

"Oil and Gas Pipelines, Rail and Truck Transport in New Mexico: Capacity Constraints and Economic Development Risk"

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The current infrastructure of unconventional fuel production in New Mexico was designed and constructed for 1990s activity and the access, price, and supply/demand assumptions of that period. This was a time of lower oil output and prices that characterized a minor decline.

Rail transport in the Southeast or Permian Basin/Delaware Basin declined as short-line track was sold off. Class I rail carriers were mostly coal transporters. Oil pipelines were abandoned or cut-up in sections and others were mothballed. New Mexico was about to lose an oil refinery. Roads connecting oil fields to existing refineries were in localized service.

With the "technology play" first in the Southeast through asset acquisition or "in-house" vertical to horizontal well development and as late as October 2011 in Northwest New Mexico (San Juan Basin), New Mexico oil production began to soar, eliminating the outlook of the 1990s. Accordingly, the existing oil infrastructure carrying capacity is 60% deficient.

Oil production is in danger of becoming "stranded" in Northwest New Mexico and subject to road congestion and safety vulnerabilities in the Southeast. Road or highway transportation from the wellheads in the New Mexico Northwest must connect to rail and then to refineries. This has created a new and unregulated industry of trans-loading oil to rail which has presented risks to small communities unprepared for oil and rail activities. The State of New Mexico has been requested to provide technical and regulatory support.

New pipelines and the re-engineering of abandoned lines require new permitting or leasing which are expected to encounter some community resistance. Refinery capacity, still reflecting the 1990s in size and scope, is at capacity in the Northwest New Mexico with production expected to increase over 65% within the next two years. New Mexico requires new refinery investment and rail expansion.

Economic development in the five county area of the Northwest New Mexico, the historic "Four Corners," depends on an uninterrupted oil flow from the San Juan Basin (jobs) with rail expansion through the Navajo Nation and New Mexico oil prone producing areas. Energy as oil transported by rail is understood as a critical option for future economic development. Pipeline expansion should compete with rail from the cost and risk perspective of the industry operators.

New Mexico manufacturing from its energy natural resource concentrations can adopt a value-added strategy for sub-regional economic development with rail expansion. Petro-chemical manufacturers, attracted to New Mexico surplus natural gas, require a rail-to-market supply chain capability.

There is a "soft" infrastructure (regulatory) constraint statewide. The U.S. Department of Interior Bureau of Land Management Offices in New Mexico do not have the staffing resources to meet permitting process demands (applications for petroleum drilling) because the activity assumptions, as in actual industry output, resemble the downside outlook of the 1990s. There is also a "boom" character in the oil industry which allows it to bid for BLM and the State of New Mexico regulatory agency (OCD) specialists with non-competitive higher compensation.

The Navajo allottees, owning land from the Federal Government apart from tribal ownership, presented by the U.S. Bureau of Indian Affairs (BIA), earlier this year sought and received direct assistance from the State of New Mexico (EMNRD). The State funded the School of Energy at San Juan College to provide students and adjunct faculty to process Navajo allottee leases under BIA assignment.

New Mexico Governor Martinez addressed a public meeting of Navajo allottees and the San Juan Basin community as having established a "first" in new state and federal relations.

This "soft" infrastructure innovation can be extended statewide in a triad of tribal, state and federal collaboration. The Department of Transportation, while concerned with safety in crude oil by rail, has yet to address the trans-loading of oil from truck to rail. Pipeline right-of-ways through the New Mexico Land Office, the Navajo Nation, and the Bureau of Land Management remain a constraint against unanticipated higher volumes of oil. Unless resolved, a slow-down or diversion of industry capital budget outlays from New Mexico could occur.

New Mexico is natural resource- dependent. It is at the bottom of state poverty levels. Oil and an natural gas price recovery are required indefinitely to stabilize population and job markets. Its oil production, following the infusion of technology innovation, is at risk because of infrastructure constraints. The assumptions of the 1990s created the current risk to further economic development through oil and energy.