

BEFORE THE ARIZONA CORPORATION COMMISSION 1 Arizona Corporation Commission **GARY PIERCE** 2 DOCKETED Chairman **BOB STUMP** 3 Commissioner JUL 2 5 2011 SANDRA D. KENNEDY Commissioner DOCKETED BY PAUL NEWMAN 5 ND Commissioner **BRENDA BURNS** 6 Commissioner 7 IN THE MATTER OF MOHAVE ELECTRIC) DOCKET NO. E-01750A-10-0453 8 COOPERATIVE, INC.'S APPLICATION 9 FOR APPROVAL OF A WASTE-TO-ENERGY FACILITY AS A PILOT **ORDER** 10 PROGRAM UNDER THE RENEWABLE ENERGY RULES OR, IN THE 11 ALTERNATIVE, FOR A LIMITED **WAIVER** 12 13 14 Open Meeting 15 July 12 and 13, 2011 Phoenix, Arizona 16 BY THE COMMISSION: 17 **FINDINGS OF FACT** 18 1. Mohave Electric Cooperative, Inc. ("MEC" or "the Cooperative") is certificated to 19 provide electric service as a public service corporation in the State of Arizona. 20 Introduction 21 2. On November 5, 2010, MEC filed its Application for Approval of a Waste-to-22 Energy Facility as a Pilot Program under the REST Rules or, in the Alternative, for a Limited 23 Waiver ("Application"). 24 3. In its Application, MEC is requesting that the Arizona Corporation Commission 25 ("Commission" or "ACC") either (1) recognize energy produced at a single municipal waste-to-26 energy ("WTE") facility owned, operated or developed by Reclamation Power Group, LLC 27

("RPG") as a pilot program pursuant to Arizona Administrative Code ("A.A.C.") R14-2-1802(D)

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or (2) grant a waiver, pursuant to A.A.C. R14-2-1816(A), to the extent necessary to recognize the energy produced at this WTE facility as an "Eligible Renewable Energy Resource" as defined by A.A.C. R14-2-1802. Under either scenario, MEC is seeking to have the facility qualify for "Renewable Energy Credits" under A.A.C. R14-2-1803 and be eligible to satisfy the annual renewable energy requirements established by A.A.C. R14-2-1804.

- 4. RPG is an Arizona limited liability company, formed in 2008, that is currently in good standing with the State of Arizona. The facility developed by RPG would use steam produced from the direct combustion of residential municipal solid waste ("MSW") to run a turbine and electric generator. The anticipated facility would receive approximately 500 tons per day of MSW, 25 percent of which may be recycled. The City of Phoenix and surrounding areas generate in excess of 10,000 tons of MSW per day. Although the proposed facility would provide residents in MEC's territory with power, the location of the planned facility would be in the Phoenix Metropolitan area. However, an actual site for the facility has yet to be determined.
- 5. The net output of the planned facility would be 11 megawatts ("MW"). WTE facilities provide baseload power. This facility could potentially supply MEC's customers with more than 86,000 megawatt-hours ("MWh") of energy on an annual basis (assuming a 90 percent capacity factor). RPG has indicated that the facility would support approximately 40 direct jobs and a number of indirect jobs related to contract services, such as housekeeping, legal, and ash disposal.

## Waste-to-Energy

- 6. In the United States, there are currently 87 WTE facilities operating in 24 states, generating approximately 2,500 MW, or about 0.3 percent of total national power generation.<sup>1</sup>
- MSW as a Renewable Resource
- 7. Treatment of MSW as a renewable resource varies at both the state and federal level. Some state renewable portfolio standards include all or part of MSW-fueled generation as

U.S. Environmental Protection Agency. Municipal Solid Waste, Electricity from Municipal Solid Waste. http://www.epa.gov/cleanenergy/energy-and-you/affect/municipal-sw.html

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renewable while others exclude MSW entirely.<sup>2</sup> At the federal level, the treatment of MSW as a form of renewable energy varies across programs, laws and even within sections of the same body of law.3

- The Energy Information Administration ("EIA") recently examined how it 8. classifies MSW as a renewable resource and found that it had sufficient information to separate the energy produced from MSW into biogenic and non-biogenic portions.<sup>4</sup> following items as biogenic material: newsprint, paper, containers and packaging, textiles, yard trimmings, food wastes, wood, and leather. The EIA identified non-biogenic material to include plastics and rubber.
- 9. In 2008, the most recent year for which data is available, biogenic MSW accounted for almost 6 percent of the renewable energy consumed in the United States.<sup>5</sup>
- 10. MEC provided Staff with a breakdown, by category, of an MSW sample from the City of Glendale Materials Recovery Facility as an example of the MSW that could be used as fuel for the proposed RPG facility. Prior to recycling, the MSW, assumed to be typical of that in the Phoenix Metropolitan area, is composed of about 82 percent biogenic material, 12 percent nonbiogenic material, and 6 percent non-combustible material, such as glass and metal. After taking

For example, Connecticut (Conn. Gen. Stat. §16-245a et seq), the District of Columbia (D.C. Code § 34-1431 et seq), Maryland (Md. Public Utility Companies Code § 7-701 et seq.), Massachusetts (M.G.L. ch. 25A, § 11F), New Jersey (N.J. Stat. § 48:3-49 et seq.), and Pennsylvania (73 P.S. § 1648.1 et seq.) allow energy from MSW to be partially counted toward compliance with a renewable portfolio standard. Hawaii (HRS § 269-91 et seq.), Iowa (Iowa Code § 476.41 et seq.), Maine (35-A M.R.S. § 3210), Michigan (MCL § 460.1021 et seq.), Minnesota (Minn. Stat. § 216B.1691), Nevada (NRS 704.7801 et seq.), Utah (Utah Code 54-17-101 et seq.) allow for energy from MSW to count completely toward RPS compliance. Delaware (26 Del. C. § 351 et seq.), Illinois (§ 20 ILCS 3855/1-75), Texas (Texas Utilities Code § 39.904), Vermont (30 V.S.A. § 8001 et seq.) and Washington (WAC 194-37) specifically prohibit the use of MSW for purposes of generating renewable energy. Energy Information Administration. Methodology for Allocating Municipal Solid Waste to Biogenic and Non-

Biogenic Energy. May 2007. "For example, the definition of renewable energy in Section 203 of the Energy Policy Act of 2005 explicitly includes MSW-derived electricity as a "renewable energy" resource eligible to satisfy the federal renewable energy purchase requirement established in that section. Yet, many other sections of the same bill do not include MSW as an eligible renewable energy source for purposes of programs that aim to develop, assess, or support renewable energy."

http://www.eia.doe.gov/cneaf/solar.renewables/page/mswaste/msw report.html Although it is not meant as a definitive source for the treatment of MSW, the EIA issued a "Methodology for Allocating Municipal Solid Waste to Biogenic/Non-Biogenic Energy" detailing the methodology it used to distinguish between biogenic and non-biogenic energy in MSW.

http://www.eia.doe.gov/cneaf/solar.renewables/page/mswaste/msw\_report.html Energy Information Administration. Renewable Energy Annual, Table 1.1 U.S. Energy Consumption by Source. Available at http://www.eia.doe.gov/cneaf/solar,renewables/page/rea data/table1 1.xls

recycling rates into account, the biogenic material accounts for about 95 percent of the waste stream, with non-biogenic and non-combustible materials accounting for only approximately 2 percent and 3 percent of the waste stream, respectively.

- 11. Although the biogenic material may count for approximately 95 percent of the MSW stream after recycling, the biogenic material does not contribute 95 percent of the energy to the system to produce electricity. The remaining components of the MSW burn at various heat rates. Using heat rate factors from the EIA, the biogenic material contributes about 91 percent of the energy to the process while non-biogenic materials contribute about 9 percent of the energy to the process with the non-combustibles contributing nothing (glass and metal do not burn to produce energy).
- 12. Until recently, calculation of energy from renewable content was accounted for by gross estimation of combustion fuel sources, similar to the description of the MSW composition discussed above. Recently, however, another method was developed out of the U.S. Department of Agriculture's BioPreferred program. This program prefers manufacturers of products derived from renewable resources.<sup>6</sup>
- 13. ASTM-D6866 is a standardized method of identifying the carbon-14 isotope ("C14") and providing a value of renewable carbon content within any solid, liquid or gas.<sup>7</sup> The test methods are applicable to any product containing carbon-based components that can be combusted in the presence of oxygen to produce carbon dioxide ("CO<sub>2</sub>") gas.<sup>8</sup> The overall analytical method is also applicable to gaseous samples, including flue gases from electrical utility boilers and waste incinerators.
- 14. Recycled CO<sub>2</sub>, also known as carbon-neutral CO<sub>2</sub>, is carbon dioxide which was removed from the air through plant respiration, then returned to the air through combustion of plant derivatives. Common fuels which produce recycled CO<sub>2</sub> include biomass, ethanol and

ASTM Standard D6866-10, 2010, "Standard Test Methods for Determining the Biobased Content of Solid, Liquid, and Gaseous Samples Using Radiocarbon Analysis," <a href="https://www.astm.org">www.astm.org</a>.

Institute of Clean Air Companies, Inside the APC Industry, Regulatory Implications of ASTM-D6866. September 2007, Volume 1 Issue 1. p. 4. <a href="http://www.betalabservices.com/PDF/ICAC.pdf">http://www.betalabservices.com/PDF/ICAC.pdf</a>

ASTM International, ASTM D6866 - 10 Standard Test Methods for Determining the Biobased Content of Solid, Liquid, and Gaseous Samples Using Radiocarbon Analysis. <a href="http://www.astm.org/Standards/D6866.htm">http://www.astm.org/Standards/D6866.htm</a>

municipal solid waste. The carbon-14 isotope is present in all plant material and is absent in all fossil fuels. By measuring the presence of C14 in the air and in emissions from combustion activities directly, the ratio of recycled CO<sub>2</sub> to fossil fuel-based CO<sub>2</sub> can be determined. The basic difference between renewable-based products and petroleum-based products is the presence of modern or ancient origin of the carbon in those products. As such, radiocarbon dating is able to distinguish between the two sources.

15. The balance method is also currently used to determine the biogenic portion of mixed waste. The balance method uses existing data on the composition of materials and the operating conditions of the WTE plant, and calculates the most probable result based on a mathematical-statistical model. Comparisons between the C14 method and the balance method conducted at three full-scale facilities in Switzerland show that both methods arrive at the same result.<sup>10</sup>

## Environmental Impacts

- 16. In general, the resultant emissions from most thermal power plants will range from most dirty in the case of coal as fuel, to least dirty in the case of natural gas as fuel, with MSW as fuel lying somewhere between the two. All waste-to-energy facilities must comply with the U.S. Environmental Protection Agency's ("EPA") Maximum Achievable Control Technology ("MACT") standards. While MSW may be cleaner than coal, it is not necessarily cleaner than natural gas or other renewable resources, such as wind and solar.
- 17. For example, SO<sub>2</sub> emissions from a WTE facility are generally less than those from coal-fired facilities, greater than those from natural gas facilities, and on par with those from biomass and landfill gas-to-energy facilities. NO<sub>x</sub> emissions from a WTE facility are generally

When plants fix atmospheric  $CO_2$  into organic material during photosynthesis they incorporate a quantity of C14 that approximately matches the level of this isotope in the atmosphere. After plants die or they are consumed by other organisms, the C14 fraction of this organic material declines at a fixed exponential rate due to the radioactive decay of C14.

Wikipedia, Waste-to-energy. <a href="http://en.wikipedia.org/wiki/Waste-to-energy">http://en.wikipedia.org/wiki/Waste-to-energy</a> (citing Fellner, J., Cencic, O. and Rechberger, H., A New Method to Determine the Ratio of Electricity Production from Fossil and Biogenic Sources in Waste-to-Energy Plants. 2007. Environmental Science & Technology, 41(7): 2579-2586 and Mohn, J., Szidat, S., Fellner, J., Rechberger, H., Quartier, R., Buchmann, B. and Emmenegger, L., Determination of biogenic and fossil CO<sub>2</sub> emitted by waste incineration based on <sup>14</sup>CO<sub>2</sub> and mass balances. 2008. Bioresource Technology, 99: 6471-6479).

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less than those from coal-fired, landfill gas-to-energy, or biomass facilities but greater than those from natural gas facilities. PM<sub>10</sub> emissions from a WTE facility are generally less than those from coal-fired and landfill gas-to-energy facilities but greater than those from natural gas facilities. CO<sub>2</sub> emissions from a WTE facility tend to be less than those from coal-fired and landfill gas-toenergy facilities but greater than those from natural gas and biomass facilities. 11

- As stated previously, carbon dioxide emissions from biogenic sources are 18. considered "recycled" or carbon-neutral because the sources of the emissions, prior to being used as fuel, were absorbing CO<sub>2</sub> from the atmosphere. <sup>12</sup> In biomass facilities, all of the CO<sub>2</sub> emissions are carbon-neutral because all of the fuel is renewable. In a WTE facility, where the fuel is a mixture of biogenic and non-biogenic sources, there will be carbon-neutral CO<sub>2</sub> emissions from the biogenic sources and fossil fuel based CO<sub>2</sub> emissions from the non-biogenic sources.
- 19. Although the fuel source for landfill gas-to-energy facilities is derived from the breakdown of biogenic materials in the landfill, the methane leakage from landfills accounts for significant emissions of CO<sub>2</sub> equivalent ("CO<sub>2</sub>e"). Current estimates show that one ton of MSW combusted rather than landfilled reduces greenhouse gas emissions by an average of one ton of CO<sub>2</sub>. 13

## Water Impacts

20. Power plants that burn MSW are normally smaller than fossil fuel power plants and typically require a similar amount of water per unit of electricity generated.14

U.S. Environmental Protection Agency. Municipal Solid Waste, Electricity from Municipal Solid Waste. http://www.epa.gov/cleanenergy/energy-and-you/affect/municipal-sw.html. EIA form 923 generation information for 2010 and EPA NEI data for 2008 eGRIDweb Version 1.0 Plant File (Year 2005 Data) for Arizona Facilities http://www.srpnet.com/environment/sustainability/RenewableTechnologies.aspx

Institute of Clean Air Companies. Inside the APC Industry, Regulatory Implications of ASTM-D6866. September 2007, Volume 1 Issue 1. p. 4. http://www.betalabservices.com/PDF/ICAC.pdf

http://www.epa.gov/cleanenergy/energy-and-you/affect/municipal-sw.html

P.O. Kaplan, Joseph Decarolis and Susan Thornloe. Is it Better to Burn or Bury Waste for Clean Electricity Generation? Environ. Sci. Technol. 2009, Volume 43, No. 6, pp. 1711-1717. See also Waste-to-Energy Research and Technology Council, Answers to FAQ. http://www.seas.columbia.edu/earth/wtert/faq.html U.S. Environmental Protection Agency. Municipal Solid Waste, Electricity from Municipal Solid Waste.

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consumption by power plants varies by plant type and cooling technology with coal, biomass, and natural gas facilities consuming between approximately 100 and 500 gallons per MWh. 15

## Land Impacts

- 21. WTE facilities, much like other power plants, require land for equipment and fuel storage.
- The non-hazardous ash residue from the burning of MSW is typically deposited in 22. landfills.<sup>16</sup> Regular testing ensures that residual ash is non-hazardous before being landfilled. About ten percent of the total ash formed in the combustion process is used for beneficial use such as daily cover in landfills and road construction.<sup>17</sup> Less MSW being sent to the landfill leads to reduced land impacts associated with landfill sites - WTE plants reduce the space required for landfilling by about 90 percent (one square foot per ton of MSW). WTE plants also do not have the aqueous emissions, or leachate, that may be experienced in landfills, either now or in the distant future. 18 Moreover, burning waste at extremely high temperatures also destroys chemical compounds and disease-causing bacteria. 19

## Improved Recycling Rates

23. MSW combustion processes using refuse-derived fuel can also be equipped to recover recyclables, thereby increasing recycling rates, before shredding the combustible fraction

Water & Sustainability (Volume 3): U.S. Water Consumption for Power Production—The Next Half Century, EPRI, Palo Alto, CA: 2002. 1006786.

U.S. Environmental Protection Agency. Municipal Solid Waste, Electricity from Municipal Solid Waste. http://www.epa.gov/cleanenergy/energy-and-you/affect/municipal-sw.html

U.S. Environmental Protection Agency. Municipal Solid Waste, Combustion. http://www.epa.gov/epawaste/nonhaz/municipal/combustion.htm

Waste-to-Energy Research and Technology Council, Answers to FAQ.

http://www.seas.columbia.edu/earth/wtert/faq.html; Cornell Waste Management Institute, Trash Goes to School. "Leachate is produced when water filters downward through a landfill, picking up dissolved materials from the decomposing wastes. Depending on characteristics of the landfill and the wastes it contains, the leachate may be relatively harmless or extremely toxic. Generally leachate has a high biochemical oxygen demand (BOD) and high concentrations of organic carbon, nitrogen, chloride, iron, manganese, and phenols. Many other chemicals may be present, including pesticides, solvents, and heavy metals." Modern sanitary landfills, however, are constructed to prevent leachate contamination of groundwater or surface waters.

http://cwmi.css.cornell.edu/TrashGoesToSchool/Landfill.html U.S. Environmental Protection Agency. Municipal Solid Waste, Combustion. http://www.epa.gov/epawaste/nonhaz/municipal/combustion.htm

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to uniform size for incineration.<sup>20</sup> Additionally, WTE plants recover more than 700,000 tons of ferrous metals for recycling annually. Recycling metals saves energy and CO<sub>2</sub> emissions that would have been emitted if the materials were mined and new metals, such as steel, were manufactured.<sup>21</sup>

# **Renewable Energy Standard and Tariff**

- 24. The Renewable Energy Standard and Tariff ("REST") Rules are codified at Title 14, Chapter 2, Article 18 of the Arizona Administrative Code.<sup>22</sup> The REST Rules detail the Annual Renewable Energy Requirement<sup>23</sup> that each Affected Utility<sup>24</sup> must satisfy and also prescribes the Eligible Renewable Energy Resources<sup>25</sup> that may be used to meet the Annual Renewable Energy Requirement.
- 25. MEC, as a public service corporation serving retail electric load in Arizona, is an Affected Utility under the REST Rules and, as such, must comply with the Annual Renewable Energy Requirement. MEC wishes to use the energy from the proposed WTE facility to meet part of that Requirement. Municipal solid waste-to-energy facilities, however, are not an Eligible Renewable Energy Resource under A.A.C. R14-2-1802(A).

Pilot Program

26. MEC requests that the Commission recognize energy produced at the proposed WTE facility as a pilot program pursuant to A.A.C. R14-2-1802(D) which states:

The Commission may adopt pilot programs in which additional technologies are established as Eligible Renewable Energy Resources. Any such additional technologies shall be Renewable Energy Resources that produce electricity, replace electricity generated by Conventional Energy Resources, or replace the use of fossil fuels with Renewable Energy Resources. Energy conservation products, energy management products, energy efficiency products, or products that use non-renewable fuels shall not be eligible for these pilot programs.

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U.S. Environmental Protection Agency. Municipal Solid Waste, Combustion.

http://www.epa.gov/epawaste/nonhaz/municipal/combustion.htm
Ted Michaels. Waste Not, Want Not: The Facts Behind Waste-to-Energy. April 2009.

<sup>26 | 22</sup> See A.A.C. R14-2-1801, et seq.

<sup>&</sup>lt;sup>23</sup> See A.A.C. R14-2-1804.

See A.A.C. R14-2-1801(A): ("'Affected Utility' means a public service corporation serving retail electric load in Arizona, but excluding any Utility Distribution Company with more than half of its customers located outside of Arizona.").

<sup>&</sup>lt;sup>25</sup> See A.A.C. R14-2-1802(A).

- 27. Staff does not recommend that the Commission adopt the proposed RPG facility as a pilot program. Instead, Staff believes that good cause exists for the Commission to grant a waiver of the REST Rules to recognize energy produced at the RPG WTE facility as an Eligible Renewable Energy Resource because Staff believes that the potential benefits of the RPG WTE facility outweigh the potential consequences, especially when compared to the alternative of landfilling MSW. WTE plants mitigate the risk of leachate and water contamination that may be experienced by landfilling MSW.
- However, the Commission disagrees with Staff that a waiver of the REST Rules is necessary or appropriate in this case. Burning the biogenic material in MSW to generate electricity is essentially the same as burning biomass to generate electricity. Biomass is explicitly recognized as an Eligible Renewable Energy Resource in the REST Rules. Because the vast majority (82-95 percent) of the waste stream in the Phoenix Metropolitan area is biogenic, we believe the RPG WTE facility should be approved on a pilot program basis. The biogenic waste stream is renewable.
- 29. Although we disagree with Staff that a waiver of the REST Rules is necessary to approve the application in this case, we recognize and acknowledge that Staff's analysis, as contained in its Staff Report and Recommended Order that was docketed on May 10, 2011, provides an independent and alternative basis upon which to approve this application.
- 30. We recommend that 1 Renewable Energy Credit ("REC") be created for each kilowatt-hour ("kWh") of energy generated by the RPG WTE facility from biogenic material. Based on the local data MEC has provided to Staff representing that 91 percent of the energy would come from biogenic sources, we believe that 90 percent of the kWhs generated by the proposed RPG WTE facility be deemed biogenic and produced by an Eligible Renewable Energy Resource. In other words, if this facility produced a **total** of 1,000,000 kWh in a year, it will be considered to have produced 900,000 RECs.
- 31. Staff recommends that MEC provide the Commission with accurate and timely information that will allow Staff to confirm the percent of energy that comes from biogenic material in the RPG WTE facility. We agree and will require MEC to file such reports with

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Commission Staff on a semi-annual basis. After reviewing these reports, if Commission Staff
believes that less than 85 percent of the energy produced at the RPG WTE facility is from biogenic
sources, Staff shall file a recommendation with the Commission to reduce the allowable
percentage of RECs from the RPG WTE facility. Conversely, if MEC believes that the amount of
energy produced from biogenic sources at the RPG WTE facility is greater than 95 percent, it may
apply to the Commission to increase the allowable percentage of RECs from the facility.

- 32. Staff recommends that RPG monitor the waste stream entering the WTE facility to determine the categorical composition breakdown of MSW samples, similar to that previously provided to Staff. We Agree. MEC shall provide Commission Staff with such reports on a semi-annual basis until further order of the Commission. The reports should include the following information: composition by MSW categories, measured weight, percent by weight, and recycling rates.
- 33. The RPG WTE facility shall comply with all applicable air quality standards. MEC shall file all air quality monitoring results required by Maricopa County and/or the Arizona Department of Environmental Quality with the Commission Staff as part of the above described semi-annual reports.
- 34. The Commission's decision in this matter does not address the prudence of any purchased power agreement that MEC may enter into with RPG.

# **CONCLUSIONS OF LAW**

- 1. Mohave Electric Cooperative, Inc. is an Arizona public service corporation within the meaning of Article XV, Section 2, of the Arizona Constitution.
- 2. The Commission has jurisdiction over MEC and over the subject matter of the Application.
- 3. The Commission, having reviewed the application and Staff's Memorandum dated May 10, 2011, concludes that it is in the public interest to approve MEC's Application, as discussed herein.

## **ORDER**

IT IS THEREFORE ORDERED that Mohave Electric Cooperative, Inc.'s application to recognize energy produced at the RPG WTE as a pilot program pursuant to A.A.C. R14-2-1802(D) is approved, as discussed herein.

IT IS FURTHER ORDERED that, at this time, 90 percent of the total kWhs of energy derived from the RPG WTE facility be considered as being produced by an Eligible Renewable Energy Resource.

IT IS FURTHER ORDERED that Mohave Electric Cooperative, Inc. file the reports discussed in Findings of Fact 30, 31, and 32 relating to, respectively, the percent of energy that comes from biogenic material in the RPG WTE facility, the MSW categorical composition breakdowns, and the air quality monitoring results. The semi-annual reports shall include data from January 1st through June 30th and from July 1st through December 31st of each year and the reports shall be docketed 45 days after the end of June and December, respectively.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

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

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 25th day of 1000 years.

ERNEST G. JOHNSON

EXECUTIVE DIRECTOR

DISSENT Paul Neuman

SMO:LAF:SMH/sms

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SERVICE LIST FOR: Mohave Electric Cooperative, Inc. 1 DOCKET NO. E-01750A-10-0453 2 Mr. William P. Sullivan 3 Mr. Michael A. Curtis Curtis, Goodwin, Sullivan, 4 Udall & Schwab, P.L.C. 501 East Thomas Road 5 Phoenix, Arizona 85012-3205 6 Mr. Timothy M. Hogan Arizona Center for Law in the Public Interest 8 202 East McDowell Road, Suite 153 9 Phoenix, Arizona 85004 Attorney for Sierra Club - Grand 10 Canyon Chapter 11 Mr. Steven M. Olea Director, Utilities Division 12 Arizona Corporation Commission 1200 West Washington Street 13 Phoenix, Arizona 85007 14 Ms. Janice M. Alward 15 Chief Counsel, Legal Division Arizona Corporation Commission 16 1200 West Washington Street 17 Phoenix, Arizona 85007 18 19 20 21 22 23 24 25 26

Decision No. <u>72500</u>

COMMISSIONERS
GARY PIERCE - Chairman
BOB STUMP
SANDRA D. KENNEDY
PAUL NEWMAN
BRENDA BURNS



#### SANDRA D. KENNEDY COMMISSIONER

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#### ARIZONA CORPORATION COMMISSION

July 15, 2011

Arizona Corporation Commission Docket Control Phoenix, Arizona Corporation Commission

Re:

Dissent

Mohave Electric Cooperative, Inc.

E-0175A-10-0453

I am submitting this letter explaining my No vote on Mohave Electric Cooperative, Inc.'s application for a waiver of the Commission's Renewable Energy Standards and Tariff (REST) rules. MEC requested approval of a Waste-to-Energy Facility as a Pilot Program or, in the alternative, for a limited waiver.

Several issues concerned me in this application: and judging from the numerous telephone calls and emails to my office, so many ratepayers in the Company's service territory expressed the same.

From my understanding of the information and testimony provided in this case, the amount of water that this project will use in its operation is confidential. In my opinion that put us as regulators and the public at a disadvantage. We may never know how this type of technology utilizes a precious resource.

Another issue of concern is many municipalities have done an admirable job with their residential and commercial recycling programs. It does worry me that many will see this program as a viable renewable energy project and no longer see the need to reuse and or recycle by approving this program. I do not want to give the public the impression that it is okay to replace robust municipal solid waste recycling programs with incineration of such waste.

The testimony and evidence clearly show that the Commission during the REST development and rule making process rejected defining or including waste-to-energy as a renewable energy source. It was my understanding that the REST rules were fully vetted and debated.

While the witness on behalf of MEC kept referring to this project as using renewable energy resource, there has been no determination or revision to the REST rules in this record stating that waste-to-energy is a renewable energy resource.

Mohave Electric Cooperative, Inc. E-0175A-10-0453

I am fully aware that our REST rules allow for waivers. I also am aware that the rules require good cause for granting a waiver. In my review of the information provided in this case, I did not find where good cause for a waiver was established or even cited in the application. As I read and re-read Staff's report and listened to the testimony, I did not see an articulated justification that the good cause standard had been met. It has been my understanding that electric cooperatives do not need to meet the same benchmarks for renewable energy as the investor owned electric utilities to comply with our standards. My concern on how we handled this application may lead us down a slippery slope that other regulated utilities may use as justification for allowing non-renewable forms of energy to count toward the REST standard.

As uncomfortable as I am regarding the Staff recommendation that 75 percent of the total kilowatt-hours of energy derived from the waste-to-energy facility be counted as renewable energy, the amendment that increased the 75 percent to 90 percent is extremely bothersome.

Arizonans have clearly stated their preference and desire for renewable energy. In fact, ratepayers tell me repeatedly that they want more. They never tell me they want the burning of municipal waste, but more solar and wind.

Research and evidence in this case highlighted that municipal solid waste produces harmful emissions that pose a risk to the public health. We also know that incinerators for waste-to-energy are not carbon neutral.

Finally, it is rare for me to not support or adopt a recommendation forwarded by our Staff. However, I find that I have to oppose the final version that was approved and therefore voted against this measure.

Sandra D. Kennedy

**Corporation Commissioner**