

NEW APPLICATION
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BEFORE THE ARIZONA CORPORATION COMMISSION

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2010 NOV -5 P 4: 25

AZ CORP COMMISSION
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E-01750A-10-0453

IN THE MATTER OF THE APPLICATION
OF MOHAVE ELECTRIC COOPERATIVE,
INC. FOR APPROVAL OF A WASTE-TO-
ENERGY FACILITY AS A PILOT
PROGRAM UNDER THE RENEWABLE
ENERGY RULES OR, IN THE
ALTERNATIVE, FOR A LIMITED
WAIVER

DOCKET NO. E-01750A-10-_____

Application for Pilot Program Or, in the
Alternative, for a Limited Waiver

Mohave Electric Cooperative, Inc. ("MEC"), by and through its undersigned attorneys, respectfully requests the Arizona Corporation Commission ("Commission") for an order (1) recognizing energy produced at a single municipal waste-to energy ("WTE") facility owned, operated or developed by Reclamation Power Group, LLC ("RPG") as a pilot program pursuant to A.A.C. R14-2-1802(D) or (2) granting a waiver to the Renewable Energy Standard and Tariff Rules, pursuant to A.A.C. R14-2-1816(A), to the limited extent necessary to recognize energy produced at such WTE facility as an "Eligible Renewable Energy Resource" as defined by A.A.C. R14-2-1802 and as otherwise qualifying as "Renewable Energy Credits" under A.A.C. R14-2-1803 and eligible to satisfy the annual renewable energy requirements established by A.A.C. R14-2-1804. This Application is supported by the following:

1. MEC is an Arizona not-for-profit cooperative corporation doing business as a public service corporation subject to the regulation of the Commission.

Arizona Corporation Commission

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1 2. RPG is an Arizona limited liability company formed in 2008. It has been
2 actively working with entities that haul and dispose of municipal solid waste (“MSW”) to
3 develop an economically viable and environmentally safe WTE facility that will use steam
4 produced from the direct combustion of municipal waste to run a turbine and electric
5 generator.

6 3. After more than a year of discussions and evaluating partnering with
7 various waste haulers and utilities, including MEC, MEC and RPG have concluded that the
8 state-of-the-art WTE facility RPG desires to develop in Arizona is not economically viable
9 unless the energy output of the WTE facility qualifies as an “Eligible Renewable Energy
10 Resource” as defined by A.A.C. R14-2-1802 or such energy is otherwise treated as
11 “Renewable Energy Credits” under A.A.C. R14-2-1803 and eligible to satisfy the annual
12 renewable energy requirements established by A.A.C. R14-2-1804.

13 4. WTE technology is common in Europe (where in 1999 the European
14 Union established a legally binding requirement to reduce landfilling of biodegradable waste)
15 and in several states,¹ but has not yet been actively developed in Arizona where relatively
16 inexpensive land close to municipalities once seemed almost inexhaustible.

17 5. A WTE facility serves multiple purposes, including disposing of
18 municipal waste, minimizing the need for landfills and producing clean renewable energy.
19 WTE avoids greenhouse gas emissions, generates clean renewable energy, promotes energy
20 independence, and provides safe reliable disposal services. As part of the production cycle
21 recyclable materials, where economical, can first be removed. As a result, communities with
22

23 ¹ The factual statements contained in this Application are generally derived from the following
24 articles: P. Oze Kaplan, DeCarolis and Thorneloe, *Is It Better to Burn or Bury Waste for Clean
25 Electricity Generation?* (2008) (Kaplin); Waste Not, Want Not: the Facts Behind Waste-to-Energy,
Reported by Ted Michaels, President Integrated Waste Services Association (IWSA), September
2008. (IWSA was formed in 1991 to promote integrated solutions to municipal solid waste
management challenges). The articles are attached as Appendix A.

1 WTE facilities generally have a higher average recycling rate than the national EPA average.
2 The remaining waste is screened for hazardous materials (even though most sanitation
3 providers prohibit disposition of hazardous materials with general municipal waste). The
4 sorted municipal waste is then heated to extreme temperatures to incinerate trash while
5 generating clean energy.

6 6. The production of clean energy from MSW is attained by a heavy
7 investment by the WTE industry and its municipal partners.

8 7. In 2005, a total of 245 million tons of MSW was generated in the United
9 States, with 166 million tons discarded to landfills. As there is a constant need for MSW
10 disposal, there is no foreseeable end to the amount of MSW available as renewable fuel. At
11 the same time there is an equally constant need for reliable energy generation.

12 8. Implementing a WTE controlled burning process reduces the volume of
13 waste that is placed in landfills by approximately 90%. Solid waste combustion processes
14 using refuse derived fuel, can also be equipped, where economical, to recover recyclables
15 before shredding the combustible fraction to uniform size for incineration.

16 9. MSW is a viable energy source for electricity generation. The use of
17 MSW to generate electricity has been estimated to represent roughly 14% of U.S. nonhydro
18 renewable electricity generation. The 87 WTE plants operating in 25 states dispose of more
19 than 90,000 tons of trash each day while generating enough clean energy to supply electricity
20 to about 2.3 million homes nationwide.

21 10. The energy derived from WTE results from the combustion of both
22 biogenic and fossil materials. WTE facilities can operate 365-days-a-year, 24-hours a day and
23 can operate under severe conditions and thus are generally considered baseload electricity.

24 11. The WTE facilities generally operate in or near an urban area. As a result
25 they can ease congestion on electric transmission and minimize line loss.

1 12. The Clean Air Act regulations require WTE facilities to have the latest in
2 air pollution control equipment. A variety of pollution control technologies (such as scrubbers
3 and filters) significantly reduce the regulated gases emitted in the air and there have been
4 major improvements in stack gas emissions controls for both criteria and metal emissions.
5 Performance data indicates that actual emissions from WTE's are less than regulatory
6 requirements.

7 13. WTE is capable of producing a significantly greater amount of electricity
8 with the same amount of MSW than can be produced through the landfill-gas-to-energy
9 (LFGTE) process. Approximately 65 kWh/ton of MSW can be generated through LFGTE,
10 while 600 kWh/ton of MSW of electricity can be generated from a WTE facility.

11 14. Burning waste at extremely high temperatures also destroys chemical
12 compounds such as dioxins and furans and disease-causing bacteria.

13 15. WTE advances the reduction of greenhouse gas emission in three ways:
14 first, it displaces carbon dioxide emissions from fossil fuel based electrical generation; second,
15 it avoids creation and potential release of methane resulting from the disposal of waste in
16 landfills; and third, it recovers ferrous and nonferrous metals from MSW displacing less
17 energy efficient production from raw materials. These result in one (1) ton carbon dioxide
18 equivalent reduction per ton of MSW burned.

19 16. Life-cycle analysis of the environmental and energy impacts for different
20 combinations of recycling, landfilling and WTE show that WTE yielded the maximum energy
21 with the least environmental impact. WTE has been found to be the best waste management
22 option for both energy and environmental parameters and specifically for greenhouse gas
23 emissions.

24 17. Section 203 of the Energy Policy Act of 2005 defines municipal solid
25 waste as "renewable energy." Public Law 109-58; 42 USC §15852(b)(2).

1 18. WTE is already included in many state renewable portfolio standards,
2 including: Alaska, Arkansas, California, Connecticut, District of Columbia, Florida, Hawaii,
3 Iowa, Indiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nevada,
4 New Hampshire, New Jersey, New York, Oregon, Pennsylvania, South Dakota, Virginia,
5 Washington and Wisconsin.

6 19. When Arizona developed its Renewable Energy Standard it defined a
7 “Renewable Energy Resource” as “an energy resource that is replaced rapidly by a natural,
8 ongoing process and that is not nuclear or fossil fuel.” However, in defining “Eligible
9 Renewable Energy Resources” it failed to list WTE, while listing the less energy efficient and
10 less environmentally safe “Biogas Electricity Generator,”² “Biomass Electricity Generator”³
11 and “Landfill Gas Generator”⁴ as an acceptable Renewable Energy Resource.

12 20. Under A.A.C. R14-2-1802(D) the Commission may adopt pilot programs
13 in which additional technologies are established as Eligible Renewable Energy Resources.
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16 ²A.A.C. R14-2-1802(A)(1) defines “Biogas Electricity Generator” as “a generator that produces
17 electricity from gases that are derived from plant-derived organic matter, agricultural food and feed
18 matter, wood wastes, aquatic plants, animal wastes, vegetative wastes, or wastewater treatment
facilities using anaerobic digestion or from municipal solid waste through a digester process, an
oxidation process, or other gasification process.”

19 ³ A.A.C. R14-2-1802(A)(2) defines “Biomass Electricity Generator” as an electricity generator that
20 uses any raw or processed plant-derived organic matter available on a renewable basis, including:
21 dedicated energy crops and trees; agricultural food and feed crops; agricultural crop wastes and
22 residues; wood wastes and residues, including landscape waste, right-of-way tree trimmings, or small
diameter forest thinnings that are 12” in diameter or less; dead and downed forest products; aquatic
23 plants; animal wastes; other vegetative waste materials; non-hazardous plant matter waste material
that is segregated from other waste; forest-related resources, such as harvesting and mill residue, pre-
24 commercial thinnings, slash, and brush; miscellaneous waste, such waste pellets, crates, and dunnage;
and recycled paper fibers that are no longer suitable for recycled paper production, but not including
25 pained, treated, or pressurized wood, wood contaminated with plastics or metals, tires or recyclable
post-consumer waste paper.”

⁴ A.A.C. R14-2-1802(A)(8) defines “Landfill Gas Generator” as “an electricity generator that uses
methane gas obtained from landfills to produce electricity.”

1 21. A.A.C. R14-2-1816 (A) permits the Commission “to waive compliance
2 with any provision of this Article for good cause.”

3 22. MEC will submit further explanation of the WTE technology and its
4 proposed WTE facility to the Commission upon request and provided any proprietary or trade
5 secrets related thereto are filed in a manner that protects their confidentiality.

6 WHEREFORE, MEC prays the Commission enter its Order:

- 7 1. Designating the first Waste-To-Energy facility owned, operated or
8 developed by Reclamation Power Group, LLC within Arizona as a pilot
9 program pursuant to A.A.C. R14-2-1802(D) and declaring that all energy
10 produced by the WTE facility is an “Eligible Renewable Energy
11 Resource” that produces “Renewable Energy Credits” that can be used to
12 satisfy an “Annual Renewable Energy Requirement” of any “Affected
13 Utility” as those terms are defined by the Commission’s Renewable
14 Energy Standard and Tariff Rules. A.A.C. R14-2-1801 *et seq.*; or
15 2. Alternatively, pursuant to its authority under A.A.C. R14-2-1816 (A),
16 waive the definitional requirements of an “Eligible Renewable Energy
17 Resource” for the first Waste-To-Energy facility owned, operated or
18 developed by Reclamation Power Group, LLC within Arizona and
19 declare that such facility qualifies as an “Eligible Renewable Energy
20 Resource” that produces “Renewable Energy Credits” that can be used to
21 satisfy an “Annual Renewable Energy Requirement” of any “Affected
22 Utility” as those terms are defined by the Commission’s Renewable
23 Energy Standard and Tariff Rules.
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DATED this 5th day of November, 2010.

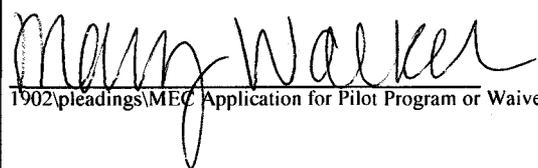
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PROOF OF AND CERTIFICATE OF MAILING

I hereby certify that on this 5th day of November, 2010, I caused the foregoing document to be served on the Arizona Corporation Commission by delivering the original and thirteen (13) copies of the above to:

Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007


1902\pleadings\MEC Application for Pilot Program or Waiver 11-05-10