewable energy system are

generally known industry-wide, varying by system size and location, with materials and labor purchased at market rates. The purchase price, paid to the developer by the customer, is essentially the amount of the PBI plus the cost of energy. APS pays the customer the PBI in exchange for the RECs associated with the energy produced by the system, with the REC value being equal to the value of the PBI. The customer's final cost then is essentially the price of the renewable energy. PBI payments have typically been [REDACTED]. PBI payments are paid out of REST funds.

The REC and Energy Contract Model

Under the REC and Energy Contract Model, the customer enters a site lease agreement with a renewable energy developer, allowing the developer to construct and operate a renewable energy generation facility on the customer's property.

APS contracts with the developer for the purchase of the renewable energy and the associated RECs. In this instance, APS' contract with the solar developer is a fixed price contract. The contract price is comprised of the APS' Power Supply Adjustor ("PSA") for those contract costs representing the Costs of Comparable Conventional Generation ("CCCG") and the RES adjustor for the costs above the CCCG. The costs above the CCCG are the cost of the RECs, which is paid out of the REST fund.

APS also contracts with the customer for the sale of the renewable energy. APS secures a Renewable Energy Charge from the customer in the present, creating an opportunity for that fixed Renewable Energy Charge to potentially provide a long-term benefit to the customer as the price of conventional energy surpasses that of the fixed Renewable Energy Charge. The price for the renewable energy paid by the customer to APS through the Renewable Energy Charge is credited to the REST fund, decreasing the cost of the REC and reducing the burden on the REST fund and on APS' ratepayers.

The REC and Energy Contract Model provides some certainty for ratepayers, allowing APS to procure a large amount of solar energy for a specified period of time, at a price that is very likely less than that which APS would be able to procure on the market through a Power Purchase Agreement ("PPA"). An illustration of the REC and Energy Contract Model is attached in Appendix 1.

The Solar Agreement

Freeport-McMoRan would allow RE Bagdad Solar 1 LLC, a third-party solar developer, to construct, own and operate a 15 megawatt ("MW") solar photovoltaic ("PV") system on the premises of the Bagdad Mine which would interconnect to APS' distribution system. RE Bagdad Solar 1 LLC would sell to APS all of the metered kWh output of the PV system, and Freeport-McMoRan would purchase all of the electricity APS receives from RE Bagdad Solar 1 LLC. Under such an arrangement, solar energy would provide Freeport-McMoRan with approximately 5% of its energy needs over the next 25 years. RE Bagdad Solar 1 LLC is an

independent solar developer that has contracted with Freeport-McMoRan to lease land on which to place the solar resource.

The proposed Solar Agreement is consistent with the REC and Energy Contract model, with the PV system qualifying as a "Solar Electricity Resource" as that term is defined in Arizona Administrative Code R14-2-1802(A)(10). A Solar Electricity Resource qualifies as a Distributed Renewable Energy Resource when located at a customer's premises and displaces Conventional Energy Resources that would otherwise be used to provide electricity.¹ The Solar System and Solar Agreement meet these definitions and, as such, all of the output of the PV system would count towards APS' non-residential DE target. [REDACTED]

The Solar Agreement would become effective upon Commission approval and placement of metering and remain in effect for 25 years, beginning on the commercial operational date of the Solar System, or as long as the underlying Purchase and Sale Agreement between APS and RE Bagdad Solar 1 LLC for the output of the Solar System remains in effect, whichever is sooner.

Freeport-McMoRan is currently served by APS under Rate Schedule E-35, Extra Large General Service Time of Use. Although it will use the output of the Solar System to supply a portion of its electric requirement, Freeport-McMoRan will continue to purchase full requirements service from APS per the REC and Energy Contract Model. In accordance with the terms of the Solar Agreement, a Solar Energy Charge will be applied only to the metered production of the Solar System, in lieu of the Unbundled Generation Charge contained in Rate Schedule E-35 and Rate Schedule PSA-1, and will appear as a separate line item on Freeport-McMoRan's monthly bill.

The renewable energy sold to Freeport-McMoRan under the Solar Agreement will be treated as "energy-only" for purposes of monthly billings and will be counted as a reduction against consumption only, but will not serve to reduce Freeport-McMoRan's billing demand. All other charges and provisions under Rate Schedule E-35 and any applicable adjustor Rate Schedule, including any new, non-emissions-related adjustor, will continue to apply. Electricity required by Freeport-McMoRan, net of the solar provided, will continue to be charged according to Rate Schedule E-35.

The Solar Energy Charge is a fixed charge and is based on APS' current rates. It includes the Rate Schedule E-35 Unbundled Generation Charge [REDACTED], the PSA-1 Power Supply Adjustment [REDACTED], and a "solar adder" [REDACTED] which is based upon the Green Premium rate in GPS-1, GPS-2 and GPS-3. This Solar Energy Charge will remain the same amount for the term of the Agreement, regardless of any future changes to the above rate schedules.

¹ A.A.C. R14-1802(B)

For its cost-benefit analysis, APS assumes an annual [REDACTED] increase in fuel costs, based on a 13-year historical increase in average retail revenue, and an annual decrease in Solar System output [REDACTED]. Over the length of the Solar Agreement, APS estimates that Freeport-McMoRan will have paid APS about [REDACTED] under the proposed agreement, compared to about [REDACTED] under Rate Schedule E-35, making the Solar Agreement economical for Freeport-McMoRan.

The Purchase and Sale Agreement

APS has executed a Purchase and Sale Agreement with RE Bagdad Solar 1 LLC for the entire solar output of the solar system. Although Commission approval is not required for the Purchase and Sale Agreement, the obligations of APS and RE Bagdad Solar 1 LLC under the Purchase and Sale Agreement are expressly conditioned upon Commission approval of the Solar Agreement between APS and Freeport-McMoRan.

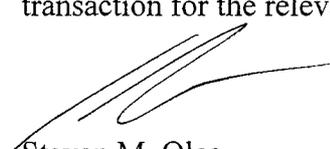
Fair Value Implications

Staff has also analyzed this application in terms of whether there were fair value implications. In Decision No. 71448, issued on December 30, 2009, the Commission determined the fair value of APS' jurisdictional rate base to be \$7,665,727,000. That determination is appropriate for purposes of this analysis. Compared to APS' total revenues, any revenue impact from this agreement would be de minimus, and any impact on APS' fair value rate base and rate of return would also be de minimus.

Recommendations

Staff recommends approval of the Solar Agreement as a special contract between APS and Freeport-McMoRan.

Staff also recommends that APS be required to include within its annual REST reports, in the confidential pages provided to Staff, the annual kWh output of the Solar System, the value of the CCCG and the RECs, and the amount deposited into the REST fund as a result of this transaction for the relevant reporting period.



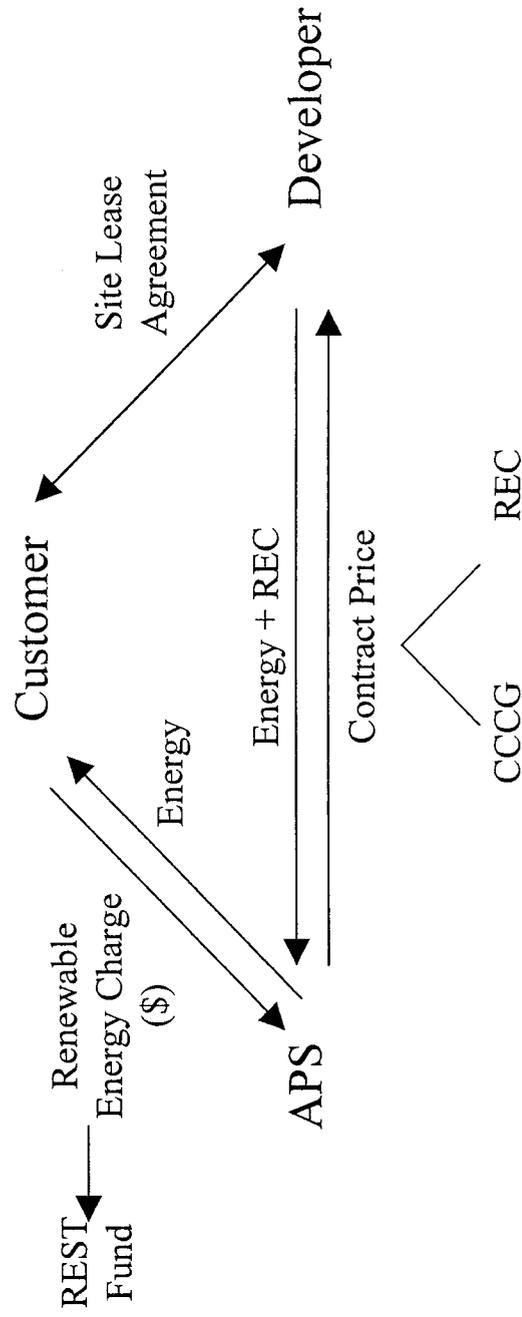
Steven M. Olea
Director
Utilities Division

SMO:LAF:lhms\CH

ORIGINATOR: Laura Furrey

Appendix 1

Illustration of the REC and Energy Contract Model



CCCG: Costs of Comparable Conventional Generation

REC: Renewable Energy Credit

REST: Renewable Energy Standard and Tariff

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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

IN THE MATTER OF THE APPLICATION)
OF ARIZONA PUBLIC SERVICE)
COMPANY FOR A SOLAR ELECTRICAL)
SUPPLY AGREEMENT)

DOCKET NO. E-01345A-10-0113
DECISION NO. _____
ORDER

Open Meeting
September 21 and 22, 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.

Background

2. On March 29, 2010, APS filed an application for approval of a solar electric supply agreement ("Solar Agreement") with Freeport-McMoRan Bagdad Inc. ("Freeport-McMoRan"). On April 1, 2010, APS waived the 30-day time clock provision referenced in Arizona Revised Statutes § 40-367.

3. The proposed Solar Agreement stems from APS' Request for Proposals for Distributed Resources, issued August 14, 2008. APS provided Staff with an unredacted version of the agreement under a confidentiality agreement.

4. Freeport-McMoRan currently purchases all of its electric power from APS. Freeport-McMoRan now wishes to utilize solar energy as a source for a portion of its electric requirements at the Bagdad Mine.

1 5. APS' Renewable Energy Standard and Tariff ("REST") Implementation Plan for
2 2010, approved by the Commission on January 11, 2010, in Decision No. 71459, included a new
3 transaction model for non-residential distributed energy ("DE"). Under the Renewable Energy
4 Credit ("REC") and Energy Contract Model, renewable energy systems would be installed by a
5 developer at the customer's facility, APS would purchase all of the energy and associated RECs
6 generated by the system, and the customer would contract with APS to purchase all of the
7 renewable energy. APS stated that such a model provides a more economic way to integrate solar
8 power for very large energy users and anticipates that implementation of this model will reduce
9 program costs for RECs.

10 Distributed Energy Models

11 The PBI model

12 6. Currently, most non-residential projects are eligible for and utilize Production Based
13 Incentives ("PBIs"). Under the PBI model, customers purchase renewable energy and RECs from
14 a renewable energy developer over the term of the contract, which is generally 10 or 20 years. The
15 costs associated with construction and operation of a renewable energy system are generally
16 known industry-wide, varying by system size and location, with materials and labor purchased at
17 market rates. The purchase price, paid to the developer by the customer, is essentially the amount
18 of the PBI plus the cost of energy. APS pays the customer the PBI in exchange for the RECs
19 associated with the energy produced by the system, with the REC value being equal to the value of
20 the PBI. The customer's final cost then is essentially the price of the renewable energy. PBI
21 payments are paid out of REST funds.

22 The REC and Energy Contract Model

23 7. Under the REC and Energy Contract Model, the customer enters a site lease
24 agreement with a renewable energy developer, allowing the developer to construct and operate a
25 renewable energy generation facility on the customer's property.

26 8. APS contracts with the developer for the purchase of the renewable energy and the
27 associated RECs. In this instance, APS' contract with the solar developer is a fixed price contract.
28 The contract price is comprised of the APS' Power Supply Adjustor ("PSA") for those contract

1 costs representing the Costs of Comparable Conventional Generation (“CCCG”) and the RES
2 adjustor for the costs above the CCCG. The costs above the CCCG are the cost of the RECs,
3 which is paid out of the REST fund.

4 9. APS also contracts with the customer for the sale of the renewable energy. APS
5 secures a Renewable Energy Charge from the customer in the present, creating an opportunity for
6 that fixed Renewable Energy Charge to potentially provide a long-term benefit to the customer as
7 the price of conventional energy surpasses that of the fixed Renewable Energy Charge. The price
8 for the renewable energy paid by the customer to APS through the Renewable Energy Charge is
9 credited to the REST fund, decreasing the cost of the REC and reducing the burden on the REST
10 fund and on APS’ ratepayers.

11 10. The REC and Energy Contract Model provides some certainty for ratepayers,
12 allowing APS to procure a large amount of solar energy for a specified period of time, at a price
13 that is very likely less than that which APS would be able to procure on the market through a
14 Power Purchase Agreement (“PPA”). An illustration of the REC and Energy Contract Model is
15 attached in Appendix 1.

16 **The Solar Agreement**

17 11. Freeport-McMoRan would allow RE Bagdad Solar 1 LLC, a third-party solar
18 developer, to construct, own and operate a 15 megawatt (“MW”) solar photovoltaic (“PV”) system
19 on the premises of the Bagdad Mine which would interconnect to APS’ distribution system. RE
20 Bagdad Solar 1 LLC would sell to APS all of the metered kWh output of the PV system, and
21 Freeport-McMoRan would purchase all of the electricity APS receives from RE Bagdad Solar 1
22 LLC. Under such an arrangement, solar energy would provide Freeport-McMoRan with a small
23 portion of its energy needs over the next 25 years. RE Bagdad Solar 1 LLC is an independent
24 solar developer that has contracted with Freeport-McMoRan to lease land on which to place the
25 solar resource.

26 12. The proposed Solar Agreement is consistent with the REC and Energy Contract
27 model, with the PV system qualifying as a “Solar Electricity Resource” as that term is defined in
28 Arizona Administrative Code R14-2-1802(A)(10). A Solar Electricity Resource qualifies as a

1 Distributed Renewable Energy Resource when located at a customer's premises and displaces
2 Conventional Energy Resources that would otherwise be used to provide electricity.¹ The Solar
3 System and Solar Agreement meet these definitions and, as such, all of the output of the PV
4 system would count towards APS' non-residential DE target.

5 13. The Solar Agreement would become effective upon Commission approval and
6 placement of metering and remain in effect for 25 years, beginning on the commercial operational
7 date of the Solar System, or as long as the underlying Purchase and Sale Agreement between APS
8 and RE Bagdad Solar 1 LLC for the output of the Solar System remains in effect, whichever is
9 sooner.

10 14. Freeport-McMoRan is currently served by APS under Rate Schedule E-35, Extra
11 Large General Service Time of Use. Although it will use the output of the Solar System to supply
12 a portion of its electric requirement, Freeport-McMoRan will continue to purchase full
13 requirements service from APS per the REC and Energy Contract Model. In accordance with the
14 terms of the Solar Agreement, a Solar Energy Charge will be applied only to the metered
15 production of the Solar System, in lieu of the Unbundled Generation Charge contained in Rate
16 Schedule E-35 and Rate Schedule PSA-1, and will appear as a separate line item on Freeport-
17 McMoRan's monthly bill.

18 15. The renewable energy sold to Freeport-McMoRan under the Solar Agreement will
19 be treated as "energy-only" for purposes of monthly billings and will be counted as a reduction
20 against consumption only, but will not serve to reduce Freeport-McMoRan's billing demand. All
21 other charges and provisions under Rate Schedule E-35 and any applicable adjustor Rate Schedule,
22 including any new, non-emissions-related adjustor, will continue to apply. Electricity required by
23 Freeport-McMoRan, net of the solar provided, will continue to be charged according to Rate
24 Schedule E-35.

25 16. The Solar Energy Charge is a fixed charge and is based on APS' current rates.

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¹ A.A.C. R14-1802(B)

1 17. For its cost-benefit analysis, APS assumes an annual increase in fuel costs, based on
2 a 13-year historical increase in average retail revenue, and an annual decrease in Solar System
3 output. Over the length of the Solar Agreement, APS estimates that Freeport-McMoRan will
4 spend less money on electricity utilizing the Solar System than it would have otherwise under Rate
5 Schedule E-35, making the Solar Agreement economical for Freeport-McMoRan.

6 **The Purchase and Sale Agreement**

7 18. APS has executed a Purchase and Sale Agreement with RE Bagdad Solar 1 LLC for
8 the entire solar output of the solar system. Although Commission approval is not required for the
9 Purchase and Sale Agreement, the obligations of APS and RE Bagdad Solar 1 LLC under the
10 Purchase and Sale Agreement are expressly conditioned upon Commission approval of the Solar
11 Agreement between APS and Freeport-McMoRan.

12 **Fair Value Implications**

13 19. Staff has also analyzed this application in terms of whether there were fair value
14 implications. In Decision No. 71448, issued on December 30, 2009, the Commission determined
15 the fair value of APS' jurisdictional rate base to be \$7,665,727,000. That determination is
16 appropriate for purposes of this analysis. Compared to APS' total revenues, any revenue impact
17 from this agreement would be de minimus, and any impact on APS' fair value rate base and rate of
18 return would also be de minimus.

19 **Recommendations**

20 20. Staff has recommended approval of the Solar Agreement as a special contract
21 between APS and Freeport-McMoRan.

22 21. Staff has also recommend that APS be required to include within its annual REST
23 reports, in the confidential pages provided to Staff, the annual kWh output of the Solar System, the
24 value of the CCCG and the RECs, and the amount deposited into the REST fund as a result of this
25 transaction for the relevant reporting period.

26 **CONCLUSIONS OF LAW**

27 1. APS is an Arizona public service corporation within the meaning of Article XV,
28 Section 2 of the Arizona Constitution.

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IT IS FURTHER ORDERED that Arizona Public Service Company shall include within its annual REST reports, in the confidential materials provided to Staff, the annual kWh output of the Solar System, the value of the CCCG and the RECs, and the amount deposited into the REST fund as a result of this transaction for the relevant reporting period.

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

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

CHAIRMAN

COMMISSIONER

COMMISSIONER

COMMISSIONER

COMMISSIONER

IN WITNESS WHEREOF, I, ERNEST G. JOHNSON, 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 _____, 2010.

ERNEST G. JOHNSON
EXECUTIVE DIRECTOR

DISSENT: _____

DISSENT: _____

SMO:LAF:lhbm\CH

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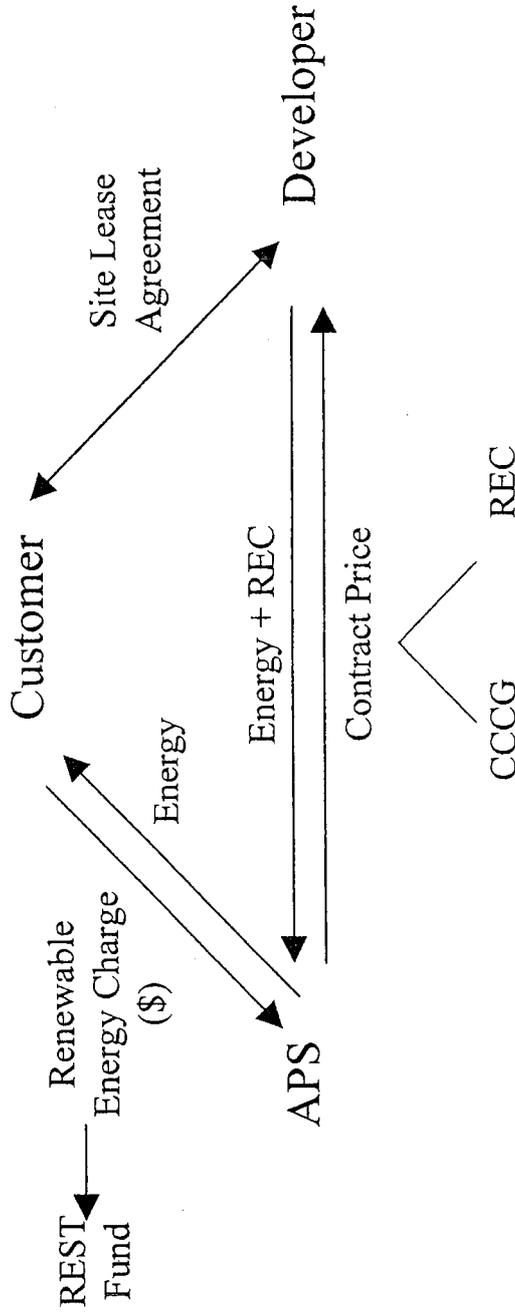
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Appendix 1

Illustration of the REC and Energy Contract Model



CCCG: Costs of Comparable Conventional Generation

REC: Renewable Energy Credit

REST: Renewable Energy Standard and Tariff