



State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

Office of the Governor PUBLIC LANDS POLICY COORDINATION

JOHN HARJA
Director

April 22, 2008

Dr. Vince Lamarra, CEO
Symbiotics L.L.C.
975 South Highway 89-91
Logan, Utah 84321

Dear Dr. Lamarra:

I want to express appreciation to you and other employees of Symbiotics for the briefing you gave a number of Utah state agencies on March 31, 2008, concerning the pump-storage hydroelectric project proposed for Hook Canyon (FERC No. 12707), on the eastern shore of Bear Lake, Utah. We have been reviewing the information you provided at that meeting, and the information contained in your submissions to the Federal Energy Regulatory Commission (FERC).

In addition, we have reviewed letters state agencies previously submitted concerning the proposal, including a letter dated May 7, 2007, over my signature, a letter dated December 19, 2007, signed by Mary Tullius, Director of the Division of State Parks and Recreation, and a letter dated May 8, 2007, signed by Todd Adams, Assistant Director at the Division of Water Resources. These letters identify numerous serious concerns state agencies have about the proposed facility, and about use of the affected State Park and state sovereign lands. Based on this subsequent review, the state wishes to convey to you its opposition to the proposed facility at Bear Lake.

Bear Lake is one of the recreational gems of the state of Utah, with residents and visitors enjoying summer and winter fishing, sailing, scuba diving, hunting, camping, and relaxing beach time. In addition, the residents enjoy all the benefits of small town living, sustained in large part by the draw of visitors from near and afar to the lake. The lake is marketed as the "Caribbean of the Rockies" due to its exceptional clarity and amazing blue color. Four species of fish are found only within the lake. The forests and shrub lands surrounding it are alive with deer, elk, birds, small mammals and sensitive species such as sage grouse. The economy of the entire region is tied to this recreational and scenic background.

In this light, the state has been reviewing the apparent and potential impacts to the social and natural environment which might be expected from the proposed pump-storage facility. These effects include alteration to the clarity, thermal balance and chemical properties of the lake due to mixing caused by water movement. Fish may be entrained

in the facility's intake pipes, and spawning endemic fish spawning disrupted. The proposed impact to the visual setting of the lake, particularly in the middle of the east side panorama, is alarming. The construction and operation of the facility may displace or permanently suspend recreational opportunities currently enjoyed by the visitors to Bear Lake.

More specifically, the state has serious concerns that project implementation may increase the likelihood of a federal listing under the Endangered Species Act (ESA) for the Bonneville cutthroat trout, Bear Lake whitefish, Bonneville Cisco, Bonneville whitefish, Bear Lake sculpin, and Greater Sage-Grouse. Currently, all of these species are undergoing federal status reviews to determine whether listing under ESA is warranted. The state's wildlife concerns include, among others:

- Bear Lake has a thick blanket of fine calcium carbonate marl sediment that could be entrained by turbulence caused by water pumping at the Hook Canyon pump-storage plant. Increases in turbidity have been proven to decrease light penetration which reduces algal production in lakes and streams. A reduction in the primary food source would have cascading effects on the feeding ecology of Bear Lake fish populations.
- Frequent, high-volume water exchanges have the potential to disrupt key thermal gradients within Bear Lake. Thermal gradients are particularly important to Bear Lake as they provide important feeding zones for zooplankton and fish. A small fluctuation in the depth or occurrence of these thermal gradients could cause fluctuations in food availability and lead to fish population declines.
- Four of the Bear Lake fish species migrate to Cisco Beach to spawn. Cisco Beach is in close proximity to the proposed project. These four fish species likely orient themselves from chemical and physical cues within the lake. Large-scale pumping at Hook Canyon could disrupt these cues, thereby affecting the ability of endemic fish to congregate at key spawning habitat.
- The proposed intake and outflow structure will be located near the spawning grounds of Bear Lake fish species. As larval fish emerge from these spawning habitats, they may become entrained by water pumping from the proposed project. While fish screens can be designed to protect juvenile and adult fish, they would not be effective in protecting larval fish due to their limited swimming ability and delicate nature.
- The proposed project will induce daily fluctuations of 2.6 to 3.1 inches to the level of the lake. Since Bear Lake has areas that have a very shallow gradient slope, the project would induce a daily "tidal" exposure of shallow lake substrate. Such daily changes in submersing and dewatering significant portions of the beach shoreline may influence the productivity of benthic macroinvertebrates, which are a primary food source for Bear Lake fish.

- Currents within Bear Lake are responsible for keeping sediment deposition low in rocky areas. If the natural currents are affected by the project, this could negatively impact egg and juvenile fish survival on these rocky substrates around Bear Lake.

Turning to other topics, the environs of Bear Lake have been host to human use for centuries. Native Americans and early explorers such as Jedidiah Smith and Jim Bridger used the area for hunting and rendezvous gatherings. John Fremont named many of the features in the surrounding area. Consequently, there is high potential for the presence of significant archaeological and historical sites, prehistoric and historical human burials, and Traditional Cultural Properties. Both tribes and local communities value these resources. These are all part of the social fabric and ambiance of the area, and the potential to mitigate adverse effects to this social fabric through avoidance is minimal.

The state, through the Division of Forestry, Fire and State Lands is currently engaged in a planning process for the comprehensive management of the sovereign lands (lake bed lands) at Bear Lake. These sovereign lands have been withdrawn from any new leasing until the comprehensive plan is complete. The Division is required by statute to manage its land under multiple-use, sustained yield principles, and is leaning primarily toward recreational use in the area. The Division's planning process invites and encourages public participation in the determination of the proper balance of uses at Bear Lake. The state believes that the licensing process envisioned by the FERC application for the pump storage project is not an acceptable substitute for this public process.

The proposed facility is immediately adjacent to a large geologic fault. Potential effects from movement on the fault to the proposed 270 foot-high, 1,400 foot-long dam and associated facilities cause grave concerns. These concerns are in addition to the effects from soil slippage, liquefaction potential, and effects on the project's operations from the karst topography in the area.

As a possible balance to these effects, the project proposes peak hydroelectric power in a region in need of further electrical capacity. Yet, when we examine these proposed benefits, they appear to have flaws. The project will need 20% more energy to operate than is produced due to efficiency losses involved in the pumping of water. This equates to an annual net loss of 811,468 MWh of power. This net loss of power contradicts the Governor's goal of increasing energy efficiency by 20% by 2015. Furthermore, the project would not generate any renewable energy; all net power output of the plant will be attributable to fossil fuel sources. The plant will generate significantly more carbon emissions than equivalent power facilities, and the plant's net carbon output per unit of electricity will actually exceed the output of a coal-fired power plant.

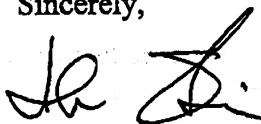
We understand that many of these concerns are potential in nature, and that additional study might produce further options. The state was, therefore, severely disappointed to learn that Symbiotics did not choose to propose any studies concerning impacts to recreation from the proposed facility. Instead, Symbiotics chose to proceed

with minimal analysis by defining the project area as solely a small buffer area immediately around the facility and associated power lines (approximately 300ft), when the potential for effects to the entire region is readily apparent. Further, Symbiotics has not chosen to study the cumulative impacts of the project upon the local communities and the state.

The state must balance the potential for societal benefit from projects such as this against the potential for unnecessary disruption of the social and natural fabric of the region involved. The state has concluded that the potential for harm to the valuable Bear Lake region from the proposed pump-storage project far outweighs the marginal benefits to the state.

For these reasons, I wish to convey to you, on behalf of the Governor, the State of Utah's opposition to the proposed project. The state is no longer willing to enter into negotiations with Symbiotics for the use of the lands managed by the Division of State Parks and Recreation along the east shore of Bear Lake. The state will inform the Federal Energy Regulatory Commission of this decision as well.

Sincerely,



John Harja
Director