112th Congress, 1st Session – – – – – – – – – – – – – House Document 112–73

CONTINUED PRODUCTION OF THE NAVAL PETROLEUM RESERVES BEYOND APRIL 5, 2012

MESSAGE

FROM

THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

AUTHORIZATION THAT THE CONTINUED PRODUCTION OF THE NAVAL PETROLEUM RESERVES IS TO CONTINUE BEYOND APRIL 5, 2012

NOVEMBER 18, 2011.—Message and accompanying papers referred to the Committee on Armed Services and ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE
19–011 WASHINGTON : 2011

To the Congress of the United States:

Consistent with section 7422(c)(2) of title 10, United States Code, I am informing you of my decision to extend the period of production of the Naval Petroleum Reserves for a period of 3 years from April 5, 2012, the expiration date of the currently authorized period of production.

Attached is a copy of the report investigating continued production of the Reserves, consistent with section 7422(c)(2)(B) of title 10. In light of the findings contained in the report, I certify that continued production from the Naval Petroleum Reserves is in the national interest.

BARACK OBAMA.

THE WHITE HOUSE, *November 17, 2011.*

U.S. Department of
ENERGY

Authorization of Continued Production of the Naval Petroleum Reserves Beyond April 5, 2012

Report to Congress
November 2011

United States Department of Energy
Washington, DC 20585

Executive Summary

The Naval Petroleum Reserves Production Act of 1976 (Public Law 94-258, April 5, 1976) directed that the Naval Petroleum Reserves be developed and produced at their maximum efficient rates for an initial six-year period beginning in April 1976. Public Law 94-258 (at 10 U.S.C. 7422) authorizes the President to extend production in increments of up to three years, provided that (1) he first requires an investigation of the necessity for continued production; (2) he submits to the Congress, at least 180 days prior to the expiration of the current production period, a copy of the report on the investigation, along with a Presidential certification that authorization of continued production is in the national interest; and (3) neither House of Congress adopts a resolution, within 90 days of receiving the report and certification, disapproving further production.

President Reagan authorized continued production on three occasions; President George H. W. Bush, once; President Clinton, three times; and President George W. Bush, three times, most recently in 2008. As a result, production from the Reserves has been continuously authorized since 1976 and is currently authorized through April 5, 2012.

This report addresses authorization of continued production operations at Naval Petroleum Reserve No. 3 (NPR-3, also known as Teapot Dome) a small, mature stripper field located near Casper, Wyoming. NPR-3 is the only remaining Naval Petroleum Reserve administered by the Department of Energy under the Naval Petroleum Reserves Production Act of 1976. Section 3404 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999, Pub.L. 105-261 (October 17, 1998) (NDAA 99), provides authority to the Secretary to dispose of the reserve after oil and gas operations are abandoned. Inasmuch as disposition to new ownership is envisioned prior to the end of FY 2015, no further Continued Production Reports are contemplated and, barring unforeseen developments, this report shall serve as the final reauthorization of production at NPR-3. No future reports will be necessary to comply with Public Law 94-258.

The President's Budget request for fiscal year 2012 proposes development of a plan for the sale or disposition of NPR-3 within the next several years. The plan would analyze options and recommend a disposition path that would maximize the value of this asset while minimizing the cost of environmental remediation. Development of the plan is not inconsistent with the conclusions of this continued production analysis directed by Public Law 94-258. The Department of Energy (DOE) has developed an efficient continuing production operating strategy and has prepared an economic analysis of the strategy. In the near-term, DOE will continue to maintain and operate those assets that provide value to potential owners with the least amount of environmental remediation costs to the government.

Minimally profitable operations are projected to continue into the authorization period, but continued production is projected to become unprofitable before the end of the authorization period. Cash flow projections for continued operations of NPR-3 for FY 2012 through FY 2015 - the four fiscal years which encompass the three-year continued production period (April 5, 2012 through April 5, 2015) that is the focus of this report — indicate that profits from the oil production will average $145,000 per year, which represents a five percent return on costs.

Because there is only a slight economic margin favoring continued production, and considering the financial risk associated with maintaining a marginally economic operation to ensure economic success, the cash flow of NPR-3 will be monitored closely as disposition plans for the property proceed. In the event that production economics become negative[1] during the authorization period, production will be discontinued except for incidental oil produced from wells used for geothermal power generation testing.

The operating strategy is designed to (1) generate marginal revenues deposited into the U.S. Treasury that exceed the cost to operate the field; (2) maintain the value (as opposed to plugging wells and selling or transferring a non-producing oilfield) of NPR-3/Rocky Mountain Oilfield Testing Center (RMOTC) for the ultimate disposal of the asset; and (3) defer and minimize costs incurred for environmental restoration. Therefore, until the Federal government is prepared to dispose of NPR-3, authorization of continued production of Naval Petroleum Reserve No. 3 beyond April 5, 2012, is in the national interest.

[1] If for any given month revenues from the sale of oil in that month are less than the cost of production (including overhead), production operations will temporarily cease until operations are restructured and the oil price forecast allows for continued economic operations. If, however, economic operations cannot be commenced within six months, such production operations will cease and all budgeted resources will be allocated to environmental remediation.

AUTHORIZATION OF CONTINUED PRODUCTION OF THE NAVAL PETROLEUM RESERVES BEYOND APRIL 5, 2012

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I. Legislative Language

The Naval Petroleum Reserves Production Act of 1976 (Public Law 94-258) directed that the Naval Petroleum Reserves be developed and produced at their maximum efficient rates for an initial six year period beginning in April 1976. Public Law 94-258 authorizes the President to extend production in increments of up to three years provided that he first requires an investigation of the necessity for continued production; that he submits to the Congress, at least 180 days prior to the expiration of the current production period, a copy of the report on the investigation, along with a Presidential certification that authorization of continued production is in the national interest; and that neither House of Congress adopts a resolution, within 90 days of receiving the report and certification, disapproving further production.

II. Background

President Reagan authorized continued production on three occasions; President George H. W. Bush, once; President Clinton, three times; and President George W. Bush, three times, most recently in 2008. As a result, production from the Reserves has been continuously authorized since 1976 and is currently authorized through April 5, 2012.

This report addresses authorization of continued production operations at Naval Petroleum Reserve No. 3 (NPR-3, also known as Teapot Dome) a small, mature stripper field located near Casper, Wyoming. NPR-3 is the only remaining Naval Petroleum Reserve administered by the Department of Energy under the Naval Petroleum Reserves Production Act of 1976.[2] The Strom Thurmond National Defense Authorization Act for Fiscal Year 1999, Public Law 105-261, authorizes DOE to dispose of NPR-3 by sale, lease, or transfer to another Federal agency, after abandoning oil and gas operations in accordance with commercial operating practices.

The President's Budget request for fiscal year 2012 proposes development of a plan for the sale or disposition of NPR-3 within the next several years. This plan will analyze options and recommend a disposition path that will maximize the value of this asset while minimizing the cost of environmental remediation. Development of the plan is not inconsistent with the conclusions of this continued production analysis directed by Public Law 94-258. The Department of Energy (DOE) has developed an efficient continuing production operating strategy and an economic analysis of the strategy was prepared.

[2] The Department of Energy (DOE) divested its interest in Naval Petroleum Reserve No. 1 (NPR-1, Elk Hills, in Kern County, California) in 1997. In addition, section 331 of the Energy Policy Act of 2005 transferred administrative jurisdiction and control over all public domain lands in Naval Petroleum Reserve No. 2 (NPR-2, Buena Vista Hills, in Kern County, California) (with certain limited exceptions) from DOE to the Department of the Interior for management in accordance with laws governing management of the public lands. Therefore, continued production from NPR-1 and NPR-2 is not analyzed in this report.

In 2007, DOE estimated that the cost of restoring NPR-3 to pristine environmental condition would be $112.7 million.[3] These environmental restoration costs to the Federal government will continue to be deferred by continued production activities on the site. Additionally, these environmental restoration costs possibly could be substantially reduced depending upon the uses made of the property by future transferees, particularly if the transferees continue to operate the site as an oil field or a testing facility owned and operated by the private sector. These options will be thoroughly studied in the disposition plan. Therefore, in the near-term, DOE will continue to maintain and operate those assets that provide future value to potential owners with the least amount of environmental remediation costs to the Federal government.

III. Continued Production of NPR-3

Economics and Assumptions

NPR-3 is a mature crude oil stripper field (i.e., production averages under ten barrels per day per well). It is nearing the end of its economic life (the time during which revenues from the sale of produced oil exceed the costs of production to yield a positive net cash flow). Estimated average production from all producible wells during FY 2011 is projected to be 158 barrels of oil per day. With an actual average crude oil sales price of $80.16 per barrel, FY 2011 revenues from the sale of the produced oil will exceed $4.6 million.

The overall operating strategy for the period will be to direct all efforts to maximizing the value of the field for final disposition. Minimal production efforts at NPR-3 will allow oil to be produced profitably through the end of life of the field. NPR-3 will generate revenues that minimally exceed the operational costs through the period of this report. The primary assumptions of this forecast are:

- An annual oil production decline rate of less than 5 percent throughout the projection period that is based on recent production history;
- The projected average sales price for crude oil for FY 2012 and beyond are the Energy Information Administration (EIA) crude oil price forecast found in its FY 2011 Annual Energy Outlook, adjusted downward for the regional Rocky Mountain market;
- No capital investment projects will be undertaken;
- No routine maintenance will be performed;
- General overhead (Program Direction and Business Management) is allocated between production operations and environmental restoration proportional to costs, consistent with standard accounting practices;
- Costs escalate at 1.5 percent per year; and
- All costs are in current year dollars.

[3] Environmental Liabilities Study of the Rocky Mountain Oilfield Testing Center, Report for the Congress of the United States, November 2007.

By continuing to produce the field and leaving the operational site facilities in-place for prospective owners to utilize as a production or testing facility, instead of the complete demolition and return to original conditions envisioned by the 2007 RMOTC Environmental Liabilities Study, the environmental restoration costs to the Federal government may be reduced substantially (depending upon applicable regulatory requirements). This approach is not likely to impact the amount of environmental restoration that ultimately is conducted at the site, as a portion of that burden is shifted from the taxpayer to the new ownership.

Minimally profitable operations are projected to continue into the authorization period, but continued production is projected to become unprofitable before the end of the authorization period. Cash flow projections for continued operations of NPR-3 for FY 2012 through FY 2015 -- the four fiscal years which encompass the three-year continued production period (April 5, 2012 through April 5, 2015) that is the focus of this report — indicate that profits from the oil production will average $145,000 per year, which represents a five percent return on costs.

Transfer of the field to new owners is expected to take place during FY 2015, coincident with the projected mid-year time frame when production operations are expected to begin to experience a negative cash flow. Given the range of uncertainty in oil prices and revenue projections, production economics will be monitored monthly and in the event that production economics become negative[4] during the authorization period prior to disposition to new ownership, production will be discontinued except for incidental oil produced from wells used for geothermal power generation testing.

Discussion

To achieve this positive cash flow operationally, NPR-3 has devised a strategy to rotate production among its nearly 550 wells available for production. For FY 2012 through FY 2014 period, NPR-3 will produce about 120 wells daily. There will be no capital investment to enhance production. As the wells on production become "pumped off," i.e., there is no more oil in the well bore, production activities will stop and a new group of wells will be produced. Since the primary mechanism for production is gravity drainage, the wells that are turned off will refill with oil to be produced at a later time. Wells will be rotated for production, thus reducing the overall decline rate of the field to nearly zero. Allowing the wells to sit idle for an extended period of time, i.e., throughout the disposition process, is not a viable option as it could result in damage to the pumping equipment and could lead to being in non-compliance with Wyoming oil and gas regulations.

[4] If for any given month revenues from the sale of oil in that month are less than the cost of production (including overhead), production operations will temporarily cease until operations are restructured and the oil price forecast allows for continued economic operations. If, however, economic operations cannot be commenced within six months, such production operations will cease and all budgeted resources will be allocated to environmental remediation.

Wells will not be shut-in or plugged and abandoned unless there are mechanical problems. If it is determined that a well could be produced profitably by a private party, it will not be plugged. Infrastructure and wells that add no value to the field will be environmentally restored in accordance with state law. Operating the field at reduced levels of funding requires that all maintenance be curtailed except that required for health, safety, and environmental protection. Typically, if a well stops producing because of mechanical problems, it will be plugged and abandoned since the cost of major repairs will not provide a timely payout. Repair of infrastructure will be limited to safety and health only.

Co-located at NPR-3, and utilizing the same production and processing facilities, is the Rocky Mountain Oilfield Testing Center (RMOTC), a program initiated by DOE in 1994. The cost-shared portion of the RMOTC testing program has been discontinued; however, testing of 100 percent funds-in[5] projects continues, including the two geothermal power generation projects being sponsored by the DOE's Geothermal Technology Program and industry partners. Certain production wells at NPR-3 are used to support the geothermal testing program. These wells are economic to operate for production without geothermal power generation based on routine, reoccurring maintenance and electrical costs. The incremental costs associated with the geothermal program are covered by test sponsors. While these wells consume a significant portion of the electrical power in the field since they utilize large electric pumps to produce the hot water required for the geothermal power generation units, they do generate more power than they consume. These wells will continue to be produced as long as they remain economic.

While the revenues from production operations at NPR-3 are not significant in the context of the overall federal budget, crude oil sales nonetheless provide income to the U.S. Treasury. Discontinuing production at NPR-3 would result in the loss of revenue from oil sales. However, such a marginally economic operation is susceptible to financial risk as a result of minor fluctuations in critical parameters – lower production, lower oil price, or increased costs. In addition to the financial risk to the government of losing money, an environment, security, safety, and health risk and a visibility risk also exists. Because there is such a slight margin favoring continued production and considering the financial risk associated with maintaining a marginally economic operation, to ensure economic success, the cash flow of NPR-3 will be monitored monthly as disposition plans for the property proceed. In the event that production economics become negative during the authorization period, production will be discontinued except for incidental oil produced from those wells being produced for geothermal power generation testing.

As part of its strategy to operate and maintain asset value, DOE has concluded that maintaining crude oil production in the field provides added value for disposition (vs. plugging and abandonment of the wells). Given the nature of NPR-3's crude oil reservoirs, production at NPR-3 is unlikely to resume if its wells are plugged and abandoned and the field restored to

[5] 100 percent funds-in projects are fully funded by the project sponsor. All costs incurred by the US Government are fully reimbursed.

original conditions. Drilling new wells or re-drilling cemented wells in a stripper oil field is uneconomic for the foreseeable future. Once shut-in, the field would likely remain closed, and more than 150,000 of barrels of currently economically recoverable oil reserves would become much less economic to recover. Closing the field as a disposition plan is developed would also increase the cost to produce some of NPR-3's remaining 200 million barrels of presently non-economically but technically recoverable oil resources at a future date, depending on market conditions.

Emergency Preparedness

NPR-3 provides less than 0.001 percent of daily domestic crude oil consumption and would have no measureable effect on mitigating supply interruptions. Although NPR-3 production rates are so small that there is no defense value or other national benefit in conserving the oil field for future use, it is important in the local, state, and regional context.

IV. Conclusion

Given (1) the management decision that cost-shared testing should be discontinued and the test center be supported with 100 percent partner contributions and (2) the marginal economics of production, disposition of NPR-3/RMOTC is warranted and a disposition plan is being prepared by the Department. In order to maintain value and demonstrate the viability of NPR-3 as a stripper oil field and RMOTC as a testing center to prospective owners, continuing to produce at NPR-3 in the interim is prudent.

By leaving the operational site facilities in-place for prospective owners to utilize as a testing facility instead of the complete demolition and return to original conditions envisioned by the 2007 Environmental Liability Study, the environmental restoration costs to the Federal government may be deferred and reduced substantially (depending upon applicable regulatory requirements). This approach is not likely to impact the amount of environmental restoration that ultimately is conducted at the site, as a portion of that burden is shifted from the taxpayer to the new ownership.

Because there is only a slight economic margin favoring continued production and considering the financial risk associated with maintaining a marginally economic operation, to ensure economic success, the cash flow of NPR-3 will be monitored monthly as disposition plans for the property proceed. In the event that production economics become negative during the authorized period, production will be discontinued except for those wells being produced for geothermal power generation testing.

The operating strategy will (1) generate and deposit revenues into the U.S. Treasury exceeding the cost to operate the Teapot Dome Field (2) maintain value of NPR-3 for disposal of the asset, and (3) defer and minimize costs incurred for environmental restoration. Therefore, until the

Federal government is prepared to dispose of NPR-3, authorization of continued production of Naval Petroleum Reserve No. 3 beyond April 5, 2012, is in the national interest.

Finally, inasmuch as disposition to new ownership is envisioned prior to the end of FY 2015, no further Continued Production Reports are contemplated and, barring unforeseen developments, this report shall serve as the final reauthorization of production at NPR-3. No future reports will be necessary to comply with Public Law 94-258.