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BEFORE THE ARIZONA CORPORATION COMMISSION

GARY PIERCE, CHAIRMAN
BOB STUMP
SANDRA D. KENNEDY
PAUL NEWMAN
BRENDA BURNS

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-10-0453

**NOTICE OF FILING TRANSCRIPT
CITATION CORRECTIONS IN
OPENING BRIEF**

The opening brief filed by Sierra Club-Grand Canyon Chapter ("Sierra Club") contains a number of erroneous transcript citations. Instead of using the actual transcript page number, many of the references in the Opening Brief use the page number from the pdf file. The corrected citations are as follows:

**Opening Brief Page,
Line and Citation**

Corrected Citation

Page 4, Line 12, Transcript, 11/30/11 at 178
Page 4, Line 18, Trans., 11/30/11 at 158
Page 5, Line 2, Trans., 11/30/11 at 166
Page 5, Line 10, Trans., 11/29/11 at 164
Page 5, Line 20, Trans., 12/1/11 at 103
Page 5, Line 23, Trans., 11/30/11 at 31
Page 6, Line 9, Trans., 11/30/11 at 168

Transcript, 11/30/11 at 370
Trans., 11/30/11 at 350
Trans., 11/30/11 at 358
Trans., 11/29/11 at 163
Trans., 12/1/11 at 477
Trans., 11/30/11 at 223
Trans., 11/30/11 at 360

1 Page 6, Line 12, Trans., 11/30/11 at 172-3
2 Page 7, Line 17, Trans., 12/1/11 at 121
3 Page 8, Line 10, Trans., 12/1/11 at 88
4 Page 13, Line 11, Trans., 11/29/11 at 172

Trans., 11/30/11 at 364-5
Trans., 12/1/11 at 495
Trans., 12/1/11 at 462
Trans., 11/29/11 at 171

5 A corrected copy of the Opening Brief is attached to this Notice.

6 DATED this 18th day of January, 2012.

7 ARIZONA CENTER FOR LAW IN
8 THE PUBLIC INTEREST

9 By 

10 Timothy M. Hogan
11 202 E. McDowell Rd., Suite 153
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13 Attorneys for Sierra Club – Grand Canyon
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15 ORIGINAL and 13 COPIES of
16 the foregoing filed this 18th day
17 of January, 2012, with:

18 Docketing Supervisor
19 Docket Control
20 Arizona Corporation Commission
21 1200 W. Washington
22 Phoenix, AZ 85007

23 COPIES of the foregoing
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25 18th day of January, 2012, to:

All Parties of Record



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8 **BEFORE THE ARIZONA CORPORATION COMMISSION**

9 GARY PIERCE, CHAIRMAN
10 BOB STUMP
11 SANDRA D. KENNEDY
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14 IN THE MATTER OF THE APPLICATION OF
15 MOHAVE ELECTRIC COOPERATIVE, INC.
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Docket No. E-01750A-10-0453

**SIERRA CLUB – GRAND CANYON
CHAPTER’S OPENING BRIEF**

21 Sierra Club - Grand Canyon Chapter (“Sierra Club”) submits the following
22 Opening Brief in this matter.

23 **I. INTRODUCTION**

24 In July 2011, this Commission approved the application of Mohave Electric
25 Cooperative, Inc. (“Mohave”) for approval of a Waste-To-Energy (“WTE”) facility as a
26 pilot program under the Renewable Energy Standard and Tariff (“REST”) Rules.

27 Decision No. 72500. In its decision, the Commission also determined that a waiver of the
28 REST Rules provided an independent and alternative basis upon which to approve the
29 application.

1 Subsequent to the decision, the Sierra Club requested a rehearing which the
2 Commission granted on August 24, 2011. That rehearing was conducted on November
3 29, November 30 and December 1, 2011. At the hearing, the Sierra Club presented the
4 testimony of three witnesses, Mohave presented the testimony of five witnesses and the
5 Staff presented the testimony of one witness, Laura Furrey.

6
7 There are compelling policy and legal reasons why the Commission should deny
8 Mohave's application. Short of that, the evidence at the hearing clearly established that
9 the factual basis for the Commission's decision was weak to non-existent. In its decision,
10 the Commission cited data that Mohave provided to the Staff representing that 91% of the
11 energy from this facility would come from biogenic sources. Decision at 9, ¶ 30. The
12 evidence showed that it is pretty much impossible to achieve that percentage from a
13 waste-to-energy facility and if it is true in the case of this facility, it would be the first
14 time in the United States or anywhere else in the world. Perhaps that is why even upon
15 rehearing, the Staff continued to recommend that only 75% of the energy be recognized
16 as renewable and even that recommendation is generous given the record in this case.

17
18 **II. THE EVIDENCE IN THIS CASE DOES NOT SUPPORT THE**
19 **COMMISSION'S DECISION**

20 This case originally came to the Commission with a recommendation by Staff that
21 75% of the total kWhs of energy derived from the WTE facility proposed by the
22 Reclamation Power Group ("RPG") be considered as produced by an Eligible Renewable
23 Energy Resource. Exhibit S-2 at 10. Staff developed that recommendation based upon
24 several factors. The first cited by Staff was the composition of a sample of Municipal
25

1 Solid Waste ("MSW") reported to the Staff by Mohave. Staff stated in its memorandum
2 that:

3 MEC provided staff with a breakdown, by category, of an MSW
4 sample from the City of Glendale materials recovery facility as an
5 example of the MSW that could be used as fuel for the proposed RPG
6 facility. Prior to recycling, the MSW, assumed to be typical of that in
7 the Phoenix metropolitan area, is composed of about 82% biogenic
8 material, 12% non-biogenic material, and 6% noncombustible material,
9 such as glass and metal after taking recycling rates into account, the
10 biogenic material accounts for about 95% of the waste stream, with
11 non-biogenic and noncombustible materials accounting for only
12 approximately 2% and 3% of the waste stream, respectively. Ex. S-2 at
13 3.

14 Staff went on to note that although the biogenic material in the sample may count for
15 approximately 95% of the MSW stream after recycling, the biogenic material does not
16 contribute 95% of the energy to the system to produce electricity. Ex. S-2 at 3. That is
17 because the components of the MSW burn at various heat rates. Staff applied heat rate
18 factors from the U.S. Energy Information Administration to determine that the biogenic
19 material in the sample reported by Mohave would contribute about 91% of the energy
20 while non-biogenic materials would contribute about 9% of the energy. *Id.*

21 The conclusions based upon this sample are critical because it is the 91% figure
22 that the Commission used in its decision to support its belief that 90% of the kwh's
23 generated by the proposed WTE facility should be deemed biogenic and produced by an
24 eligible renewable energy resource. The problem is that the "sample" reported by
25 Mohave was not a sample at all. There was no evidence to suggest that it is
representative or typical of MSW in the Phoenix Metropolitan area and, in fact, the
evidence in the record supports a far different conclusion.

1 **A. The Process for the Sample Produced by RPG was Totally Arbitrary**

2 Ron Blendu, a principal in RPG, was aware that a comprehensive study had been
3 conducted by the City of Phoenix concerning the composition of Municipal Solid Waste
4 in 2003. The study was performed by Cascadia Consulting Group and involved analysis
5 of almost 300 truckloads of MSW in winter and summer from six different service areas
6 throughout the City of Phoenix. Ex. SC-9 at 3. The Cascadia study is used as the
7 benchmark and is relied upon by the City of Glendale among others. Ex. SC-3 at 9.
8

9 However, Mr. Blendu claims to have needed something “better” to identify the
10 components of MSW for his project. Additionally, he testified that the waste analyzed in
11 the Cascadia study had not been subject to curbside recycling but later admitted he was
12 wrong about that. Transcript, 11/30/11 at 370.
13

14 Rejecting the City of Phoenix study as inadequate, he instead contacted a private
15 contract hauler to the City of Glendale landfill to deliver four truckloads of MSW from a
16 single day in August 2010 for his analysis. Only two truckloads were actually delivered
17 and, for some reason, Mr. Blendu decided to evaluate the contents of only one of those
18 truckloads. Trans., 11/30/11 at 350.
19

20 According to Mr. Blendu, he and some other individuals took two days to sift
21 through that single truckload with 17,900 pounds of garbage and separate it into various
22 components. However, they couldn't complete the job in two days so they just stopped at
23 a certain point leaving 2,600 pounds of garbage out of the analysis. The components of
24 the part that they were able to sort were then weighed. The results are shown on Exhibit
25 RE-1.

1 Incredibly, Mr. Blendu testified that once the MSW was separated into its
2 component parts, there was nothing left over. Trans., 11/30/11 at 358. According to Mr.
3 Blendu, every single ounce of the MSW fell neatly into the component categories shown
4 on Exhibit RE-1. It doesn't take a sanitary engineer to understand that this is impossible.
5 Obviously, some garbage can be separated but there is a certain amount of material that
6 will blend together and cannot be separated. Indeed, Ron Estes, RPG's consultant who
7 was present for at least some of the day, testified that he thought it was the "goosey"
8 material left after separation that was actually sent to the lab for analysis. Trans.,
9 11/29/11 at 163.

11 Nevertheless, it was this single partial truckload of garbage that Mr. Blendu
12 preferred to view as representative of the MSW that would be processed and burned at
13 the WTE facility in or near Surprise, Arizona. It is not surprising that Mr. Blendu
14 preferred this partial truckload compared to the almost 300 truckloads involved in the
15 Cascadia study because his single truckload of garbage contained a substantially higher
16 percentage of biogenic material than the Cascadia study showed for the Phoenix
17 Metropolitan area. The biogenic content of the almost 300 truckloads for the Cascadia
18 study was approximately 60% which is also consistent with the biogenic content of MSW
19 referenced by Mohave's own witness, Professor Marco Castaldi. Trans., 12/1/11 at 477;
20 *see* also SC-9 at 1. He testified that an analysis of three WTE facilities from around the
21 country showed the biogenic content of MSW to be 64-66%. Trans., 11/30/11 at 223.

24 Mr. Blendu's garbage substantially exceeded these amounts. His partial truckload
25 of garbage was 82% biogenic. Because the content of garbage does not vary significantly

1 across the United States, there is no way to account for how the biogenic content of Mr.
2 Blendu's garbage was so much higher than data from any other source. *See* Ex. S-2 at 8.

3 Nevertheless, the biogenic content of the RPG "sample" was still only 82%. RPG
4 needed to get that number higher and the way it did that was to assume that a certain
5 amount of this single truckload of garbage would be recycled. Mr. Blendu testified that
6 the process he used for determining the recycling rates to apply to the various
7 components of the MSW was that he and a few other people sat around a table and
8 guessed at what the recycling rate should be for each category. *Trans.*, 11/30/11 at 360.
9 No effort was made to actually determine the recycling rates achieved by other material
10 recycling facilities in use at other WTE facilities in the United States. *Trans.*, 11/30/11 at
11 364-5. By the time they were done, Mr. Blendu concluded that they could boost the
12 biogenic content of the "sample" from 82% to 95% through recycling at the onsite
13 recycling facility.
14
15

16 Understandably, Staff was reluctant to draw any conclusions from this "sample."

17 In its memorandum to the Commission, Staff stated that:

18 It is difficult to fully assess how much of the MSW in the Phoenix
19 Metropolitan area, and the energy it could produce, may be deemed
20 "renewable" based on the biogenic content of the small sample provided
21 by MEC. Although MSW is substantially similar nationwide, Staff is
22 also hesitant to rely on national averages to determine the renewable
23 content of Phoenix's MSW. *Ex. S-2 at 8.*

24 Instead of relying on the sample submitted by Mohave, Staff focused on the
25 amount of energy generated from biogenic material that could be considered as being
produced by an eligible renewable energy resource. Staff cited national data indicating

1 that 60-75% of WTE facility energy is generated from biogenic sources. Ex. S-2 at 8.
2 Staff cited another source supporting a value of 60-75% and a third suggesting a biogenic
3 ratio of between 40-70%. *Id.* n. 29. Sierra Club witness, Dr. Jeffrey Morris, testified
4 that, based on the Cascadia study, approximately 55% of the electricity would come from
5 biogenic sources. SC-1 at 4.

6 Because none of the actual data came anywhere close to RPG's sample, the Staff
7 determined that it would select the high end of the 60-75% range applicable to the 87
8 other WTE plants in the United States. That is the method by which Staff determined,
9 and continues to recommend, that 75% of the energy from the RPG facility be regarded
10 as renewable. The selection of 75% as the percentage of electricity attributable to
11 biogenic sources was a generous acknowledgement by the Staff that RPG's sample was
12 an outlier compared to all the other data. The fact is that none of the national data cited
13 by the Staff supports a figure anywhere close to 91%. At the rehearing, Staff testified
14 that achieving 91% was "not likely" and acknowledged that achieving such a high rate
15 could be a first worldwide. Trans., 12/1/11 at 495.

16
17
18 There is no evidence anywhere to support a figure as high as 91%. If municipal
19 solid waste was 91% biogenic, it would almost be biomass. That's not what garbage is,
20 no matter how much recycling is applied to it. There is a limit to the amount of recycling
21 that can be done and that's why all of the other available data support a range of 60-75%.
22 It was only out of Staff's acknowledgement that it had received the data from a single
23 partial truckload of MSW from Mohave that it chose the higher end of that range for the
24 RPG facility.
25

1 All of this matters for two reasons.

2 First, the RPG Project is not financially viable without renewable energy credits
3 (“RECs”). When this matter first came to the Commission, Mohave objected to Staff’s
4 recommendation because RECs at the 75% level would render the facility uneconomic.
5 Mohave’s Exceptions to Proposed Order, dated May 27, 2011 at 2 (“...[I]t is unlikely the
6 WTE facility will be economically viable...”). That is why the Commission increased
7 the RECs from 75% in Staff’s recommended order to 90% in the final decision.
8
9 However, in so doing, the Commission is going to make Mohave customers pay more for
10 renewable energy than they otherwise should. Trans., 12/1/11 at 462. If Mohave buys
11 the output of the RPG facility, it will be paying a premium to RPG for RECs at the 90%
12 level. If it turns out based on actual operating experience, as it most surely will, that only
13 75% or less of the electricity is produced from biogenic sources, then Mohave customers
14 will have paid too much of a premium for the electricity from the RPG facility. What’s
15 worse is the fact that there will be no way for the customers to be made whole once the
16 percentage is properly established based on actual operating data.
17

18 Second, setting the percentage at too high a level as the Commission has done in
19 its Decision means that, as a practical matter, it will be virtually impossible to reset the
20 percentage at a lower level based on actual operating data. That is because by that time
21 the plant will have been built with financing premised on RECs at the 90% level. If, after
22 two years of operating experience, it is determined that the percentage should have been
23 set at a much lower level as Staff has recommended, it will be impossible to do so
24
25

1 without shutting down the plant. That is because the financing will be based upon
2 receiving RECs at the 90% level.

3 **III. THE COMMISSION'S DECISION IS INCONSISTENT WITH, AND** 4 **CONTRARY TO, COMMISSION'S REST RULES**

5 **A. Waste-to-Energy was Specifically Excluded from the Definition of an** 6 **Eligible Renewable Energy Resource**

7 This case is about whether Waste-To-Energy facilities produce the kind of energy
8 that should be considered renewable. The Commission already confronted that issue
9 when it adopted the REST Rules in 2007. At that time, the original Staff
10 recommendation included Municipal Solid Waste as an eligible renewable energy
11 resource. As originally proposed by the Staff, the rule defined "Biomass" to include
12 Municipal Solid Waste as follows:

13 "Biomass" is defined as any raw or processed plant-derived organic matter
14 available on a renewable basis, including dedicated energy crops and trees,
15 agricultural food and feed crops, agricultural crop wastes and residues,
16 wood wastes and residues, aquatic plants, animal wastes, *municipal solid*
wastes, and other vegetative waste materials. (Emphasis added).

17 Staff memorandum from Ernest G. Johnson, Director, Utilities Division to Docket
18 Control, dated January 21, 2005 titled *Staff Report on Proposed Changes to the*
19 *Environmental Portfolio Standard Rules (Docket Nos. Re-00000c-00-0377 and Re-*
20 *00000c-05-0030.*

21 Staff's recommendation to include MSW triggered a vigorous debate. The Commission
22 at that time considered the very same claims that are being advanced for WTE in this case
23 and rejected them. The Commission excluded MSW from the definition of an Eligible
24 Renewable Energy Resource in the rule as it was finally adopted. To now allow the
25

1 designation of WTE as renewable energy circumvents the Commission's previous
2 decision to exclude it.

3 The REST Rules are a part of a coordinated effort on the part of all branches of
4 Arizona government to promote renewable energy. Arizona's Governor has stated that
5 she is "committed to making Arizona the solar capital of the world." *Brewer Pushes for*
6 *Nuclear as Key Part of Goals*, Arizona Republic, January 6, 2010. The Governor's
7 Office has worked hard to attract solar investment to Arizona. Likewise, the Arizona
8 legislature has established renewable energy tax incentives. *See* A.R.S. § 41-1511. The
9 legislature defines qualifying renewable energy as energy produced through the
10 conversion of energy provided by sunlight, water, wind, geothermal, heat, biomass,
11 biogas, landfill gas or other non-fossil renewable resources. That definition is consistent
12 with the Commission's definition in the REST Rules. What those definitions have in
13 common is the exclusion of fossil fuels from consideration as renewable energy. That is
14 because fossil fuels are finite and converting them into energy inevitably pollutes the
15 environment and degrades air quality. Although there is no explicit requirement that the
16 renewable energy promoted by the Commission, the Governor and the legislature be
17 "clean," the exclusion of fossil fuel based energy suggests that renewable energy and
18 clean energy are closely related.
19
20
21

22 It is indisputable that Municipal Solid Waste contains fossil fuels. It is not a clean
23 source of energy as the evidence in this case shows. The Cascadia study of City of
24 Phoenix waste disposed after recycling shows that 8.3% of the material was plastic of one
25

1 kind or another. Another 4.4% was metal, 7.3% was construction and demolition waste
2 and 0.4% was household hazardous waste. *See* SC-9 at 1.

3 The RPG sample from the partial truckload shows similar but less detailed results.
4 For plastics, RPG's analysis shows approximately 13% of PVC and non-PVC plastic by
5 weight. It also shows a little over 1% in ferrous and non-ferrous metals and 0.5%
6 aluminum. The RPG analysis omits any reference to household hazardous waste
7 material. *See* Ex. RE-1.
8

9 No matter who measures it, the fact is that municipal solid waste contains a
10 substantial amount of fossil fuel based material as well as metals of various kinds
11 including hazardous waste material. Whether municipal solid waste can be characterized
12 as "renewable" in the sense that its supply is replenished on an ongoing basis is
13 debatable. What is not debatable is that municipal solid waste is not a clean energy
14 resource and should not be considered renewable energy.
15

16 **B. The Combustion of MSW Produces Toxic Emissions that Distinguishes**
17 **it from Other Forms of Energy that are Considered Renewable**

18 The Staff broadly assessed the environmental impacts of Waste-To-Energy
19 facilities as follows:

20 In general, the resultant emissions from most thermal power plants will
21 range from most dirty in the case of coal as fuel, to least dirty in the case
22 of natural gas as fuel, with MSW as fuel lying somewhere between the
23 two... While MSW may be cleaner than coal, it is not necessarily
24 cleaner than natural gas or other renewable resources, such as wind and
25 solar. Ex. S-2 at 4.

1 This is a sobering assessment for an energy source that aspires to be renewable. If the
2 best that can be said for it is that it's "cleaner than coal," then its categorization as
3 renewable should be reconsidered.

4 In contrast to fossil fuel based energy, the eligible renewable energy resources
5 recognized by the Commission's REST Rule generally don't produce toxic emissions.
6 That is not the case with the WTE facility proposed by RPG. It will burn municipal solid
7 waste that, despite recycling, will contain toxic substances that are emitted into the air.
8

9 The EPA standards provided by RPG and applicable to this facility are:

10 PM	24 milligrams per dry standard cubic meter (mg/dscm)
11 Cadmium (Cd)	10 mg/dscm
12 Pb	140 mg/dscm
13 Mercury (Hg)	Less Stringent of: 15 mg/dscm or 85 percent removal
14 SO ₂	Less stringent of: 30 ppmv or 80 percent removal
15 Hydrogen chloride (HCl)	Less stringent of: 25 ppm or 95 percent removal
16 Dioxin/furan	13 nanograms per dscm
17 NO _x (first year of operation)	180 ppmv
18 NO _x (after first year ops)	150 ppmv
19 CO	100 ppmv

20 Request 3(A)(ii), Reclamation Power Group, Response to Ariz. Corp. Comm. Data
21 Request.

22 The RPG WTE will emit all of these pollutants and toxins.

23 Initially, Mr. Blendu asserted that the facility would not emit any dioxins. Letter
24 to Chairman Pierce dated July 8, 2010 at 1 ("...[T]he project would destroy these
25 compounds that may be contained in the incoming MSW rather than emit them.").
Dioxins are likely human carcinogens formed from a variety of industrial processes,
including combustion processes such as burning wood, coal and oil, and incineration of
municipal solid waste. Health effects linked to dioxins range from suppression of the

1 immune system to cancer, birth defects, and changes in genetic material, among others.
2 According the Environmental Protection Agency (“EPA”), “Because dioxins are widely
3 distributed throughout the environment in low concentrations, are persistent and
4 bioaccumulate, most people have detectable levels of dioxins in their tissues. These
5 levels, in the low parts per trillion, have accumulated over a lifetime and will persist for
6 years, even if no additional exposure were to occur. This background exposure is likely to
7 result in an increased cancer risk and is uncomfortably close to levels that can cause
8 subtle adverse non-cancer effects in animals and humans.”
9

10 Despite Mr. Blendu’s earlier assertion to the contrary, Mohave’s witness admitted
11 at the rehearing that the RPG facility would indeed emit dioxins. Trans., 11/29/11 at 171;
12 Trans., 11/30/11 at 373. However, he could not say what quantity of dioxins would be
13 emitted by the facility just as he could not provide any information on the expected
14 emissions from the facility except to say that they would meet EPA standards. This is
15 despite the fact that RPG had engaged URS to develop emission estimates for the facility.
16 However, Mr. Blendu failed to bring those estimates to the hearing and could not recall
17 them. Trans., 11/30/11 at 373.
18

19 The amounts of certain emissions will vary depending on the components of the
20 trash being burned and the types of pollution control devices installed. For example, any
21 trash containing materials with heavy metals will result in more air emissions of those
22 metals, including mercury, lead, and cadmium. Mercury is a neurotoxin. Children and
23 developing fetuses are particularly vulnerable to mercury exposure and it can damage
24 children’s developing nervous systems, reducing their ability to think and learn.
25

1 Exposure of mercury in the bloodstreams of pregnant and nursing women can result in
2 birth defects including learning disabilities, lowered IQ, deafness, blindness and cerebral
3 palsy.

4 The emissions from the RPG facility are important because the Phoenix
5 Metropolitan area is in non-attainment for national ambient air quality standards for
6 coarse particulates and ozone. In particular, the Phoenix Metropolitan area exceeds the
7 standard for coarse particulate matter PM10. There have also been significant
8 exceedances in fine particulates in the Phoenix area, including several in late 2011. The
9 emissions from the RPG facility will contain significant particulate pollution and will
10 only add to the problem. Because RPG has not yet applied for its air quality permit, it is
11 unclear the extent to which it will affect the air quality, but an increase in emissions in an
12 area that already has unhealthy air is of concern, and in particular where there are
13 vulnerable populations such as the high number of elderly people in the Surprise, Sun
14 City West, and Sun City areas. The emissions from the RPG facility will obviously add
15 to the Valley's pollution.
16
17

18 It is true that it is not the Commission's job to enforce air quality regulations.
19 However, it is also true that the Commission's REST Rules were designed to promote
20 renewable energy that, up until now, has generally been clean. The incineration of
21 municipal solid waste is anything but clean and only exacerbates existing air quality
22 problems that adversely affect human health.
23
24
25

1 **C. The REST Rules do not Permit Either a Pilot Program or a Waiver**
2 **Under the Circumstances of this Case**

3 **1. The RPG Waste-To-Energy Facility Does Not Qualify as a Pilot**
4 **Program Under the REST Rules**

5 Staff did not support adoption of the proposed RPG facility as a pilot program
6 because MSW in the Phoenix Metropolitan area might not constitute a “Renewable
7 Energy Resource” within the meaning of the REST rules. Ex. S-2 at 73. Decision at 9, ¶
8 27. At the rehearing, Staff continued to maintain that it was not appropriate for the
9 Commission to adopt the RPG facility as a pilot program. Notwithstanding Staff’s
10 recommendation, the Commission determined that burning biogenic material in
11 municipal solid waste to generate electricity is essentially the same as burning biomass to
12 generate electricity. *Id.*, ¶ 28. The Commission determined that because biomass is
13 explicitly recognized as an eligible renewable energy resource in the REST Rules and its
14 belief that “the vast majority (82-95%) of the waste stream in the Phoenix Metropolitan
15 area is biogenic,” that the RPG WTE facility should be approved on a pilot program
16 basis. *Id.*

17
18
19 First, the factual predicate for the Commission’s determination is wrong. The
20 evidence in this case does not support the claim that the “vast majority (82-95%) of the
21 waste stream in the Phoenix Metropolitan areas is biogenic....” The evidence in this case
22 shows that the percentage is closer to 60 or 65%. *See* Sec. II.

23
24 Second, there is no logical connection between the observation that burning
25 biogenic material in MSW is essentially the same as burning biomass and the conclusion

1 that the RPG facility should therefore be approved on a pilot program basis. It might
2 provide some kind of foundation for amending the rules to include the biogenic portion of
3 MSW but it does not justify a deviation from the rule on the contrived basis that it is a
4 “pilot program.”

5 The Commission’s REST rules are very clear about what qualifies as a pilot
6 program. The rules provide that:

7
8 The Commission may adopt pilot programs in which additional
9 technologies are established as eligible renewable energy resources. Any
10 such technology shall be renewable energy resources that produce
11 electricity, replace electricity generated by conventional energy resources,
12 or replace the use of fossil fuels with renewable energy resources. Energy
conservation project products, energy management products, energy
efficiency products, *or products that use non-renewable fuels shall not be
eligible for these pilot programs.* (Emphasis added).

13 A.A.C. R14-2-1802(D).

14 Therefore, there are two principal requirements to be considered for adoption of a
15 pilot program. First, the technology is only eligible as a pilot program if the technology
16 is established as an eligible renewable energy resource. A “Renewable Energy
17 Resource” is defined in the rule to mean “an energy resource that is replaced rapidly by a
18 natural, ongoing process and that is not nuclear or fossil fuel.” A.A.C. R14-2-1801(O).
19 Municipal solid waste does not qualify as a renewable energy resource because it
20 contains fossil fuel components. The Staff testified at the rehearing in this case that there
21 is a percentage at which the mixture of biogenic materials and fossil fuels in MSW would
22 disqualify the combination from being regarded as a renewable energy resource. Trans.,
23
24
25 12/1/11 at 468-9.

1 Second, products that use non-renewable fuels are not eligible for pilot programs.
2 Municipal solid waste indisputably contains non-renewable fuels such as plastics and
3 metals. Whether it is RPG's so-called "sample" or the more comprehensive Cascadia
4 study that is used, non-renewable fuels are a component of municipal solid waste. It was
5 for that reason that Staff rejected MSW as a "Renewable Energy Resource" within the
6 meaning of A.A.C. R14-2-1801(O).
7

8 That is also why the Commission's determination that burning biogenic material
9 in MSW is essentially the same as burning biomass is wrong. The Commission's rule
10 defines a "Biomass Electricity Generator" as an electricity generator that uses any raw or
11 processed plant-derived organic matter available on a renewable basis but does not
12 include "painted, treated, or pressurized wood, wood contaminated with plastics or
13 metals, tires, or recyclable post consumer waste paper." A.A.C. R14-2-1802(A)(2).
14 Municipal solid waste may contain any or all of these excluded materials. That is why
15 municipal solid waste is not considered biomass and also why the Commission excluded
16 it as an eligible renewable energy resource when the rules were first adopted.
17

18 **2. The RPG Facility Does Not Qualify for a Waiver from the REST Rules**
19 **Requirements**

20 In its Decision, the Commission cited Staff's recommendation that the
21 Commission grant a waiver of the REST rules to recognize the biogenic energy produced
22 at the RPG facility as an eligible renewable energy resource. Staff's recommendation
23 was, and continues to be, based on its belief that the potential benefits of the RPG WTE
24
25

1 facility outweigh the potential consequences especially when compared to the alternative
2 of land-filling municipal solid waste. Ex. S-2 at 8.

3 The Commission's REST rules require that "good cause" be demonstrated in order
4 for a waiver to be granted. A.A.C. R14-2-1816(A). That means that the Commission
5 cannot grant a waiver for a bad reason or for no reason. The good cause requirement also
6 means that the waiver must be related to the compliance requirement from which the
7 waiver is sought.
8

9 The record in this case does not establish any good cause for a waiver from the
10 requirement of the REST rules. Mohave has never claimed that it cannot comply with the
11 REST rules in the absence of the waiver it seeks in this case. If its application is denied,
12 Mohave will simply comply with the rules by securing renewable resources that are
13 explicitly recognized in the rules.
14

15 Staff's belief that the potential benefits of the RPG WTE facility outweigh the
16 potential consequences especially when compared to the alternative of land-filling MSW
17 is not good cause for relief from the rules requirement. If it were, then the Commission
18 would have included municipal solid waste as a renewable energy resource when it
19 adopted the rules. In fact, that is what Staff recommended but the Commission rejected
20 that recommendation. The reasons Staff cites now for a waiver in this case are the same
21 reasons that the Staff recommended the inclusion of municipal solid waste as a renewable
22 energy resource when the rules were first adopted. The fact that the Staff believed then,
23 just as it does now, that waste-to-energy facilities provide benefits that outweigh the
24
25

1 potential consequences may provide a basis for amendment of the rule but it does not
2 provide a basis for waiver of the rule.

3 In any event, and notwithstanding Staff's belief, it must be noted that there is a
4 difference between burning biogenic material and landfilling it. The combustion of
5 biogenic material immediately releases all of the stored carbon as carbon dioxide.
6 Landfilling the biogenic material also releases the carbon but over an extended period of
7 years as the material degrades. Ex. SC-9 at 6.

9 Granting a waiver to Mohave in this case is essentially the same as telling Mohave
10 that it need not comply with the REST rules except for the distributed generation
11 requirements. An exhibit prepared by Staff witness Furrey shows that the electricity
12 generated by the RPG facility would more than satisfy the REST requirements for years
13 to come such that Mohave would never have to secure any other solar, wind or other
14 renewable energy to comply with the rules. See Commissioner Newman Exhibit 1. In
15 effect, the Commission will have given Mohave a complete pass on the REST rules.
16

17 **IV. CONCLUSION**

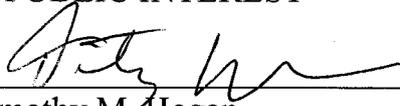
18 The Commission should amend its decision to deny Mohave's application.
19 Ratepayers should not have to pay a premium for the combustion of municipal solid
20 waste. It is a dirty process that should not be regarded as renewable energy. The
21 Commission's REST rules appropriately provide an incentive for the development of
22 renewable energy that has a benign effect on the environment. Waste-to-energy facilities
23 are anything but benign. Their emissions pollute the air and degrade the environment.
24
25

1 They should not be considered in the same category as the other renewable energy
2 resources recognized in the REST rules.

3 If the Commission nevertheless decides to adopt the RPG project as a pilot or
4 grant Mohave a waiver, then it must revise its decision to reflect the evidence in this case.
5 That evidence unquestionably shows that the electricity produced by the RPG facility
6 from biogenic sources will not exceed the 75% recommended by Staff and will come
7 nowhere close to the 90% previously approved by the Commission. The failure to
8 appropriately adjust the renewable energy credits for the RPG facility is irreparable.
9 Mohave ratepayers will pay too much for the energy and, once the plant is built, it will be
10 too late to make the necessary adjustments to conform to actual operating data.
11

12 RESPECTFULLY SUBMITTED this 18th day of January, 2012.

13 ARIZONA CENTER FOR LAW IN
14 THE PUBLIC INTEREST

15 By 

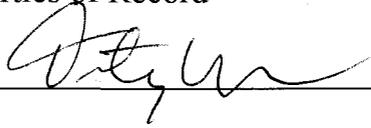
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21 ORIGINAL and 13 COPIES of
22 the foregoing filed this 18th day
of January, 2012, with:

23 Docketing Supervisor
24 Docket Control
Arizona Corporation Commission
25 1200 W. Washington
Phoenix, AZ 85007

1 COPIES of the foregoing
2 Electronically mailed this
3 18th day of January, 2012, to:

4 All Parties of Record

5  A handwritten signature in cursive script is written over a horizontal line. The signature appears to be 'J. Tyler'.

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