

Section 1813 Study: Request for Additional Information
from the Departments of Energy and Interior

Responses of the Ute Indian Tribe of the
Uintah and Ouray Reservation,
Prepared with the assistance of
Sue Tierney and Paul Hibbard of Analysis Group, Inc.

June 26, 2006

The answer below responds to the following 2 questions:

- **QUESTION: On page 5 you state that energy resources on tribal lands represent a bright spot in a dreary national energy picture. And, on pages 25 and 28, natural gas production numbers are presented. Do you have any data that show expansion of energy production in the last 10 or 20 years on tribal lands v. nationally? Or, some version of that data, maybe just Northern Ute lands v. nationally? Or, maybe just natural gas production?**

- **QUESTION: On page 46, you state that tribes are a more than fair-share contributor to national energy needs. Do you have any data that shows how much energy production tribes contribute v. national numbers, maybe on a per square mile basis?**

The Minerals Management Service of the U.S. Department of the Interior collects and reports data on mineral leases involving Indian lands. These data cover leases relating to coal, natural gas, liquid natural gas, and oil. The information available indicates sales volumes from the leases, sales value, and royalties associated with these leases. We are attaching a document based on excerpts from these data (See Attachment 1 to these information responses). The first few pages of the document show the data for the U.S. as a whole for several historical time periods (Table 25 = 1937-1993; Table 28 = 1937-1996; second Table 28 = 1928-2000). The latter tables show data for each separate fiscal year from 2001 through 2005.

These data show a general pattern of increasing sales volumes and sales values, with that trend continuing in recent years. The most recent fiscal years' of sales volumes from American Indian mineral leases are summarized here for the U.S. and for each energy commodity.

Additionally, the Energy Information Administration also compiles data on oil and gas production and reserves through forms EIA-23, "Annual Survey of Domestic Oil and Gas Reserves," filed by operators of oil and gas wells, and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production," filed by operators of natural gas

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processing plants. EIA similarly collects data on coal production and reserves through form EIA-7A, "Coal Production Report." EIA then publishes results with respect to changes in reserves and production on an annual basis, including results for past years, with data broken down regionally and by state in various semi-annual and annual reports, such as "US Crude Oil, Natural Gas, and Natural Gas Liquid Reserves", and "Annual Coal Report." Consequently, excellent data are available, with appropriate regional and state breakdowns, on the domestic production of coal, oil, and natural gas, on known domestic reserves of these fuels, and on how production and reserve numbers have changed over time.

The data are collected as reported by producers and operators, who typically have multiple operations crossing state boundaries and land classifications. Reporting requirements, however, for the most part do not require disaggregation beyond state boundaries (that is, not distinguishing, for example, between production and reserves on Indian lands versus non-Indian lands). Consequently, non-proprietary, public sources of data on reserves and production on Indian lands is at best difficult to come by, and at worst, non-existent. One useful outcome of the Department's Section 1813 study would be to address this resource data deficiency by establishing the tracking of such information specific to production and reserves of oil, gas, and coal on Indian lands, to report it annually (in whatever level of aggregation needed to protect confidentiality), and perhaps to characterize past growth in reserves and production on Indian lands through a one-time study.

Despite the lack of public data and reporting requirements, there are indications that there may be proprietary studies, surveys, and data available that characterize the level of production and reserves on Indian lands. In our search, we were only able to produce a couple of references to such information. As an example, we attach to this response an article by Nancy Appleby, Gregory Hawn, and Nancy Wodka from oilandgasinvestor.com, which states that Indian contribution to domestic production and reserves has been and will continue to be substantial, noting that over the past 20 years, Indian lands have contributed approximately 11% of U.S. onshore oil and gas production, but that this amounts to development of at most a quarter of *known* reserves on Indian lands. (See Attachment 2 to these data responses.)

Finally, while EIA does not necessarily distinguish between Indian and non-Indian lands, it does report, and show graphically in various publications, the location of coal and natural gas basins. One can roughly compare these representations to maps of Indian lands to recognize that a significant portion of our domestic coal and natural gas resource base is likely within the boundaries of and accessible via rights of way accessing Indian tribal land. And as our report documents extensively, at least the Ute Indian Tribe, and in our understanding other tribes as well, have been actively promoting the development of resources within their boundaries through productive partnerships with energy development companies.

The answer below responds to the following 2 questions:

- **QUESTION: Throughout your report you cite to a Natural Gas Intelligence report that there are 310,000 miles of gas pipelines nationally, of which INGAA stated 2,500 are on tribal lands. How confident are you in those numbers? If, not so much, are you aware of any other data?**
- **QUESTION: On page 35, 163,000 miles is given for electric transmission lines, and an estimate for lines on tribal lands. Are you confident in the 163,000 figure, and have you located a number for lines on tribal lands?**

Our estimate of 310,000 miles of gas pipelines is rounded from a total of 314,203 miles of major operating pipelines in the U.S. identified by Natural Gas Intelligence (NGI) in its 2005/2006 CD of "Natural Gas Infrastructure in North America." NGI is a respected source of natural gas industry infrastructure information, with products in use by many companies, analysts, and government agencies throughout the country.

Our reference to 163,000 miles of electricity transmission lines is based on our rounding from a figure of 162,979 miles of major electric transmission lines (230 kV and above) in operation as of 2004 as reported by the North American Electric Reliability Council (NERC) in its most recent long-term reliability assessment. NERC is effectively responsible for reporting on and coordinating the planning for and reliable operation of the North American electricity grid, and is a highly reliable source for information on interstate electricity transmission infrastructure in the country.

Our use of 2,500 miles as part of our report was based on our personal notes from the verbal report of an INGAA representative at the Section 1813 consultation meeting held in April in Denver; we understood at the time that that reference to 2,500 miles represented the total mileage of natural gas pipelines on tribal land. However, in written comments filed with the Departments, INGAA characterizes the 2,500 mile figure as representing ROW easements from 32 tribes in 15 states, including natural gas pipelines and electric transmission lines. The 15 states include most states with any significant amount of tribal land area and gas pipelines that appear to cross tribal lands.¹ If INGAA's survey on this point is accurate, the actual mileage of natural gas pipelines on tribal land is likely to be less, since the 2,500 mile number is associated with both electricity and gas, and most states with significant tribal land are included in the survey. However, absent access to and a review of INGAA data, we simply can not confirm the accuracy of the INGAA number.

¹ The states referred to by INGAA in its comments include Arizona, California, Colorado, Idaho, Michigan, Minnesota, Montana, Nebraska, New Mexico, Oklahoma, Oregon, Texas, Utah, Washington, and Wisconsin. As can be seen in the attached map of "FEDERAL LANDS AND INDIAN RESERVATIONS," published by Nationalatlas.gov, there are several other states (notably, South Dakota, North Dakota and Wyoming) which appear to have significant tribal lands. But based on a visual comparison between the location of the tribal lands in these three other states and the location of gas pipelines (as shown on the attached Platt's map of natural gas pipelines), there do not appear to be many pipelines that overlap with tribal lands in these states.

There may be reliable, verified data available in the public domain on the mileage of interstate electricity transmission lines and natural gas and/or crude oil/refined product pipelines on Indian lands. However, we were unable to find it even after substantial research. Nonetheless, for our analysis and review of the role of Tribes in the overall national energy context, we considered it important to at least capture an order-of-magnitude estimate of how much of the interstate transmission and pipeline systems fall on Indian land. By "order of magnitude" we mean the following: is an appropriately conservative number – that is, one likely to overstate the portion of ROW mileage on tribal land – on the order of 1%, 10%, 25%, or 50% of total ROW mileage? Given the lack of reliable public data sources, to try to narrow the estimate any further could only convey a misleading sense of false precision without improving the accuracy or meaningfulness of the result.

In order to identify this order of magnitude, we first tried to find data on the mileage of transmission lines and pipelines on tribal lands using government and other public sources of data, and were unable to locate any reliable sources. Next, we conducted a search for sources of information from literature or private studies, with similar result. Absent a reliable source for estimating the portion of ROW on Tribal land, and realizing that a comprehensive survey of private companies or BIA data was beyond the scope of our analysis, we then began a review of transmission system, pipeline system and tribal land maps, in order to simply capture what we believe is the magnitude of Tribal contribution to the national interstate electric transmission and natural gas pipeline networks, by a straightforward comparison of land areas using the two maps.

There are several proprietary programs that provide comprehensive information on the interstate natural gas pipeline network, including mileage, size, capacity, system components, etc., and that contain accurate and up-to-date maps of the interstate pipeline network. As noted above, Analysis Group has access to the NGI's maps and data on Natural Gas Infrastructure in North America, and this includes a comprehensive mapping of the pipeline system on a national and regional/state basis. We relied upon the NGI map and data system for our review of natural gas pipeline mileage in the US. In order to compare this with tribal land areas, we note that there are several public sources of data on the location of Indian lands across the country. For this purpose, we relied on the National Atlas Mapping System ("Nationalatlas.gov") to capture the layout of Indian lands on a national and state-by-state basis.

For electricity transmission lines, a source exists that places the U.S. electric transmission system and tribal lands on the same map. This is DOE/NREL's representation of the country's high-voltage transmission network and tribal lands, presented as Figure 14 in our report. While this map is somewhat dated, it was our belief that additions to the transmission network since that time would not have changed the qualitative conclusions we drew, or the order-of-magnitude estimates used in subsequent calculations.

While we can not attest to the accuracy of the INGAA statement that 2,500 miles of natural gas and electric ROW are on Tribal lands (in the states/companies reviewed), this is not what we set out to do in any event. Instead, we reviewed the maps available to us to answer the following two questions: (a) do we have any reason to believe that

2,500 miles is likely to be *significantly lower than* the apparent gas pipeline mileage of ROW on Tribal lands from a visual comparison of maps; and (b) can we create a conservative estimate of an order of magnitude of pipeline mileage on tribal lands that is likely to represent an upper bound?

As noted in our report, based on our review, we consider it unlikely that total ROW mileage on Indian land – for either natural gas pipelines or electricity – exceeds 1%. Recognizing that the actual result would vary considerably by company and region, we chose instead, for the purpose of our calculations of rate and consumer impact, to use 10% as an upper-bound estimate on the portion of ROW on tribal land. We believe that by using 10% rather than 1%, this provided a highly conservative estimate (i.e., over-estimate of costs and consumer impacts).

QUESTION: The answer below responds to the following questions:

- **In calculating the portion of tribal ROW costs attributable to an electricity customer's bill, on page 37 and 38, you assume that tribal lands account for 10% of all ROW lands. Could you remind me how you arrived at 10%?**
- **In the same calculation, you assume that ROW costs are the same for tribal lands v. private lands, given historical compensation and experience on the U & O Reservation. Is this assumption still true in 2004 - which appears to be the year of the data being used? If so, can you provide some examples from the U & O Reservation? And, is this assumption still true in 2004 because of the 50 year (or perpetual) term for electric ROWs, i.e. not many have been subject to renewal? If not, do you think using the 10% allocation (see above) covers any recent increases in tribal ROW costs?**
- **Please answer the two bullets above for your analysis of natural gas prices.**

The answer to the first bullet – how we arrived at an order of magnitude estimate of the portion of utility ROW on tribal land – is presented in the previous response. In this response, we discuss the second assumption in our calculations – that tribal ROW compensation has been not more than non-tribal compensation on an average basis. However, we combine these two questions because in practical effect they are closely related in our calculations. That is, our approach in rate and customer impact calculations was intended to set an upper-bound impact on the contribution of *tribal ROW costs* to *total ROW costs*, combining mileage and compensation factors. In other words, it is more appropriate to consider whether 10% of total ROW costs are attributable to tribal land ROW, than to consider in isolation whether (a) tribal ROW represents 10% of total ROW land, or (b) tribal ROW compensation is now or in the future less than, equal to, or greater than other ROW compensation.

As we suspect the Departments are painfully aware from reviewing comments in this proceeding, there are not robust or comprehensive public data available to accurately capture the universes of tribal ROW mileage and tribal ROW compensation rates. The best there is to-date are visual comparisons, rules of thumb, and widely divergent case studies (the divergence depending on the tribe, the location, the issue, and the entity reporting the results). Given this state of affairs, in our estimates we attempt to answer a more direct and simple question: what is a reasonable upper-bound estimate of the impact of tribal ROW costs on energy transportation rates, and on energy end-use costs? In doing so, we believe we have layered on several levels of conservatism in the analytic approach and assumptions used:

- we did not construct a representation for the country as a whole, we constructed it for the companies and states most likely to be most significantly affected by tribal ROW costs;
- we selected for the calculations an estimate of actual tribal ROW mileage that is an order of magnitude higher than what we believe is actually the case (i.e., using 10% rather than the 1% which could otherwise be reasonably justified); and

- we ignored what we believe to be a history of dramatic under-compensation for energy company use of tribal land, in the interest instead of capturing an upper-bound estimate of the current impacts only.

Our estimate is grounded in the data reported annually by electric and gas companies on FERC Forms 1 and 2. This simple estimate based on company-reported, publicly available data represents nearly the full extent of our calculation, without the need for assumptions associated with tribal impacts. That is, we believe that *even if one assumes 100% of ROW cost is due to tribal ROW, the impacts revealed by FERC form data are small, and are unlikely to suggest qualitatively different conclusions than we drew in our Report with respect to rate and consumer impacts.* However, it is clearly wrong to assume that 100% of total company ROW costs are due to that portion of electric or gas lines crossing tribal land, so we set out to develop the upper-bound estimate for the contribution to ROW *costs* associated with Tribes. Our estimate assumes that tribal compensation on average does not exceed non-tribal compensation on average. (We think that this is appropriate in light of the many and countervailing factors that affect ROW acquisition costs across the country.) We estimate an upper bound of 10% of total ROW on tribal land. The practical effect of these two assumptions is to conclude that of the total ROW costs reported by companies, Tribes contribute not more than 10%.

Is there room in our estimates of consumer impacts to absorb potential future increases in tribal ROW compensation vis-à-vis non-tribal compensation, without changing our findings that the impacts are minuscule? Absolutely. In order for our estimate to be substantively incorrect, one would need to conclude that *the combined effect of the tribal ROW mileage (or acreage) assumption and the average tribal compensation (compared to non-tribal compensation) assumption would lead to a result whereby tribal ROW costs equal or exceed 10% of total company ROW costs.* As noted in our Report, our best estimate is that our assumption of 10% of ROW on tribal lands may be high by at least an order of magnitude – that is, the number is actually more likely to be 1% or less. Thus, until there is verifiable public data demonstrating that the combined effect of actual tribal land ROW and average tribal compensation significantly exceeds non-tribal compensation, it is simply inappropriate to assume tribal ROW impact greater than 10% of total ROW.

Of course, if the Departments wish to get to a clearer picture on this, they could (and should) simply request that companies provide relevant and verifiable data. This would not require information on actual tribal ROW agreements or history, either in aggregate or on a case-by-case basis. It is much simpler than that – all that would be required is a 2-line breakdown of the annual ROW cost data already presented annually in FERC Form 1 and 2 reports: one line for total annual ROW costs (already reported), and another showing how much of this annual cost is associated with compensation to Indian Tribes. Perhaps the Departments could recommend to the FERC that it modify the filing requirements and instructions for FERC Form 1 and 2 reporting from electric and gas companies.

Will the portion of total utility ROW associated with tribal ROW change over time?
Probably – to a limited extent, and fairly slowly; we think this will occur because both

total utility ROW and ROWs on tribal lands are likely to grow over time, with the possibility that the goal of accessing energy resources on tribal lands may slightly shift the ratio over time. Will the comparison of tribal compensation to average non-tribal compensation change over time? It is hard to know, as pipelines may need to be added not only on tribal lands, but also on non-tribal land, where costs may be rising due to a variety of pressures relating to urban densities, development increases, and rising land values. Further, based on our examination of ROW compensation from the Ute Tribe, while ROW compensation in recent agreements may be higher than historical compensation, there is no reason to believe that compensation levels will increase further above the levels in these recent agreements. In any event, we would expect significant variances on a regional, state, utility, and specific-ROW basis. We have no doubt that the record in this investigation is full of single examples that span the spectrum – from tribal ROW for which compensation has been essentially zero, to the El Paso headliner request of \$440 million for the Navajo renewal. What matters, however, is where the impact of tribal ROW sits relative to the cost drivers of transportation rates and end-use bill impacts ultimately seen by customers. We have conservatively and conclusively demonstrated that the impact is barely, if at all, noticeable. Even if one does assume significant changes in tribal requests going forward, we do not believe this fundamental conclusion will change. We see no reasonable basis to expect that Tribal ROW to become a significant component of energy costs. However, we encourage the Department to not take our word for it, but instead to require that companies make public filings of the data underlying annual ROW costs that are the basis for company electricity and gas transportation rates.

QUESTION: The answer below responds to the following 4 questions relating to our analysis of SEC filings of utility companies:

- **On page 49, you state that 3 companies characterized the negotiation of tribal ROWs as a material issue in annual reports filed with the SEC. Who were these companies, and how many times did each one raise the issue?**
- **Can you provide citations to when they raised the issue, or better yet, quotes from those citations?**
- **What is the total number of SEC filings that you reviewed?**
- **Of all the SEC filings that you reviewed what percentage raised tribal ROWs as a material issue?**

In its analysis of Western electric and gas utilities' disclosure statements filed with the SEC, Analysis Group reviewed a total of 86 10K filings covering 18 companies over the period from 2001-2005. The list of companies reviewed is: Arizona Public Service Company, Avista Corporation, El Paso Corporation, El Paso Natural Gas, Gas Transmission Northwest Corp, Idaho Power, MidAmerican Energy, Northern Border Pipeline, Northwest Pipeline, PacifiCorp, Pacific Gas & Electric, PNM, Questar Corporation, San Diego Gas & Electric, Sierra Pacific Resources, Southern Union, Southwest Gas Corporation, Tucson Electric.

All told, these 86 filings amounted to 6,597 pages of discussion for the 18 companies. Recall that these companies were selected for study because they were presumed to represent a set of electric and gas utilities located in Western states where there was a relatively high likelihood that utility ROW crossed tribal lands. For context, 93% of the 86 filings mentioned that regulation in general was a material issue; 12% indicated that energy facility siting was a material issue; that ROW in general were a material issue in 3% of the filings. While our research indicated that ROW on tribal lands was mentioned as a material issue by three companies, this analysis revealed tribal ROW was noted as a material issue on *only 6* of the 6,597 pages (0.09%) of SEC filings reviewed for the 18 companies. (Page counts exclude any exhibits included with the filing, and are thus conservative.)

The following three companies characterized the negotiation or renegotiation of tribal ROW as a material issue in 10-Ks:

- El Paso NG,
- Northern Border Pipeline,
- Southern Union.

The relevant citations are as follows:

- El Paso Natural Gas (2003 10-K p. 12; 2005 10-K p. 14),
- Northern Border Pipeline (2001 10-K p. 22; 2002 10-K p. 24; 2003 10-K p. 29), and
- Southern Union (2005 10-K p. 25).

Discussion of tribal ROW as a material issue appeared on 6 of the 536 pages (0.1%) of SEC filings reviewed for these three companies. Page counts exclude any exhibits included with the filing, and are thus conservative. (Also, note that the 2005 10-K filing of El Paso Corp contains a reference to tribal ROW that is excluded from this count, as it is substantially similar to that of its subsidiary El Paso Natural Gas. The reference to tribal ROW in the 2005 El Paso Corp filing (page 128) frames the issue as affecting only El Paso Natural Gas, and was thus excluded to avoid double-counting.)

Finally, it is instructive to review the specific characterizations of Tribal ROW issues within the filings of the three companies which address this issue.

- El Paso, of course, is referencing the financial uncertainty associated with its well-publicized dispute with Navajo Nation.
- In Southern Union's case, Tribal ROW discussion is limited to (1) recognizing that recovery of new or renewal ROW costs is a financial concern *in the event* that the company is not allowed to recover such costs in rates (in other words, a specific example of the standard regulatory rate recovery risk identified in nearly ALL utility SEC filings), and (2) identifying as a legal matter the filing of lawsuits associated with trespass claims on tribal and allottee lands, claims whose settlement are either in process or before the BIA for approval.
- In Northern Border Pipeline's case, the only significant financial issue mentioned related to Tribal ROW is associated with a Tribal claim to collect back taxes related to a pipeline on tribal land, a dispute that was resolved through a mediation process resulting in a settlement that provides for up to 50 years of ROW renewal after the current ROW expires in 2011. Northern Border states that it expects the settlement will be approved by BIA, and the company will seek regulatory review and rate recovery of associated costs, only identifying as a potential material financial impact the normal risk of regulatory disallowance for any cost faced by all rate-regulated utilities when subject to rate regulation by public utility commissions.

In considering these factors, we were not sure that it was even appropriate to include in our report either Southern Union or Northern Border in a group of companies characterized as identifying Tribal ROW as a material risk, but did so in any event to ensure that we were not understating the consideration of such issues by electric and gas utilities. We encourage the Departments to review the relevant SEC risk characterizations to determine for themselves whether or not it is really only one company -- El Paso -- actively characterizing Tribal ROW as a material risk.

QUESTION: On page 58, the text states that the date range of the chart is from the mid-1960's to 2005, but the chart is from 1980 to 2005. Do you have data, or a chart, for this larger date range? How many of these ROWs are natural gas or electric transmission ROWs?

The supplemental data tables (in Attachment 3 to these information responses) provide the number of ROWs granted for all years as reported by BIA for the Uintah & Ouray Reservation. The table separately reports the number of ROWs for the following five categories: total ROWs, well sites, pipelines, access roads, and electric transmission lines. As noted in the report, these data reflect the BIA's physical records and data as input by the BIA, or its consultants. Consequently, the absolute quality of the data is not known.

For several reasons, data from earlier periods should be used with some caution. First, the BIA database reflects physical records held by BIA which may be less complete for periods in the more distant past. Second, for some renewed ROWs, information on the original ROW is removed from the database as renewals occur. Consequently, the database may not fully reflect all ROWs granted from earlier periods. Since ROW terms are typically 20 years, ROW data prior to 1985 may reflect such undercounting.

Pipeline data reflect three types of pipelines: natural gas pipelines, water-injection pipelines,² and oil pipelines. However, data are not maintained in a form that allows natural gas pipelines to be distinguished from oil and water-injection pipelines in each year. Out of the 1,377 pipeline ROWs on the Uintah and Ouray Reservation, three of these are oil pipelines and approximately 470 are water-injection pipelines. Consequently, approximately two-thirds of the pipeline ROWs are for natural gas pipelines. These totals include both regulated pipelines and unregulated feeder pipelines.

² In order to stimulate production from wells that have declined in production, water is injected back into the well reservoir to increase pressure and force up additional quantities of oil and natural gas. Water-injection pipelines transport water to and from the well site as a part of such operations.

QUESTION: On page 58, you state that over 200 ROW applications are pending approval by the BIA. How many exactly? How long have these applications been with the BIA? Is this a typical number awaiting approval? Or, do they represent a special circumstance?

In the discussion on Page 58 of the Utes' May 15th Report (Tierney and Hibbard), the statement regarding "over 200 ROWs" is made with reference to the administrative approval of previously undocumented ROWs. These ROWs have been identified pursuant to research performed by the Tribe that compared current *de facto* land uses by outside parties and uses as specified in documented ROWs. As noted in the Report, this research identified "defects in the grants of access, or discrepancies between the terms of the right of way agreement and actual practice in the field, or expiration of a right-of-way agreement, or other reasons" (Tierney and Hibbard, page 74). The Ute Tribe is currently analyzing each company's operations to determine the extent of undocumented ROW. Negotiations between the Ute Tribe and individual companies have led to various efforts to formalize all such undocumented ROWs at appropriate compensation levels, some of which are described in the case studies included in the Report.

For previously undocumented ROWs, the Ute Tribe has reached agreements with six outside parties; these agreements set out the terms and conditions frequently through Surface Use Agreements that stipulate uniform terms and conditions for all ROWs for that company. The process of formalizing undocumented ROWs, however, is very time consuming, requiring site visits and measurements, documentation, and approval by the BIA. The Ute Tribe and BIA place a higher priority on processing of new ROWs, including renewals, since continued operations on undocumented ROWs does not depend on completion of these administrative steps. Consequently, while these ROWs have been approved by the Ute Tribe, administrative processing proceeds at a slower rate than ROWs for new grants of access. As noted in the Report, "over 200 ROWs" are pending approval, with a portion of these awaiting BIA approval, although data are not maintained in a format that allows more precise estimates.

QUESTION: You note that even though these applications are pending, there has been no-interruption of commercial operations. Is energy being transported in the absence of an approved ROW? If so, have there been any reliability issues associated with the uncertain status of these ROWs?

During the process of identification, documentation, and resolution of undocumented ROWs, the Ute tribe has allowed all commercial operations, including energy transportation, to continue on associated lands. As a result, no disruption of operations or actions affecting reliability has resulted from either negotiations or lags in ROW approvals. Once reaching terms on the process for addressing undocumented ROWs, firms have been able to continue operations without fear of legal action or concerns about continued access. This consent has been provided through both informal communications and formal agreements between the Tribe and outside parties that specify the timeline and process for addressing undocumented ROWs.

In fact, for several reasons, it is generally in the Tribe's interest to allow such operations to continue without interruption. First, many companies pay ongoing royalty and/or severance taxes on minerals extracted under Tribal leases. Disrupting operations would lead to a suspension of these activities and the royalty and tax payments associated with them. Second, the effective date of agreements is typically set at the date when negotiations commenced; consequently, ROW payments are received during the negotiation period. Consequently, disrupting operations during the negotiation period would reduce the level of payments to the Ute Tribe. Third, the Ute Tribe attempts to develop and maintain a reputation favorable to the formation of partnerships with outside companies; actions interrupting operations raises business risks for potential development partners that either reduce their willingness to partner with the Ute Tribe or reduce the compensation they are willing to pay for such partnerships. Consequently, the Ute Tribe attempts to minimize these interruptions to create favorable business conditions.

QUESTION: The data on page [i.e., Figure] 29 show numbers of companies granted ROWs. How many of these companies were natural gas companies or electric transmission companies?

Data on the annual number of companies granted ROWs is provided in the supplemental data tables (Attachment 3 to these information responses). The Ute Tribe has granted access to more than ten companies for electric power transmission lines. These companies include the local electric power co-operative (Moon Lake Electric Association), a regional electric utility (Utah Power and Light), and other energy companies constructing power lines to operation sites. Natural gas companies operating on the Uintah and Ouray Reservation include companies operating both regulated and unregulated pipeline operations.

Can you provide larger versions on the Figure 32 charts for transmission ROWs and pipeline ROWs, so that exact numbers can be derived. Are the pipeline ROWs just natural gas or are some oil? If any are oil, or other products, can you provide a chart for natural gas ROWs?

The supplemental data table described in the previous response (and included in Attachment 3 to these information responses) provides the numerical data for each graph in Figure 32. As discussed earlier, pipelines include natural gas, oil and water-injection pipelines, although approximately two-thirds of these totals are natural gas pipelines.

QUESTION: On page 62 and 63, you note ROWs provided for designated areas. Do you have data, or can estimate, how much these agreements speed up the ROW application process?

Prior to the use of various "Designated Area Agreements (which include Surface Use Agreements (SUAs), Exploration and Development Agreements (EDAs), and related agreements), each individual ROW request would undergo a full approval process, including preparation of the ROW and grant of easement documentation, approval by the Tribal Business Committee, and review and approval by BIA. Designated Area Agreements remove or shorten many steps in this process; in particular, approval by the Tribal Business Committee is not required and review and final approval by the BIA is greatly shortened because of previous approval of the general terms and conditions of the Agreement by BIA. As a result, the administrative approval process for an ROW may be shortened by up to two months. In addition, the agreements provide flexibility to allow access in as little as one day if urgent or emergency circumstances arise requiring an immediate grant of access. Such immediate access would be more difficult without the prior consent and agreement reached through the Designated Area Agreement.

More importantly, however, Designated Area Agreements (DAAs) set forth the terms and conditions under which ROWs are granted. The fact that these terms and conditions are pre-determined eliminates the required negotiating period for any subsequent agreement covered under the DAA. In fact, since agreements are set at terms and conditions mutually agreeable to both parties, the agreements act as an incentive for the Tribe to shorten the administrative approval process to ensure that development projects proceed as quickly as possible.

QUESTION: In these designated area agreements, does the tribe negotiate ROW compensation based on a real estate appraisal method? Or, is the compensation based on a production or throughput value? In these situations is it possible to know ahead of time how many ROWs will be required for a designated area? And/or, would a real estate appraisal method be functional for these designated area agreements?

Is there something about designated area agreements that tend to encourage exploration and bringing new production on-line? If so, can the Tribe show how much production has been brought on-line using such agreements?

The Ute Tribe does not negotiate on the basis of a real estate appraisal method, and this method is generally not informative to determining fair and appropriate compensation for grants of access. Previous agreements developed by the Ute Tribe with outside partners or similar agreements made between other Tribes and outside partners may inform the Ute Tribe in their negotiations. However, fair and appropriate terms and conditions will reflect the particular circumstances of the partnership between the Ute Tribe and outside partners, including the physical resources under development, the assets being developed, complementary assets held by the Tribe or outside partners, past business experience between the Tribe and outside partners, and the risk and operations management approach of the outside partner.

As indicated in Table 4, a wide variety of compensation mechanisms have evolved from such negotiations. In many circumstances, a portion of compensation is tied to the production or throughput from the activity granted by the ROW. This arrangement allows development risk to be shared and interests to be aligned between the Tribe and outside partner; if, for example, ROWs are not developed or wells are not productive, the Tribe does not receive compensation. The real estate appraisal method does not capture this structural incentive in the compensation arrangement.

Over time, variation in the terms of compensation has diminished as the Tribe has determined preferred arrangements from its vantage point. However, the flexibility provided by the negotiation process allows partnership agreements to reflect the financial, risk, ownership, and operational preferences of both the Tribe and outside partners, as well as the unique circumstances of the resources under consideration. Absent this flexibility, which is inherent to the negotiation process but largely inconsistent with the real estate appraisal process, many of the agreements between the Ute Tribe and outside parties would not have transpired or been implanted at the scale eventually agreed to.

In general, the number of ROWs granted under a Designated Area Agreement is not known in advance. In fact, Designated Area Agreements are designed to provide outside partners with flexibility to develop designated areas depending on the productivity of early projects, market conditions, and other company operations. Many of the Designated Area Agreements represent previously undeveloped lands where there is uncertainty about the productivity of the underlying reserves. In these circumstances, the Designated Area Agreements, particularly those providing exclusive access, provide

outside partners with the option to develop the resources if the financial prospects of development appear profitable.

Designated Area Agreements encourage new exploration and production by reducing the cost of negotiation between Tribe and the company, shortening the approval process, providing outside partners with security about access and the terms for access to local resources, encouraging regional coordination of energy infrastructure to achieve scale economies and improve operations, and – last, but not least – properly aligned incentives for the Tribe and the company. The Agreements provide an important mechanism for the Tribe to develop working partnerships with outside companies by allowing both the Tribe and outside partners to better plan the development of designated lands.

Since 2002, DAA's have resulted in the development of nearly 200 wells; this count includes many exploratory wells that, if they successful in proving significant reserves, will lead to a large growth in production.

QUESTION: Do Figures 33 and 34 include ROWs other than natural gas pipelines and electric transmission lines? If so, can the charts be revised to show just this data?

Average ROW payment per acre and per ROW for natural gas pipelines, electric power transmission lines, and all ROWs are provided in the supplemental data tables. Note that the averages are based on a sample of ROW representing approximately 70 percent of all ROWs on the Uintah and Ouray Reservation.

QUESTION: On page 74, you discuss trespass issues. How many ROWs are currently in trespass on tribal lands? Does the Tribe assess penalties or receive some other compensation while a ROW is in trespass? While in trespass are companies ever prohibited from accessing their facilities? Have any trespass issues ever resulted in a disruption of service or reliability issue?

It is difficult to determine the extent of trespass on Tribal lands. As discussed above, the Ute Tribe is currently in the process of examining each company's operations to determine the extent of undocumented ROW use that leads to trespass. All companies examined to date have been in trespass, although the extent of trespass has varied greatly; some companies have had hundreds of undocumented ROWs, while one company had only seven. It is likely that companies whose operations have yet to be examined are also in trespass; in fact, several companies yet to be reviewed have, in discussions with the Tribe, acknowledged that some operations are performed on undocumented ROWs.

Despite what is likely widespread trespass in some cases, the Tribe generally does not impose penalties for trespass. As noted earlier, agreements with the Tribe to resolve undocumented ROWs typically have an effective date set at the date when negotiations with the individual company began; the Tribe does not impose penalties for previous trespass and ROW payments from the negotiation date represent standard ROW compensation payments, not penalties. An exception to this rule, however, are some older agreements, signed during the 1980's and 1990's that include clauses requiring nominal payments (e.g., \$1,000) to a scholarship fund in the event of trespass.

Aside from a few minor instances, the Tribe has not prohibited companies from accessing facilities or taken other actions to disrupt service. In two instances, changes in ownership status resulted in temporarily interruption of operations until proper approvals were received; in both cases, interruptions lasted less than two weeks. In a third case, operations at one well site were interrupted for roughly one week until the company agreed to discuss the resolution of outstanding issues identified by the Tribe on existing ROWs owned by the company.

QUESTION: Are any of the case studies provided the same ones Historical Research Associates is compiling?

None of the agreements provided to HRA pertain to the case studies.

QUESTION: In Case 1, page 78, you note that the Tribe negotiated "long-term" pipeline agreements. Did these agreements result in long-term ROWs and if so how long?

In this case, the pipeline concession agreement provides the counterparty pipeline company with an initial 10-year ROW with the option to renew for an additional 10 years.

QUESTION: In Case 2, page 83, you state that the parties eventually engaged in joint ventures and exploration. Can you provide data on whether this arrangement resulted in additional production and how much?

The agreement has resulted in drilling of over 100 wells, although data on the production of these wells is not readily available.

QUESTION: On page 87, do you have any data on the number of natural gas leases that were granted and then never developed? When these leases expired, was the Tribe or someone else able to develop the resource?

Many leases for exploration and development of potential natural gas and oil reserves held under the Ute Tribe's subsurface mineral rights have been granted but subsequently never developed. However, data are not maintained in a form that allows the number of such leases to be quantified.

QUESTION: On page 88, do you know how many natural gas and electric ROW applications have been denied v. the amount granted since the tribe has adopted its active management approach?

The Ute Tribe has not denied any ROW applications except under circumstances when the proposed activity conflicts with either environmental factors identified by the National Environmental Policy Act (NEPA) or cultural, archeological and historical factors identified by the Ute Tribe. Frequently, these proposed uses are eventually approved after amendment of the proposal to mitigate impacts of the proposed uses. Since 2001, the Ute Tribe has approved 14 electric transmission line ROWs, 4 of which were granted to electric utilities. Over the same period, 531 pipeline ROWs were granted, although, as discussed earlier, data are not maintained in a format that allows natural gas pipelines to be distinguished from other types of pipelines.

The Ute Tribe has never rejected a ROW request for an electric power transmission line. The utilities, however, have indicated a desire to improve the speed of such approvals. In an effort to improve this process, the Tribe is currently negotiating with the local electricity cooperative to develop a Surface Use Agreement to cover all future ROW requests. The SUA would be intended to speed up the approval process and provide the utility with further certainty that approvals will occur in a timely fashion, thus facilitating their operations planning.

In rare cases, the Ute Tribe has failed to act on ROW applications if the outside company fails to offer reasonable compensation. In one circumstance, for example, the Ute Tribe has declined to approve ROW applications for a company because the two parties have been unable to agree to terms and conditions for undocumented ROWs on which the company has existing, and uninterrupted, operations. From our experience, this is not dissimilar from actions by state and federal permitting agencies that put to the end of the permitting queues those projects that submit incomplete applications or fail to substantiate all elements of the project proposals.

QUESTION: I can't recall whether there was any data on the range or average term of natural gas and electric transmission ROWs that the Tribe grants. Could you please direct me to that data, or provide it if it is available?

Page 63 of the May 15th Report of the Ute Indian Tribe discusses the ROW terms. As indicated, the vast majority of ROWs extend for 20 years. Less than 5 percent of ROWs extend for finite terms other than 20 years. The remaining ROWs, generally associated with lease agreements or well sites, extend for the life of the lease or the productive life of the well associated with the ROW.

QUESTION: In addition, it appears that some agreements might include consideration of future renewals. Is that correct? And, if so, do agreements of this nature effectively extend the term of the ROW? If agreements that promote future renewals exist, do the agreements also describe under what circumstances would a future renewal be declined? And, what are those reasons?

The vast majority of agreements specifying fixed terms in years have some language regarding renewal. Past agreements vary in the terms for contract renewal. Some contracts specify a methodology for determining compensation while others provide relatively imprecise language regarding compensation. Renewal under older agreements typically requires approval of both the Tribal Business Committee and the outside company.

Agreements developed under the new Tribal management have evolved to provide outside partners with a more clearly defined renewal option. First, the new agreements more clearly specify the terms of compensation if ROWs are renewed; frequently, renewal continues the compensation provisions of the initial term. Second, the agreements do not require Tribal approval to invoke ROW renewal. Consequently, renewal is solely at the company's option, thus effectively extending ROW terms to 40 years.

While the effective term of ROW agreements typically extends to 40 years or the productive life of associated well, companies can typically terminate ROW agreements, and associated payments, at their discretion by ceasing productive operations. Once operations have been ceased for two years, ROWs expire and all obligations under the ROW cease once the company has restored the site back to previous condition. Thus, the company has an effective option to terminate uses and payments at any time if compensation terms become financially unprofitable.

QUESTION: On page 99, is there any literature that discusses the negotiation process as the most reliable method for determining fair and appropriate compensation?

A bedrock principle of business transactions is that in circumstances where arm's length negotiations – that is, negotiations between an unrelated willing buyer and an unrelated willing seller – produce a deal, then the terms of that deal can be considered fair and appropriate for the parties to the transaction. The principle is so fundamental that it is often presumed – rather than explicitly described – in the business and economics literature. One example is as follows:

In many valuations, the terms "arm's-length negotiation" or "arm's length transaction" are invoked. These terms mean that a transaction taking place is between two unrelated parties, or at least two parties who are trying to maximize their side of the bargain. This does not mean that each party has equal information about what an asset is worth; in other words, there can be information asymmetry. Indeed, because intangibles often are harder to value than tangibles, information asymmetry plays an important role in negotiating acquisition where intangibles loom large. But to be at arms' length, whatever price eventually is reached is not the result of a non market relationship or agreement between the two parties. A simple exception is when a parent sells the family home to a child for a price below market. An intangible asset example might be when a corporation licenses at a heavy discount some piece of intellectual property, such as a trademark, to a subsidiary or franchisee. (Jeffrey A. Cohen, *Intangible Assets: Valuation and Economic Benefit*, John Wiley & Sons, New York: 2005, pages 5-6.)

Negotiations between un-coerced and fully informed parties have a fundamental role in determining fair, appropriate, and efficient prices within market economies. In fact, development of efficient market prices requires that independent parties are able to freely negotiate the terms of market transaction. Such transactions do not occur unless they are perceived to be fair by both parties; if they do not perceive the terms to be fair, they can choose not to enter the transaction and do business with other parties. That is,

The equilibrium price is the unintended consequence of the self-interested exchange. Suppliers charge as high a price as they can, what the market will bear; if you as a demander are irritated by this lack of charity, feel free to call it "price gouging" or charging an "exorbitant" price. But keep in mind that you as a consumer offer as low a price as you can, what the market will bear: in the supplier's eyes you are "exploiting" the supplier or paying an "unfair price." (Donald McCloskey, *The Applied Theory of Price*, p. 97-98.)

When parties cannot freely negotiate the terms of a transaction, and the resulting transaction occurs at terms different from that which would have occurred following negotiations, then one of the parties has been forced to enter the agreement at terms that would they would not have agreed to. It is hard to see how such an outcome can be construed as "fair and appropriate." Consequently, negotiations are the only

mechanisms available to insure that transactions occur at terms mutually agreeable to both parties.

Further, when parties can not freely negotiate these terms, then problems emerge. Parties may be either unwilling to offer their resources because they will be undervalued, or will create obstacles to the transaction going forward. Regardless, resources will likely be over or under-utilized. Over utilization may occur if one party obtain such advantageous transaction terms that they would consume more of the good or service than they otherwise would if the transaction was consummated at an efficient price.

QUESTION: On page 100, do you have any data on the costs (or other terms) that merchant transmission companies pay for ROWs? Or, any information on the negotiation process merchant transmission companies are subject to, and whether that process has resulted in service disruption or reliability issues?

Re: data on what merchant companies pay for ROW: We are not aware of any literature or industry presentations that provide data on the cost of land for merchant energy projects – whether merchant transmission lines or merchant power projects. By definition, these projects are not subject to cost-of-service regulation and typically the underlying costs associated with a project (e.g., its land acquisition cost, its construction cost, its labor costs) typically are not publicly available. Even in situations where such the owners of such projects have signed long-term contracts to sell products (e.g., capacity, energy) from the project, the specific costs associated with land acquisition may not be public. In theory, there would be public records associated with property valuations and property taxes for individual projects posted in local taxing entities, but we have not conducted a search of such records.

Re: information about merchant project negotiations: Sue Tierney of Analysis Group has direct, personal experience consulting to teams involved in developing merchant transmission and/or power generation projects. None of these projects had the benefit of the possibility of or actual use of acquiring land through eminent domain. In each case, each parcel of land had to be acquired from the open real estate market for the market price – with such price and other terms and conditions arrived at through negotiations between the seller of the land and the purchaser. Tierney is aware that acquisition of land on the open market – and the buyer's willingness to pay some amount for acquiring land rights for a particular project – was shaped by the various elements of the overall project configuration. For example, willingness to pay an amount for a site for the project (and any associated parcels for fuel pipelines and/or transmission lines) was influenced by a variety of economic trade offs, including for example: the asking price for the land; the cost to acquire other suitable parcels of land; the zoning of the land and any changes in zoning that might need to be obtained; the distance of each parcel to the pipeline and transmission systems, including the likelihood of being able to obtain land for interconnections to such; the time it might take to acquire the site, to obtain any zoning changes, to permit and build the interconnections to gas pipeline systems and the electric grid; the property tax rates in the various local jurisdictions; any payments (e.g., in lieu of taxes, or other "mitigation" payments to local communities) that might need to be made if the project were located on one parcel versus another; and so forth. Each one of these elements involved cost-related trade offs, and in the end the sum of these costs had to fit within the overall economics of the project – i.e., within its market value. If, for example, an early project in-service date would positively affect the net revenues from the facility, the developer was willing to pay more to acquire land in a location that afforded more timely access to the market. Tierney is aware that it was not uncommon for a developer to send an agent to acquire the property, due to the expectation that if the seller knew that the project were intended for development of a power project or a merchant transmission facility, it could affect the asking price for the property.

We are not aware of any circumstances where problems relating to access to land caused a reliability or service disruption problem. We are aware of other permitting issues (e.g., environmental impacts, need for the project) and financing considerations which did lead to disputes over bringing the projects to commercial operations.

QUESTION: In footnote 84, you note that some properties cannot be valued or are unlikely to be subject to ROWs. Do you have any information on how rare or unique lands, such as national park lands, are valued or negotiated for in the ROW context?

There are certain rare and unique lands whose owners will not make them available for sale, easements or rights of way; in other words, these are priceless from the point of view of valuation. Examples we used in Footnote 84 of our report were the Taj Mahal in India, or the Parthenon in Greece, or Windsor Castle in England. In these instances, because they are owned by the government and held in trust, their valuation cannot be negotiated except through a voluntary act or policy decision of the sovereign government. There is some discussion among legal scholars about whether property or lands held in trust by the government for a public purpose can be sold or abandoned or diverted from the uses for which the trust was created; in that sense, again, they might be considered priceless. See, for example, the following discussion:

Although it would be inappropriate for a court to declare that governmental resource allocations are irreversible,[footnote 36], the government may certainly make less binding commitments which discourage certain reallocations. An example of such commitments is found in the 'forever wild' clause in the New York constitution [footnote 37], which reserves the Adirondack forest as a wilderness – a dedication to public uses which cannot be abrogated without a constitutional amendment repealing that clause. Similarly, many statutory dedications, such as those creating public parks, will be interpreted as immune from changes without specific statutory authorization.[footnote 38]. (Joseph L. Saxe, "The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention," Michigan Law Review, Vol. 68: 471, at 482-483.

In jurisdictions where statutes allow the legislature to make public lands available for private use, the valuation process is explicitly one rooted in subjective values, rather than monetary values. For example, in a state (like New York, which requires a constitutional amendment to affirm a decision to remove Adirondack Park lands from wilderness states, or like Massachusetts, which requires a 2/3 vote of the legislature to make the state's "Article 97" parkland available for private use), the valuation process requiring such strong affirmative votes is inherently a procedural and democratic means to place value on public lands for non-public purposes. Where intangible public trust values are at stake, these are means to determine whether the proposed use is worth it to those entrusted and empowered to act on behalf of the public in valuing the activity at hand relative to retaining the land in public use.

QUESTION: On page 108, you cite to some examples where state or municipal governments may decide not to issue a ROW if, for example, citizens are not served or unique lands may be affected. Do you have copies of utility commission decisions, or other documents, that might illustrate these examples?

We are not aware of utility decisions that indicate examples of where a utility unsuccessfully attempted to acquire rights to use a parcel of land due to a decision of a state or local government to withhold the land for utility use. It strikes us as unlikely that such would come to a commission for decision, since – to our knowledge of the law in most jurisdictions – the utility would not be able to exercise eminent domain as a means to acquire such land and could therefore not take such requirements to the public utility commission (for its approval).

A recent example of a state legislature's decision about whether to allow an energy project use public land is occurring in Massachusetts. As noted in the attached article (Attachment 4), the Massachusetts legislature recently shelved a proposal to use state parkland in a federal recreation area for an energy project. The land is on Outer Brewster Island; the island is state parkland managed by the state's natural resource agency, and the island is located within the National Park Service's Boston Harbor Islands National Recreation Area. An energy company, AES Corporation, recently requested that the state legislature vote to permit the use of Outer Brewster Island the purpose of siting a liquefied natural gas facility. A decision to use state parkland for a private purpose (including for a utility purpose, such as a regulated natural gas pipeline) requires a 2/3 vote of the state legislature. The Massachusetts Secretary of Environmental Affairs and the Superintendent of the Boston Harbor National Recreation Area (part of the National Park Service) have weighed in that removing this land from part use for an industrial facility is inconsistent with legislative and policy mandates and should not occur. As of this writing, the proposal has been shelved in legislative committee (see attached article).

**Attachment 1 –
MMS/DOI Data on Indian Mineral Leases**

Mineral Revenues 1993

Indian

Table 25.--Summary of sales volume, sales value, and royalties by State and commodity from Indian mineral leases, Calendar Years 1937-93 (cont.)

	1937-88	1989	1990	1991	1992	1993	1937-93
Wyoming							
Oil in Barrels							
Sales Volume	250,981,376	2,903,945	2,775,325	2,446,113	2,377,418	1,998,419	263,482,596
Sales Value	\$1,385,564,990	\$ 43,644,439	\$ 53,113,393	\$ 39,998,659	\$ 33,763,484	\$ 26,496,232	\$1,582,581,197
Royalties	\$ 198,176,825	\$ 7,773,964	\$ 10,076,457	\$ 7,540,665	\$ 6,745,055	\$ 5,385,643	\$ 235,698,609
Gas in Mcf							
Sales Volume	334,783,972	16,485,447	6,825,391	6,350,739	5,307,732	11,226,343	380,979,624
Sales Value	\$ 263,623,221	\$ 29,708,116	\$ 16,831,502	\$ 15,716,594	\$ 12,741,101	\$ 17,648,161	\$ 356,268,695
Royalties	\$ 39,266,180	\$ 4,074,330	\$ 2,419,975	\$ 2,439,482	\$ 2,103,759	\$ 2,821,107	\$ 53,124,833
Other Products							
Sales Value	\$ 6,692,681	\$ 9,689	\$ 3,811	\$ 1,189,504	\$ 314,803	\$ 239,834	\$ 8,450,322
Royalties	\$ 649,285	\$ 411	\$ 527	\$ 137,749	\$ 37,633	\$ 10,484	\$ 836,089
Total Royalties							
All Minerals	\$ 238,092,290	\$ 11,848,705	\$ 12,496,959	\$ 10,117,896	\$ 8,886,447	\$ 8,217,234	\$ 289,659,531
	1937-88	1989	1990	1991	1992	1993	1937-93
Indian Totals							
Oil in Barrels							
Sales Volume	1,268,594,607	15,472,363	15,317,646	14,176,197	15,332,033	14,601,598	1,343,494,444
Sales Value	\$8,047,683,197	\$269,801,995	\$330,457,469	\$283,383,813	\$279,711,971	\$243,901,399	\$9,454,939,844
Royalties	\$1,139,514,826	\$ 40,835,885	\$ 52,207,285	\$ 44,431,636	\$ 46,386,064	\$ 40,358,446	\$1,363,734,142
Gas in Mcf							
Sales Volume	3,896,355,135	114,452,197	126,939,751	131,985,320	149,685,398	189,006,082	4,608,423,883
Sales Value	\$3,268,291,057	\$190,532,422	\$219,727,298	\$210,187,959	\$248,754,839	\$341,569,493	\$4,479,063,068
Royalties	\$ 431,437,350	\$ 24,632,980	\$ 29,750,975	\$ 29,223,094	\$ 34,630,655	\$ 48,030,441	\$ 597,705,495
Coal in Tons							
Sales Volume	400,675,308	26,982,687	27,526,318	32,090,432	28,144,767	28,091,462	543,510,974
Sales Value	\$4,253,640,891	\$498,952,769	\$531,632,387	\$543,959,584	\$547,885,670	\$541,918,731	\$6,917,990,032
Royalties	\$ 217,042,334	\$ 47,677,927	\$ 60,791,496	\$ 62,883,284	\$ 65,918,888	\$ 64,749,821	\$ 519,063,750
Other Products							
Sales Value	\$1,930,016,548	\$ 78,790,386	\$ 74,185,401	\$ 70,640,984	\$ 75,611,044	\$170,965,178	\$2,400,209,541
Royalties	\$ 210,268,122	\$ 9,283,010	\$ 9,243,132	\$ 8,647,341	\$ 9,461,608	\$ 13,232,648	\$ 260,135,861
Total Royalties							
All Minerals	\$1,998,262,632	\$122,429,802	\$151,992,888	\$145,185,355	\$156,397,215	\$166,371,356	\$2,740,639,248

Mineral Revenues 1996

Indian

Table 28. Summary of sales volume, sales value, and royalties by State and commodity from Indian mineral leases, Calendar Years 1937-96 (cont.)

	1937-92	1993	1994	1995	1996	1937-96
Wyoming						
Gas						
Sales Volume	369,753,281	11,226,343	9,480,135	13,767,763	15,426,502	419,654,024
Sales Value	\$ 338,620,534	\$ 17,648,161	\$ 14,202,443	\$ 14,600,508	\$ 15,659,653	\$ 400,731,299
Royalties	\$ 50,303,726	\$ 2,821,107	\$ 2,382,380	\$ 2,315,144	\$ 2,672,664	\$ 60,495,021
Oil						
Sales Volume	261,484,177	1,998,419	1,845,015	1,909,177	2,006,628	269,243,416
Sales Value	\$1,556,084,965	\$ 26,496,232	\$ 21,773,231	\$ 25,615,408	\$ 40,308,290	\$ 1,670,278,126
Royalties	\$ 230,312,966	\$ 5,385,643	\$ 4,065,760	\$ 5,447,990	\$ 8,304,712	\$ 253,517,071
Other						
Sales Value	\$ 8,210,488	\$ 239,834	\$ 157,799	\$ 160,452	\$ 175,225	\$ 8,943,798
Royalties	\$ 825,605	\$ 10,484	\$ 6,630	\$ 6,741	\$ 7,356	\$ 856,816
Total Royalties	\$ 281,442,297	\$ 8,217,234	\$ 6,454,770	\$ 7,769,875	\$ 10,984,732	\$ 314,868,908
Indian Totals						
Coal						
Sales Volume	515,419,512	28,091,462	28,921,412	28,365,138	26,304,968	627,102,492
Sales Value	\$6,376,071,301	\$541,918,731	\$558,105,134	\$532,189,959	\$521,289,702	\$ 8,529,574,827
Royalties	\$ 454,313,929	\$ 64,749,821	\$ 68,904,413	\$ 65,690,348	\$ 63,063,871	\$ 716,722,382
Gas						
Sales Volume	4,419,417,801	189,006,082	209,030,250	217,810,606	248,489,802	5,283,754,541
Sales Value	\$4,137,493,575	\$341,569,493	\$338,707,877	\$254,438,181	\$345,839,080	\$ 5,418,048,206
Royalties	\$ 549,675,054	\$ 48,030,441	\$ 47,497,637	\$ 34,655,144	\$ 48,258,559	\$ 728,116,835
Oil						
Sales Volume	1,328,892,846	14,601,598	13,567,482	13,104,667	14,273,770	1,384,440,363
Sales Value	\$9,211,038,445	\$243,901,399	\$202,562,715	\$215,122,055	\$285,486,458	\$10,158,111,072
Royalties	\$1,323,375,696	\$ 40,358,446	\$ 32,734,330	\$ 35,298,920	\$ 47,430,848	\$ 1,479,198,240
Other						
Sales Value	\$2,229,244,363	\$170,965,178	\$ 83,669,645	\$ 81,498,581	\$ 77,342,017	\$ 2,642,719,784
Royalties	\$ 246,903,213	\$ 13,232,648	\$ 11,116,506	\$ 10,757,035	\$ 9,428,334	\$ 291,437,736
Total Royalties	\$2,574,267,892	\$166,371,356	\$ 160,252,886	\$ 146,401,447	\$ 168,181,612	\$ 3,215,475,193

Mineral Revenues 2000

American Indian

Table 28. Summary of sales volume, sales value, and royalties by State and commodity from American Indian mineral leases, Calendar Years 1928-2000 (cont.)

	1928-96	1997	1998	1999	2000	1928-2000
Wisconsin						
Other						
Sales Value	\$ 40,711	\$ ---	\$ ---	\$ ---	\$ ---	\$ 40,711
Royalties	\$ 3,271	\$ ---	\$ ---	\$ ---	\$ ---	\$ 3,271
Total Royalties	\$ 3,271	\$ ---	\$ ---	\$ ---	\$ ---	\$ 3,271
Wyoming						
Gas						
Sales Volume	419,654,024	14,319,076	14,247,516	17,767,881	19,108,126	485,096,623
Sales Value	\$ 400,731,299	\$ 24,657,895	\$ 24,934,914	\$ 32,117,984	\$ 54,327,619	\$ 536,769,711
Royalties	\$ 60,495,021	\$ 4,010,087	\$ 4,191,012	\$ 5,342,307	\$ 9,169,717	\$ 83,208,144
Oil						
Sales Volume	269,243,416	2,032,319	2,110,462	2,015,969	2,570,690	277,972,856
Sales Value	\$ 1,670,278,126	\$ 32,689,940	\$ 20,096,358	\$ 26,056,676	\$ 67,585,113	\$ 1,816,706,213
Royalties	\$ 253,517,071	\$ 7,159,543	\$ 3,984,293	\$ 5,418,433	\$ 13,481,653	\$ 283,560,993
Other						
Sales Value	\$ 8,943,798	\$ 865,888	\$ 120,006	\$ 138,435	\$ 533,505	\$ 10,601,632
Royalties	\$ 856,816	\$ 78,536	\$ 16,466	\$ 18,618	\$ 76,926	\$ 1,047,362
Total Royalties	\$ 314,868,908	\$ 11,248,166	\$ 8,191,771	\$ 10,779,358	\$ 22,728,296	\$ 367,816,499
American Indian Totals						
Coal						
Sales Volume	627,102,492	32,283,406	28,933,563	27,076,574	28,318,238	743,714,273
Sales Value	\$ 8,529,574,827	\$ 547,313,667	\$ 501,292,467	\$ 490,660,388	\$ 489,772,299	\$ 10,558,613,648
Royalties	\$ 716,722,382	\$ 66,626,634	\$ 60,421,903	\$ 60,632,003	\$ 58,383,154	\$ 962,786,076
Gas						
Sales Volume	5,283,754,541	269,117,141	281,680,354	291,001,758	300,138,396	6,425,692,190
Sales Value	\$ 5,418,048,206	\$ 558,520,555	\$ 513,060,250	\$ 514,741,728	\$ 832,633,758	\$ 7,837,004,497
Royalties	\$ 728,116,835	\$ 80,409,783	\$ 74,515,233	\$ 72,308,500	\$ 124,684,429	\$ 1,080,034,780
Oil						
Sales Volume	1,384,440,363	15,195,279	15,308,578	11,620,128	13,029,425	1,439,593,773
Sales Value	\$ 10,158,111,072	\$ 293,606,997	\$ 197,934,191	\$ 168,363,364	\$ 347,254,802	\$ 11,165,270,426
Royalties	\$ 1,479,198,240	\$ 48,538,385	\$ 32,017,641	\$ 28,423,659	\$ 57,888,348	\$ 1,646,066,273
Other						
Sales Value	\$ 2,642,719,784	\$ 72,197,001	\$ 64,586,588	\$ 90,284,261	\$ 125,140,979	\$ 2,994,928,613
Royalties	\$ 291,437,736	\$ 9,651,329	\$ 8,837,882	\$ 10,919,181	\$ 14,688,708	\$ 335,534,836
Total Royalties	\$ 3,215,475,193	\$ 205,226,131	\$ 175,792,659	\$ 172,283,343	\$ 255,644,639	\$ 4,024,421,965

**American Indian Reported Royalty Revenues
 Fiscal Year 2001**

	<u>Sales Volume</u>	<u>Sales Value</u>	<u>Royalty/Revenue</u>
Coal (ton)	36,754,112.52	\$ 710,271,200.44	\$ 63,850,455.16
Gas (Mcf)	287,791,069.52	1,410,620,545.90	207,667,685.91
NGL (gal)	51,248,286.82	34,972,036.13	4,236,381.18
Oil (bbl)	11,212,706.77	296,557,405.13	48,392,668.55
Other Royalties			17,218,105.72
Subtotal			\$ 341,365,296.52
Rents			
Bonus			
Other Sales Volume			
Other Revenues			(3,517,724.30)
Subtotal			\$ (3,517,724.30)
Total			\$ 337,847,572.22

**American Indian Reported Royalty Revenues
 Fiscal Year 2002**

	<u>Sales Volume</u>	<u>Sales Value</u>	<u>Royalty/Revenue</u>
Coal (ton)	34,061,783.07	\$ 634,973,807.84	\$ 68,719,174.38
Gas (Mcf)	278,103,080.47	648,616,434.54	96,790,878.22
NGL (gal)	163,389,288.52	27,099,602.37	3,201,071.77
Oil (bbl)	9,427,393.89	194,116,400.70	31,991,300.24
Other Royalties			19,362,439.13
Subtotal			\$ 220,064,863.74
Rents			1,224,251.42
Bonus			
Other Sales Volume			
Other Revenues			1,180,703.72
Subtotal			\$ 2,404,955.14
Total			\$ 222,469,818.88

**American Indian Reported Royalty Revenues
 Fiscal Year 2003**

	<u>Sales Volume</u>	<u>Sales Value</u>	<u>Royalty/Revenue</u>
Coal (ton)	24,358,159.00	\$ 459,649,552.45	\$ 54,971,992.79
Gas (Mcf)	277,658,980.29	1,065,200,224.17	156,916,199.57
NGL (gal)	84,994,404.34	36,390,695.33	4,541,612.80
Oil (bbl)	11,075,450.17	294,218,863.41	47,061,867.83
Other Royalties			8,149,961.87
Subtotal			\$ 271,641,634.86
Rents			1,009,662.02
Bonus			
Other Sales Volume			
Other Revenues			(5,589,791.06)
Subtotal			\$ (4,580,129.04)
Total			\$ 267,061,505.82

**American Indian Reported Royalty Revenues
 Fiscal Year 2004**

	<u>Sales Volume</u>	<u>Sales Value</u>	<u>Royalty/Revenue</u>
Coal (ton)	39,722,316.74	\$ 855,088,971.14	\$ 103,897,907.56
Gas (Mcf)	307,786,089.28	1,394,967,482.18	200,376,249.27
NGL (gal)	82,453,851.00	43,532,790.27	5,371,754.89
Oil (bbl)	10,407,359.99	339,468,623.91	54,102,637.65
Other Royalties			23,405,992.82
Subtotal			\$ 387,154,542.19
Rents			1,099,672.84
Bonus			
Other Sales Volume			
Other Revenues			5,851,357.09
Subtotal			\$ 6,951,029.93
Total			\$ 394,105,572.12

**American Indian Reported Royalty Revenues
 Fiscal Year 2005**

	<u>Sales Volume</u>	<u>Sales Value</u>	<u>Royalty/Revenue</u>
Coal (ton)	(35,972,205.44)	\$ 731,557,953.83	\$ 84,737,089.30
Gas (mcf)	321,636,378.75	1,768,404,162.47	257,781,380.40
NGL (gal)	77,681,390.40	55,542,139.47	6,864,955.63
Oil (bbl)	10,680,466.31	472,183,576.59	76,908,323.94
Other Royalties			13,503,997.15
Subtotal			\$ 439,795,746.42
Rents			1,146,877.07
Bonus			
Other Sales Volume			
Other Revenues			1,298,798.79
Subtotal			\$ 2,445,675.86
Total			\$ 442,241,422.28

**Attachment 2 –
Oil and Gas Investors article**

DOMESTIC ACCESS

OPPORTUNITIES IN INDIAN COUNTRY

Recent legislative and development initiatives could lead to a surge in exploration and production on tribal lands.

ARTICLE BY
NANCY J. APPLEBY,
GREGORY G. HAWN
and
NANCY A. WODKA

Native American Indian tribes own millions of acres of land in the United States, and it appears the tribes have become more eager to exploit their untapped energy resources. An estimated 890 million barrels of oil and natural gas liquids and 6 trillion cubic feet of natural gas are thought to exist beneath tribal land in the continental United States and Alaska.

Over the past 20 years, Indian lands have contributed approximately 11% of the nation's onshore oil and gas production. Yet, according to recent surveys, only 25% of known reserves on tribal lands have been developed.

Difficulties in structuring and completing transactions have often led to a falloff in developer and investor pursuit of unique opportunities in concert with the tribes. Understanding and successful navigation of these issues is critical to unleashing energy potential on tribal lands.

As a largely untapped resource, tribal lands are uniquely situated. But contrary to popular belief, opportunities on Indian lands extend beyond raw fuel production. Given the often remote locations of reservations, with few prohibitive land-use conflicts, and proximity to major pipeline routes and transmission grids, the potential for siting power plants is substantial.

Furthermore, many tribes are sitting on renewable energy opportunities. The Department of Energy (DOE) estimates at least 61 reservations have renewable energy resources in quantities

sufficient to support central-station generation.

With so much potential, why have these resources, for the large part, remained untouched?

New energy legislation

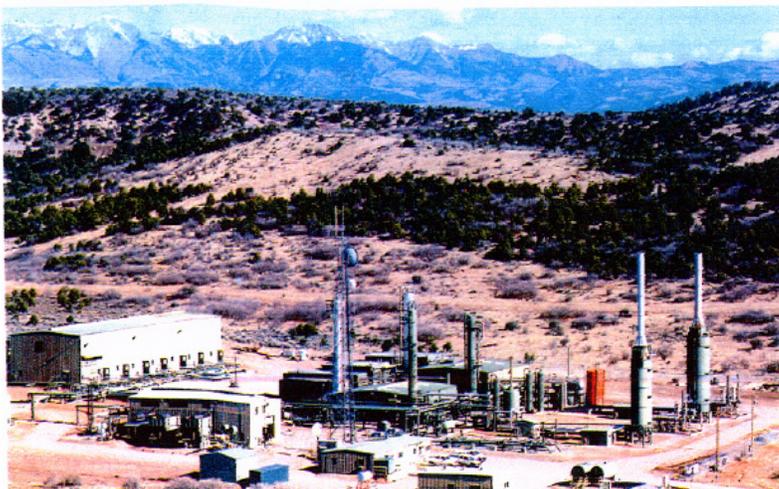
There are longstanding advantages for companies that partner with Indian tribes in energy development. Federal tax incentives for private investment on Indian reservations allow for accelerated depreciation of a company's assets, and tax credits for companies that employ Native Americans. In addition, existing legislation, like Title XXVI (Indian Energy Resources) of the Energy Policy Act of 1992, has authorized funding for renewable energy projects located on tribal land.

Historically, however, legal complexity and a lengthy process to obtain federal approval have discouraged outside investment in tribal energy projects.

Fortunately, after five years in the making, President Bush signed the Indian Tribal Energy Development and Self-Determination Act (ITEDSDA, or Title V of the Energy Policy Act of 2005). This creates within the DOE an Office of Indian Energy Policy, authorized to receive \$20 million annually until 2016, to provide grants to tribes that carry out, among other things, planning and management of tribal electrical generation, transmission and distribution facilities

ITEDSDA also directs the Secretary of the Interior to create an Indian Energy Resource Development Program to provide grants and low-interest loans to tribes and their energy development partners who utilize and develop tribal energy resources. Finally, the act loosens some traditional regulatory red tape by streamlining the federal approval process for new energy projects on tribal lands.

Indians lands throughout the West offer a variety of opportunities. Below, the Arkansas Loop amine plant, on the Southern Ute Indian Reservation in Colorado, treats 250 million cubic feet of gas a day. Part of the Red Cedar gathering system, it is owned 51% by the tribe and 49% by Kinder Morgan.





“...the act loosens some traditional regulatory red tape by streamlining the federal approval process for new energy projects on tribal lands.”

Current tribal energy development initiatives include oil, gas, coal, coalbed methane, hydroelectric generation, liquefied natural gas and renewables projects.

The Blackfeet Indian Nation of northwestern Montana recently opened 150,000 acres of its reservation to gas exploration and production, which could produce up to 30 billion cubic feet of gas per acre. According to the U.S. Geological Survey, in more than 80 years of commercial production, wells on the Blackfeet Reservation have produced 1.1 trillion cubic feet of gas and 440 million barrels of oil.

In 2001, the Northern Ute Tribe opened 84,000 acres of mineral-rich land in Utah's Uinta Basin, including 17.5 billion cubic feet of natural gas, to oil and gas development. A successful exploration and development partnership with Dominion Exploration & Production Inc., led to the tribe's May 2005 establishment of a privately owned energy firm, Ute Energy LLC.

Ute Energy is now partnered with Questar Corp., Fidelity Investors Management, Bill Barrett Corp. and Berry Petroleum Co. in the development of 30 producing oil and gas wells, currently averaging 500 barrels of oil and 7.5 million cubic feet of gas per day.

Plans have been made to commence the first stage of a four-year oil and gas exploration and drilling effort targeting an additional 236,000 acres of the Northern Ute's reservation, 150 miles east of Salt Lake City. Other successful upstream tribal projects include:

- The Southern Ute Tribe of Colorado's natural gas-development initiatives and energy portfolio is worth more than \$2 billion, including partnerships with Kinder Morgan Energy Partners and Trident Exploration Corp.

- The Jicarilla Apache Nation and partner John D. Jones Engineering Inc. are planning an oil processing facility on the petroleum-rich Jicarilla Reservation in New Mexico.

- The Three Affiliated Tribes (Arikara, Mandan and Hidatsa) in North Dakota and their partner, Advanced Resources International, are collaborating to develop an integrated, non-invasive procedure to assess oil exploration potential on the Fort Berthold Indian Reservation in western North Dakota.

Issues unique to tribal energy

Currently there are more than 560 federally recognized tribes in the United States. Over the course of the nation's history, the federal government's relationship with Indian tribes has been defined and modified by treaties, executive orders, court decisions, issue-specific legislation and assorted regulations. The result is a body of federal and tribal Indian law that presents a number of unique issues to developers.

One of the most fundamental principles of federal Indian law is the federal government's trust responsibility to tribes. This fiduciary obligation is manifest in, among other things, the

federal responsibility to manage trust assets on behalf of tribes. Currently, trust asset management involves some 45 million acres.

The government's role is more than just an asset manager. Federal legislation requires that the Secretary of the Interior approve encumbrances of trust and restricted land and says that certain types of contracts with tribes are not valid unless they are approved by the Secretary.

Typically, all energy and related development proposals, from new building construction to pipeline rights of way, require secretarial approval. Additionally, Indian lands cannot be accessed without permission. Finally, federal approval of agreements affecting Indian lands is a "major federal action" that triggers environmental review under the National Environmental Policy Act.

A tribe may choose to contract itself, or it may separate its governmental and business functions, giving control of its business activities to a tribal-related entity. The nature of the entity with whom the investor is dealing affects its rights and remedies.

Business due diligence should include a review of the tribal entity's organizational documents and tribal law (including its custom and tradition).

Typically, a tribe will adopt resolutions specifically authorizing a business transaction and granting authority to execute and deliver related documents. Adoption of authorizing resolutions is important since tribal leaders may not have authority to act absent specific action by the tribe's governing body. Opinions of counsel for the tribe regarding the organization of the tribe, the organization of the tribal business and the respective power and authority of each, can add more assurance.

As dependent sovereign nations, tribes enjoy immunity from suit. Absent an effective waiver of immunity, a tribe may not be sued in tribal, state or federal court. As a rule, a tribe's immunity from suit extends to tribally owned businesses and to business entities formed under tribal law. Any waiver of immunity must be unambiguous and "unequivocally expressed."

Tribes regard their sovereign immunity as an essential feature of their sovereign status, and thus may resist waiving it. In such cases, if a transaction is to be consummated, middle ground must be found and a compromise reached.

Investors in energy development projects located on Indian lands are well advised to be familiar with tribal custom and law as well as federal law related to Indian tribes. Familiarity with each is the key to unlocking natural resources on Indian land. □

Nancy J. Appleby, Gregory G. Hawn and Nancy A. Wodka are partners in the Washington, D.C., office of law firm Bracewell & Giuliani LLP. They represent clients with domestic, foreign and tribal energy projects.

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**Attachment 3 –
Supplemental Right of Way Data for the Ute Indian Tribe**

Annual # of Rights of Way Granted by the Ute Tribe (by Date of Grant of Easement)

Year	Total	Wellsite	Pipeline	Access Road	Powerline
1941	1		1		1
1950	1		1		
1957	1				
1961	3	1	1		
1964	1		1		
1965	6		4		
1966	3		1	2	
1968	1				
1969	1				
1970	1		1		
1971	4		2	2	2
1972	3		2	2	1
1973	11		10	1	1
1974	7		6	1	3
1975	2		2		
1976	3		3		1
1977	4		3	1	2
1978	17	6	7	9	3
1979	64	14	47	16	2
1980	24	11	12	14	1
1981	29	8	21	9	
1982	40	18	20	20	1
1983	25	7	17	7	1
1984	41	12	15	23	3
1985	30	9	14	14	4
1986	25	10	13	12	3
1987	34	12	23	12	5
1988	12	4	5	4	2
1989	51	15	26	22	7
1990	22	11	11	11	3
1991	45	31	14	31	4
1992	216	103	117	103	4
1993	26	8	18	7	5
1994	50	34	26	26	
1995	85	41	54	46	2
1996	88	55	61	50	
1997	156	97	57	53	1
1998	128	51	67	60	2
1999	84	46	44	49	
2000	225	116	119	109	1
2001	397	265	217	230	9
2002	172	120	79	77	1
2003	179	106	70	67	1
2004	193	123	65	49	1
2005	236	139	100	77	2
Total	2,747	1,473	1,377	1,216	79

Source: Bureau of Indian Affairs, Department of Interior

**Annual # of Companies Granted Right of Ways by the Ute Tribe
 Based on Date of Grant of Easement (page 1 of 2)**

Year	Number of Companies Granted Right of Ways	Number of Companies Granted Powerline Right of Ways	Number of Companies Granted Pipeline Right of Ways
1941	1	1	1
1942	0	0	0
1943	0	0	0
1944	0	0	0
1945	0	0	0
1946	0	0	0
1947	0	0	0
1948	0	0	0
1949	0	0	0
1950	1	0	1
1951	0	0	0
1952	0	0	0
1953	0	0	0
1954	0	0	0
1955	0	0	0
1956	0	0	0
1957	0	0	0
1958	0	0	0
1959	0	0	0
1960	0	0	0
1961	2	0	1
1962	0	0	0
1963	0	0	0
1964	1	0	1
1965	3	0	3
1966	1	0	1
1967	0	0	0
1968	0	0	0
1969	0	0	0
1970	1	0	1
1971	2	1	1
1972	3	1	2
1973	4	1	4
1974	3	1	3
1975	1	0	1
1976	2	1	2
1977	3	1	2
1978	4	1	2
1979	9	1	5
1980	8	1	6

**Annual Number of Companies Granted Right of Ways by the Ute Tribe
 Based on Date of Grant of Easement (page 2 of 2)**

Year	Number of Companies Granted Right of Ways	Number of Companies Granted Powerline Right of Ways	Number of Companies Granted Pipeline Right of Ways
1981	7	0	5
1982	11	0	3
1983	12	1	7
1984	14	2	8
1985	17	3	9
1986	12	2	7
1987	7	3	6
1988	4	2	2
1989	13	1	6
1990	9	1	5
1991	12	1	7
1992	11	1	10
1993	10	3	10
1994	7	0	6
1995	9	1	8
1996	9	0	8
1997	14	1	8
1998	12	1	10
1999	11	0	9
2000	13	1	10
2001	12	2	7
2002	10	1	6
2003	15	1	9
2004	14	1	11
2005	19	2	13

Source: Bureau of Indian Affairs, Department of Interior

**Average Annual Dollars per Acre and Dollars per Right of Way Agreements for the Ute Tribe
 Based on Right of Way Year as Recorded by BIA**

Year	All		Powerlines		Pipelines	
	Dollars/Acre	Dollars/ROWs	Dollars/Acre	Dollars/ROWs	Dollars/Acre	Dollars/ROWs
1966	6	46			6	46
1967						
1968						
1969						
1970	48	361			48	361
1971	57	524	50	402	50	402
1972	50	318				
1973	671	145			671	145
1974	973	4,665	50	528	973	4,665
1975	373	2,343	229	811	371	2,563
1976	1,526	10,711			1,526	10,711
1977	811	1,787			811	1,787
1978	301	1,141	86	182	156	409
1979	159	596	100	464	164	523
1980	1,570	5,636	1,420	725	613	2,204
1981	574	2,442			582	2,033
1982	943	3,875			407	1,968
1983	1,120	3,386	544	930	883	2,371
1984	2,124	5,892	511	942	1,315	4,278
1985	1,936	5,105	554	1,181	885	1,749
1986	2,312	5,953	713	1,293	1,929	4,510
1987	2,047	5,194	354	1,235	2,059	5,421
1988	1,427	3,718	818	820	1,393	3,312
1989	1,851	4,861	1,249	2,489	2,512	6,060
1990	2,147	4,727	2,130	1,607	1,912	2,098
1991	1,165	3,779	1,317	1,926	889	2,855
1992	1,387	3,333	499	1,285	1,581	3,103
1993	1,361	2,251	1,016	3,061	1,576	1,283
1994	1,353	1,962			1,447	890
1995	1,237	2,909	1,549	6,125	1,300	2,545
1996	1,114	2,926			1,848	4,527
1997	1,275	3,123	1,000	525	1,280	2,758
1998	344	4,546	303	1,080	182	4,196
1999	1,247	3,394	1,821	5,408	1,366	2,472
2000	1,469	4,799	1,000	646	1,382	3,899
2001	1,189	3,750	1,540	1,277	1,292	3,225
2002	1,185	3,719	1,540	2,992	1,340	3,390
2003	840	2,546	157	549	763	1,499
2004	1,132	3,043			2,579	3,779
2005	1,283	4,458	810	655	1,522	2,963

Source: Bureau of Indian Affairs, Department of Interior

**Attachment 4 –
Article on Shelving of LNG project on State Parkland**



LNG plan for harbor is shelved Legislators say island terminal needs study

By Stephanie Ebbert, Globe Staff | March 16, 2006

A controversial proposal to build a liquefied natural gas terminal on Outer Brewster Island in Boston Harbor was shelved yesterday by a legislative committee, thrilling environmentalists who worried that industrial development would devastate the federally protected parkland.

The committee voted to send the proposal to a study committee -- a step that effectively derails the proposal for now -- but state lawmakers and environmentalists said they expect the measure to resurface in some form. The company that wants to build the terminal, AES Corp. of Virginia, vowed to press on with its proposal.

The proposal would require a two-thirds vote of the Legislature, which is necessary to convert parkland to another use, plus approval by the Federal Energy Regulatory Commission and the support of the state's environmental secretary, who criticized the project during a recent legislative hearing.

"There are still 34 islands in the Boston Harbor Islands National Recreation Area -- for now," said Bruce Berman, communications director for Save the Harbor/Save the Bay, who had led a coalition of environmental groups fighting the plan. "Sometimes bad bills just don't go away. Like boomerangs, they come back, and we're going to stay vigilant."

In a prepared statement, a representative of AES Corp. said that he was not surprised by the outcome and that the company will continue to seek legislative approval.

"As this was a late-filed bill and had a public hearing just last week, we expected the bill to spend time in a study committee, so that technical changes could be considered," said Aaron Samson, managing director of Battery Rock LLC, the local development company formed by AES for the project.

AES Corp., backed by a high-powered local team of Beacon Hill lobbyists, proposed to lease the island from the state to build a \$500 million LNG facility there and increase the supply of natural gas to the region.

But legislators complained that the bill that would have authorized the lease was tailor-made for the company, written to ensure that only AES would qualify to bid on the lease. And, they said, the bill would have postponed an environmental review of the project until the 99-year lease was signed, blunting the importance of the review.

The environmentalists and harbor advocates balked at the idea of surrendering public parkland to a corporate interest and said the development would destroy the habitat for breeding ibis and harbor seals. One of 34 harbor islands designated a national park area in 1996, Outer Brewster lies near the iconic Boston Light on Little Brewster Island.

"There should never be a case where we as government custodians cut a sweetheart deal for an energy corporation or any other corporation," said Senator Mark C. Montigny, Senate cochairman of the 17-member Joint Committee on Bonding, Capital Expenditures, and State Assets, which overwhelmingly agreed to shelve the proposal. "I'm not going to let something that smells that badly leave a committee where I have to then defend it."

With demand for natural gas soaring, energy companies have proposed several new LNG terminals, often drawing fierce opposition from local residents concerned about the potential for a terrorist attack on a tanker. The existing LNG terminal in Everett is viewed as especially worrisome because tankers delivering LNG pass through Boston's inner harbor. Mayor Thomas M. Menino has led other local politicians in trying to phase out LNG deliveries to the Everett facility.

The Outer Brewster proposal was considered attractive by its supporters because deliveries would occur offshore. When the proposal was unveiled last year, backers said that tankers would make 50 to 80 LNG deliveries to the site each year and that gas would be sent ashore via a new undersea pipeline that would connect with an existing gas line.

But the proposal offered no guarantee of closing the Everett terminal or blocking an alternative project proposed by another gas company close to neighborhoods in Fall River.

"If there was somebody giving the guarantee that Fall River was dead and Everett was closed, you'd have a lot more sympathetic ear from the public and their proxy, us," Montigny said.

Last month, New England's congressional delegation wrote to US Energy Secretary Samuel Bodman seeking a more coherent strategy for reviewing the various terminals that have been proposed recently, including four new facilities proposed in Massachusetts.

"Given all the different possibilities, there's no reason to site these things in public parklands or in a densely populated urban area," said Sue Reid, staff lawyer for the Conservation Law Foundation.

The AES proposal ignited a public relations battle over the recreational value of the islands and the competing value of increased LNG supply. Berman, who opposed the project, sent regular e-mails to journalists and policymakers with photos depicting a serene island frequented by seals and egrets. Rob Gray, a consultant working for AES, countered with photos showing graffiti in the island's abandoned military barracks and a cove littered with debris. And Regan Communications, also working for AES, helped to establish a group of citizens who publicly supported the AES plan and suggested it would close the Everett terminal.

Senator Robert L. Hedlund, a Weymouth Republican who is on the committee, said his opposition to the project stemmed from his love of the islands.

"If you could convince me you could segregate this one island and wouldn't impact the parks system, then I would reconsider -- but you can't," he said. "I take great exception to the characterization of the island by AES as some kind of an industrial wasteland."

Hedlund said he became a "little bit nervous," in discussing the issue with the governor, who sounded amenable to the project.

The Associated Press previously reported that Romney's former environmental chief, Douglas I. Foy, who is friendly with AES cofounder Roger Sant, helped arrange a meeting between Sant and Romney, who also knew Sant from their work on the corporate board of Marriott

International.

However, during the committee's hearing on the bill last week, the administration was critical of the proposal. "I am mindful of our regional energy needs and our ongoing need for gas supplies," Stephen Pritchard, Romney's environmental secretary, was quoted as saying in his testimony. "In this instance, however, we must not act . . . before understanding the full consequences of our actions."

Stephanie Ebbert can be reached at ebbert@globe.com. ■

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