FINDING OF NO SIGNIFICANT IMPACT-ENERGEN RESOURCES NATURAL GAS AND PRODUCED WATER PIPELINES BETWEEN THE DUNGAN 32-5 #5-2 and #5-3 WELLS and THE DUNGAN 32-5 #5-1 GAS WELL

FONSI # WCAO-NAV-CO-01-2008

United States Department of Interior Bureau of Reclamation Upper Colorado Region Western Colorado Area Office

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FONSI # WCAO-NAV-01-2008 Energen Resources Dungan Natural Gas and Produced Water Pipelines Sec. 5, T32N, R6W, NMPM

November 2, 2007

United States Department of the Interior
Bureau of Reclamation

FINDING OF NO SIGNIFICANT IMPACT and DECISION RECORD

Energen Resources Natural Gas and Produced Water Pipelines Between the Dungan 32-5 #5-2 and #5-3 and the Dungan 32-5 #5-1 Gas Wells

Finding of No Significant Impact

Reclamation has determined that implementing the Proposed Action Alternative for the construction, operation, and maintenance of proposed pipelines for natural gas and produced water between the Dungan 32-5 #5-2, 5-3 and the Dungan 32-5 #5-1 gas wells across Reclamation lands within the Navajo Reservoir Area will not result in a significant impact on the human environment and that an Environmental Impact Statement is not required. This determination is based on the Plan of Development for the proposal with accompanying supplemental documents and the Environmental Assessment (EA) dated September 2007 for the proposed action as prepared by Adkins Consulting for Reclamation. This determination is in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended, and the Council on Environmental Quality=s Regulation for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR 1500-1508).

Decision- Authorize the Proposed Action Alternative

Reclamation will issue a license agreement for the construction, operation and maintenance of a natural gas pipeline and a produced water pipeline between the Dungan 32-5 #5-2 and #5-3 wells and the Dungan 32-5 #5-1 gas well across Reclamation lands within the Navajo Reservoir Area. Said license agreement will be issued for the pipeline alignment in the proposed action, for a period of 25 years and will contain

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reasonable and appropriate conditions of approval to reduce adverse environmental effects from the proposed action.

The proposed action alternative is compatible with the primary purposes of the Navajo Unit, Colorado River Storage Project (CRSP). That alternative keeps the proposed pipelines on the west side of Colorado State Highway 151 while avoiding cultural properties between the wells and potential interference with recreational uses of the reservoir area.

Background and Proposed Alternative

The Navajo Unit is located in southwestern Colorado and northwestern New Mexico and is managed by Reclamation. The Navajo Unit is one of the four initial storage units authorized by the CRSP Act of April 11, 1956. The proposed pipelines will cross Reclamation lands west of the Piedra arm of the reservoir near the western edge of the Navajo Reservoir Area. The Colorado Department of Parks and Outdoor Recreation manages the area as part of Navajo State Park.

The proposed alternative is the construction, operation, and maintenance of an 8-inch diameter natural gas pipeline and a 4-inch diameter produced water pipeline in the same trench between the Dungan 32-5 #5-2, and 5-3 wells and the Dungan 32-5 #5-1 well. Construction of these pipelines will allow Energen to market up to an additional 2 million cubic feet of natural gas and dispose of up to an additional 200 barrels of produced water per day from the Dungan 32-5 #5-2 and 5-3 wells through existing facilities connected to the Dungan 32-5 #5-1 well. The #5-2 and #5-3 wells are located on the same well pad.

The well locations are on private land with Southern Ute Tribal lands and Reclamation lands intervening. The pipeline would have to cross either the SUIT lands or Reclamation lands and the SUIT was not willing to grant a right-of-way across its lands. Under the No Action Alternative, the construction of these pipelines across Reclamation lands within the Navajo Reservoir Area would not be allowed.

Four possible alignments for the pipelines across Reclamation lands were considered; these alignments are considered variants of one alternative. Energen's original proposal called for about 1,22 miles of pipelines to follow the #5-2 well access road easterly to Highway 151, cross Highway 151 and a Navajo State Park recreation road to the east side, then parallel the recreation road south along its east side for about 0.5 mile, then re-cross the recreation road and the highway and proceed westerly up the hill to the #5-1 well location (a total of about 4010 feet on Reclamation lands). A second alignment, about 1.12 miles long, called for the pipelines to follow the #5-2 well access road and existing disturbance on private land to just west of the Highway 151 right-of-way, then overland south roughly paralleling the highway right-of-way for about 0.5 mile, then westerly up the hill to the #5-1 well location (about 2660 feet on Reclamation land; mostly new disturbance). A third alignment, about 0.8 miles long, extended east overland on private land from the #5-2 well to the second proposed alignment west of the highway. thence along that alignment to the #5-1 well (about 2660 feet on Reclamation land; mostly new disturbance). The final proposed alignment is about 1.15 miles long and follows the 5-2 well access road to just east of the highway right-of-way boundary then south within the west barrow ditch of the highway about 3550 feet then westerly up the hill to the #5-1 well location (about 3900 feet, including 350 feet of new disturbance, on Reclamation land). The Colorado Department of Transportation has issued a utility permit for Energen to place the pipelines in the west barrow ditch of the highway.

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Energen's original proposal was intended to avoid crossing SUIT lands, but they had mistakenly identified a parcel of Reclamation land west of the highway as SUIT lands. The second alignment was proposed by Reclamation to utilize Reclamation lands while avoiding the two highway crossings and two recreation road crossings, and while reducing potential impacts to recreational uses east of the highway. Energen suggested the third alignment on private land to reduce overall length of the pipeline and subsequent construction costs. The final alignment (proposed action) was proposed by Energen to keep the pipelines west of the highway (per Reclamation's rationale for the second alignment) and to avoid a large, significant archaeological site found on the third alignment.

Issues

Primary issues raised during the pipeline alignment discussions and EA process included the effects of construction, operation, and maintenance of the pipelines on reservoir water quality, vegetation, cultural resources. State Highway 151, and recreational facilities and use. Consultation and coordination for this proposal was conducted with US Fish and Wildlife Service, Colorado SHPO, Colorado Department of Transportation, and Colorado State Parks.

Environmental Commitments

Energen, in its Plan of Development (POD) and associated plans and permits, has and is committed to various actions to protect the environment. These actions include but are not limited to the following:

- Compliance with applicable federal, state and local laws, regulations, and permits.
- Compliance with their POD and associated plans and permits, including but not limited to:
 - CDOT utility permit with its conditions
 - Spill Prevention, Control and Containment Plan for Hazardous Materials.
 - Stormwater Management Plan
 - CO stormwater discharge permit
 - COE permit, if necessary.
- Re-contouring and re-vegetating the disturbed areas.
- Monitoring and control of noxious weeds along the pipeline right-of-way.
- Avoidance of known cultural resources, ceasing work and reporting unknown cultural resources during
 construction. Specifically, routing the pipeline to the west side of the 5-2 well access road between
 stations 53-09.37 and 57-07.53, installing temporary protective fencing on the east side of the access
 road between the same two stations, and on-site monitoring of all ground disturbance with 100 feet of
 site 5AA3081.
- Protection of water quality and soil resources through use of Best Management Practices for water control on and revegetation of disturbed areas.
- Monitoring of produced water pipeline for leakage.

Additional Terms and Conditions

• Within 60 days of issuance of the license agreement, Energen shall prepare a Spill Prevention and Control Plan specific to the produced water pipeline. Energen shall maintain and implement said plan as necessary. Said plan shall contain elements to reduce the potential for leaks and breaks in the pipeline and to minimize any adverse environmental effects from any such leaks or breaks. Said plan may be patterned after the SPCC plan for hazardous materials.

Summary

Reclamation has selected the proposed alignment that allows the construction, operation and maintenance of an 8-inch diameter natural gas pipeline and a 4-inch diameter produced water pipeline in the same trench on Reclamation lands between the Dungan 32-5 #5-2, 5-3 and Dungan 32-5 #5-1 gas wells. The alignment for the proposed pipelines remains on the west side of Highway 151 with approximately 3550 feet in the western barrow ditch of the highway. The authorization allows Energen to market natural gas and dispose of produced water from the Dungan 32-5 #5-2 and #5-3 wells by connecting to existing facilities at the Dungan 32-5 #5-1 well location. The license agreement will be for a period of 25 years and will contain reasonable and appropriate conditions of approval to reduce adverse environmental effects from the proposed action. The Colorado Department of Transportation has issued a "Utility Permit" for the proposed action within the highway right-of-way. This alternative protects existing water uses, and the potential effects on reservoir operations and resources are minimal.

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Alań Schroeder Natural Resource Specialist

Western Colorado Area Office

Concur:

NEPA Compliance Western Colorado Area Office

Concur:

Resources Division Manager

Western Colorado Area Office

Approved:

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