STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION COMMISSION

APPLICATION OF LOS LOBOS RENEWABLE POWER, LLC (FORMS G-112) FOR APPROVAL TO INJECT INTO A GOETHERMAL AQUIFER THROUGH TWO PROPOSED GEOTHERMAL INJECTION WELLS AT THE SIDE OF THE PROPOSED LIGHTNING DOCK GEOTHERMAL POWER PLANT, HIDALGO COUNTY, NEW MEXICO

CASE NO. 14948

AMENDED PRE-HEARING STATEMENT

Michelle Henrie, Esq. Attorney for Applicant Los Lobos Renewable Power, LLC P.O. Box 7035 Albuquerque, N.M. 87194

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION NEW DOOD

2013 MAR 13 P 4: 31

APPLICATION OF LOS LOBOS RENEWABLE POWER, LLC TO PLACE GEOTHERMAL WELLS LDG-55-7 AND LDG 53-7 ON INJECTION IN SECTION 7, TOWNSHIP 25 SOUTH, RANGE 19 WEST, NMPM, HIDALGO COUNTY, NEW MEXICO

Case No. 14948

AMENDED PRE-HEARING STATEMENT

Los Lobos Renewable Power, LLC ("Los Lobos"), by and through its attorney Michelle Henrie, LLC, respectfully asks the Oil Conservation Division (OCD) to dismiss the objection by AmeriCulture, dated December 26, 2012, regarding two pending form G-112s and grant the two pending form G-112s. These pending form G-112s request permission to use existing geothermal wells, LDG-55-7 and LDG 53-7, as re-injection wells in connection with Los Lobos' geothermal power plant project in Section 7, Township 25 South, Range 19 West, Hidalgo County, New Mexico. OCD does not oppose Los Lobos' application.

APPLICABLE LAW

19.14.93.8 METHOD OF MAKING APPLICATION:

- A. Application for authority to inject fluids into a geothermal reservoir or to dispose of geothermal waters into a zone or formation not classified as a geothermal reservoir shall be made in duplicate on division form G-112, application to place well on injection-geothermal resources area, and shall be accompanied by one copy of each of the following:
 - (1) A plat showing the location of the proposed injection/disposal well and the location of all other wells within a radius of one mile from said well, and indicating the perforated or open-hole interval in each of said wells. The plat shall also indicate the ownership of all geothermal leases within said one-mile radius;
 - (2) The log of the proposed injection well, if available;
 - (3) A diagrammatic sketch of the proposed injection well showing casing strings, including diameters and setting depths, quantities used and tops of cement,

perforated or open-hole interval, tubing strings, including diameters and setting depths, and the type and location of packers, if any.

- B. Copies of the form G-112 (without the above attachments) shall be sent to all other geothermal lease owners, if any there be, within a one-half mile radius of the proposed injection/disposal well.
- C. If no objection is received within 20 days from the date of receipt of the application, and the division director is satisfied that all of the above requirements have been complied with, that the proposal is in the interest of conservation and will prevent waste and protect correlative rights, and that the well is cased, cemented, and equipped in such a manner that there will be no danger to any natural resource, including geothermal resources, useable underground water supplies, and surface resources, form G-112 will be approved. In the event the form is not approved because of objection from an affected geothermal lease owner or for other reason, the application will be set for public hearing, if the applicant so requests.
- D. The division director may dispense with the 20-day waiting period if waivers of objection are received from all geothermal lease owners within a one-half mile radius of the proposed injection/disposal well.

STATEMENT OF THE CASE

- 1. Los Lobos is developing a utility-scale binary (two closed loops) geothermal power facility to provide base-load renewable electricity to Public Service Company of New Mexico (PNM).
- 2. Los Lobos seeks to place two geothermal wells (wells LDG 55-7 and LDG 53-7) on injection for well testing and potential future re-injection of geothermal fluids.
- 3. Well LDG 55-07, a well that has been in existence since 1985, is located in Unit J, 2390 FSL and 2412 FEL, Section 7, Township 25 South, Range 19 West, Hidalgo County, New Mexico.

- 4. Well LDG 53-7, completed in November 2011, is located in Unit G, 1525 feet FNL and 2228 feet FEL Section 7, Township 25 South, Range 19 West, Hidalgo County, New Mexico.
- 5. AmeriCulture asserts that its State Well No. 1 is in direct hydraulic connection with the production interval in well LDG-55-7 and references an October 2000 pump test and observation data from well LDG-55-7. Los Lobos has not seen this data, which (but for an executive summary) is not available via OCD Online. Regardless, even if these wells are in direct hydraulic connection, Los Lobos' request is to reinject into well LDG-55-7—i.e., to augment the water table.
- 6. With regard to well LDG 53-7, AmeriCulture speculates regarding "migration" of disposed geothermal power plant "fluids". AmeriCulture's email of January 10, 2013, clarifies that the "fluids" are alleged to include "copious quantities of cooling tower chemicals." Even if Los Lobos were to build a water-cooled cooling tower (it no longer plans to do so), the issue of cooling tower "chemicals" was already addressed at the 2009 hearing and the Discharge Permit expressly addresses mitigation measures.
- 7. Los Lobos should be allowed to place wells LDG 55-7 and LDG 53-7 on injection because all water produced for geothermal power plant operations will be reinjected to the same geothermal reservoir from which it was produced, thus conserving the geothermal reservoir and preventing waste.
- 8. Los Lobos should be allowed to place wells LDG 55-7 and LDG 53-7 on injection because doing so preserves and protects correlative rights. Los Lobos' federal geothermal lease is for over 2,500 acres. AmeriCulture's state geothermal lease is for 10 acres. Moreover, in an

agreement between AmeriCulture and Los Lobos' predecessor—an agreement which has been assigned to Los Lobos—AmeriCulture agreed that "If LDG's drilling activities result in a depletion of AmeriCulture's heat source for non-power purposes, then upon the commencement of geothermal production by LDG, LDG shall provide AmeriCulture with effluent heat in an amount equivalent to that by which AmeriCulture's resource is depleted."

- 9. Los Lobos should be allowed to place wells LDG 55-7 and LDG 53-7 on injection because well completion logs and well testing has established that these wells are cased, cemented, and equipped in such a manner that there will be no danger to any natural resource, including geothermal resources, useable underground water supplies, and surface resources.
- 10. Los Lobos should be allowed to place wells LDG 55-7 and LDG 53-7 on injection because Los Lobos has provided OCD with geothermal fluid analytical results that indicate consistent concentrations of analytes from the geothermal fluid flow intervals in LDG 45-7, LDG 53-7, and LDG 55-7 and these concentrations are not substantially different from those in the shallow alluvial wells within the geothermal fluid up-flow area.
- 11. Los Lobos should be allowed to place wells LDG 55-7 and LDG 53-7 on injection because Los Lobos has provided geological information that indicates the geothermal fluid production zones in LDG 53-7 and LDG 55-7 is the same. The producing geothermal fluid flow interval in LDG 53-7 ranges from approximately 2,400 to 3,000 feet bgs and is comprised of the lower portion of the Tertiary volcaniclastic rocks and the upper portion of the Horquilla Formation. The producing geothermal fluid flow interval in LDG 55-7 ranges from approximately 1,200 to 1,800 feet bgs and is also comprised of the lower portion of the Tertiary volcaniclastic rocks and the upper portion of the Horquilla Formation. Regardless of the depths

below surface, these geothermal fluid flow intervals occur in the same geological formations and are not directly connected to the alluvial aquifer at 400 feet bgs in AmeriCulture's State Well No. 1.

LOS LOBOS'S INITIAL WITNESS LIST

Applicant may call the following witnesses to testify or rebut:

Ted De Rocher
 Vice President of Operations
 AltaRock Energy , Inc.
 7900 E Green Lake Drive N Suite 302
 Seattle, Washington 98103

Mr. De Rocher may testify as both a fact and expert witness regarding geothermal issues, Los Lobos's pending C-112 applications, and/or any of the issues stated in paragraphs 1-11 above. Los Lobos anticipates Mr. De Rocher's testimony will require approximately 30 minutes, and that approximately 10 minutes will be needed for Los Lobos' rebuttal.

David W. Janney, PG
 Senior Geologist
 AMEC Environment and Infrastructure
 8519 Jefferson, NE
 Albuquerque, NM 87113

Mr. Janney may testify as both a fact and expert witness regarding geologic and formation-related issues, Los Lobos's pending C-112 applications, and/or any of the issues stated in paragraphs 1-11 above. Los Lobos anticipates Mr. Janney's testimony will require approximately 50 minutes, and that approximately 20 minutes will be needed for Los Lobos' rebuttal.

 John W. Shomaker, Ph.D. or Roger Peery John Shomaker & Associates, Inc.
 2611 Broadbent Parkway NE Albuquerque, NM, 87107

Mr. Shomaker or Mr. Peery may testify as both a fact and expert witness regarding hydrology issues, Los Lobos's pending C-112 applications, and/or any of the issues stated in paragraphs 1-11 above. Los Lobos anticipates Mr. Shomaker's or Mr. Perry's testimony will require approximately 20 minutes, and that approximately 30 minutes will be needed for Los Lobos' rebuttal.

4. Chuck Smiley
Site Manager
Lightning Dock Geothermal Site
P.O. Box 86
Animas, New Mexico 88020

Mr. Smiley may testify as a fact witness regarding geothermal issues, site issues, company issues, Los Lobos's pending C-112 applications, and/or any of the issues stated in paragraphs 1-11 above. Los Lobos anticipates Mr. Smiley's testimony will require approximately 10 minutes, and that approximately 10 minutes will be needed for Los Lobos' rebuttal.

PROCEDURAL ISSUES

- A. Undersigned counsel recently learned that the hearing is scheduled for two days, presumably March 19 and 20, 2013. Undersigned counsel has a conflict and is unavailable after noon on March 20, 2013.
- B. Procedurally, as is customary in Rules of Civil Procedure and with other administrative agencies, Los Lobos, as Applicant, expects that it will first be allowed to make its case, that Protestant AmeriCulture will then make its case, that Los Lobos will present rebuttal thereafter, and that cross examination (and redirect) of all witnesses will be allowed.

- C. Los Lobos asks as a courtesy that all parties file and serve proposed forms of Order at least 24 hours before the hearing to avoid continued delays. Los Lobos objects to post-hearing briefing.
- D. Los Lobos objects to any expansion of the scope of this proceeding by AmeriCulture. This proceeding has been noticed as follows, and any expansion of the issues addressed in this proceeding would be inappropriate: "This hearing is being conducted pursuant to the Geothermal Resources Conservation Act, NMSA 1978 Sections 71-5-1 through 71-5-24, as amended, and Rules set forth in 19.14 NMAC, especially 19.14.93.8 NMAC, concerning permitting of geothermal injection and disposal wells." The Notice further states that "issues to be addressed concern whether the proposed injection will contaminate any underground source of drinking water or otherwise cause waters of the State of New Mexico to exceed applicable water quality standards, and whether such injection will cause waste of geothermal resources or impair correlative rights of geothermal users, as defined in 19.14. 1.7.C NMAC."
- E. Los Lobos does not intend to submit any exhibits under seal or request that portions of the hearing be closed.

Respectfully Submitted,

MICHELLE HENRIE, LLC

Michelle Henrie

P.O. Box 7035

Albuquerque, NM 87194

Attorney for Lightning Dock Geothermal HI-01, LLC

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Pre-Hearing Statement was e-mailed to the following on March 13th, 2013:

Charles N. Lakins Lakins Law Firm P.O. Box 91357 Albuquerque, NM 87199 charles@lakinslawfirm.com

David Brooks EMNRD 1220 South St. Francis Dr Santa Fe, NM 87505 david.brooks@state.nm.us

Dated this 13th day of March, 2013.

Michelle Henrie