



June 2015

INDIAN ENERGY DEVELOPMENT

Poor Management by BIA Has Hindered Energy Development on Indian Lands

GAO Highlights

Highlights of [GAO-15-502](#), a report to the Chairman, Committee on Indian Affairs, U.S. Senate

Why GAO Did This Study

Indian energy resources hold significant potential for development, but remain largely undeveloped. Interior's BIA reviews and approves leases and other permits required for development. Other Interior components and federal agencies also have roles in this process.

The Energy Policy Act of 2005 provided the opportunity for interested tribes to pursue TERAs—agreements between a tribe and Interior that allow the tribe to enter into energy leases and agreements without review and approval by Interior. The act also authorizes Interior to provide grants to tribes to develop the capacity needed to enter into a TERA. However, no tribe has entered into a TERA.

GAO was asked to review Indian energy development. This report examines (1) factors that have hindered Indian energy development, (2) factors that have deterred tribes from pursuing TERAs, and (3) the effectiveness of Interior's efforts to build tribes' capacity to enter into TERAs. GAO analyzed federal data; reviewed federal, academic, and other literature; and interviewed tribal, federal and industry stakeholders.

What GAO Recommends

GAO recommends that Interior take steps to address data limitations, track its review process, provide clarifying guidance, and evaluate the effectiveness of grants. Interior generally agreed with most but not all of the recommendations because it is taking other actions to address some data limitations. GAO continues to believe that its recommendations are valid.

View [GAO-15-502](#). For more information, contact Frank Rusco at (202) 512-3841 or ruscof@gao.gov.

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What GAO Found

Bureau of Indian Affairs' (BIA) management shortcomings and other factors—such as a complex regulatory framework, tribes' limited capital and infrastructure, and varied tribal capacity—have hindered Indian energy development. Specifically, BIA does not have the data it needs to verify ownership of some Indian oil and gas resources, easily identify resources available for lease, or identify where leases are in effect, as called for in Secretarial Order 3215 and internal guidance. BIA also faces staff limitations and does not have a documented process or the data needed to track its review and response times, as called for in implementation guidance for Executive Order 13604, and therefore it cannot ensure transparency in its review of energy-related documents. These shortcomings can increase costs and project development times, resulting in missed development opportunities, lost revenue, and jeopardized viability of projects. Examples are as follows:

- **Missed development opportunities:** According to a tribal official, BIA took 18 months to review a wind lease. According to the developer of the project, the review time caused the project to be delayed and resulted in the project losing an interconnection agreement with the local utility. Without this agreement, the project has not been able to move forward, resulting in a loss of revenue for the tribe.
- **Lost revenue:** According to a tribal official, BIA's review of some of its energy-related documents took as long as 8 years. In the meantime, the tribe estimates it lost more than \$95 million in revenues it could have earned from tribal permitting fees, oil and gas severance taxes, and royalties.
- **Jeopardized viability of projects:** One lease for a proposed utility-scale wind project took BIA more than 3 years to review and approve. According to a tribal official, the long review time has contributed to uncertainty about the continued viability of the project because data used to support the economic feasibility and environmental impact of the project became too old to accurately reflect current conditions.

Several factors have deterred tribes from seeking tribal energy resource agreements (TERA). These factors include uncertainty about some TERA regulations, costs associated with assuming activities historically conducted by federal agencies, and a complex application process. For instance, one tribe asked the Department of the Interior (Interior) for additional guidance on the activities that would be considered inherently federal functions—a provision included in Interior's regulations implementing TERA. Interior officials told GAO that the agency has no plans to provide additional clarification.

Interior's Office of Indian Energy and Economic Development (IEED) provided grants to build tribal energy development capacity to 25 tribes from 2007 through 2013, but the effectiveness of the grants to move tribes closer to demonstrating that they have the capacity to enter into TERAs is unknown. The *Standards for Internal Control in the Federal Government* call for agencies to compare actual performance with planned or expected results and to monitor performance; however, IEED has not tracked how, if it all, the grants have eliminated capacity gaps.

Contents

Letter		1
	Background	8
	Shortcomings in BIA's Management and a Variety of Other Factors Have Hindered Indian Energy Development	18
	A Variety of Factors Have Deterred Tribes from Entering into TERAs	32
	IEED Has Provided TEDC Grants to 25 Tribes, but Their Effectiveness at Building Tribal Capacity Is Unknown	34
	Conclusions	35
	Recommendations for Executive Action	36
	Agency Comments and Our Evaluation	37
Appendix I	Scope and Methodology	39
Appendix II	TERA Application Process	42
Appendix III	Comments from the Department of the Interior	43
Appendix IV	GAO Contact and Staff Acknowledgments	50
Figures		
	Figure 1: Location of Shale Plays and Basins and Tribal Boundaries in the Continental United States	9
	Figure 2: BIA Regions and Number of Agency Offices	11
	Figure 3: Example of Surface and Mineral Ownership	14

Abbreviations

BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CARS	Cadastral Automated Request System
DOE	Department of Energy
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FWS	U.S. Fish and Wildlife Service
GIS	geographic information system
IEED	Office of Indian Energy and Economic Development
IG	Office of Inspector General
Interior	Department of the Interior
ITEDSA	Indian Tribal Energy Development and Self-Determination Act
MWh	megawatt hour
MW	megawatt
NEPA	National Environmental Policy Act
ROW	right-of-way
TAAMS	Trust Asset and Accounting Management System
TEDC	tribal energy development capacity
TERA	tribal energy resource agreement

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June 8, 2015

The Honorable John Barrasso
Chairman
Committee on Indian Affairs
United States Senate

Dear Mr. Chairman:

Indian energy resources¹ hold significant potential for development, but remain largely undeveloped.² For instance, Indian tribes and tribal members, collectively, are the third largest owner of domestic mineral resources, including oil, gas, and coal.³ In addition, according to a 2013 Department of Energy (DOE) report, Indian lands⁴ in the contiguous 48 states have the technical potential to produce about 1.1 billion megawatt hours (MWh) of electricity for wind energy—3.4 percent of total U.S. technical potential.⁵ Indian lands also have the potential to produce about

¹For the purposes of this report, we use the term Indian energy resources to include energy resources that are held in trust by the United States for Indian tribes and tribal members. Also, for the purposes of this report, these resources are located within tribal boundaries, which we use to include land located within the boundaries of an Indian reservation, land not located within the boundaries of an Indian reservation which is held in trust by the United States for the benefit of an Indian tribe or individual Indian, or land not located within the boundaries of an Indian reservation that is held by an Indian tribe or an individual Indian and subject to restriction against alienation under laws of the United States. Tribal boundaries can include land and minerals owned by tribes, individual Indians, and non-Indians.

²See *Strengthening Self-Sufficiency: Overcoming Barriers to Economic Development in Native Communities: Field Hearing Before the S. Comm. on Indian Affairs*, 112th Cong. (Aug. 17, 2011) (statement of Michael R. Smith, Deputy Bureau Director, Field Operations, Bureau of Indian Affairs).

³See Judith V. Royster, *Mineral Development in Indian Country: The Evolution of Tribal Control Over Mineral Resources*, 29 *Tulsa L. J.* 541 (1993).

⁴Indian land means any tract in which any interest in the surface estate is owned by a tribe or individual Indian in trust or restricted status and includes both individually owned Indian land and tribal land. 25 C.F.R. §162.003.

⁵DOE's National Renewable Energy Laboratory, *Geospatial Analysis of Renewable Energy Technical Potential on Tribal Lands*, DOE/IE-0013 (Washington, D.C.: February 2013).

14 billion MWh of solar energy—5.1 percent of total U.S. generation potential.⁶

For some federally recognized Indian tribes and their members,⁷ energy development already provides economic benefits, including funding for education, infrastructure, and other public services. For example, in 2012, the President of the Jicarilla Apache Nation reported that approximately 90 percent of the tribe's government operations were funded by oil and gas development.⁸ In addition, the Campo Band of Mission Indians of the Kumeyaay Nation⁹ leased lands in 2005 to a developer to construct a utility-scale wind farm that consists of 25 2-megawatt (MW) wind turbines.¹⁰ Tribal officials told us the wind farm provides revenue for tribal government operations. According to Department of the Interior (Interior) data, in fiscal year 2014, development of Indian energy resources provided over \$1 billion in revenue to tribes and individual Indian resource owners.

However, even with considerable energy resources, according to a 2014 Interior document, Indian energy resources are underdeveloped relative to surrounding non-Indian resources. For example, as of March 2015, the Kumeyaay Wind Facility in California is the only operating utility-scale wind facility on Indian lands—another utility-scale wind project is under construction on Indian lands, and one utility-scale solar project is under construction on Indian lands, according to Interior officials. In contrast, there has been significant utility-scale wind and solar generating capacity developed in the United States in the last decade. For example,

⁶DOE, *Developing Clean Energy Projects on Tribal Lands, Data and Resources for Tribes*, DOE/IE-0015 (Revised April 2013).

⁷Federally recognized tribes have a government-to-government relationship with the United States and are eligible to receive certain protections, services, and benefits by virtue of their unique status as Indian tribes. As of January 14, 2015, the federal government recognized 566 tribal entities.

⁸Hearing on Energy Development in Indian Country: Hearing Before the S. Comm. on Indian Affairs, 112th Cong., 2d. sess. (Feb. 16, 2012) (*Written Statement of Levi Pesata, President of the Jicarilla Apache Nation*).

⁹The Indian tribe recently changed their name from the Campo Band of Diegueno Mission Indians of the Campo Indian Reservation to the Campo Band of Mission Indians of the Kumeyaay Nation.

¹⁰Utility-scale projects are those that are connected to the grid and intend to sell electricity.

according to our analysis of SNL Financial data, from 2004 through 2013, 686 utility-scale wind projects added more than fifty-four thousand MWh of generating capacity to the grid and 778 utility-scale solar projects added more than seven thousand MWh of generating capacity to the grid. Development of Indian energy resources could provide opportunities to grow tribal economies and contribute to the nation's energy production.

The federal government recognizes Indian tribes as distinct, independent political communities that possess certain powers of sovereignty and self-government, including some power to manage the use of their territory and resources and control economic activity within their jurisdiction.¹¹ For the past several decades, federal policy has supported greater tribal autonomy and control by promoting and supporting opportunities for increased tribal self-determination and self-governance. According to literature, successful tribal economic development depends in part on tribal control and decision-making authority over the programs and activities that affect the tribe and its tribal members.¹² By returning decision-making authority to tribes, tribes are accountable to their own people and can establish priorities that reflect those of the tribe over federal agency priorities. Further, according to some literature, successful tribal economic development involves the federal government making the

¹¹*New Mexico v. Mescalero Apache Tribe*, 462 U.S. 324, 335 (1983) (citing *Merrion v. Jicarilla Apache Tribe*, 455 U.S. 130, 137 (1982); *Montana v. United States*, 450 U.S. 544 (1981); *White Mountain Apache Tribe v. Bracker*, 448 U.S. 136, 151 (1980)). See also *Worcester v. Georgia*, 31 U.S. 515 (1832), which identified tribes as political bodies with powers of self-government. Subsequent courts have concluded that Indian tribes have all the powers of self-government of any sovereign except insofar as those powers have been limited or repealed by federal law. In addition, see Mary Christina Wood, *Protecting the Attributes of Native Sovereignty: A New Trust Paradigm for Federal Actions Affecting Tribal Lands and Resources*, 1995 Utah L. Rev. 109 (1995) ("Self-government is the quintessential mark of sovereignty").

¹²Cornell, Stephen, Joseph P. Kalt. "Two Approaches to Economic Development on American Indian Reservations: One Works, the Other Doesn't." Joint Occasional Papers on Native Affairs No. 2005-02. The Harvard Project on American Indian Economic Development, Native Nations Institute for Leadership, Management, and Policy, The University of Arizona. Tucson, Arizona. 2006. JOPNA. (They note, "After fifteen years of research and work in Indian Country, we cannot find a single case of sustained economic development in which an entity other than the Indian nation is making the major decisions about development strategy, resource use, or internal organization.")

transition from decision maker to advisor, from controlling the process to providing information and technical assistance to tribes.¹³

However, according to literature, tribal control over the development and use of Indian energy resources has been limited.¹⁴ In general, Interior's Bureau of Indian Affairs (BIA), along with multiple other federal and tribal agencies, govern the development of Indian energy resources, and BIA often holds final decision-making authority. For example, BIA, with some involvement from other federal agencies—such as the Bureau of Land Management (BLM)—reviews and approves energy-related documents, including surface and subsurface leases, drilling permits, right-of-way (ROW) agreements,¹⁵ cultural resource surveys, and environmental studies and surveys.

In 2005, Congress passed the Indian Tribal Energy Development and Self-Determination Act (ITEDSA) of 2005, part of the Energy Policy Act of 2005, to provide an option for federally recognized tribes to exercise greater control of decision-making authority over their own energy resources. The ITEDSA provides for interested tribes to pursue a Tribal Energy Resource Agreement (TERA)—an agreement between a tribe and the Secretary of the Interior that allows the tribe, at its discretion, to enter into leases, business agreements, and ROW agreements for energy resource development on tribal lands without review and approval by the Secretary. The act and Interior's implementing regulations require that the Secretary determine whether a tribe has the capacity to regulate the development of its energy resources before approving a TERA. A TERA may address development of all or a portion of a tribe's energy resources but does not authorize tribes to assume responsibility for lands and resources owned by individual Indians—Interior is to maintain responsibility for those lands and resources even if a TERA is approved.

¹³See, for example, Cornell, Stephen, Joseph P. Kalt. "Sovereignty and Nation-Building: The Development Challenge in Indian Country Today," Joint Occasional Papers on Native Affairs No. 2003-03, The Harvard Project on American Indian Economic Development, Native Nations Institute for Leadership, Management, and Policy, The University of Arizona. Tucson, Arizona. 2003. JOPNA.

¹⁴See Judith V. Royster, *Practical Sovereignty, Political Sovereignty, and the Indian Tribal Energy Development and Self-Determination Act*, 12 Lewis & Clark L. Rev. 1065 (2008).

¹⁵A ROW is an authorization to a qualified individual, business, or government entity to use a specific area of land for a specific amount of time for a certain purpose and with certain restrictions.

Nearly a decade after enactment of ITEDSA, no tribe has entered into a TERA with Interior, but, according to Interior officials, six tribes requested preapplication meetings to discuss establishing an agreement. ITEDSA also authorizes Interior to provide grants to Indian tribes and, according to Interior regulations, these tribal energy development capacity (TEDC) grants are to be used to help tribes build capacity to perform the administrative and technical functions included in a TERA.¹⁶ Interior's Office of Indian Energy and Economic Development (IEED) manages the TEDC grant program.

Federal management and oversight of Indian energy development is to be conducted consistent with the federal government's fiduciary trust responsibility to federally recognized Indian tribes and individual Indians. The federal trust responsibility is a fiduciary obligation on the part of the United States to federally recognized Indian tribes and tribal members.¹⁷ According to Interior's Secretarial Order 3335, among the guiding principles of the trust relationship are supporting tribal sovereignty and the right of Indian tribes to make important decisions about their own best interests, protecting tribal resources, and practicing responsiveness and timeliness.

In recent decades, Indian tribes and individual Indians have asserted that Interior has failed to fulfill its trust responsibility, mainly with regard to the management and accounting of tribal and individual trust funds and trust assets. Interior recently settled numerous "breach of trust" lawsuits, including *Cobell v. Salazar*, one of the largest class action suits filed against the United States, and more than 80 other cases involving Indian

¹⁶"Capacity" is not defined in the Interior regulations, but, for the purposes of this report, we define capacity as the regulatory, administrative, and technical expertise and capabilities needed to effectively control and manage the development of energy resources.

¹⁷The Supreme Court has recognized a general trust relationship with Indian tribes since 1831. See *Cherokee Nation v. Georgia*, 30 U.S. (5 Pet.) 1 (1831). The trust responsibility originates from the unique, historical relationship between the United States and Indian tribes and consists of the "highest moral and legal obligations" that the federal government must meet to ensure the protection of tribal and individual Indian lands, assets and resources, but is legally enforceable only to the extent it is specifically defined by federal laws. See *Seminole Nation v. United States*, 316 U.S. 286, 296-297 (1942), and *United States v. Jicarilla Apache Nation*, 564 U.S. ___, 131 S. Ct. 2313 (2011).

tribes.¹⁸ Interior's Office of Inspector General (IG) has also identified weaknesses in BIA's management and oversight of Indian energy resources. For instance, in 2012, Interior's IG found that weaknesses in BIA's management of oil and gas resources contributed to a general preference by industry to acquire oil and gas leases on non-Indian lands over Indian lands.¹⁹ In addition, in 2014, Interior's IG found that two of the three BIA offices it reviewed had records management deficiencies, including one office with incorrect property records, incomplete and outdated ROW files, and incomplete well files.²⁰

You asked us to review the development of Indian energy resources. This report examines (1) factors that have hindered Indian energy resource development, (2) factors that have deterred tribes from seeking TERAs, and (3) the effectiveness of TEDC grants to build tribes' capacity to enter into TERAs.

To examine the factors that have hindered Indian energy development and deterred tribes from seeking TERAs, we reviewed and synthesized literature that included more than 40 reports, conference proceedings, hearings statements, and other publications from federal and tribal governments; industry; academics; and nonprofit organizations. To identify literature, we searched Web-based databases, including energy industry specific databases, and other resources containing general academic articles, law review articles, and government resources, such as reports and hearing statements. In this report, we did not evaluate tribal activities or actions to govern the development of their resources or assess any potential barriers to energy development such actions or activities may pose.

¹⁸*Cobell v. Salazar* was a class action lawsuit initially filed in 1996 by Elouise Cobell, a member of the Blackfeet Tribe, and others against the federal government concerning Interior's management of individual Indian trust fund accounts. Those accounts contain funds from leases of Indian land, some of which involve energy development. The settlement in *Cobell* required congressional authorization, which was provided in the Claims Resolution Act of 2010, Pub. L. No. 111-291, § 101, 124 Stat. 3064, 3066 (2010).

¹⁹Office of Inspector General, Department of the Interior, *Oil and Gas Leasing In Indian Country: An Opportunity For Economic Development*, Report No. CR-EV-BIA-0001-2011 (Washington, D.C.: 2012).

²⁰Office of Inspector General, Department of the Interior, *Records Management at Selected Bureau of Indian Affairs' Agency Offices*, Report No. CR-IS-BIA-0001-2014 (Washington, D.C.: January 2014).

To gain additional insights into the factors that hinder Indian energy development and deter tribes from seeking TERAs, we interviewed a nongeneralizable sample of stakeholders representing numerous agencies and organizations, including officials from BIA, IEED, DOE, the National Renewable Energy Laboratory, BLM, the U.S. Fish and Wildlife Service (FWS), and the Environmental Protection Agency (EPA).²¹ Within BIA, we interviewed officials from all 12 BIA regional offices and 9 BIA agency offices. In addition, we interviewed officials representing 33 Indian tribes, two Alaska Native Corporations, representatives from 13 energy development companies or consulting firms, and representatives from five nongovernmental organizations related to Indian energy development. We selected federal offices based on their regulatory oversight authorities, assistance of Indian energy development, and management (trust) responsibilities of Indian lands and resources. We selected Indian tribes to ensure a representation of tribes with various types of energy development, including oil and gas and renewable energy development, a range of experience with development, tribal size, and geographic location.

We obtained available data on key dates associated with the review and approval of energy-related documents for planned or completed utility-scale renewable projects from several BIA regional and local officials, tribal officials, and industry representatives. In some cases, this information came from publicly available documentation, such as environmental impact statements. To assess the reliability of these data and this information, we verified key dates with relevant and knowledgeable officials associated with the project. We also obtained information from BIA documents and officials to identify its process for tracking its review of energy-related documents. We compared this information with statutory and regulatory provisions, executive orders, best practices for modernizing the federal permitting and review process identified by an interagency committee, and the *Standards for Internal Control in the Federal Government*.²²

²¹Because this was a nonprobability sample, the findings from our interviews with select stakeholders are not generalizable to those we did not speak to; rather, they identify common factors, challenges, and concerns among these stakeholders.

²²GAO, *Standards for Internal Control in the Federal Government*, [GAO/AIMD-00-21.3.1](#) (Washington, D.C.: Nov. 1, 1999).

To examine the effectiveness of TEDC grants in building the tribal capacity needed to enter into a TERA, we obtained and reviewed available information from IEED regarding the purpose and use of grants awarded. To identify characteristics of effective tribal capacity building activities, we reviewed literature from relevant federal agencies, nonprofit organizations, and tribal research institutes with experience developing capacity, including EPA's Office of International and Tribal Affairs, the Harvard Project on American Indian Economic Development, the Native Nations Institute at the University of Arizona, and the First Nations Development Institute. We compared the identified characteristics to Interior's TEDC grant program (see app.I for more information on our scope and methodology).

We conducted this performance audit from March 2014 to June 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

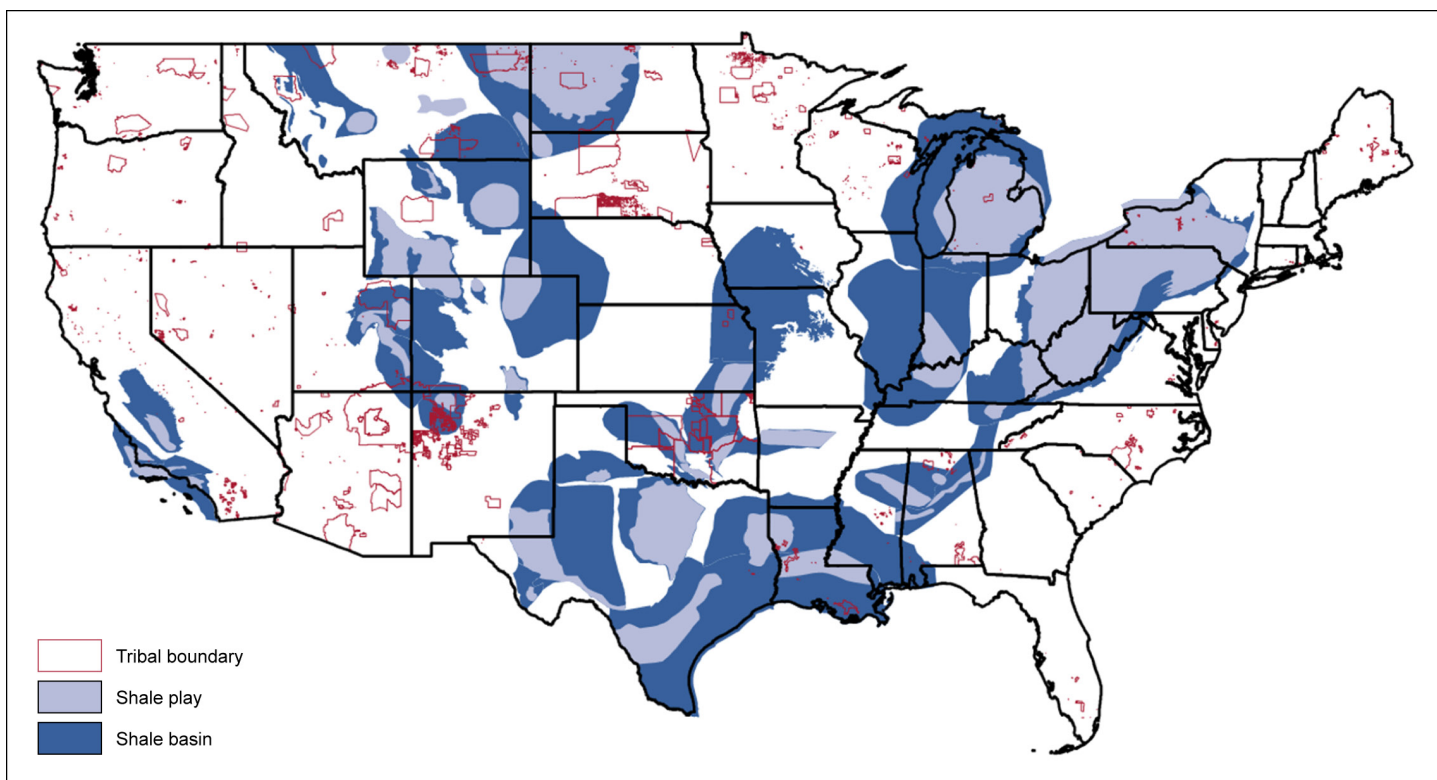
Domestic energy production, including Indian energy resources, contributes to the U.S. economy and national security, providing energy for transportation, manufacturing, and residential use. More than 90 percent of domestic energy consumption in 2013 came from fossil or renewable sources.²³ Fossil energy comes primarily from crude oil, natural gas, and coal. Renewable energy comes from a variety of sources, including wind, solar, hydroelectric power, geothermal, and biomass. Electricity generation using renewable energy can range from facility- and community-scale production—such as rooftop solar panels or a wind turbine to power a community center—to utility-scale production of hundreds of MWs of electricity.

Most of this energy was produced from non-Indian resources, but Indian energy resources hold significant potential for future development. For example, natural gas and crude oil are found in a variety of geological

²³Nine percent of the energy consumed came from nuclear sources.

formations, including shale. Some Indian tribes and their members own resources located in known shale plays (see fig.1).²⁴

Figure 1: Location of Shale Plays and Basins and Tribal Boundaries in the Continental United States



Sources: Energy Information Administration (shale boundaries); U.S. Census Bureau (tribal boundaries); MapInfo (map). | GAO-15-502

Notes:

The U.S. Census Bureau data includes attributes for federally recognized American Indian reservations, off-reservation trust land areas, state-recognized American Indian reservations, and designated statistical areas for federally and state recognized Indian tribes.

The boundaries shown on this map are those reported to the U.S. Census Bureau and are in effect as of January 1, 2010. These boundaries are for Census Bureau statistical data collection and tabulation purposes only; their depiction and designation for statistical purposes do not constitute a determination of jurisdictional authority or rights of ownership or entitlement.

Shale plays are a set of discovered or undiscovered oil and gas accumulations on prospects that exhibit similar geological characteristics. They are located within basins, which are large-scale geological depressions, often hundreds of miles across, that also may contain other oil and gas resources.

²⁴Shawn E. Regan and Terry L. Anderson, *The Energy Wealth of Indian Nations*, 3 LSU J. of Energy L. & Resources (2014).

Development of Indian energy resources is a complex process that may involve a range of stakeholders, including federal, tribal, and state agencies. BIA, through its various regional and agency offices, Division of Real Estate Services, Division of Land Titles and Records, and Division of Natural Resources has primary authority for managing Indian energy development (fig. 2 shows BIA regions and the number of associated agency offices).

Figure 2: BIA Regions and Number of Agency Offices



Sources: GAO analysis of Bureau of Indian Affairs data; Map Resources (map). | GAO-15-502

Note: The number of agency offices within each region is based on information found in BIA's 2014 Tribal Leaders Directory, which also includes information on BIA agency offices.

Other federal agencies and offices, including BLM, IEED, and FWS, may also have a role in the development of Indian energy resources. For instance, IEED's Division of Energy and Mineral Development serves

tribes by assisting with the exploration, development, and management of their energy resources—fossil fuels and renewable.

While the specific steps and order of events listed below vary based on the type of resource being developed, location of development, and ownership of the resource, energy development generally includes the following activities:

Exploration. To develop energy resources, developers and operators must locate a suitable resource. To identify potential oil and gas resources, most operators use seismic methods of exploration.²⁵ For renewable projects, developers conduct a feasibility assessment to determine the viability of the project, including an evaluation of the market area to determine demand for power, availability of interconnection with the grid, and financing opportunities.²⁶ During the exploration phase, a number of permits or authorizations may be required. For example, permitting requirements can include seismic exploration permits,²⁷ permission to survey, ROW agreements, archeological and cultural surveys, tribal access permits, and environmental assessments.

Preleasing. Operators must identify ownership of surface and/or subsurface resources. BIA maintains surface and mineral ownership records, and operators generally request a title status report from BIA's Land Titles and Records Office to verify ownership of land and resources. A title status report is issued after BIA examines land titles and identifies the legal description of a tract of Indian land; current ownership, including any applicable conditions, exceptions, restrictions, or encumbrances on record; and whether the land or resource is in trust, restricted, or fee

²⁵The seismic method of exploration introduces energy into the subsurface through explosions in shallow "shot holes" by striking the ground forcefully (with a truck-mounted thumper), or by vibration methods. A portion of the energy returns to the surface after being reflected from the subsurface strata.

²⁶In some cases, federal assistance can be provided to determine resource potential. For example, from 2000 through 2011, DOE loaned wind anemometers, which measure wind speed and direction over long periods of time, to Indian tribes considering the development of wind resources. In addition, DOE's Tribal Energy Program invested financial and technical assistance for renewable energy projects.

²⁷Indian mineral owners can also grant permits for seismic activities with the written approval of BIA.

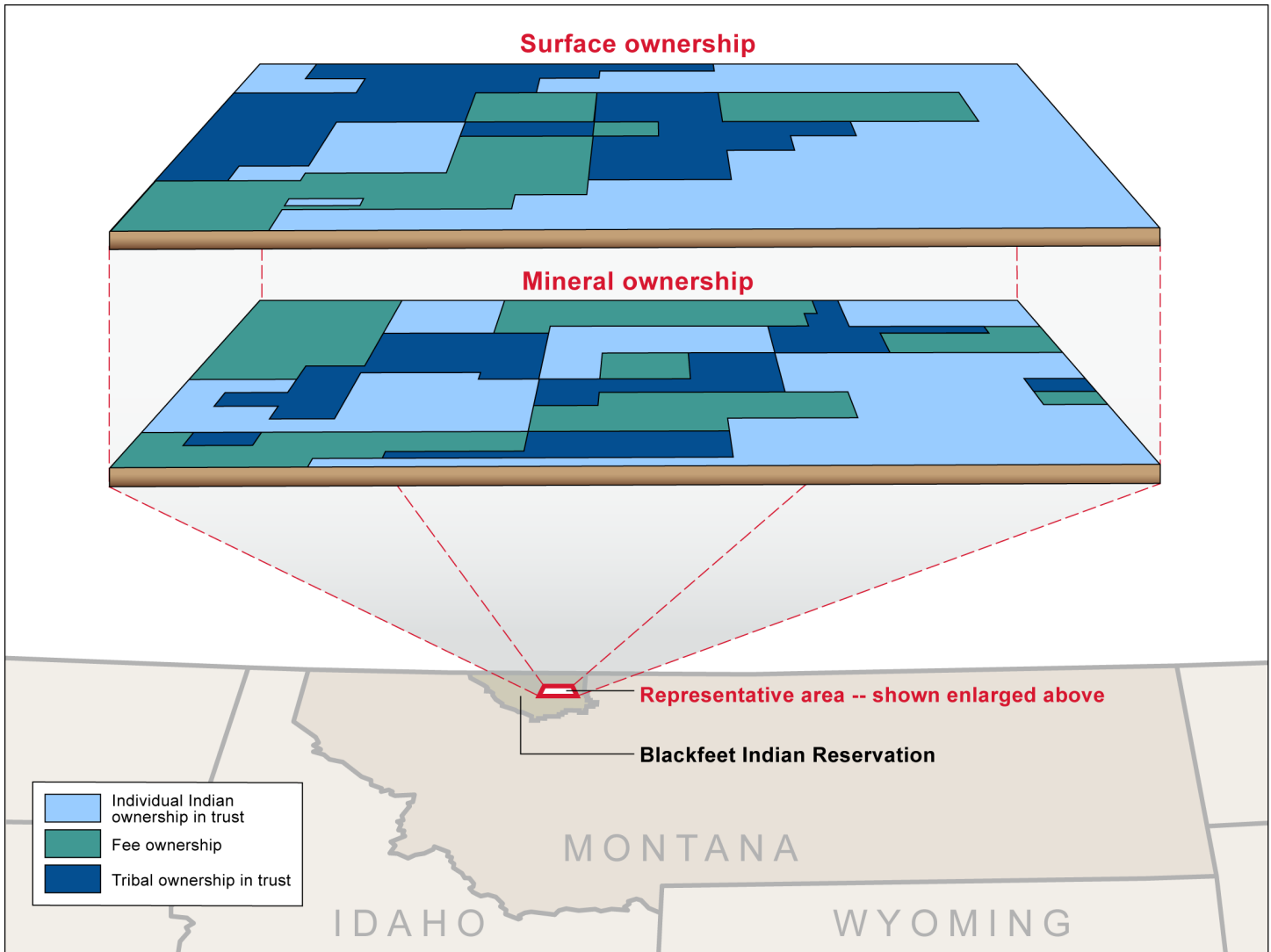
status.²⁸ Trust and restricted resources are held for the beneficial interest of the tribe or an individual Indian and cannot be transferred or leased without approval of the Secretary of the Interior, who has generally delegated this authority to BIA.²⁹ Some tribal boundaries include a patchwork of these ownership patterns, along with parcels of land and resources owned by the federal government, states, and counties, intermingled together—giving land ownership maps a “checkerboard” appearance (see fig. 3).³⁰

²⁸Fee is a form of ownership status where the person may freely alienate and encumber title without federal approval. In contrast, restricted lands may be held in fee, subject to restraints on alienation.

²⁹Primarily between 1887, with the passage of the General Allotment Act (also known as the Dawes Act), until 1934, with the passage of the Indian Reorganization Act, some reservations and other communally held tribal lands were severed into smaller parcels and allotted to individual Indians. These allotted tracts of land may be held in trust or may be held in fee simple and subject to restrictions on alienation.

³⁰*See, for example, Hearing Before the S. Comm. on Indian Affairs, 111th Cong. (Oct. 22, 2009) (statement of Honorable Steve Herrera, Southern Ute Tribal Council Member on behalf of the Southern Ute Indian Tribe.)*

Figure 3: Example of Surface and Mineral Ownership



Sources: GAO analysis of the Department of the Interior’s Office of Indian Energy and Economic Development (surface and mineral ownership data); U.S. Census Bureau (tribal boundaries); Map Resources (map). | GAO-15-502

Note: Fee ownership land may be owned by the tribe or tribal member and can be subject to restrictions against alienation.

Leasing. The operator or developer must acquire a lease for the use of the surface and/or the right to drill for oil and gas resources. There are several ways in which Indian oil and gas resources can be leased. For example, oil and gas resources can be nominated for lease by operators, the tribe, or an individual Indian owner. Then, BIA reviews nominated oil

and gas resources to determine ownership and in some cases, BLM may assist with identifying ownership of proposed parcels. If the resources are not already leased, BIA may advertise and conduct competitive lease sales where operators can bid on nominated leases. BIA reviews the bids, identifies the highest bidder, and notifies the operator whether its bid was accepted.³¹ Tribes and individual Indians can, in some cases, lease their own oil and gas resources.³² For energy development that requires use of surface lands, leases for use of the lands are generally submitted to BIA for review, after ownership has been determined.³³

Permitting and other government actions. Multiple permits and other approvals can be required throughout the development process, and types of permits vary by project. For example, BLM issues drilling permits to operators developing Indian oil and gas resources—after receiving BIA concurrence for approval of the permit. In addition, operators and developers may have to obtain other types of permits from other federal agencies. For example, an oil and gas operator may be required to obtain a permit from EPA for air emissions, and a developer of a wind project may be required to obtain a permit from FWS for unavoidable bird deaths.³⁴ Other approvals that may be needed for energy development

³¹In reviewing leases, BIA must consider whether an action is “in the best interest of the Indian mineral owner” and consider factors such as date of lease expiration, probable financial effect on the Indian mineral owner, marketability, and potential environmental, social, and cultural effects. See 25 C.F.R. § 211.3.

³²Indian Mineral Development Act of 1982, Pub. L. No. 97-382, 96 Stat. 1938 (1982) (codified at 25 U.S.C. §§ 2101-08).

³³Under the Helping Expedite and Advance Responsible Tribal Home Ownership Act (HEARTH Act), Pub. L. No. 112-151 (2012), federally recognized tribes can develop and implement their own regulations governing leasing of Indian lands for residential, business, renewable energy, and other purposes. Upon approval of its regulations by Interior, a tribe may process these leases without first obtaining approval from BIA. BIA has approved 16 tribal business leasing regulations that can be applicable for wind or solar energy development and 9 additional leasing regulations are under review at Interior, according to BIA officials.

³⁴Take permits may be required under several acts, including the Bald and Golden Eagle Protection Act, 16 U.S.C. §§ 668-668d, and the Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1544.

include the granting of a ROW, which is generally obtained through BIA approval.³⁵

Indian tribes may also have their own set of laws and regulations governing energy development. For instance, tribes may require operators to enter into tribal business license agreements and tribal employment rights ordinance agreements.³⁶

State regulatory agencies may, under certain circumstances, issue drilling permits to operators developing Indian oil and gas resources on Indian country within state boundaries.³⁷ According to officials we spoke with from Interior, tribes, and industry, as well as tribal and state guidance, operators generally do obtain a drilling permit from state regulatory agencies for the development of Indian oil and gas resources and adhere to state rules for operations within state boundaries. Further, many states have authority to levy severance and other resource-related taxes on non-Indian entities developing energy resources in Indian country, in certain circumstances, but do not have such authority over Indian tribes, tribal members, or certain Indian entities unless authorized by federal

³⁵The development of Indian energy resources generally requires an operator or developer to cross Indian lands to access a development site or install pipelines or transmission lines needed to export the energy to market. A ROW authorizes the use of a specific area of Indian land for a specific amount of time for a certain purpose.

³⁶Heather J. Tanana, John C. Ruple, *Energy Development in Indian Country: Working Within The Realm of Indian Law and Moving Towards Collaboration*, 32 Utah Envtl. L. Rev. 1, 17 (2012).

³⁷State agencies have general authority to regulate natural resources within state boundaries if the resources are located outside Indian country. States do not have authority to regulate Indian resources located on Indian country unless Congress has authorized this in a federal statute. One such statute is the Act of Aug. 4, 1947, 61 Stat. 731, sec. 11 (authorizing regulation of resources on “[a]ll restricted lands of the Five Civilized Tribes under Oklahoma oil and gas conservation laws” if approved by the Secretary of Interior). Indian country is all land within the limits of any Indian reservation, including rights-of-way; all dependent Indian communities within the borders of the United States; and all Indian allotments the Indian titles to which have not been extinguished, including rights-of-way. 18 U.S.C. § 1151.

statute.³⁸ In addition, according to Interior officials, BIA and BLM generally defer to state well spacing, well completion, and production rules and operators generally obtain a state drilling permit regardless of ownership.

Finally, for a utility-scale renewable energy project, a developer may also need to execute transmission and power purchase agreements—agreements with a utility to connect the project to the grid and to purchase the energy created by the project.

Environmental compliance and other requirements. Indian energy development is generally subject to federal environmental and other laws that apply to both federal and Indian resource development, but not to private resource development. In particular, under the National Environmental Policy Act (NEPA), federal agencies are required to evaluate the likely environmental effects of certain major federal actions by using an environmental assessment or, if the projects likely would significantly affect the environment, a more detailed environmental impact statement.³⁹ Federal agencies review and approve the leases, permits, and other documents needed to develop Indian energy resources. These approvals are generally considered “major federal actions.” BIA, as the responsible surface management agency for Indian lands, often takes the lead in reviewing the NEPA analysis, though the analysis is reviewed by multiple agencies, and the public is provided opportunities to provide comment on the analysis. In addition, Indian energy development projects

³⁸State taxation of tribes or tribal members within Indian country is prohibited absent federal statutory authorization. State taxation of non-Indians in Indian country is prohibited if the tax is preempted by federal law or interferes with a tribe’s ability to exercise its sovereign functions. In 1989, the U.S. Supreme Court found a state severance tax on the production of oil and gas in Indian country permissible because the tax was paid by a non-Indian entity, the tax was not pre-empted by federal law, and the state provided substantial services to the tribe and non-Indian entity, even though the tribe’s taxation of the same activity was also permissible. *Cotton Petroleum Corp. v. New Mexico*, 490 U.S. 163, 189 (1989). See also Tanana & Ruple, *supra* note 36 at 19 (“Currently, many states impose taxes on oil, gas, and other hydrocarbon substances produced from wells on Indian lands by non-Indian lessees. For example, in Utah, the Utah Code Ann. § 59-5-116 specifically provides for the disposition of certain taxes collected on Ute Indian land.”). Currently, a federal circuit court is considering whether the federal regulatory scheme for residential, business, wind and solar leases on Indian land pre-empts state taxation of non-Indian lessees. *Seminole Tribe of Florida v. Florida*, No. 12-62140 (Sept. 5, 2014), *appeal docketed sub. nom.*, *Seminole Tribe of Florida v. Michael Stranburg*, No. 14-14524 (Oct. 7, 2014).

³⁹Pub. L. No. 91-190, 83 Stat. 852 (1970), *codified as amended at* 42 U.S.C. §§ 4321-4370.

are subject to National Historic Preservation Act requirements, and, under some circumstances, require an Endangered Species Act (ESA) consultation with FWS. Also, as noted above, operators may be required to obtain a permit from EPA for air emissions. Under section 7 of the ESA, federal agencies must ensure that any action they authorize, fund, or carry out—including approval for Indian energy development activities—is not likely to jeopardize the continued existence of a species protected under the act.

Development. After leases, permits, and other authorizations are obtained, the construction of the oil and gas well or renewable project can begin.

Shortcomings in BIA's Management and a Variety of Other Factors Have Hindered Indian Energy Development

A variety of factors, including shortcomings in BIA's management of Indian energy development, have hindered development of Indian energy resources, according to some of the literature we reviewed and several stakeholders we interviewed. In particular, BIA does not have comprehensive data to identify ownership and resources available for development, does not have a documented process or data to track and monitor its review and response times, and some offices do not have the skills or adequate staff resources to effectively review energy-related documents. Additional factors, generally outside of BIA's management responsibilities, have also hindered Indian energy development, including (1) a complex regulatory framework, (2) fractionated ownership interests, (3) tribes' limited access to capital and federal tax credits, (4) dual taxation by states and tribes, (5) tribal capacity, and (6) infrastructure limitations.

BIA Does Not Have Comprehensive Data Identifying Ownership and Use of Indian Resources

BIA does not have the data it needs to verify ownership of some oil and gas resources, easily identify resources available for lease, or easily identify where leases are in effect. The ability to account for Indian resources would assist BIA in fulfilling its federal trust responsibility, and determining ownership is a necessary step for BIA to approve leases and other energy-related documents. In addition, Interior's Secretarial Order 3215 calls for BIA to maintain a system of records that identifies the location and value of Indian resources and allows for resource owners to obtain information regarding their assets in a timely manner. Further, according to Interior guidance, the determination of the legal boundaries of Indian trust lands is essential to ensure that property and resources are properly accounted for and protected.

However, in some cases, BIA cannot verify ownership because federal cadastral surveys—the means by which land is defined, divided, traced, and recorded—cannot be found or are outdated.⁴⁰ For example, BIA officials told us of an instance of Indian minerals under development without an approved lease because BIA’s ownership data were outdated and, therefore, not reliable to allow the agency to verify ownership.⁴¹ Without an approved lease, BIA officials told us the operator could not make royalty payments to the Indian beneficiary, and the royalty funds were held in an escrow account for at least 8 months. BIA officials told us that, as of April 2015, BLM started the survey, and the agency approved the lease.⁴²

According to an Interior official, the absence of a cadastral survey is not an isolated event. The official said he was aware of similar scenarios throughout Montana, North Dakota, Oklahoma, and Wyoming; however, the extent of this deficiency is unknown because neither BIA nor BLM maintains an inventory of Indian cadastral survey needs, as called for by Interior guidance issued annually since 2008.⁴³ BLM historically maintained this information in its Cadastral Automated Request System (CARS), but a BLM official told us the system has not been fully maintained or consistently used since 2011. Without an inventory of needs, BIA does not know the magnitude of the problem or how to prioritize and target its limited resources.

⁴⁰A cadastral survey is, in effect, the public record of the extent, value, and ownership of land.

⁴¹Concerns about reliable data were also identified by the Commission on Indian Trust Administration and Reform. Specifically, the Commission reported that some information systems to manage Indian oil and gas resources are prone to data inconsistencies. Department of the Interior, *Report of the Commission on Indian Trust Administration and Reform*, Approved December 10, 2013. On December 8, 2009, Interior Secretary Ken Salazar established the Secretarial Commission on Indian Trust Administration and Reform in connection with the Administration’s Cobell Settlement. The commission’s report was to guide improvement of the federal-tribal relationship and fulfillment of federal trust obligations.

⁴²BLM’s cadastral survey services office, upon request and funding from BIA, conducts surveys needed to determine the legal boundaries of Indian lands and minerals.

⁴³Department of the Interior, Bureau of Land Management Instruction Memorandum No. 2008-123; 2009-152; 2010-146; 2011-091; 2012-126; 2013-050; and 2014-044.

In addition, BIA does not have geographic information system (GIS) mapping data identifying resource ownership and use of resources, such as existing leases. Interior guidance identifies that efficient management of oil and gas resources relies, in part, on GIS mapping technology because it allows managers to easily identify resources available for lease and where leases are in effect. However, BIA's database for recording and maintaining historical and current data on ownership and leasing of Indian land and mineral resources—the Trust Asset and Accounting Management System (TAAMS)—does not include a GIS mapping component.

According to a BIA agency official, without a GIS component, the process to identify transactions such as leases and ROW agreements for Indian land and resources can take significant time and staff resources to search paper records stored in multiple locations. For example, in response to a request from a tribal member with ownership interests in a parcel of land, BIA responded that locating the information on existing leases and ROW agreements would require that the tribal member pay \$1,422 to cover approximately 48 hours of staff research time and record duplication costs. In addition, officials from a few Indian tribes told us that they cannot pursue development opportunities because BIA cannot provide the tribe with data on the location of their oil and gas resources. According to a 2012 report, an inventory of Indian resources can provide a road map for expanding development opportunities.⁴⁴

According to Interior's 2014-2015 performance plan, it was to incorporate a GIS mapping component into TAAMS in fiscal year 2014. However, BIA officials told us the agency faced competing priorities and has delayed the incorporation of the GIS mapping component to fiscal year 2015. Without easily accessible data, such as provided in GIS mapping technology, BIA will continue to face challenges to properly manage Indian energy resources and tribes could miss out on development opportunities.

⁴⁴Board of Governors of the Federal Reserve System, *Growing Economies in Indian Country: Taking Stock of Progress and Partnerships, A Summary of Challenges, Recommendations, and Promising Efforts* (April 2012). This report was the result of a series of workshops that included nine federal agencies, four Federal Reserve Bank partners, and representatives from 63 Indian tribes. The effort was focused on economic development in Indian Country.

BIA Does Not Have a Documented Process or Data to Track Its Review and Response Times

BIA review and approval is required throughout the development process, including the approval of leases, ROW agreements, and appraisals; however, BIA does not have a documented process or the data needed to track its review and response times. In 2014, an interagency steering committee that included Interior identified best practices to modernize federal decision-making processes through improved efficiency and transparency.⁴⁵ The committee determined that federal agencies reviewing permits and other applications should collect consistent data, including the date the application was received, the date the application was considered complete by the agency, the issuance date, and the start and end dates for any “pauses” in the review process. The committee concluded that these dates could provide agencies with greater transparency into the process, assist agency efforts to identify process trends and drivers that influence the review process, and inform agency discussions on ways to improve the process.

However, BIA does not collect the data the interagency steering committee identified as needed to ensure transparency and, therefore, it cannot provide reasonable assurance that its process is efficient. A few stakeholders we interviewed and some literature we reviewed identified that BIA’s review and approval process can be lengthy and increase development costs and project development times, resulting in missed development opportunities, lost revenue, and jeopardized viability of projects.⁴⁶ For example, in 2011, the President for the Rosebud Sioux Tribe in South Dakota, reported that it took 18 months for BIA to review a wind lease.⁴⁷ According to the developer of the project, the review time

⁴⁵This government-wide initiative was developed in response to Executive Order 13604 and was led by an interagency Steering Committee, which is composed of Deputy Secretaries or their equivalent from 12 federal agencies, including the Department of the Interior. In 2014, the Steering Committee released an implementation plan for the Presidential Memorandum on Modernizing Infrastructure Permitting. Executive Order 13604 calls for agencies to improve federal permitting and review processes.

⁴⁶See, for example, Elizabeth Ann Kronk Warner, *Tribal Renewable Energy Development Under The HEARTH Act: An Independently Rational, But Collectively Deficient, Option*, 55 Ariz. L. Rev. 1031, 1041 (2013) (“Many tribes, despite strong interest, have not engaged in renewable energy development because it takes too long to obtain the mandatory federal approvals and, even if the approvals are obtained, energy produced in Indian country may not be competitive with energy developed elsewhere because of double taxation by both the state and tribe”).

⁴⁷Hearing on regulatory barriers to American Indian Job Creation, 112th Cong. (April 7, 2011). Testimony of Mr. Rodney M. Bordeaux, President, Rosebud Sioux Tribe (as given by Ms. Patricia Douville, Council Member of the Rosebud Sioux Tribe).

caused the project to be delayed and resulted in the project losing an interconnection agreement with the local utility. Without this agreement, the project has not been able to move forward, resulting in a loss of revenue for the tribe.

In another example, in 2014, the Acting Chairman for the Southern Ute Indian Tribe reported that BIA's review of some of its energy-related documents took as long as 8 years. Specifically, as of April 30, 2014, the tribe had been waiting for at least 5 years for BIA to review 81 pipeline ROW agreements—11 of the 81 ROW applications had been under review for 8 years. According to the official, had these ROW applications been approved in a timely manner, the tribe would have received revenue through various sources, including tribal permitting fees, oil and gas severance taxes, and royalties. The official noted that, during the period of delay, prices for natural gas rose to an historic high but had since declined. Therefore, the official reported that much of the estimated \$95 million in lost revenue will never be recovered by the tribe.⁴⁸

In yet another example, BIA took more than 3 years to review and approve a lease for a proposed wind project and, according to a tribal official, the lease was only reviewed and approved after multiple calls and letters from the tribe to BIA headquarters. Long review times can contribute to uncertainty about the continued viability of the project because data used to support the economic feasibility and environmental impact of the project can become too old to accurately reflect current conditions. The Commission on Indian Trust Administration and Reform reported that undue delays in BIA's review process can have a direct negative impact on economic development and noted that willing developers have walked away from a lease or other agreement because the process takes too long.

BIA has taken some steps to improve its collection of data on review and response times for some leases. Specifically, BIA determined that it did not have a standard approach to track activities associated with the review of leases, permits, and applications for the development of Indian resources. Without this information, the agency could not monitor its performance to meet regulatory processing times identified in its 2012

⁴⁸Hearing on the Indian Tribal Energy and Self-Determination Act Amendments (S. 2132), 113th Cong. (April 30, 2014). Statement of the Honorable James M. Olguin, Acting Chairman, Southern Ute Indian Tribal Council on behalf of the Southern Ute Indian Tribe.

regulations⁴⁹ or the status of applications. To address this concern, in 2014, the agency developed the Realty Tracking System. According to BIA officials, this system provides the data needed to track reviews of surface leases. However, the system does not track information for oil or gas leases or other key review activities associated with energy development, such as ROW agreements, and does not include comprehensive data on existing surface leases under review.⁵⁰

According to BIA officials, the lengthy review times can be attributed, in some instances, to incomplete lease or application packages submitted to the agency. However, without key data to identify the time it has taken to process energy-related documents and a documented process to track review times, BIA cannot verify the extent to which incomplete lease or application packages contribute to lengthy reviews. It also cannot ensure that documents are moving forward in a timely manner or determine if its efforts to improve the process are effective.

Some BIA Offices Do Not Have Staff with the Skills Needed to Effectively Manage Indian Energy Development

Some BIA regional and agency offices do not have staff with the skills needed to effectively evaluate energy-related documents or adequate staff resources, according to a few stakeholders we interviewed and some of the literature we reviewed.⁵¹ For example, Interior's IG reported in 2014 that a BIA agency office in Colorado does not have sufficient staff qualified to effectively administer oil and gas operations.⁵² In 2013, the Commission on Indian Trust Administration and Reform reported that Interior does not have adequate resources to meet Indian leasing demands for oil and gas development.⁵³ Several stakeholders, including

⁴⁹In 2012, BIA adopted revisions to its residential, business, wind, and solar resource leasing on Indian lands, which, among other things, specifies the process for obtaining BIA lease approval and imposes time limits on BIA to act on submitted lease documents. For instance, under its revised rule, BIA is generally to make a decision on wind and solar leases within 60 days of receiving a complete lease package. 25 C.F.R. § 162.565.

⁵⁰We also requested information from a few BIA offices for various energy-related documents, and officials from these offices also responded that consistent information on the dates documents were submitted and reviewed was not available.

⁵¹See, for example, Olguin, *supra* note 48.

⁵²Office of Inspector General, U.S. Department of the Interior, *Onshore Oil and Gas Permitting*, U.S. Department of the Interior, CR-EV-MOA-0003-2013 (Washington, D.C.: June 2014).

⁵³See Commission on Indian Trust Administration and Reform, *supra* note 41.

Interior officials, also highlighted this concern and further identified inadequate staff resources as a contributing factor in lengthy review times and a hindrance to development of Indian energy resources. For instance, Interior officials told us that the number of BIA personnel trained in oil and gas development is not sufficient to meet the demands of increased development. In another example, a BIA official from an agency office told us that leases and other permits cannot be reviewed in a timely manner because the office does not have enough staff to conduct the reviews. Further, the Chairman of the Shoshone-Bannock Tribes reported that one of the major impediments to the success of its wind project is insufficient BIA staff resources to review and approve environmental documents required under NEPA.⁵⁴

A Variety of Factors Generally Outside of BIA's Control Have Hindered Indian Energy Development

A variety of factors generally outside of BIA's control have also hindered Indian energy development, according to some of the literature we reviewed and stakeholders we interviewed, including (1) a complex regulatory framework with multiple jurisdictions, (2) fractionated land and mineral ownership interests, (3) tribes' limited access to capital and federal tax credits, (4) dual taxation by states and tribes, (5) tribal capacity, and (6) infrastructure limitations.

Complex Regulatory Framework with Multiple Jurisdictions

According to Interior officials, while the potential for oil and gas development can be identical regardless of the type of land ownership—such as state, private, or Indian—the added complexity of the federal process stops many developers from pursuing Indian oil and gas resources for development. In addition, the development of Indian energy resources can be governed by multiple federal, tribal, and, in certain cases, state agencies and also can be affected by states' regulation of oil and gas resources on adjacent state or private lands.⁵⁵ According to several stakeholders and some literature we reviewed, this framework can involve significantly more steps than the development of private and state resources, increase development costs, and add to the timeline for

⁵⁴Prepared statement of Hon. Nathan Small, Chairman, Fort Hall Business Council, Shoshone-Bannock Tribes. *Strengthening Self-Sufficiency: Overcoming Barriers to Economic Development in Native Communities*, Field Hearing Before the Committee on Indian Affairs, United States Senate 112th Cong. 1st sess. (Aug. 17, 2011).

⁵⁵BLM issues drilling permits to operators developing federal or Indian resources, regardless of the surface owner.

development.⁵⁶ For example, according to a representative from a private investment firm we interviewed, an oil or gas well that develops Indian resources generally costs almost 65 percent more for regulatory compliance than a similar well developing private resources.

As discussed above, the development of Indian energy resources, like federal energy resources, can require involvement and approval by federal agencies and is therefore subject to a number of federal statutes, such as NEPA, the ESA, and the National Historic Preservation Act. In addition, the development of Indian oil and gas resources are generally subject to BLM regulations for oil and gas development. Some stakeholders told us that because these laws and regulations apply to the development of tribal lands and resources, they believe development is generally not managed according to tribal priorities and does not reflect that Indian lands are intended for the use and benefit of Indian tribes and their members. Rather, some stakeholders⁵⁷ said they believe that the applicability of some of these laws results in Indian lands being managed according to priorities generally associated with public lands⁵⁸ and that review processes and requirements associated with the acts can hinder development.⁵⁹

⁵⁶See, for example, Tom Fredericks & Andrea Aseff, *When Did Congress Deem Indian Lands Public Lands?: The Problem of BLM Exercising Oil and Gas Regulatory Jurisdiction in Indian Country*, 33 Energy L. J. 119 (2012). See also the transcript for the Four Corners Tribal Summit, *Tribal Energy Development & Impact in the San Juan Basin, A Special Conference Report*, August 2013. Tribal officials noted that complying with NEPA regulations is expensive and can slow down development by a year or more, and, in some cases, has stopped energy development projects.

⁵⁷In 2013, the Coalition of Large Tribes passed a resolution calling for federal agencies to adopt policies declaring that Indian lands are not public lands and should not be managed according to public interest standards, but rather managed by Indian tribes for the benefit of their members.

⁵⁸Federal lands are managed for a variety of development and conservation purposes.

⁵⁹The Secretary of the Interior is charged by statute with discharging the federal government's trust responsibilities for Indian tribes and Indians, including appropriately managing the natural resources located within the boundaries of Indian reservations and trust lands. In administering its trust responsibility, the Secretary may need to balance competing interests, such as compliance with other statutory duties including environmental and conservation obligations. When tribes or Indians believe the Secretary has breached her trust responsibility, they can bring a lawsuit under certain circumstances.

According to an Interior report to Congress, because Section 7 of the ESA applies to the development of Indian resources, Indian energy development often requires costly surveys and other forms of data collection that are not always required for projects on private lands.⁶⁰ In addition, as part of the NEPA process, Indian energy development may be open to a public comment period—allowing the public to present concerns for consideration before BIA approves leases and permits. Several stakeholders highlighted the additional costs required for NEPA compliance, most often paid for by the developer or operator, and the uncertainty associated with public opposition and comments received during the NEPA process as factors that can cause a developer to avoid Indian energy resources and choose to develop non-Indian resources that do not require federal agency action.⁶¹ Interior officials told us that NEPA compliance reviews significantly increase the cost of conducting operations on Indian lands and, as a result, projects are moved to adjoining state or private lands where NEPA compliance is not required.⁶² A few stakeholders also expressed concern that BLM’s recent hydraulic fracturing rule applies to Indian oil and gas development, adding more federal regulation to development activities on Indian resources that are not generally applicable to private or state resources.⁶³

Indian oil and gas development can also be subject to higher fees than those for non-Indian resources. For example, development of Indian oil and gas resources is subject to BLM’s \$6,500 drilling permit fee.⁶⁴ In

⁶⁰Department of the Interior, *Budget Justifications and Performance Information Fiscal Year 2015, Indian Affairs*. Section 7 (a)(2) of the ESA does apply to projects on private land if a federal permit or other federal action is required.

⁶¹In 2012, Interior’s IG found that BIA offices inconsistently apply NEPA to Indian oil and gas leases. Office of Inspector General, Department of the Interior, *Oil and Gas Leasing In Indian Country: An Opportunity For Economic Development*, Report No. CR-EV-BIA-0001-2011 (Washington, D.C.: 2012).

⁶²As with the ESA, NEPA applies to energy development on state or private lands if a federal permit or other federal action is required.

⁶³According to Interior officials, an operator may submit the same information it submits to the state or tribes if the state or tribal requirements meet or exceed the standards set forth in the hydraulic fracturing rule.

⁶⁴The present drilling permit fee of \$6,500 was established by Congress in the Interior Department and Further Continuing Appropriations Act, Fiscal Year 2010 (Pub. L. No. 111-88, 123 Stat. 2904, 2905 (Oct. 30, 2009)), and carried through in subsequent appropriation acts.

comparison, development of private and state oil and gas resources may be subject to state drilling permit fees, which vary by state; for example, drilling permits in Montana cost \$150 or less. Interior officials told us that some Indian oil and gas resources are located in areas that offer marginal economic returns, and development in those areas can be affected by BLM's permitting fee. In addition, in 2015, a research affiliate from the Harvard Project on American Indian Economic Development noted that the permitting costs to develop Indian energy resources are higher than the development of resources elsewhere, thus creating an environment of uncertainty and contributing to lackluster economic development.⁶⁵

⁶⁵Statement of Eric Conrad Henson, Senior Vice President Compass Lexecon and Research Affiliate, The Harvard Project on American Indian Economic Development. Field Hearing Before the Committee on Indian Affairs, United States Senate (Apr. 8, 2015).

Fractionated Land and Mineral Ownership Interests

Fractionated Ownership Interests

Fractionated ownership interests for Indian resources are a result of the application of state law by the General Allotment Act of 1887, subsequent federal laws, court decisions, and administrative rulings. Allotted tracts of land are passed down through generations and, as generations pass, ownership interests are fractionated among heirs, but the land is not physically divided. With each generation, ownership interests exponentially grow.

To consolidate ownership of highly fractionated trust lands, in 2012, Interior created a land buy-back program for tribal nations to implement the land consolidation component of the *Cobell v. Salazar* settlement. This settlement provides \$1.9 billion to be used to purchase and consolidate fractionated interests in trust or restricted land. Consolidated parcels will be transferred to tribal governments for uses benefiting the tribes.

Source: GAO. | GAO-15-502

Access to Capital and Federal Tax Credits

Some Indian resources have highly divided, or fractionated, ownership interests that can result in more costly and longer development times compared with non-Indian resources that are not fractionated. According to Interior officials, fractionated ownership creates a problem for leasing because federal statutes require written consent from at least a majority of the “undivided interest” holders of an allotment before various activities are authorized or permitted to occur on an allotment, such as surveying, geophysical permits, ROW agreements, and mineral lease approval.⁶⁶ In most instances, the proponent of the activity, such as a developer, is responsible for obtaining the required consents and providing proof of consent to the federal agency. In the case of competitive bid sales, BIA will ordinarily obtain the necessary consents; however, for negotiated mineral leases, the would-be lessee is required to obtain the consents needed.⁶⁷ According to some literature we reviewed, these allotted parcels of land have hundreds or even thousands of owners with interests in a single parcel.⁶⁸ According to some literature, fractionation raises the cost of developing Indian energy resources, reduces the potential benefits for each individual owner, and hinders development of some resources.⁶⁹

Some tribes face difficulty accessing the capital needed to undertake energy development projects, which can also hinder development of their resources. For example, a 2013 article found that tribes have difficulty establishing wind farms because they neither have access to the initial

⁶⁶Dependent upon the number of owners, consent requirements vary from 51 percent to 90 percent. Specifically, if there are 5 or fewer owners, 90% of the ownership interests must approve; if there are 5 to 10 owners, 80% of the interests must approve; if 11 to 19 owners, 60% approval is required; if 20 or more owners exist, over 50% approval must be obtained. 25 U.S.C. § 2218(b).

⁶⁷In some cases, the Secretary of the Interior may provide consent on behalf of landowners such as minors, persons whose whereabouts are unknown, persons who are not of sound mind, and certain heirs of an estate.

⁶⁸See Hunt, Jeffrey, Kiger, Stephanie P., and Pudwill, Sharon. “Allottee Issues,” *Energy and Mineral Development in Indian Country*, Paper 8 (Rocky Mt. Min. L. Fdn. 2014).

⁶⁹See Property and Environment Research Center, *Unlocking the Wealth of Indian Nations: Overcoming Obstacles to Tribal Energy Development*, PERC Policy Perspective No. 1 (Bozeman, MT: February 2014).

capital needed to start the project nor the tax incentives to keep it going.⁷⁰ Specifically, because federally recognized Indian tribes are sovereign legal entities and not subject to federal income tax, Indian tribes also have limited opportunities to take advantage of federal tax credits to develop their own resources, such as federal production tax credits.⁷¹ In September 2014, we found that federal activities, such as tax credits for renewable energy producers, were factors influencing a 30-fold increase and a 19-fold increase in production of electricity from wind and solar energy, respectively, from 2000 to 2013.⁷² According to some of the literature we reviewed, without access to these tax credits, development of Indian energy resources cannot easily compete with non-Indian projects that receive tax credits.⁷³

However, Indian energy development projects may be able to benefit from tax credits if the project is owned by a non-Indian entity. For example, energy development projects in Indian country can be structured so that non-Indian entities involved in the project benefit from the tax credits and, in certain circumstances, tax credits, such as investment credits for renewable energy assets, can be passed from the tribe to a non-Indian project participant. However, according to a tribal stakeholder we interviewed, this option limits the tribe's ability to have an ownership interest in projects developing its resources.

Dual Taxation

A severance tax on oil and gas production is a common mechanism governments use to raise revenue, and both states (under certain circumstances) and tribes can impose a severance tax. Dual taxation of resources does not occur on private, state, and federally owned

⁷⁰Jada Scott Greenhowe, *Reservations Please! Could Energy Development on Native American Land Be America's Most Valuable Resource?* 7 Pitt. J. Env'tl Pub. Health L. 279, 286 (2013).

⁷¹In December 2014, the Tax Increase Prevention Act of 2014 extended the expiration date for the Production Tax Credit to December 31, 2014. Projects that were not under construction prior to January 1, 2015, are ineligible for this credit. Originally enacted in 1992, the credit has been renewed and expanded numerous times.

⁷²GAO, *Energy Policy: Information on Federal and Other Factors Influencing U.S. Energy Production and Consumption from 2000 through 2013*, [GAO-14-836](#) (Washington, D.C.: Sept. 30, 2014). In addition to federal outlays and tax credits, state policies requiring the use of renewable energy in electricity production were found to be a factor influencing production of electricity from wind and solar energy.

⁷³See, for example, Greenhowe, *supra* note 70.

resources and can make development less economically attractive and discourage development of Indian resources, according to some of the literature we reviewed.⁷⁴ For example, in 2010, the National Congress of American Indians included state taxation of Indian energy resources as an identified threat to the viability of some projects.⁷⁵

Not all energy development activities in Indian country may be subject to dual taxation, however. For example, states cannot tax Indian tribes or certain tribally-owned corporations for their activities in Indian country. However, a tribal stakeholder told us that most tribes do not have the resources to start a production company to develop their resources, such as oil and gas. As noted above, the lack of access to federal tax credits can hinder a tribe's ownership of renewable projects.

Tribal officials told us that both states and tribes may also impose taxes on renewable energy equipment owned by nontribal entities, and Interior officials identified dual taxation as a concern that can affect the development of Indian energy resources. In the preamble to the 2012 final regulation governing the leasing of Indian lands for wind and solar power development, among other activities, Interior noted that federal laws and regulations governing surface leasing on Indian lands are comprehensive and preclude state taxation of such leases and activities occurring on leased Indian land. As noted above, a federal circuit court is currently considering whether the federal regulatory scheme for surface leases on Indian land, including leases for wind and solar development, preempts state taxation of non-Indian lessees.⁷⁶ In addition, federal courts have found a state tax on non-Indian business extracting tribally owned coal was preempted by federal law and infringed on the tribe's rights of self-government.⁷⁷

⁷⁴See, for example, Kronk Warner, *supra* note 46 at 1041-1042.

⁷⁵*Discussion Draft of the Indian Energy Promotion and Parity Act of 2010: Hearing Before the S. Comm. on Indian Affairs* (2010) (Testimony of the National Congress of American Indians).

⁷⁶*Seminole Tribe of Fla. v. Florida*, No. 12-62140 (Sept. 5, 2014), *appeal docketed sub. nom.*, *Seminole Tribe of Fla. v. Michael Stranburg*, No. 14-14524 (Oct. 7, 2014).

⁷⁷*Crow Tribe of Indians v. Montana*, 819 F.3d 895, *aff'd*, 484 U.S. 997 (1988) (holding a state severance tax on coal and gross proceeds tax on coal mining activity to be preempted by federal law because they were so high as to affect the coal's marketability and that the tax infringed on the tribe's self-government rights).

Tribal Governance and Capacity

According to some of the literature we reviewed and several stakeholders we interviewed, perceived or real concerns about the political stability and capacity of some tribal governments have hindered some tribes' efforts to pursue development of their resources. For example, a 2012 report found that underdeveloped tribal legal infrastructure, outdated tribal governance structures, and politicized business management are real or perceived barriers to Indian economic development for some Indian tribes.⁷⁸ Specifically, many tribes do not have modern, comprehensive, and culturally appropriate business and commercial laws or codes. An underdeveloped legal infrastructure can create uncertainty and risk for lenders and other business entities, which may deter lending or raise the costs of doing business through increased interest rates and/or shorter loan terms.

Officials from one tribe told us that it is difficult to build tribal capacity due to understaffing or a lack of qualified staff with needed expertise. The officials noted that several developers interested in developing its energy resources have approached the tribe, but the tribe does not have the legal or business expertise needed to ensure that negotiations with the developers are in the best interest of the tribe.

Limited Access to Infrastructure

Some Indian energy resources are located in remote areas that are distant from consumer markets, and the transmission lines to carry power generated from renewable sources to market are not always readily available.⁷⁹ According to a 2014 report, many tribes lack the proximate access to connect with the electrical grid.⁸⁰ Without access to transmission lines, the profitability of a utility-scale renewable energy project is diminished. In addition, some Indian oil and gas resources are located in areas with limited access to transportation linkages to processing facilities. In 2014, we found that infrastructure limitations can

⁷⁸See Board of Governors of the Federal Reserve System, *supra* note 44.

⁷⁹See, for example, Thomas, Pilar M., "Indian Energy Development, Regulatory, and Jurisdictional Considerations," *Energy and Mineral Development in Indian Country*, Paper 11A (Rocky Mt. Min. L. Fdn. 2014).

⁸⁰Western Regional Partnership, *Renewable Energy Development on Tribal Lands, Brief Overview of Challenges, Recommendations and Resources*, 2014.

have economic implications, including lost revenue and hindered development, for oil and gas development in some areas.⁸¹

A Variety of Factors Have Deterred Tribes from Entering into TERAs

A variety of factors have deterred tribes from entering into TERAs, including: (1) uncertainty about TERA regulations, (2) limited tribal capacity and costs associated with assuming activities currently conducted by federal agencies, and (3) a complex application process, according to some of the literature we reviewed and stakeholders we interviewed.

Uncertainty about TERA regulations. Two stakeholders told us that certain provisions in the TERA regulations need additional clarification. Specifically, TERA regulations authorize tribes to assume responsibility for energy development activities that are not “inherently federal functions.”⁸² According to officials from one tribe we interviewed, the tribe has repeatedly asked Interior for additional guidance on the activities that would be considered inherently federal functions under the regulations. Interior officials told us that the agency has not determined what activities would be considered inherently federal because doing so could have far-reaching implications throughout the federal government. According to the tribal officials, without additional guidance on inherently federal functions, tribes considering a TERA do not know what activities the tribe would be assuming or what efforts may be necessary to build the capacity needed to assume those activities. Additional guidance could include a provision of examples of activities that are not inherently federal in the energy development context, which could assist tribes in identifying capacity building efforts that may be needed. In addition, the tribal officials told us that they have requested additional guidance to clarify whether the requirement to develop a tribal environmental review process that includes public input would open the tribe to additional liability from nontribal members and could delay implementation of tribal resource

⁸¹GAO, *Oil and Gas Transportation: Department of Transportation Is Taking Actions to Address Rail Safety, but Additional Actions Are Needed to Improve Pipeline Safety*, [GAO-14-667](#) (Washington, D.C.: Aug. 21, 2014).

⁸²Interior’s preamble to the regulations provides that, under the Indian Self-Determination and Education Assistance Act, the Secretary determines inherently federal functions on a case-by-case basis and that “Congress did not expressly prohibit the use of the term ‘Inherently Federal Functions.’” 73 Fed. Reg. 12808, 12810 (Mar. 10, 2008).

development decisions.⁸³ Moreover, the tribal officials told us that it is unclear whether a tribe that assumes certain responsibilities or activities currently conducted by federal agencies can administer them using its own protocols, or if the tribe must follow federal regulations to administer these responsibilities and activities. Executive Order 13563 calls for agencies to ensure that regulations promote predictability and reduce uncertainty.⁸⁴ Without additional clarification to address these concerns and unknowns, BIA may not have fully ensured that the TERA regulations are easy to understand, and tribal participation in a TERA may be hindered.

Limited tribal capacity and associated costs. According to several stakeholders we interviewed and some literature we reviewed, assuming control of tasks currently conducted by federal agencies can require significant tribal resources.⁸⁵ Through a TERA, a tribe assuming control for energy development activities that are currently conducted by federal agencies does not receive federal funding for taking over the activities from the federal government. Several tribal officials we interviewed told us that the tribe does not have the resources to assume additional responsibility and liability from the federal government without some associated support from the federal government to cover expenses for taking over activities currently conducted by federal agencies.

Complex application process. Several stakeholders we interviewed stated that the process to seek a TERA is complex, confusing, and time-consuming (see app. II for details on the TERA application process). This process involves multiple federal agencies, and, according to a few tribal officials we interviewed, will require significant tribal resources to complete the application process. According to Interior officials, the agency is aware that tribes consider the process to obtain TERA approval to be complex and that it has likely deterred tribes from seeking a TERA.

⁸³“Many of the public input provisions of ITEDSA, although not necessarily all, conflict sharply with tribal self-governance. One tribe’s attorneys summed up the various public input requirements as ‘a trade-off that may be unacceptable’ to tribes that otherwise would take advantage of the TERA program.” Royster, *supra* note 14 at 1086.

⁸⁴Exec. Order No. 13563, 76 Fed. Reg. 3821 (Jan. 21, 2011).

⁸⁵See, for example, Ludvig, Szonja, *The Tribes Must Regulate: Jurisdictional, Environmental, and Religious Considerations of Hydraulic Fracturing on Tribal Lands*, 2013 BYU L. Rev. 727; see also Royster, *supra* note 14.

However, according to Interior officials, the process cannot be simplified because all of the steps are needed to meet statutory requirements. Interior officials told us the concern over the complexity and resources needed for a tribe to apply for a TERA is compounded by the fact that no tribe has yet entered into a TERA—leaving the outcome of the process unknown.

IEED Has Provided TEDC Grants to 25 Tribes, but Their Effectiveness at Building Tribal Capacity Is Unknown

IEED allocated more than \$2 million through 29 grants provided to 25 tribes from 2007 through 2013 under the TEDC program, but the effectiveness of the program is unknown because Interior has not tracked the benefit of the grants and does not have a documented process to assess whether the grants have moved tribes closer to building the capacity needed to pursue a TERA. According to Interior regulations, these grants are to be used to help tribes build capacity to perform the administrative and technical functions included in a TERA, and Interior reported that one of its goals for fiscal year 2015 is to significantly increase the ability of tribes to assess, plan, develop, and manage their own conventional and renewable energy resources.⁸⁶ In addition, the solicitation for grant proposals in the Federal Register notes that a grant recipient is to submit an interim report and a final report with a summary of events, accomplishments, and deliverable products.⁸⁷ However, Interior has not used these reports to track how, if at all, funds were used to eliminate identified capacity gaps. Interior was only able to identify five final reports submitted for grants awarded between 2007 and 2012 and could not locate or identify final reports for the remaining grants awarded during this time period. Without a documented process to measure the effectiveness of its TEDC program, IEED is limited in its ability to ensure that the funds it provides are used to eliminate capacity gaps.

⁸⁶Interior reported that helping tribes build their capacity can have multiple benefits, including increased tribal control and opportunities for energy and economic development. The U.S. Department of the Interior Indian Affairs, Budget Justifications and Performance Information for Fiscal Year 2015.

⁸⁷In addition, the Standards for Internal Control in the Federal Government call for agencies to compare actual performance with planned or expected results and to monitor performance measures. [GAO/AIMD-00-21.3.1](#).

Tribal Energy Development Capacity Grants

Tribal energy development capacity grants range from approximately \$20,000 to \$200,000 to fund activities such as determining the current level of a tribe's technical, administrative, or management capacity for energy development and determining what process or procedure may be used to eliminate potential capacity gaps in energy resource development. For example, according to the Office of Indian Energy and Economic Development, a tribe received \$100,000 in 2008 to assess renewable energy opportunities. In addition, another tribe received \$60,000 in 2013 to assess their current energy development capacity.

Source: GAO. | GAO-15-502

In addition, the effectiveness of tribal capacity building efforts under the TEDC program may be challenged by the design of the program itself. For example, Congress appropriates funds annually to Interior that are only available for 1 year for grants provided under the TEDC program. According to literature from organizations with experience building capacity, effective capacity building efforts should both provide for sustained, consistent funding over time, since developing capacity can be an ongoing effort that may take longer than 1 year to achieve, and facilitate a tribe's ability to develop a program that is responsive to each tribe's unique conditions and priorities.⁸⁸ The current TEDC program provides single-year grants for activities that can be completed within the award year. According to a few stakeholders we interviewed, this can hinder a tribe's efforts to address capacity limitations that require longer-term efforts and strategies.

Conclusions

The development of Indian energy resources has the potential to provide significant benefits to Indian tribes, tribal members, and the nation through both tribal economic development opportunities and by contributing to the nation's energy production. However, a number of factors have hindered development of these resources, including shortcomings in BIA's management of the resources and the development process. In particular, without data to verify ownership and use of resources—including current and accurate cadastral surveys, which are generally completed by BLM—BIA cannot ensure that Indian resources are properly accounted for or that Indian tribes and their members are able to take full advantage of development opportunities. In addition, lengthy review and response times at BIA have hindered development and, without a documented process and data to track agency review times, BIA cannot ensure that its review process is transparent or that documents are moving forward in a timely manner. We recognize the challenges that are associated with the administration and management of Indian resources, and the shortcomings we identified in BIA's management of Indian energy development are not the only factors hindering Indian energy development. However, unless BIA takes steps to address the factors we identified, these factors may continue to

⁸⁸ See, for example, First Nations Development Institute, *Native American Asset Watch: Rethinking Asset-Building in Indian Country* (Longmont, CO: 2009); see also EPA Office of Inspector General, *Framework for Developing Tribal Capacity Needed in the Indian General Assistance Program*, Report No. 08-P-0083 (Washington, D.C.: Feb. 19, 2008).

contribute to developers avoiding Indian energy resources in favor of developing non-Indian resources. Further, these factors place the agency at risk of not fulfilling its trust responsibility to Indian tribes and their members.

Federal policy calls for providing enhanced self-determination and economic development opportunities for Indian tribes by promoting tribal oversight and management of energy resource development on tribal lands. The shortcomings in BIA's management of Indian energy development highlight the need for tribes to build the capacity to perform the duties that would enable them to obtain greater tribal control and decision-making authority over the development of their resources. However, uncertainty associated with Interior's TERA regulations has, in part, deterred tribes from pursuing these opportunities. To enter into a TERA, tribes must have the capacity to take over activities long held by BIA, and IEED has provided some assistance building the capacity needed to assume these responsibilities through the TEDC grant program. However, without a documented process to evaluate the effectiveness of this program, IEED cannot determine whether the assistance it provided has moved any tribes closer to eliminating capacity gaps needed to pursue a TERA or whether there are features of the TEDC grant program that may limit the effectiveness of the program.

Recommendations for Executive Action

We recommend that the Secretary of the Interior direct the Director of the Bureau of Indian Affairs or the Director of the Office of the Indian Energy and Economic Development, as appropriate, to take the following seven actions:

- To ensure it can verify ownership in a timely manner and identify resources available for development, BIA should (1) take steps to complete its GIS mapping module in TAAMS and (2) work with BLM to identify cadastral survey needs.
- To improve the efficiency and transparency of its review process, BIA should (1) develop a documented process to track its review and response times and (2) enhance data collection efforts to ensure it has data needed to track its review and response times.
- Provide additional energy development-specific guidance on provisions of TERA regulations that tribes have identified to Interior as unclear.

-
- To ensure the TEDC grant program is effective in moving tribes closer to developing the capacity needed to pursue TERAs, IEED should take steps to (1) develop a documented process for evaluating the effectiveness of TEDC grants and (2) identify features of the TEDC grant program that could limit the effectiveness of the program to help tribes eliminate capacity gaps.

Agency Comments and Our Evaluation

We provided a draft of this report to Interior for review and comment. In its written comments, reproduced in appendix III, Interior agreed with our recommendations related to TERA and the need for additional guidance. Interior also agreed with our recommendations for a documented process to evaluate the effectiveness of TEDC grants and to improve the agency's data collection efforts. However, Interior did not fully concur with our recommendations related to the identification of Indian resources and the need for a documented process to track and monitor BIA's review process. Specifically:

- Interior did not concur with our recommendation to complete its GIS mapping module in TAAMS and identify cadastral survey needs. In its written comments, Interior stated that the agency is developing and implementing other applications that will supplement TAAMS and provide GIS mapping capabilities, although noting that one of these applications, the National Indian Oil and Gas Evaluation Management System (NIOGEMS), is not available nationally. During the course of our review, the agency did not identify these applications as an alternative to the planned mapping component in TAAMS or as a mechanism for addressing cadastral survey needs. As such, we cannot comment on these programs or whether these efforts, when completed and fully implemented, will respond to the purpose and intent of our recommendations. We continue to believe that Interior needs to ensure it can verify ownership and use of resources in a timely manner and identify resources available for development.
- Interior did not fully concur with our recommended actions related to the need for a documented process to track review and response times. In its letter, Interior stated that it will use NIOGEMS to assist in tracking review and response times. However, as Interior states in its written comments, this application does not track all realty transactions or processes and has not been deployed nationally. Therefore, while NIOGEMS may provide some assistance to the agency, it alone cannot ensure that BIA's process to review energy-related documents is transparent or that documents are moving forward in a timely manner. We continue to believe that BIA needs a

documented process and increased data collection efforts in order to improve its review and response times for energy related documents.

Interior also provided technical comments that we incorporated, as appropriate.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the appropriate congressional committees, the Secretary of the Interior, and other interested parties. In addition, the report will be available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff members have any questions about this report, please contact me at (202) 512-3841 or ruscof@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix IV.

Sincerely yours,



Frank Rusco
Director, Natural Resources and Environment

Appendix I: Scope and Methodology

To determine what factors have hindered Indian energy development and factors that have deterred tribes from seeking Tribal Energy Resource Agreements (TERA), we searched literature relevant to Indian energy development, including fossil sources, such as oil and gas, as well as renewable sources. We searched various Web-based databases, such as Tulsa (Petroleum Abstracts), ProQuest Environmental Science Professional, Ei EnCompassLIT, Inspec, and PolicyFile to identify existing studies from articles, peer-reviewed and nonpeer-reviewed journals, including law review journals, and government and academic publications, including reports and hearing statements. We identified articles from 2007 to 2014. We examined summary-level information about the literature identified in our search and identified articles that we believed to be germane to our report. We also asked external stakeholders that we interviewed to recommend additional studies on the topic. We reviewed and synthesized literature that included 41 reports, conference proceedings, congressional testimony, and other publications from federal and tribal governments, industry, academics, and nonprofit organizations. It is possible that we may not have identified all of the reports with findings relevant to our objective, and there may be other factors that have hindered Indian energy development that we did not present.

We identified relevant federal laws, executive orders, secretarial orders, regulations, and Interior guidance to determine requirements and responsibilities related to Indian energy development. We obtained available data on key dates associated with the review and approval of energy-related documents for planned or completed utility-scale renewable projects from several Bureau of Indian Affairs (BIA) regional and local officials, tribal officials, and industry representatives. We also obtained information from BIA documents and officials to identify its process for tracking its review of energy-related documents. We compared this information with an executive order and best practices for modernizing the federal permitting and review process identified by an interagency committee, and the *Standards for Internal Control in the Federal Government*.¹

To gain additional insights into the factors that have hindered Indian energy development and deterred tribes from seeking TERAs, we

¹[GAO/AIMD-00-21.3.1.](#)

interviewed a sample of stakeholders representing numerous agencies and organizations, including officials from BIA, the Office of Indian Energy and Economic Development (IEED), the Department of Energy, the National Renewable Energy Laboratory, the Bureau of Land Management (BLM), the U.S. Fish and Wildlife Service, and the Environmental Protection Agency (EPA). Within BIA, we interviewed officials from all 12 BIA regional offices and 9 BIA agency offices. In addition, we interviewed officials representing 33 Indian tribes, two Alaskan Native Corporations, representatives from 13 energy industry companies or related consulting firms, and representatives from five nongovernmental organizations related to Indian energy development. We did not evaluate tribal activities or actions to govern the development of their resources or assess any potential barriers to energy development such actions or activities may pose. To characterize stakeholders' views throughout this report, we define modifiers, such as "several" stakeholders to refer to representatives from six or more entities; and "a few" stakeholders refers to representatives from three to five entities. We selected federal offices based on their regulatory oversight authorities, assistance of Indian energy development, and management (trust) responsibilities of Indian lands and resources. We selected Indian tribes to ensure a representation of tribes with various types of energy development, including oil and gas and renewable energy development, a range of experience with development, tribal size, and geographic location. We selected energy industry companies to ensure a representation of companies with both fossil fuel and renewable energy development experience. The findings from our interviews with select stakeholders are not generalizable to those we did not speak to, but rather our findings identify common factors, challenges, and concerns among these stakeholders.

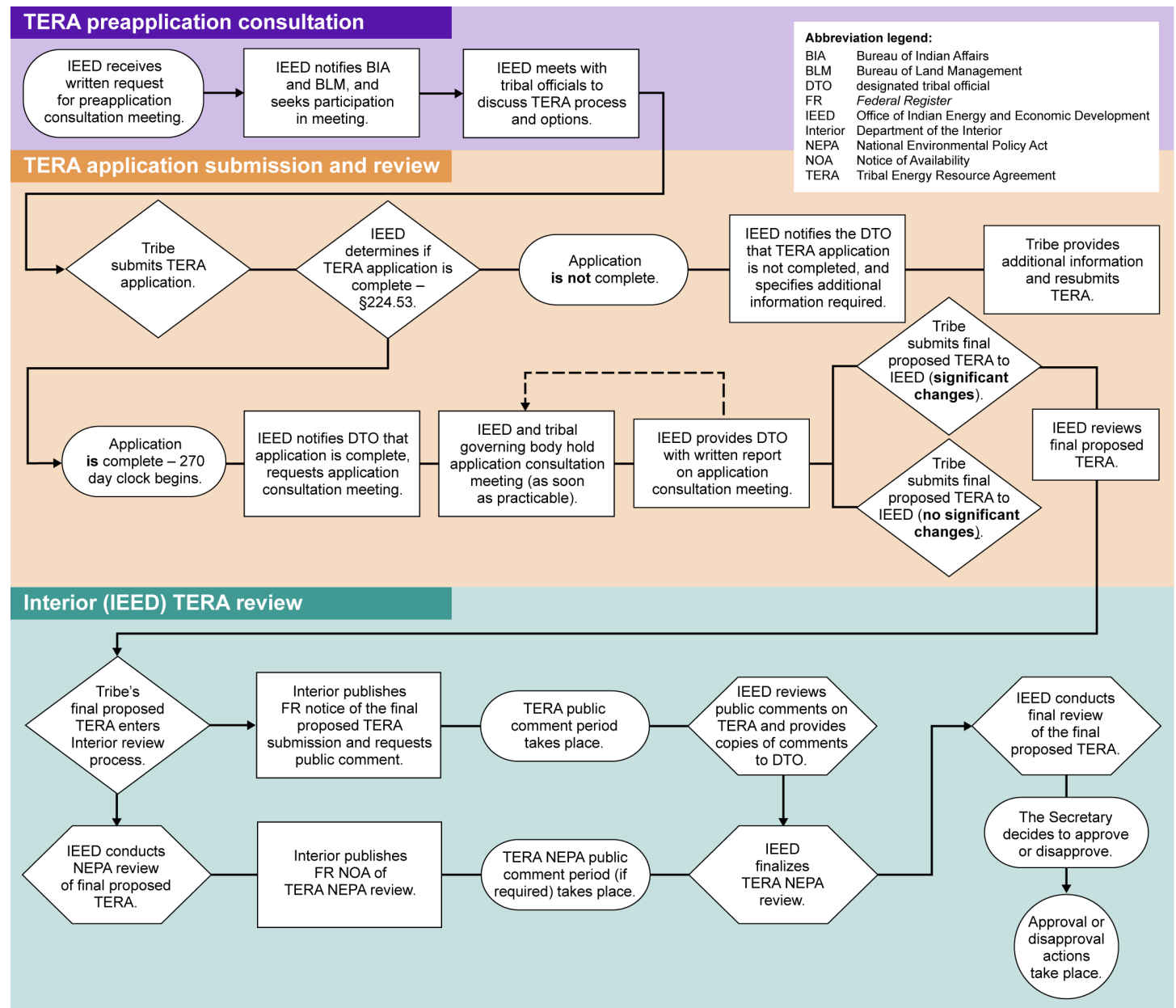
We also conducted site visits to California, Colorado, Montana, Nevada, Oklahoma, and Texas to interview tribal and federal officials and industry representatives, as well as to observe completed energy development projects and those under construction. These sites were located based on a number of factors, including proximity to tribal nations, presence of energy development activities, the potential for energy development, and proximity to federal agency field offices. Because we visited a nongeneralizable sample of sites, findings from these visits cannot be generalized.

To examine the effectiveness of TEDC grants in building the tribal capacity needed to enter into a TERA, we obtained and reviewed all available information from IEED regarding the purpose and use of grants

awarded. In addition, to identify characteristics of effective tribal capacity building activities, we reviewed literature from a federal agency, nonprofit organizations, and tribal research institutes with experience building capacity. These included EPA's Office of International and Tribal Affairs, the Harvard Project on American Indian Economic Development, the Native Nations Institute at the University of Arizona, and the First Nations Development Institute. We compared the identified characteristics with Interior's TEDC grant program.

We conducted this performance audit from March 2014 to June 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: TERA Application Process



Source: Department of the Interior's Office of Indian Energy and Economic Development. | GAO-15-502

Appendix III: Comments from the Department of the Interior



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

MAY 22 2015

Mr. Frank Rusco
Director, Natural Resources and Environment
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

Dear Mr. Rusco:

Thank you for providing the Department of the Interior (Department) the opportunity to review and comment on the draft Government Accountability Office Report entitled *Indian Energy Development: Poor Management by BIA Has Hindered Energy Development on Indian Lands* (GAO-15-502).

As discussed in the enclosure, the Trust Asset and Accounting Management System (TAAMS) used to maintain ownership data, contains sufficient information on owners and their interests for most tracts. However, TAAMS is not adequately designed or correctly utilized for storing ownership tract land descriptions, thus hindering ready mapping of ownership tracts for energy development planning and leasing. Therefore, the Assistant Secretary of Indian Affairs' Office of Energy and Economic Development, Division of Energy and Mineral Development (DEMD) has developed methods via their National Indian Oil and Gas Evaluation Management System (NIOGEMS) to overcome or minimize the TAAMS tract and lease land descriptions issues. The DEMD plans to go forward with the full deployment of the NIOGEMS to supplement the TAAMS.

Therefore, the Department generally concurs with two of the four recommendations, related to the issuance of additional guidance on provisions of Tribal Energy Resource Agreements (TERA) regulations and the development of a documented process to evaluate the effectiveness of the Tribal Energy Development Capacity (TEDC) grants.

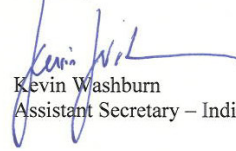
Additionally, the Fiscal Year (FY) 2016 budget for the Department also proposes to continue legislative authority provided in FY 2014 and FY 2015 to allow special rates of pay for certain job types in the Department's onshore oil and gas related fields. This authority is provided to address hiring and skills gap issues in these fields.

On May 1, 2015, the Department's Office of Natural Resources Revenue (ONRR) published a final rule regarding the valuation of oil production from Indian leases to ensure that Indian mineral lessors receive the maximum revenues from mineral resources on their land consistent with the Secretary of the Interior's trust responsibility and lease terms and to provide simplicity, certainty, clarity, and consistency for Indian oil valuation for Indian mineral revenue recipients and Indian mineral lessees. This amends 30 CFR parts 1206 and 1210.

**Appendix III: Comments from the Department
of the Interior**

If you have any questions or need additional information, contact Mr. Michael Oliva, Director,
Indian Affairs Office of Internal Evaluation and Assessment, at (703) 390-6537.

Sincerely,



Kevin Washburn
Assistant Secretary – Indian Affairs

Enclosure

Enclosure

Department of the Interior
Comments to the GAO Draft Report
Indian Energy Development: Poor Management by BIA Has Hindered Energy
Development on Indian Lands (GAO-15-502)

General and Technical Comments

Page 12, first paragraph: "Then, BIA, and in some cases, BLM, review nominated oil and gas resources to determine ownership and whether the resources are included within existing lands." This statement is inaccurate; it is a function solely of BIA and should be in the Trust Asset and Accounting Management System (TAAMS). In certain instances BLM helps with identifying ownership of proposed parcels and whether or not they are within existing trust leases.

Page 12, footnote 34: change cite from Migratory Bird Treaty Act to Endangered Species Act.

Page 15: Shortcomings in BIA's Management and a Variety of Other Factors Have Hindered Indian Energy Development

The BIA's Trust Asset and Accounting Management System (TAAMS), used to maintain ownership data, contains sufficient information on owners and their interests for most tracts. However, TAAMS is not adequately designed or correctly utilized for storing ownership tract land descriptions, thus hindering ready mapping of ownership tracts for energy development planning and leasing. The DEMD has developed methods via their National Indian Oil and Gas Evaluation Management System (NIOGEMS) staff and data processing software to overcome or minimize the TAAMS tract and lease land descriptions issues. The NIOGEMS is a map-oriented (GIS) computer application for managing reservation oil and gas leases, wells, production data, and other energy/mineral resources. It allows tribal, BIA, and other supporting DOI resource managers to readily access financial, realty, geo-technical information and complex resource data gleaned from other data systems/sources to track and make informed decisions on leasing, developing, and managing energy/mineral resources. Though it began with oil and gas related information, NIOGEMS is being expanded to include additional areas of energy/mineral resource data and supporting functionality.

Pages 16-17:

The DEMD has developed methods via its NIOGEMS staff and data processing software to map tract ownership, leases, and related BLM agreements. The NIOGEMS allows DEMD to provide regularly updated mapped ownership tracts, energy leases, and BLM Agreements data for tribes, BIA agencies, and supporting Federal agencies for a large set of reservations. Currently, a joint effort by DEMD and BIA IT is nearing completion to provide NIOGEMS BIA-wide and to the other supporting Federal agencies so that its

capabilities can meet the described needs. Completion of this effort is pending BIA IT authorization for national availability of NIOGEMS from a BIA Data Center.

The Office of Trust Services' Branch of Geospatial Support (BOGS) has recently begun a program to process and map tribes' ownership tracts, first as a support for the subset of ownership tracts identified for DOI's Land Consolidation effort. Ultimately, it will be able to map all ownership tracts in support of BIA-wide missions. The NIOGEMS data processing software includes an automated method for identifying and tracking the land description issues in the tract and leases data from TAAMS. Reports of these land description issues in TAAMS records can readily be provided to this BOGS program to assist with data fixes.

Page 17: BIA Does Not Have a Documented Process or Data to Track Its Review and Response Times

Under the direction of BIA's Office of Internal Evaluation and Assessments, DEMD uses a formal Internal Control Review process for ensuring timely review of Indian Minerals Development Act of 1982 (IMDA) agreements (oil, gas, mineral). These procedures require DEMD to identify all major risks (i.e., something that could go wrong) that would prevent the review of agreements from meeting a deadline, and then to establish procedures (controls) to eliminate identified risks. The DEMD's time line for reviewing and providing technical comments (including economic analysis of deal terms) is 30 days.

Page 20: Some BIA Offices Do Not Have Staff with the Skills Needed to Effectively Manage Indian Energy Development

Indian Country has experienced an unprecedented increase in oil and gas activity due to new technological advances such as horizontal drilling and multi-stage fracking. This has created unprecedented demands on Federal agencies, particularly the BIA. To address these issues, the Fiscal Year 2016 budget for BIA requests a \$4.5 million increase to establish an Indian Energy Service Center (Service Center). A Service Center would provide expertise across a broad spectrum of services and would include personnel from various Federal agencies that have a role in oil and gas development in Indian Country. The Service Center will provide supplemental services to its clients, who are BIA Agencies and Regional Offices, BLM field offices, and to the Office of Natural Resources Revenue. This will be on an as-needed basis, and the clients will dictate the kind of services offered. They will generally consist of technical assistance to expedite the permitting process, but other services may be furnished as well. The clients will be the drivers behind the services provided by the Service Center. The Service Center will provide a key component to development of oil and gas resources in Indian Country, as described above. However, this strategy must be part of a holistic approach to oil and gas development that includes value added agreements timely and efficient development of resources in a business climate facilitating the circulation of resource dollars numerous times before those dollars leave the reservation. The FY 2016 budget for the Department also proposes to continue legislative authority provided in FY 2014 and FY 2015 to allow special rates of pay for certain job

types in the Department's onshore oil and gas related fields. This authority is provided to address hiring and skills gap issues in these fields.

Page 21, footnote 55: The BLM issues drilling permits – that is, it approves the application for permit to drill (APD); however, BIA is responsible for the processing under NEPA: conducting the onsite and ensuring inventories such as cultural and threatened and endangered species. Once concurrence from BIA is submitted to BLM, BLM approves the APD inserting the required conditions of approval and stipulations. It is important to distinguish that BLM does not have control over all aspects of the APD review process.

Page 23, first paragraph: If the information submitted to states or tribes meets or exceeds the standards of the hydraulic fracturing rule, the operator does not need to generate any new information. They may submit the information generated to meet the state or tribal requirements to the BLM. The hydraulic fracturing rule is designed to reduce duplication of efforts for the operators.

Page 23, second paragraph: The report addresses the BLM permitting process and is critical of the APD fee in terms of it being higher than state fees. The APD fee has been set in statute by Congress, most recently in the FY 2015 National Defense Authorization Act.

Recommendations for Executive Actions

We recommend that the Secretary of the Interior direct the Director of the Bureau of Indian Affairs or the Director of the Office of the Indian Energy and Economic Development, as appropriate, to take the following seven actions:

- **To ensure it can verify ownership in a timely manner and identify resources available for development, BIA should (1) take steps to complete its GIS mapping module in TAAMS, and (2) work with BLM to identify cadastral survey needs.**

RESPONSE: Non-concur. The DEMD has developed a software package, NIOGEMS that provides GIS mapping capabilities. Though it has been deployed at individual offices since 1997, it is close to deployment for national availability from a BIA Data Center, pending BIA IT authorization.

Also, BIA, with BLM's assistance (survey, GIS, and contract expertise) is making great strides to stand up a national GIS program which is based upon authoritative source information such as the BLM's Public Land Survey System and BIA's TAAMS. This new GIS program is founded upon the philosophy, methodology, and process developed by the BLM for the Secretary's Cobell Indian Buy Back Program. This GIS program is directed toward servicing all land based reservations remaining beyond the 150 initial Buy Back reservations. This program is a true marriage between GIS and the survey world. Essentially, the GIS is able to spatially display and integrate survey plats/records, and the surveys provide the GIS with credibility and accuracy in terms of locational information of boundaries.

- **To improve the efficiency and transparency of its review process, BIA should (1) develop a documented process to track its review and response times, and (2) enhance data collection efforts to ensure it has data needed to track its review and response times.**

RESPONSE: Non-concur in part. The DEMD has developed a software package, NIOGEMS that can assist in providing tracking capabilities. It is close to deployment for national availability from a BIA Data Center, pending BIA IT authorization. The NIOGEMS does not track all BIA realty transactions or processes, however concur as to others.

- **Provide additional energy development-specific guidance on provisions of TERA regulations that tribes have identified to Interior as unclear.**

RESPONSE: Concur.

- **To ensure the TEDC grant program is effective in moving tribes closer to developing the capacity needed to pursue TERAs, IEED should take steps to (1) develop a documented process for evaluating the effectiveness of TEDC grants, and (2) identify features of the TEDC grant program that could limit the effectiveness of the program to help tribes eliminate capacity gaps.**

RESPONSE: Concur. The TEDC grant solicitation was revised to better enhance tribes' ability to exercise tribal self-determination over oil and gas operations, to address capacity recommendations. The TEDC will provide tribes with funding to analyze training needs and capacity gaps for tribes on the policies and procedures for oil and gas leasing and plan to develop model policies and procedures that tribes could adopt to exercise authority over all or portions of oil and gas development. The grant solicitation for TEDC is currently open.

The DEMD inherited the oversight of the TEDC grant in the spring of 2014. With the current absence of a TEDC program evaluation process, going forward DEMD has establish the following process for evaluating the effectiveness of the grant. The major evaluation goals will be to (1) identify and document the outcomes, activities, and indicators to be evaluated and (2) assess the quantity and quality of the program's achievements.

The evaluation will first involve a discussion among program staff and other stakeholders regarding: (1) What are the desired outcomes of this program? (2) What are the goals? (3) What are we trying to accomplish within the next x year(s)? (4) What activities will enable us to reach our outcomes? (5) What will indicate to us that we are making progress toward the desired outcomes?

Second, DEMD will need to establish what data will be collected. The project monitor will collect qualitative and/or quantitative data from quarterly and final reports from tribal project leads. From the above discussion and data, DEMD will

design a spreadsheet to document outcomes, activities, indicators, and/or a logic model including: Resources/Inputs, Activities, Outputs, Outcomes, Impact. Once this task is complete, DEMD will disseminate the spreadsheet and/or logic model to the appropriate stakeholders for review.

Once the initial fiscal year for the TEDC grant has come to a close, DEMD will administer an anonymous, follow up online survey with tribal stakeholders on the effectiveness of the grant. Example questions from this survey will include:

- a. From your perspective, in what ways has the program been effective or successful? Please share specific examples.
- b. In what ways has the program made progress toward the desired outcomes and indicators?
- c. From your perspective, what challenges or concerns have you encountered with this program? Please describe.
- d. What could be done to improve or enhance the program in the future?
- e. Is there anything else that you would like to add at this time?

The DEMD staff will then aggregate and synthesize the data from the surveys to guide improvements in the TEDC grant.

The DEMD will establish two methods to help identify features of the TEDC program that could limit the effectiveness of the program to help tribes eliminate capacity gaps. The first method to identify limiting factors will be to seek TEDC stakeholder feedback regarding the features limiting their effectiveness. This can be accomplished by reaching out directly to the parties involved with the TEDC and those preferring involvement with the TEDC to provide direct responses regarding their findings and views regarding the limiting features of the TEDC program. These stakeholders can include tribal council members, tribal leadership, consultants, and possibly others. The DEMD will compile and evaluate responses to establish effective solutions to the deficiencies recognized through the TEDC stakeholder outreach. The second method to identify limiting factors would be an internal reevaluation of effectiveness at the end of each closing fiscal year of the TEDC program. The DEMD staff will be responsible for project monitoring and providing technical assistance to the TEDC grant recipients. They will possess firsthand knowledge of the deficiencies limiting the grants effectiveness after the first year of project monitoring. The DEMD will evaluate these internal findings to establish revised solutions as appropriate.

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Frank Rusco, (202) 512-3841 or ruscof@gao.gov

Staff Acknowledgments

In addition to the individual named above, Christine Kehr (Assistant Director), Cindy Gilbert, Alison O'Neill, Dan C. Royer, Monica Savoy, Jay Spaan, Barbara Timmerman, and Amy Ward-Meier made key contributions.

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