Lake Powell Pipeline Project
FERC Request for Clarification Schedule A – Item 5

Exhibit E
Recreation Resources

5. In section 5.3.13.3.2.1 of exhibit E and section 5.2 and appendix B of Final Study Report 9 you describe mitigation measures for impacts on non-motorized trails on lands managed by the Bureau of Land Management, St. George Field Office. The measures involve in-kind replacement of parking areas and non-motorized trails, but they are not described in any sections of the final license application in relationship to project impacts. Please clarify what project effects these measures would mitigate, and, if available, provide more details about your proposal, such as maps showing removed and replacement features, number and type of trails, lengths of trails, size of parking lots, and detailed descriptions of any other measures.

UBWR Response:

The LPP project recreation effects that would be mitigated are described in Exhibit E, section 5.3.13.2.1.9, under the heading “Sand Mountain Special Recreation Management Area” (Sand Mountain SRMA) and subheadings Construction Effects and Operation Effects. Proposed mitigation measures in the fourth bullet under Exhibit E, section 5.3.13.3.2.1 should be separated into two bullets as follows:

- The GWT south parking area would be restored immediately after LPP construction in the vicinity is complete, in coordination with GSENM.
- Mitigation measures for permanent effects on BLM SGFO non-motorized trails include, as appropriate, replacing horse riding trails in-kind on nearby BLM land, replacing horse trailer loading and unloading ramps and trailer-vehicle parking areas on BLM land, replacing mountain bike trails in-kind on nearby BLM land, and replacing vehicle parking areas for mountain bike enthusiasts adjacent to the replaced mountain bike trails. The SGFO recreation mitigation measures would be specifically designed and constructed in coordination with the BLM SGFO.

Figure 2-1 shows the removed and replaced recreation features on a map indicating land management and ownership. Figure 2-2 shows the removed and replaced recreation features on an aerial imagery map.

Portions of two public roads constructed and maintained by the BLM St. George Field Office (SGFO) and within the Sand Mountain SRMA would be permanently affected by the LPP project and would be replaced with the following transportation infrastructure as mitigation:

1. Existing S. 1100 W./Arizona Strip Road at proposed tailrace channel crossing: A 660-foot-long bridge would be constructed over the proposed tailrace channel to maintain public access and use of the existing S. 1100 W./Arizona Strip Road (see Figures 2-1 and 2-2).
2. Existing Warner Valley Road beginning at S. 1100 W./Arizona Strip Road:
   Approximately 1,700 feet of the existing gravel road within the footprint of the proposed
   afterbay reservoir would be realigned with a new gravel road approximately 1,724 feet
   long (see Figures 2-1 and 2-2).

Existing dispersed use, user-defined ATV roads and trails within the Sand Mountain SRMA and
the footprint of the proposed tailrace channel and afterbay reservoir would be permanently
affected and removed by the LPP project tailrace channel and afterbay reservoir. The dispersed
use, user-defined ATV roads that would be permanently affected total 25,217 feet long (Figures
2-1 and 2-2). The dispersed use, user-defined ATV trails that would be permanently affected
total 8,824 feet long (Figures 2-1 and 2-2). There are no BLM-developed parking lots, trailheads,
trails, information kiosks, maps or other BLM-developed recreation features that would be
removed by the LPP project.

The proposed recreation mitigation measures include new mitigation ATV roads and trails, and
mitigation-improved ATV roads and trails, as shown on Figures 2-1 and 2-2, and presented in
Table 2-1. One proposed new mitigation ATV road (i), located within the Sand Mountain
SRMA, would total 1,200 feet long and would be accessible from the east and west parking areas
via proposed mitigation-improved ATV roads. The east parking area would provide vehicle and
trailer parking, unloading/loading ramps, three trailheads, a composting-toilet restroom, and an
information kiosk with maps for roads and trails and other interpretive information. The east
parking area would be approximately 100 feet wide and 300 feet long, connected to the existing
S. 1100 W./Arizona Strip Road within the Sand Mountain SRMA via two existing roads. Seven
new mitigation ATV trails (m, n, o, p, q, r, s) are proposed to be located within the Sand
Mountain SRMA as shown on Figures 2-1 and 2-2 and would total 14,602 feet long, connected
to the proposed ATV trailheads and the east and west parking areas via mitigation-improved
ATV roads. One proposed new non-motorized mitigation trail (a) totaling 7,426 feet long would
start at the east parking area trailhead and connect to a mitigation-improved ATV road accessible
from the east and west parking areas. One mitigation-improved non-motorized trial (b) totaling
2,988 feet long would be connected to a mitigation-improved ATV road accessible from the east
and west parking areas. Access to non-motorized trailheads would be controlled with non-
motorized access gates and placed boulders. Eight mitigation-improved ATV roads (d, e, f, g, h,
j, k, l) would total 15,623 feet long, and three mitigation-improved ATV trails (c, t, u) would
total 4,870 feet long. Access to ATV trailheads would be controlled with bollards and placed
boulders. The west parking area would provide vehicle and trailer parking, unloading/loading
ramps and include an ATV trailhead connected to a mitigation-improved ATV road. The west
parking area would be approximately 100 feet wide and 200 feet long and would be accessed via
an existing dirt road within the Sand Mountain SRMA (Figures 2-1 and 2-2).

The mitigation ATV roads and mitigation ATV trails would total 36,695 feet long. The
mitigation ATV roads (new plus improved) would total 17,273 feet long. The mitigation ATV
trails (new plus improved) would total 19,422 feet long (Table 2-1).

Mitigation non-motorized trails are proposed as an additional mitigation measure, although there
are no BLM designated non-motorized trails that would be removed by the LPP project. The
mitigation non-motorized trails (new plus improved) would total 10,414 feet long (Table 2-1).
Table 2-1
Proposed Recreation Mitigation Trails and Roads in the Sand Mountain Special Recreation Management Area

<table>
<thead>
<tr>
<th>Trail</th>
<th>Type</th>
<th>Length (ft.)</th>
<th>Trailhead</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>New non-motorized trail, access-controlled</td>
<td>7,426</td>
<td>Yes</td>
</tr>
<tr>
<td>b</td>
<td>Mitigation-improved non-motorized trail, access-controlled</td>
<td>2,988</td>
<td>No</td>
</tr>
<tr>
<td>c</td>
<td>Mitigation-improved ATV trail, access-controlled</td>
<td>1,071</td>
<td>No</td>
</tr>
<tr>
<td>d</td>
<td>Mitigation-improved ATV road</td>
<td>4,722</td>
<td>Yes</td>
</tr>
<tr>
<td>e</td>
<td>Mitigation-improved ATV road</td>
<td>687</td>
<td>No</td>
</tr>
<tr>
<td>f</td>
<td>Mitigation-improved ATV road</td>
<td>1,317</td>
<td>No</td>
</tr>
<tr>
<td>g</td>
<td>Mitigation-improved ATV road</td>
<td>2,608</td>
<td>No</td>
</tr>
<tr>
<td>h</td>
<td>Mitigation-improved ATV road</td>
<td>461</td>
<td>No</td>
</tr>
<tr>
<td>i</td>
<td>New ATV road</td>
<td>1,200</td>
<td>No</td>
</tr>
<tr>
<td>j</td>
<td>Mitigation-improved ATV road</td>
<td>5,162</td>
<td>Yes</td>
</tr>
<tr>
<td>k</td>
<td>Mitigation-improved ATV road</td>
<td>336</td>
<td>No</td>
</tr>
<tr>
<td>l</td>
<td>Mitigation-improved ATV road</td>
<td>330</td>
<td>No</td>
</tr>
<tr>
<td>m</td>
<td>New ATV trail, access-controlled</td>
<td>2,919</td>
<td>No</td>
</tr>
<tr>
<td>n</td>
<td>New ATV trail, access-controlled</td>
<td>5,937</td>
<td>No</td>
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<tr>
<td>o</td>
<td>New ATV trail, access-controlled</td>
<td>322</td>
<td>No</td>
</tr>
<tr>
<td>p</td>
<td>New ATV trail, access-controlled</td>
<td>789</td>
<td>No</td>
</tr>
<tr>
<td>q</td>
<td>New ATV trail, access-controlled</td>
<td>821</td>
<td>No</td>
</tr>
<tr>
<td>r</td>
<td>New ATV trail, access-controlled</td>
<td>2,805</td>
<td>No</td>
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<td>s</td>
<td>New ATV trail, access-controlled</td>
<td>1,009</td>
<td>No</td>
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<tr>
<td>t</td>
<td>Mitigation-improved ATV trail, access-controlled</td>
<td>772</td>
<td>No</td>
</tr>
<tr>
<td>u</td>
<td>Mitigation-improved ATV trail, access-controlled</td>
<td>3,027</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Subtotal Non-Motorized Trails, Access-Controlled (trails a, b) 10,414
Subtotal ATV Trails, Access-Controlled (trails c, m, n, o, p, q, r, s, t, u) 19,422
Subtotal ATV Roads (trails d, e, f, g, h, i, j, k, l) 17,273
Subtotal Mitigation ATV Trails and Mitigation ATV Roads 36,695
Total Mitigation Trails (ATV trails and roads, and non-motorized trails) 47,099

Note:
1Trail represents mitigation and mitigation-improved ATV trails, ATV roads, and non-motorized trails.
Lake Powell Pipeline Project

UDWR Figure 2-1

Recreation Impacts and Mitigation Measures

Figure 2-1

Spatial Reference: UTM Zone 12N, NAD-83

- Non-Motorized Trails
- Recreation Trails
- Dispersed Use, User-Defined Road
- Mitigation Trail
- Mitigation - Improved Trail
- Mitigation - Improved ATV Road
- Mitigation Parking Lot
- Proposed FERC Project Boundary
- BLM/SRMA Boundary
- Existing Primary Road
- Existing Primary Road (inside Proposed FERC Project Boundary)
- Project Transmission Lines
- Contours 100 ft
- BLK
- State
- Private

Inset East Parking Area
Inset West Parking Area
Ramps

FERC Project Number: 12956-001
BLM Serial Numbers: AZA-34041 UTU-85472