PLAN OF DEVELOPMENT
PAIUTE PIPELINE COMPANY
OWYHEE ANODE WELL INSTALLATION
WR 2954886

1. <u>Purpose and Need:</u>
   a. **What will he constructed:** Paiute Pipeline proposed to install three 10-inch Anode Wells, a new aboveground Property Line Regulator Assembly (PLRA), a Thermo Electric Generator (TEG) and fencing all within the existing BLM right-of-way boundaries.
   b. **Commodity to be transported:** Natural gas for residential usage.
   c. **Is the pipeline transmission or distribution:** The pipeline is for a transmission line.
   d. **Will it be surface or subsurface:** Three anode wells and additional piping to he installed underground, while the Property Line Regulator Assembly (PLRA), Thermo Electric Generator (TEG) and fencing installed aboveground.
   e. **Length/Width of the right-of-way and the area needed for related facilities:** Facilities to be installed within the existing BLM right-of-way (NVN-0058610). The right-of-way area to be used is 50 feet wide. 500 feet long.
   f. **Ancillary to an existing right-of-way?:** No
   g. **Alternative Routes:** The anode wells and aboveground facilities need to be along the existing transmission gas line, no other route considered.

2. **Right-of-way location:**
   a. **Legal Description:**
      T. 45 N., R. 45 E., M.D.M., Washoe County, Nevada
      Section 3
   b. **Maps/Drawings:** (See Owyhee Work Space drawing attached)

   c. **Area Calculation of Right-of way:**
      The right-of-way area to be used is 50 feet wide, 500 feet long and contains 0.57 acres, more or less.

3. **Facility Design Factors:**
   a. **Pipeline Pressure Standards:** 16" Pipe, Grade X-46, 906 Psig MOP, 906 Psig MOP
      Pipe Wall Thickness: 0.219" Wall Thickness
      Pipe Grade Rating: 46000 psi
   b. **Toxicity of Pipeline Product:** No
   c. **Anticipated Operating temperatures:** 60 F
   d. **Depth of pipeline:** 3 feet minimum top of pipe
   e. **Permanent width or size:** 10" diameter Anode Wells and 3/4" PLRA tapped from 16" Steel Pipe.
   f. **Temporary areas needed:**
      No

4. **Additional Components of the right-of-way:**
   a. **Connection to an existing right-of-way:** N/A
      i. **Existing components on or off public land:** 16" Steel Pipe
      ii. **Possible future components:** 10" underground Anode Wells, 3/4" PLRA and TEG.
   b. **Location of pumping and/or compressor stations:** N/A
   c. **Need for sand and gravel and where will it be obtained:** N/A
   d. **Location of equipment storage areas:** Drill Rigs, Backhoe and Water truck will stay overnight within the right-of-way.

5. **Government Agencies Involved:** BLM

6. **Construction of the Facilities:**

a. **Construction:** Paiute Pipeline proposed to install three 10-inch Anode Wells, a new aboveground Property Line Regulator Assembly (PLRA), a Thermo Electric Generator (TEG) and fencing all within the existing BLM right-of-way boundaries, to supply the existing 16" Steel Pipeline with cathodic protection to prevent corrosion.

   i. **Major Facilities (vehicles, number of tons/loads):**
      1. (5) Utility Vehicles – 3 Tons total
   ii. **Ancillary Facilities (vehicles, number of tons/loads):**
      1. (2) Drill Rig– 26 Tons total
      2. (1) Backhoe – 4 Tons
      3. (1) Water Truck – 20 Tons

b. **Work force (Number of people and vehicles):** 5 Paiute Employees, 3 Contractors and (5) Utility Vehicles
c. **Flagging or Staking the right-of-way:** Staking
d. **Clearing and Grading:** Yes, Clearing and Grading will be within our Right-of-way
e. **Facility Construction data:**
   i. **Description of construction process:** Paiute Pipeline proposed to install three 10-inch Anode Wells, a new aboveground Property Line Regulator Assembly (PLRA), a Thermo Electric Generator (TEG) and fencing all within the existing BLM right-of-way boundaries, to supply the existing 16" Steel Pipeline with cathodic protection to prevent corrosion.
f. **Access to and, along right-of-way during construction:** Yes
g. **Engineering drawings and specifications for site-specific problems relating to surface use or special mitigation:** No
h. **Diagrams, drawings, and cross sections to help visualize the scope of the project:** (See attached)
i. **Special equipment that will be utilized:** (2) Drill Rigs, (1) Backhoe, (1) Water truck
j. **Contingency planning:**
   i. **Holder contacts:** N/A
k. **BLM contacts:** Julie McKinnon
l. **Safety requirements:** Adequate
m. **Industrial wastes and toxic substances:** No

7. **Resource Values and Environmental Concerns:**
   a. **Address at level commensurate with anticipated impacts**
      i. **Location with regard to existing corridors:** No
   b. **Anticipated conflicts with resources or public health and safety**
      i. **Air, noise, geologic hazards, mineral and energy resources, paleontological resources, soils, water, vegetation, wildlife, threatened and endangered species, cultural resources, visual resources, BLM projects, recreation activities, wilderness, etc.:** No

8. **Stabilization and Rehabilitation**
   a. **Soil replacement and stabilization:** Yes
   b. **Disposal of vegetation removed during construction (i.e., trees, shrubs, etc.):** None
   c. **Seeding specifications:** Yes
   d. **Fertilizer:** No
   e. **Limiting access to the right-of-way:** No
   f. **Will roads built during construction be reclaimed:** No

9. **Operation and Maintenance**
   a. **Will new or expanded access be needed for operation and maintenance:** No
   b. **Will there be hydrostatic testing and subsequent release of water and what is the anticipated volume:** No
   c. **Will removal and/or addition of pipe and/or pumps be required as part of pipeline maintenance:** No
   d. **Will all maintenance activities be confined within the right-of-way:** Yes
   e. **Will industrial wastes and toxic substances be generated or stored on right-of-way:** N/A
   f. **Inspection and maintenance schedules**
      i. **will these be conducted on-the-ground and/or by aircraft:** On-the-ground
      ii. **if by aircraft, will the aircraft require landing strips and/or heliports:** N/A
   g. **Work schedules:** Summer 2015, Approximately 3 weeks (7 AM – 6 PM)
   h. **Fire control:** Yes

i. **Contingency planning:** Yes

10. **Termination and Restoration**
    a. **Removal of structures:** N/A
    b. **Will pipe be removed or cleaned and left in ground:** N/A
    c. **Obliteration of roads:** N/A
    d. **Stabilization and re-vegetation of disturbed areas:** Yes

United States Department of the Interior
BUREAU OF LAND MANAGEMENT

MEMORANDUM

To: Elisabeth Puentes, Realty Specialist
Case File No. NVN-58610
From: Ken Wilkinson, Wildlife Biologist Ken Wilkinson 1/6/2015
Subject: Paiute Pipeline ROW Amendment – Draft Categorical Exclusion Documentation
Date: January 6, 2015

Proposed Stipulations to Mitigate the Effects of Proposed Anode Bed Reconstruction within the Subject Right-of-Way (ROW) on Wildlife Habitat

Note: A memorandum dated 11/1/2010 was submitted in-house for the same case file for a separate similar anode bed proposed action to the east towards the south side of Star Ridge.

Confirm Absence or Presence of BLM Special Status Species: Including, but not limited to, any active Western Burrowing Owl or Pygmy Rabbit burrow locations or observations. Both of these species have been observed on or near the pipeline route. Special stipulations would be in effect if the project is within owl nesting or Pygmy Rabbit burrow buffer areas. (Greater Sage-Grouse: The proposed action location was part of aerial lek search transects in April 2007 and April 2014 where no lek activity was observed during both flights.)

Other Wildlife Species including Migratory Birds: Mitigate the effects of the proposed action by completing all ground disturbing work before or after the migratory bird nesting season that occurs during the approximate April 1 to July 31 period on the area. Otherwise, the area would need to be surveyed for active migratory bird nests. In the event that active nests are located, the buffer distances shown with *BLM Nevada – Wildlife Survey Protocols* would be followed.

BLM has current wildlife survey protocol available for a qualified third-party biologist. Confirm the names of pipeline personnel/third party consultants that would be involved with confirming any wildlife habitat disturbance avoidance measures and coordination of these efforts with the BLM Biologist.

Rehabilitation of work area:

Anode Bed – Reclamation Seeding Efforts: Native perennial grass species that provides an open and low-growing rhizomatous sod such as "Bannock" Thickspike Wheatgrass or "Rosanna" Western Wheatgrass should be considered which would also be competitive with exotic noxious weeds and annual species. Both species could also help to slow down or stop any fires inadvertently started on the ROW that could affect adjoining wildlife/BLM Special Status Species/migratory bird habitat. The use of exotic perennial grass species would not be permitted. Topsoil needs to be separated and re-distributed prior to reclamation seeding efforts. Seedbed preparation is needed to allow for seed incorporation with soil and prevent seed

application on compact soils.

Drill-Seeding Option: If drill seeding is considered, recommend application of a mix of the equivalent of 4.0 PLS lbs/ac "Bannock" thickspike wheatgrass and 4.0 PLS lbs/ac "Rosanna" Western Wheatgrass wheatgrass. Drill to depth of approx. 3/8 to ½-inch below soil surface.

Broadcast Seeding and "Drag" Coverage: Allow seed incorporation into the soil and cover to approx. 3/8 to ½-inch below soil surface using light chain or chain link drags. Increase seeding rate to equivalent of 6.0 PLS lbs/ac "Bannock" thickspike wheatgrass and 6.0 PLS lbs/ac "Rosanna" Western Wheatgrass wheatgrass.

Hydro-mulching Option: Application of the seed mixture, mentioned above, as recommended and completed by a qualified third party contractor.

Secondary seeding treatments might need to be completed in the event that post-construction efforts are not successful by two growing season periods after initial seeding efforts:

Seeded Areas Success Criteria
a. A minimum of three seeded perennial grasses per square meter rooted firmly in the soil, with consideration to site selection factors such as soils, topography, native release of desirable species, and the potential for seedling establishment.
b. A qualitative assessment of soil and site stability, and hydrologic function, that results in ratings of none to slight departure from that expected from the same kind of ecological site considered to be in stable condition.

Exotic Annual Species Control and Secondary Reclamation Seeding Work: Completed, as deemed necessary, for the life of the project as efforts to control annual species such as, but not limited to, cheatgrass or tumble mustard that might establish as a result of ground disturbance on the project area.

Thermo-Electric Generator: Construct the generator pad and buffer area per safety precautions for fire prevention that are recommended by the manufacturer. The generator produces internal flame with beat from an external baffling system where it needs to be emplaced at a 'maximum safe distance" with the fenced area away from intact vegetation outside the fenced area or any wind-blown annual vegetation (e.g., "tumbleweed" and tumble mustard) that could potentially collect on or next to the fence. The entire area within the proposed fence exclosure should be graveled and maintained as free of vegetation for the life of the project. Any herbicide that is applied to sterilize the soil must be approved by BLM and completed per label instructions. Notify BLM Fire Management Officer in regard to precautions that are needed in the event of a wildfire in the project area.

Fencing: Install a lightning diffusor product (see example of metal rod with splayed

top shown below) on fence brace corners which also help to provide effective predatory bird perch deterrents. Construct fencing in a manner that deters predatory bird perching on horizontal rail sections – see example below.

Example of a lightning diffusor product plus wire fencing above horizontal fence railing as an effort to deter perching by predatory birds.

Common Raven Depredation Permit

Notify the Nevada Department of Wildlife if Common Raven nests are present on the project structures. Obtain a U.S. Fish and Wildlife Service Common Raven Depredation Permit, as deemed necessary, and remove raven nests from the any project structures as stipulated in the permit, followed by any needed new placement, maintenance or replacement of a nest deterrent device(s). Nest removal should be completed prior to egg-laying and hatch periods.

Removal of Other Protected/Migratory Bird Species Nests

In consideration of Stipulation No. 2 mentioned above and State and Federal laws, notify the Nevada Department of Wildlife if other bird nests are present on the project structures and removal is requested to due to safety and fire hazards or other concerns. This would be followed by any needed new placement, maintenance or replacement of a nest deterrent device(s) maintained on the structure(s) for the life of the project.