MINUTES OF THE MEETING OF THE OIL CONSERVATION COMMISSION HELD ON MAY 9-10, 2013

The Oil Conservation Commission met at 9 o'clock a.m. on May 9, 2013, in Porter Hall, Wendell Chino Building, 1220 S. St. Francis Drive, Santa Fe, New Mexico.

PRESENT: TERRY WARNELL, Member

ROBERT BALCH, Member JAMI BAILEY, Chair

Bill Brancard served as the Commission counsel.

The meeting was called to order by Chair Bailey. Upon a motion by Commissioner Balch and a second to the motion by Commissioner Warnell, the minutes of the April 16, 2013 Commission meeting were approved and adopted.

Case 14948, the application of Los Lobos Renewable Power, LLC (Forms G-112) for approval to inject into a geothermal aquifer through two proposed geothermal injection wells at the site of the proposed Lightning Dock Geothermal Power Project, Hidalgo County, New Mexico, was called for final action. After a motion by Commissioner Warnell and a second to the motion by Commissioner Balch, Order No. R-13675-B in Case 14948 was approved and signed by the Commission.

Case 14981, the application of Occidental Permian Limited Partnership to amend Orders R-4934 and R-4934-B governing the South Hobbs Grayburg-San Andres Pressure Maintenance Project to allow the injection of carbon dioxide and produced gases, to modify the surface injection pressure, to obtain other relief, and to qualify this expansion for the recovered oil tax rate pursuant to the New Mexico Enhanced Oil Recovery Act, Lea County, New Mexico, was called. Appearances were made by Michael Feldewert for Occidental Permian Limited Partnership (Oxy), Gabrielle Gerholt for the Oil Conservation Division (OCD), and Richard Alvidrez for Malcolm Coombes.

Mr. Feldewert made an opening statement outlining the presentation of his case. Ms. Gerholt made an opening statement explaining the OCD's and OCC's statutory authority and duties regarding pressure maintenance projects. Mr. Alvidrez made an opening statement explaining Mr. Coombes' position in this case.

Chair Bailey announced that this is an adjudicatory hearing and the OCD rules do not provide for public comments in such hearings; therefore, no public comments will be accepted.

Mr. Feldewert's first witness was Richard Foppiano, Director of Regulatory Affairs with Oxy in Houston, Texas. He described Oxy's active operations and worldwide experience dealing with H₂S issues. He summarized the history of Oxy's CO₂ floods in the Permian Basin. He described the operations of the North Hobbs Field regarding the injection of CO₂ and reinjection of H₂S, and said that Oxy is seeking to do the same in the South Hobbs Unit. He described the life cycle of an oil reservoir. He talked of the differences between acid gas disposal wells and various EOR injection wells in regards to H₂S concentrations, the affected area, and the number of wells in operation. He summarized the relief Oxy is seeking with this application. He talked of communication with the City of Hobbs, which passed a resolution in support of the project. Oxy Exhibits 3, 4, 5, 6, 7 and 17 were admitted. Ms. Gerholt and Mr. Alvidrez cross-examined the witness. Mr.

Minutes of the Meeting Held on May 9-10, 2013 Page 2

Alvidrez then asked to be excused from the case, and he waived his client's rights to present testimony. Chair Bailey excused him and told him he would be allowed to participate at whatever level he wanted. Commissioner Warnell, Commissioner Balch, and Chair Bailey cross-examined the witness, and he was excused.

The next witness was Jared Brockman, Production Engineer with Oxy in Houston. He outlined the boundaries of the North and South Hobbs Units and pointed out the injection area in both units. He discussed changing the 40-acre 5-spot patterns, going from 40-acre to 80-acre spacing, and temporarily abandoning a large number of wells. He stated that all produced gas will be reinjected. He outlined the schedule for the South Hobbs project and discussed capital expenditures for the overall project. He said that a GOR limitation will negatively impact the project. He explained how the reservoir pressure will be monitored. He discussed the packer setting depth and described the material to be used in both converted and new injection wells. Ms. Gerholt, Commissioner Warnell, Commissioner Balch, and Chair Bailey cross-examined the witness, and he was excused. Oxy Exhibit 8 was admitted.

The next witness was Randy Stillwell, Senior Geologic Advisor with Oxy in Houston. He discussed a type log from the South Hobbs Unit and identified the primary objective for the project. He presented geologic information on the structure of the formation. He provided information on porosity and migration of fluids. He identified the base of the fresh water zones in the Hobbs area. Commissioner Warnell and Commissioner Balch cross-examined the witness, and he was excused. Oxy Exhibit 9 was admitted.

The next witness was Scott Hodges, Supervisor of Activities in the North and South Hobbs Units with Oxy in Hobbs, New Mexico. He described the proponents of the CO₂ satellite in the North Hobbs Unit and advised that a similar facility will be built for the South Hobbs Unit. He explained the Supervisory Control and Data Acquisition (SCADA) system, which is the collection of various data including, among other things, temperature and water content, water saturation, pressure monitoring, and injection well and production well setup. He explained how H₂S monitoring alerts Oxy personnel of a leak and triggers notice to the public. Ms. Gerholt, Commissioner Warnell, Commissioner Balch, and Chair Bailey cross-examined the witness, and he was excused. Oxy Exhibit 10 was admitted.

Jared Brockman was recalled to address a question about downhole safety valves. He was excused.

The next witness was Krishna Chokkarapu, Senior Engineering Advisor in the Permian Basin Division with Oxy in Houston. He said his group is tasked to maintain mechanical integrity. He said that industry standards have been used in the fabrication, construction and maintenance phase of the project. He discussed the standards for the equipment that may be exposed to H₂S. He explained corrosion mitigation methods. Commissioner Warnell and Commissioner Balch cross-examined the witness, and he was excused. Oxy Exhibit 11 was admitted.

The meeting was adjourned for the day at 4:30 p.m.

The meeting reconvened at 9 o'clock a.m. on May 10, 2013.

Oxy's next witness was Kelley Montgomery, Regulatory Consultant with Oxy in Houston. She provided the information required for obtaining a tax incentive. She presented a list of the project wells and injectant information, casing and injection information on the existing wells, new drill injection information, and wellbore

Minutes of the Meeting Held on May 9-10, 2013 Page 3

schematics for existing and new wells. She explained the methodology used to examine wells in the area of review. She discussed one potential problem well that was not adequately cemented. She discussed the MIT frequency on temporarily abandoned wells with real time monitors and annual bradenhead tests. She asked the Commission to strike Rule 15 in the South Hobbs injection order which provides that cement bond logs be run every time the rods and tubing are pulled from any producing well. Ms. Gerholt, Commissioner Warnell, Commissioner Balch, and Chair Bailey cross-examined the witness, and she was excused. Oxy Exhibit 12 was admitted.

The next witness was Patrick Sparks, Landman with Oxy in Houston. He stated that while reviewing the area, he discovered a discrepancy in the legal description of the project. He told of the research he conducted in order to provide notice of this hearing. He identified operators, lessees of record, and interest owners for each of the proposed injection wells. Commissioner Balch and Chair Bailey cross-examined the witness, and he was excused. Oxy Exhibits 13, 14, 15 and 16 were admitted.

Ms. Gerholt made a closing statement advising the Commission that the OCD has intervened in this case but does not oppose the application and proposed certain conditions. She presented prefiled testimony from Richard Ezeanyim, Chief Engineer with the OCD in Santa Fe, New Mexico. OCD Exhibit A was admitted. She requested that Oxy work with the district office in Hobbs to determine the time period for data being reported and when any action is taken by Oxy on the problem well. Mr. Feldewert advised the Commission that there may be a problem with filing a Form C-103 on the problem well because it is not operated by Oxy.

After a motion by Commissioner Warnell and a second to the motion by Commissioner Balch, the Commission voted unanimously to close the meeting pursuant to NMSA 1978, Section 10-15-1 H, to deliberate on the case. After a motion by Commissioner Warnell and a second to the motion by Commissioner Balch, the Commission voted unanimously to go back into open session. Chair Bailey announced that Case 14981 was the only case discussed during the closed session. Counsel Brancard explained the Commission's unanimous decision in the case addressing each of the requests in the application. He asked that counsel submit a draft order to him within 30 days.

Case 14976, the application of Occidental Permian, Ltd. for approval to add the North Hobbs G/SA Unit Well No. 431 as an injection well for water, carbon dioxide, and produced gas in its North Hobbs Grayburg-San Andres Tertiary Recovery Project located within the Hobbs Grayburg-San Andres Pool, Lea County, New Mexico, was called. Appearances were made by Adam Rankin for Occidental Permian, Ltd. (Oxy) and Gabrielle Gerholt for the Oil Conservation Division (OCD).

Mr. Rankin made an opening statement giving the history of the application which was first proposed administratively and outlining the presentation of his case. Ms. Gerholt made an opening statement advising the Commission that the OCD does not object to this application.

Mr. Rankin's witness was Kelley Montgomery, Regulatory Consultant with Oxy in Houston, Texas. She stated that Oxy wants to amend an existing order to allow injection of CO₂ in an injection well outside of Phase I of the North Hobbs Unit. She described the boundaries of the North Hobbs Unit, Phase I, and the proposed expansion of Phase I. She said that the application was found to be administratively approvable by the OCD but was brought before the Commission for approval of the expansion of Phase I. She talked of notice provided by letter and publication. She summarized the history of the injection well and explained the monitoring to be done on the well. She gave the proposed

Minutes of the Meeting Held on May 9-10, 2013 Page 4

injection volume and the source of the produced water. She identified the injection pressures being proposed for water, CO₂, and produced gases. She gave the location of fresh water sources in the area and presented a fresh water analysis. Mr. Rankin asked that the Commission take administrative notice of the geologic data presented in Case 13722 and the geologic testimony presented in Case 14981. Ms. Montgomery said that Oxy has an approved H₂S contingency plan and will ask for it to be amended to include this well. Ms. Gerholt, Commissioner Warnell, Commissioner Balch, and Chair Bailey cross-examined the witness, and she was excused. Oxy Exhibits 1 through 5 were admitted. OCD Exhibit A was admitted.

After a motion by Commissioner Balch and a second to the motion by Commissioner Warnell, the Commission voted unanimously to close the meeting pursuant to NMSA 1978, Section 10-15-1 H, to deliberate on Case 14976. After a motion by Commissioner Warnell and a second to the motion by Commissioner Balch, the Commission voted unanimously to go back into open session. Chair Bailey announced that Case 14976 was the only case discussed during the closed session. Counsel Brancard explained the unanimous decision of the Commission to accept the recommendation to expand Phase I of the North Hobbs Project and approve the authority to inject CO₂ and produced gases into the well with certain conditions. He requested that counsel provide him with a draft order in two weeks, after which he will draft an order for the Commission's individual review to be signed at the next regularly scheduled Commission meeting on June 6, 2013.

After a motion by Commissioner Balch and a second to the motion by Commissioner Warnell, the Commission voted unanimously to adjourn the meeting at 2:25 p.m.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JAMI BAILEY, Chair