Congress of the United States

Washington, DC 20515July 19, 2006

The Honorable Johnnie Burton Director Minerals Management Service 1849 C Street, NW Washington, D.C. 20240

The Honorable Colleen Clarke Director Bureau of Land Management 1849 C Street, NW, Room 406-LS Washington, D.C. 20240

Dear Director Burton and Director Clarke:

We have been concerned for some time about the process by which oil, natural gas, condensate and associated natural gases are extracted from federal and tribal landholdings. Specifically, we are concerned with Minerals Management Service's (MMS) methods for collecting royalties on these oil and gas extractions, and believe that the Interior Department's inspection, auditing and enforcement activities must result in proper revenue collections. We also strongly believe that this process must be transparent, efficient and accurate when accounting for the true value of the resources taken from these lands.

As you probably are aware, Mr. Jack Grynberg, CEO of the Grynberg Petroleum Company, has proposed a number of changes to methods of accounting for oil, natural gas, condensate, and associated natural gases such as carbon dioxide, nitrogen, helium and hydrogen sulfite, in order to accurately account for the true value of those resources, and to ensure that Federal taxpayers and Native Americans get the full value of what is owed to them for natural resources taken from public and tribal mineral lands.

We request the Minerals Management Service's (MMS) and the Bureau of Land Management's (BLM) opinion on these proposals; specifically, whether you believe these changes would improve the accuracy of royalty accounting, and if not, please provide a detailed explanation as to why not.

- 1. Require the installation of digital meters, calibrated at least monthly to an absolute zero value, for all Federal and Native American natural gas producing properties. These digital meters would replace ancient analog meters since digital meters are the most accurate and preferable natural gas flow measurement devices in existence today.
- 2. Require that every orifice plate size on each natural gas well meter on Federal and Native American natural gas producing properties be inspected at least quarterly offshore by the MMS and onshore by the BLM. Chipped orifice plates, as well as wrong-sized orifice plates should be replaced immediately during those inspections and reported to the BLM and to the MMS for appropriate retroactive volume measurement corrections and royalty payments.
- 3. Require that any plug valves that are presently in natural gas gathering lines be removed and replaced with ball valves.

- 4. Require that all meter runs should be opened for inspection by the BLM and the MMS at all times. Additionally, any welding or closing of the meter runs leading to the orifice plates should be prohibited unless authorized by the BLM and the MMS.
- 5. Require the installation of straightening vanes approximately ten feet before the natural gas enters each orifice meter.
- 6. Require that all master meters be inspected and the results of such inspections should be made available to the MMS, the BLM and to the producers immediately.
- 7. Require that all sampling of natural gas for heating content analysis be performed monthly upstream of each natural gas meter, including the master meter, and records of such sampling should be maintained by the purchaser and made available to the MMS, the BLM and to the producers. Such upstream sampling probes should be installed upstream within three (3) feet of each natural gas meter.
- 8. Reinstate the requirement to file Federal Energy Regulatory Commission (FERC) Form 16 in April and September of every year by every natural gas pipeline in addition to the FERC Form 2.
- 9. Require that the control of natural gas gathering lines and interstate pipelines revert immediately to the jurisdiction of the FERC.
- 10. Prohibit the dilution of natural gas with inert nitrogen or inert carbon dioxide gas at all times and all places.
- 11. Prohibit the construction of bypass pipes that go around the natural gas meter and any such construction or subsequent removal should result in penalties including but not limited to automatic cancellation of the lease.
- 12. The MMS and the BLM should issue rules for the measurement of volume of natural gas at the wellhead based on the independent industry standards such as these suggested by the American Society of Testing Materials (ASTM).
- 13. Require the fundamental orifice meter mass flow equation, as revised in 1990, to be used for calculating the volume of natural gas.
- 14. Require that the construction of gathering lines include constructing such lines to have as few angles and turns as possible before they connect with the natural gas meter.
- 15. Require that sales transactions be completed at "arm's length" when reporting the sale and value of natural gas, condensate and associated natural gases sold.
- 16. Require that all treating, natural gas gathering, compression, and transportation charges on natural gas and condensate produced from federal and Native American

oil and gas leases, which are now in existence; be eliminated as they are on many state and fee lands.

- 17. Require that at all times the quantity and value obtained for natural gas liquids be reported and the value based on arm's length transactions.
- 18. Require that the intentional non-payment of natural gas liquids royalties from the oil and gas lease premises recovered from purging of natural gas gathering lines and natural gas pipelines, as well as from field separators and dehydrators and processing plants, be penalized with the cancellation of oil and gas leases and criminal penalties.
- 19. Federal and Native American lessees are venting, with the government's approval, enormous quantities of natural gas, including greenhouse gases such as carbon dioxide (CO₂). In some circumstances the damage is further compounded by the fact that these natural gases contain carcinogens, such as benzene. In most cases, the technology exists to reasonably and economically prevent this waste. The BLM and the MMS should promulgate regulations to prohibit this unreasonable venting of natural gas and further, strictly enforce such provisions to require lessees to pay full royalties on any such vented, flared or "avoidably" lost natural gas.
- 20. Carbon dioxide (CO₂) is used for tertiary oil recovery from old depleted oil fields. The producers of CO₂ are also the vast consumers of such CO₂ thus creating both a monopoly and monopsony situation. Royalties should be paid on the basis of sales value for any carbon dioxide (CO₂) produced for beverage and food purposes.
- 21. Require that all CO₂ produced be analyzed for benzene (C₆H₆) content which is carcinogenic if it is greater than 5 ppb (parts per billion). Further require that benzene must be filtered through charcoal filters to stop poisoning the environment, human beings, and animals.
- 22. Require that royalties be paid on the sales market value of nitrogen (N₂) extracted from federal and Native American lands which is used industrially for well stimulation, helium (He) recovery and other uses.
- 23. Require that royalties be paid on the actual sales value of processed helium (He) recovered from federal and Native American lands.
- 24. Allow 5% of the value of the elemental sulfur recovered during processing of hydrogen sulfur (H₂S) gas to be deducted for royalty purposes to establish the fair market value.
- 25. It appears that only in the United States, are the natural gas sampling probes located downstream of natural gas meters while in Canada, Europe, and Asia, they are always upstream of the natural gas meter and that allows for a more accurate sample to be taken. If this is the case, MMS and BLM should require that natural gas sampling probes be located upstream of the natural gas meter at all times, within a

few feet of the meter and after the natural gas goes through a Welker or Y-Z vanishing chamber.

- 26. Require that temperature probes and testing probes be located between the natural gas sampling probe and the orifice meter and not vice versa.
- 27. Require that all heating content analysis of natural gas be analyzed to a minimum of C_{15} .
- 28. Require that the artificial conversion from dry BTU to wet BTU be eliminated. Natural gas should be analyzed on the basis of dry BTU only and paid as such.
- 29. Require that natural gas sampling be performed at all times with a floating piston cylinder container at the same pressure intake as the pressure of the natural gas gathering line.
- 30. Require that natural gas filters with a minimum of 10 microns (preferably 15 microns) be used both in the intake to natural gas sampling containers as well as in the exit from the natural gas sampling containers into the chromatograph.
- 31. Require that the analysis of the heating content and measurement of the volume and heating content analyses be reported at 14.73 PSI and 60 degrees Fahrenheit respectively and not at any other pressure and/or temperature for both purchases and sales of natural gas.
- 32. Require that royalties be paid on the condensate recovered through purging the gathering lines and pipelines with a pig (a cone-shaped device to push out condensate) as well as condensate recovered from separators, dehydrators, and processing plants. Violators should face cancellation of their respective oil and gas leases.
- 33. Require that the location of the separator and dehydrator be located within 100 feet of each natural gas wellhead.
- 34. Require that BTU heating content analysis be performed at a temperature of 140 to 150 degrees Fahrenheit at all times.
- 35. Require that heating content analysis and volume measurements are identical at the sales point to what they are at the purchase point, after allowing for a small volume for leakage, but with no allowance for heating content discrepancy
- 36. As you know, the Federal Power Commission (FPC), the predecessor of FERC, in June 1974 promulgated an order that all natural gas bought and sold in the United States must be sold on an MMBTU basis. FERC requires that all pertinent natural gas data must be maintained by companies for a 50-year period. There has been evidence in several cases where the records maintained by oil and gas companies,

when compared to the FERC data, demonstrate a pattern of royalty underpayments. As such, BLM and MMS should require that all natural gas from Federal and Native American lands, as well as natural gas from state and fee lands mixed with it, be sold to public industrial and private customers on a MMBTU basis, namely, MCF (1000 CF) x MBTU (1000 BTU).

37. Mr. Grynberg also suggests that you verify with your staff and/or with the U.S. Bureau of Standards that the specific gravity of natural gas measured at the meter run corresponds to the heating content analysis data for the gas.

Then MMS and BLM should review the royalty payments made by oil and gas companies when compared to the FERC data to ensure that they adequately reflected the payments that should have been made. This should be conducted by an outside contractor by reviewing all the analog charts from natural gas meters since June 1974 reintegrated to verify that the correct volume was used to pay royalties on the federal and Native American lands.

We would appreciate hearing from both MMS and BLM as to your opinion about each of these suggestions and whether or not you think these proposals would enhance the accurate, honest, and transparent collection of royalties from federal and Native American lands. If you do not think that these proposals would enhance the accurate, honest, and transparent collection of royalties, please explain why.

Thank you for your attention in this important matter. We would greatly appreciate a timely and thorough response.

Sincerely,

CAROLYN B. MAYONEY

Member of Congress

UBICE HINCHEY

Member of Congress

GEORGE MILLER

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