

Berry Petroleum Company

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04-IEP-1E

DOCKET

04-DIST-GENDATE MAY 0 5 2005

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May 5, 2005

California Energy Commission Dockets Unit Dockets No. 04-IEP-1E and 04-DIST-GEN-1 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512

Re:

Dockets 04-IEP-1E and 04-DIST-GEN-1

2005 Energy Report - CHP Workshop April 28, 2005

Dear Commissioners and Staff:

Berry Petroleum Company ("Berry") would like to complement the California Energy Commission ("Commission") on its recognition of the many benefits that combined heat & power ("CHP" or "cogeneration") facilities have provided, and will continue to provide to California. We thank the Commission for this opportunity to submit comments regarding the CHP workshop sponsored by the Commission on April 28, 2005. Berry would like to share its experience and some of the obstacles that it has encountered to the expanded and even continued use of cogeneration.

Berry Petroleum is a California-based independent oil producer with approximately 16,000 barrels per day of onshore production in California. Most of this oil is highly viscous, heavy oil that can only be pumped to the surface after injecting large quantities of steam into the reservoir. Berry has utilized cogeneration to supply steam for Enhanced Oil Recovery (EOR) in California for nearly 20 years. In the absence of cogeneration, this steam would all be produced in conventional boilers and the equivalent amount of electricity would be produced in traditional power plants. Approximately 55 % of Berry's steam is supplied by cogeneration. These facilities also produce just over 90 megawatts of electricity, approximately 10 % of which is used by Berry to produce oil. The excess electricity must be sold.

During 2000-2001, when the State was encouraging the construction of new power plants in response to the energy crisis, Berry prepared applications for permits to construct two additional 45 megawatt cogeneration facilities. These new facilities would have supplied additional steam to expand EOR production and would have allowed Berry to produce steam more efficiently, while reducing emissions. Even though Berry was willing to invest its own capital to install additional facilities on its property. Berry was unable to

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secure a viable contract to sell the surplus energy and capacity from either facility. The Company was ultimately forced to abandon its efforts to install additional cogeneration and to instal additional boilers instead.

The obstacles to cogeneration in California are not limited to the installation of new facilities. Owners of existing facilities that have operated efficiently and reliably for years, now face obstacles to the continued operation of those facilities. Upon the termination of Berry's long-term utility power purchase agreements, Berry's connected utilities refused to extend or enter into new agreements to purchase Berry's surplus energy and capacity. Without a near-term alternative to supply its EOR steam, Berry was forced to participate in a chaotic and illiquid electric market. Even though its facilities would operate in the same manner that they operated for years, Berry was required to reapply to its utilities in order to continue to interconnect with the grid. This process took in excess of a year for one of the facilities, and the only difference between its operations before and after the termination of its utility contract was the purchaser of energy. Participation in the wholesale electricity market also requires new agreements with the California Independent System Operator (ISO) and requires the installation of new metering. The installation of new electric meters took more than three months at a cost of more than \$20,000 per facility. Understanding and complying with many of the onerous provisions of the ISO agreements adds a new level of complexity to the operation of a cogeneration facility that can be overwhelming for a company whose primary business is something other than the generation of electricity.

Yours truly,

Consultant to Berry Petroleum Company