

Lake Powell Pipeline Project
FERC Request for Clarification Schedule A – Item 2

Exhibit E

Water Resources

2. Your response to our comment 27 on the preliminary licensing proposal (PLP) states that section 5.3.4.2.2.3 of exhibit E has been revised to describe surface water management at the proposed project Intake Pump Station. Please clarify where you discuss surface water management or provide this discussion.

UBWR Response:

Surface Water Drainage and Sediment Control at the Water Intake Pump Station

Surface water runoff drainage and sediment transported to the Water Intake Pump Station site would be routed through a sump containing a sediment trap and into one or both of the vertical shafts. The sump would be adjacent to the vertical shaft(s) and collect sediment transported and surface water runoff generated from the 31.8-acre area tributary to the Water Intake Pump Station. This tributary area extends up the slopes from the Water Intake Pump Station site to the paved road and Highway 89, which forms the drainage watershed for the site. The roads and parking areas around the Water Intake Pump Station site would be graded to drain surface water to the sump and shaft(s), and the pump station building roof would drain surface water to the sump and shaft(s) as well. The sediment trap would be cleaned of collected sediments as necessary during regular operations, and the sediments would be disposed in an approved landfill site. The steel-lined vertical shaft(s) would receive the surface water drainage from the tributary area, which would become part of the flow pumped from the forebay chamber into the Lake Powell Pipeline (LPP). The steel-lined vertical shaft(s) would prevent the surface water drainage from directly interacting with groundwater, and therefore would protect the groundwater aquifer from any potential contamination associated with the inflow of surface water drainage. Any sediments collecting at the bottom of the vertical shaft(s) would be periodically cleaned out as part of regular operations and disposed in an approved landfill site.

Surface water runoff occurring between the east edge of the Water Intake Pump Station site and the edge of the cliff (0.9-acre tributary area) would be generated from undisturbed ground and would flow directly into Lake Powell. The surface water runoff over the cliff edge would flow at a much lower rate than under existing conditions because nearly all of the pre-LPP tributary area would flow into the vertical shaft(s). Therefore, existing tributary area of the watershed that could flow uncontrolled into Lake Powell over the cliffs would be reduced by 97 percent (31.8 acres divided by 32.7 acres) as a result of the LPP Water Intake Pump Station site collecting surface water drainage and transported sediments. The net effect of the LPP Water Intake Pump Station operation would be to reduce surface water runoff and sediment transport into Lake Powell.