

Testimony before the Subcommittee on Energy and Minerals Resources

Oil Shale & Tar Sands  
Uintah County, Utah

## I. WHERE WE'VE BEEN

In the 70s and 80s there was considerable interest in the development of oil shale. Driven by the gas shortage of the 70s the government, along with industry, put considerable resources into the development of an oil shale facility in Uintah County. The decline in crude oil prices in the 80s resulted in the loss of government support for oil shale research and development and subsequent termination of industry interest.

All that remains of this effort is the White River Oil Shale Mine and associated facilities in declining condition and oil shale stock piles.

## II. WHERE WE ARE TODAY

A major portion of the oil shale resources of the Green River Formation are located in Uintah County. These resources are believed to be the most concentrated accumulation of hydrocarbons on earth. The commercially attractive zones measuring from 50,000 barrels per acre to more than 1 million barrels per acre. The richness of these zones are well known. The majority of these resources are located on federal land managed by the BLM. The remaining resources are owned by the state of Utah, individuals, private companies, and Indian tribes.

Because of the amount of resource existing under the federal lands, BLM resource management on these lands will greatly affect their development.

Local interest in oil shale development did not decline when that of the general government and industry did. One company in particular has conducted resource and development activities since 1993. The results are the development of a working retort that processes oil shale. This facility is currently attempting to obtain adequate feed stock to run their retort to enable an independent certification of it's operation.

Uintah County fully supports the development of oil shale, and is very concerned that the mistakes made in past efforts should not be repeated. Specifically, the lack of comprehensive and coordinate planning, impacts on community development and local infrastructure were not properly planned for or funding needs considered.

## III. POSSIBLE BENEFITS

The President and the Department of Energy have determined that increasing liquid fuel supply from domestic sources is an important national objective. Clearly there is no greater opportunity to achieve this goal than the development of the nations oil shale resources.

The Green River formation located in our area contains three trillion tons of oil shale, which is 2-3 times more than the reserves located in Saudi Arabia.

If more than three trillion barrel deposits were properly developed the United States could greatly reduce, and with conservation efforts, eliminate our dependency on imported oil.

Uintah County and the nation would benefit from oil shale development. As this development occurs, the following goals would be accomplished:

- Keep the social and economic benefits of the \$20 billion per month spent on imported oil and spending it on development in the United States.
- Depending on the method used, there are numerous by-products that would be produced, lessening the dependance on imported oil for their production.
- Provide the military with long term and secure source of fuel.
- Stabilize American industry by having a dependable fuel source.
- Reduce global conflicts related to energy access.
- Reduce the competition for energy resources with third world countries and developing nations.

## IV. NEED FOR ACTION

Government must play a critical role in removing impediments to developments, and neutralizing and mitigating investment risk. Policies, regulations and legislation are needed to make these resources available on terms attractive to industry while ensuring efficient resource development and equitable economic returns on investments.

! Authorize and direct the BLM to develop a commercial Federal Oil Shale Leasing Program with the goal of initiating leasing by December 31, 2006.

! Repeal or modify the Mineral Leasing Act that currently restricts oil shale leases to one (1) lease per company and a maximum of 5,120 acres per lease.

§ Authorize and direct BLM to exchange Federal lands for public or private lands where appropriate to facilitate development of the resource.

§ Direct BLM, within the confines of existing law, to refrain from management practices that would restrict access to the resource and prevent the development of water resources needed for production and support infrastructure.

§ Authorize and direct the Department of Energy (DOE) in cooperation with BLM to access and make available the existing White River Mine and facilities as well as oil shale stock piles for use by industry to support demonstration and commercialization of oil shale technologies.

! Authorize the return of 33 % of oil shale royalties to the county of origin. This funding would then be utilized to develop and maintain infrastructure and provide for habitat improvements.

! Authorize and direct the BLM to assess causes for delays in oil & gas permit approvals and make recommendations for policy, legislative and funding initiatives to mitigate those delays. This issue must be resolved to insure this problem doesn't carry over into the processing of oil shale leasing. Uintah County has considerable experience and has access to expertise related to this issue and would like to be part of the resolution.

! Impacts to other resources such as wildlife, grazing, soil and water must be offset by improvement in existing habitats and/or carefully planned mitigation of impacts.

#### Mitigating Investment Risks

Oil shale production is characterized by high capital and operating costs and long periods of time between expenditure of capital funds and the realization of production revenues. For 'first-generation' facilities there is substantial uncertainty over the magnitude of capital and operating cost. Revenue uncertainty is imposed by not knowing future market prices. These and other uncertainties pose investment risks that currently make oil shale investment less attractive than other investment options.

Public policy and legislation can lower investment risk by reducing cost and revenue uncertainties and by sharing in the financial risks. Public action is warranted when pursuing public goals of secure domestic fuel supply and enhanced business and economic activity. The most effective of these actions include:

Demonstration Projects. A cost-shared oil shale demonstration program would:

! Accelerate the timetable to the all-important first-generation commercial production by helping to remove cost uncertainty,

! Broaden the base of investment interest among intermediate and independent producers that could not carry the development risks alone, and

! Serve as evidence of the public's commitment to this resource.

Market Assurance: Authorize and direct the Department of Defense to specify and qualify shale oil derived aviation turbine fuels and to enter into purchase agreements at a guaranteed minimum and maximum price. This will serve to minimize market-acceptance risk and price-volatility risk.

Production Tax Credit: A production tax credit, indexed to inflation and capped or phased out at a ceiling price per barrel will enable oil shale to directly compete with foreign conventional oil. This could be accomplished by amending current "Section 29" tax credits for non-conventional fuels or through a new provision crafted for oil shale.

Federal Royalty Relief: Federal royalty structure is not yet defined for oil shale extraction. Providing royalty relief in the early stages of production will significantly improve project economics. A fair return to the Federal government can be achieved by graduated royalty rates in later years, after investment payback.

Accelerated Depreciation: Allowing front end capital investments to be depreciated in a shorter time than is allowed under current law could improve cash flow and could stimulate investment by enabling earlier payback. Royalty holidays and expended depreciation are credited as the two most important fiscal measures stimulating the production growth of Alberta oil sands.

Investment Tax Credit: Congress should allow an investment tax credit similar to that which is proposed for coal-to-liquids projects to reduce up-front capital costs and accelerate payback.

Depletion Allowance: Congress should allow oil shale projects to qualify for a percentage depletion allowance (similar to that for oil and gas resource extraction). This latter provision helps provide parity for private resource holders relative to the royalty holidays afforded federal lessees.

#### Community Development and Infrastructure Support

Oil shale industry development and operation will cause significant population growth in the local communities, accompanied by requirements for investment in community infrastructure, such as roads, schools, hospitals, and other support services.

Uintah County is a water short area. Adequate water supplies must be developed for both domestic and industrial use.

Costs for engaging in the federal planning process and for planning and construction of infrastructure occur long before tax and royalty revenues are received from oil shale operations and associated economic activity. Development delays or industry failure pose additional risks to local communities. Planning must include a strategy to avoid boom/bust cycles in local economy.

To minimize the severity of impacts and mitigate the financial risks the following action is recommended:

! Authorize and direct the DOE, in cooperation with DOI and DOD to develop a well-conceived federal Oil Shale Program so as to avoid a crisis-oriented response,

! Communicate with stakeholders so as to identify issues of concern and take measures to mitigate those concerns,

! Provide advance financial support for the communities and States so as to facilitate their engagement in the program development process and to mitigate cost burdens that occur before tax and royalty revenues are realized.

#### Streamline Regulatory Permitting

Environmental impacts must be effectively mitigated through best-available resource technologies and rigorous management utilizing adaptable and goal oriented management, not exclusionary management that is not practiced. Control of air emissions, water effluents, leachates from spent shale disposal, land reclamation design, and other environmental issues will need to meet published regulatory standards.

! Complying with these standards will require complete and comprehensive applications which should receive prompt review and action.

! Consistent with Executive Order 13212 "Actions to Expedite Energy Related Projects", it is recommended that the Interagency Task Force be reconvened and directed to coordinate with the EPA and state regulatory agencies and to review Federal environmental requirements that impact oil shale development and identify areas where permitting can be streamlined to achieve national energy goals. To date the provisions of this executive order have not been implemented at the field office level or reflected in the recent resource plan.

#### Government / Industry Coordination

§ Development and implementation of a well-considered and coordinated Oil Shale Program Plan requires goal-oriented management in government. To complement the short-term insurance policy provided by the Strategic Petroleum Reserve Congress should authorize and direct the Secretary of Energy to establish an Office of Strategic Fuels within the DOE Petroleum Reserves.

§ The mission of this Office is to promote fuels security for the United States, provide the analytical basis for strategic fuels planning, oil shale program development and management, establish and administer functions of an interagency government/industry oil shale task force and manage outreach and education efforts related to Federal oil shale efforts. The charter for this office should include interaction with the Departments of Defense, Interior, and Treasury.

§ Congress should authorize and direct DOE to establish a Federal Oil Shale Task Force, include to include representatives from DOE, DOD, DOI, and the Department of Treasury, technical experts, and advisors from industry, impacted states and communities, and other stakeholders to coordinate and facilitate oil shale industry development efforts in an integrated fashion.

#### V. PROPOSED OIL SHALE, RESEARCH, DEVELOPMENT AND DOCUMENTATION (RD&D) PROGRAM

In the supplementary information provided in the RD&D Program draft, it says that BLM intends to ensure that states and local communities have the opportunity to be involved in the development of a commercial program. Uintah County would like to see this involvement extended to include all NEPA and mitigation and mitigation issues associated with both RD&D and commercial development.

In earlier comments Uintah County expressed concern regarding the adequacy of 40 acres to conduct RD&D operations. In the latest draft the 40 acres has been changed to 160 acres. The County's recommendation remains 640 acres.

BLM considers 160 acres adequate to accommodate an R&P activity that can be envisioned. The County proposed 640 acres so as not to limit the type of R&D that can be located on the site. Perhaps 160 acres could be established as a limit unless the proponent can, based on development plans, justify additional acreage not to exceed 640 acres.

#### VI. TAR SANDS DEVELOPMENT

In addition to oil shale Uintah County has considerable tar sands resources. The total oil contained in these tar sands will total in the billions of barrels in our area. The issues in regards to the development of tar sands in Uintah County mirror those for oil shale.