Section B: U.S. Department of Interior Preliminary 4(e) Conditions – Reclamation Reservation

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Introduction

The Energy Policy Act of 2005, section 241 (c), amending section 33 of the Federal Power Act (16 U.S.C. § 823d) (Act) allows any party in a licensing proceeding to propose an alternative Federal Power Act (FPA) Section 4(e) condition. As such, in the Federal Energy Regulatory Commission relicensing proceeding for P-2082, PacifiCorp filed a proposed alternative to the Section 4(e) conditions proposed by the Bureau of Reclamation (Reclamation). Based on requirements of the Act, and the regulations at 43 CFR § 45.70-.73, Reclamation is required to provide modified Section 4(e) conditions to FERC based on the alternative provided, the results of the Administrative Law Judge preliminary hearings, comments received on FERC’s draft environmental impact statement (DEIS) and other evidence available to the Secretary.

The ALJ ultimately dismissed all Reclamation issues raised by the licensee or interveners as outside the purview of the ALJ because they did not raise any disputed issues of material fact regarding Reclamation’s conditions.

As provided in previous Reclamation and Interior filings (REA filing of March 2006 and DEIS Comments of November 2006), Reclamation does not agree with the licensee’s determination, or FERC’s preliminary determination for that matter, that Keno Dam is not used and useful for hydropower generation. Because FERC determined that Keno Dam operations data is of a proprietary nature and cannot be released to the public, Reclamation is unable to prove the value of Keno Dam to the licensee. Personal communication over the years with licensee staff regarding operational changes at Keno Dam during the winter months; that is, during periods of high power use for heating residential buildings, proves that the licensee does indeed gain value from Keno Dam.

Additionally, Keno Dam should remain a part of the license because of additional project purposes including recreation and flood control. It is FERC’s responsibility to determine project boundaries based on all project purposes.

Section 1: Resource Goals

Reclamation’s goal is to protect the efficient, reliable, and cost effective supply of water for Klamath Irrigation Project purposes.

Section 2: Description and Rationale for Modified Condition

Reclamation is not modifying originally submitted conditions. No evidence was developed during the ALJ process, from DEIS comments, or provided in the licensee’s alternative that warranted modification. The rationale and supporting evidence for the conditions are stated in
the Department’s March 27, 2006 preliminary conditions filing which is hereby incorporated by reference.

Section 3: Alternatives Analysis

This section presents analysis of PacifiCorp’s proposed alternative condition for adequacy and implementation costs or operational impacts to electricity production as compared to Reclamation’s proposed condition, in accordance with Section 33 of the FPA. Reclamation’s preliminary conditions were included in DOI 2006, and as modified are included as Attachment 1. Reclamation’s condition is compared to PacifiCorp’s April 25, 2006, alternative.

A. Description of Alternative Conditions

Description of Reclamation’s Conditions:

Following is a summary of Reclamation’s seven 4(e) conditions. Please see previous filing by the Department of the Interior on March 27, 2006 for specific details associated with each condition.

Condition 1: The Licensee shall enter into new or amended contract with Reclamation for the operation and maintenance of Link River and Keno Dams under terms and conditions satisfactory to the Secretary of the Interior as follows: (1) ensure continued operation and maintenance consistent with annual operating plans, (2) ensure cost of service power rates for agricultural users, (3) maintain the “A” Canal approach channel, (4) assume liability for damages due to Link River operations, (5) not limit the rights of the United States to Klamath Water or lands surrounding Upper Klamath Lake, and (6) operate Keno Dam ensuring continued operations consistent with irrigation and endangered species requirements.

Condition 2: Develop operating criteria, in consultation with Reclamation, to allow Reclamation to meet its responsibilities.

Condition 3: Develop operating criteria that provides for coordination with the operations of Keno Dam and Iron Gate Dam, or the most downstream dam within Project No. 2082.

Condition 4: Provide Reclamation with area capacity curves and real-time access to reservoir elevations and releases for facilities within Project No. 2082.

Condition 5: Cause no affect the Federal Klamath Reclamation Project unless approved by Reclamation.

Condition 6: Make no claim against the United States arising from the effect of any changes in releases from, operations of, or elevation changes in and facility above Keno Dam or use of water for the Upper Klamath, Lower Klamath or Tule Lake National Wildlife Refuges.
**Condition 7:** Reserves the Commission authority to require the Licensee to implement such conditions for the protection and utilization of Reclamation reservations. This general reservation of authority allows the Secretary to consider additional data as it becomes available; to respond to changed circumstances, and modify the existing section 4(e) conditions as may be necessary. The Secretary’s reservation of mandatory authorities under the FPA has been accepted by the Commission and judicially affirmed. *Wisconsin Public Services Corp.*, 62 FERC ¶ 61,905 (1993), aff’d, *Wisconsin Public Serv. Corp. v. FERC*, 32 F.3d 1165 (7th Cir. 1994).

The Klamath Tribes of Oregon hold treaty-protected property rights, including fishing and water rights, in the upper Klamath Basin. The United States and the Klamath Tribes have jointly filed claims in the State of Oregon’s water rights adjudication for the surface waters of the Klamath Basin in Oregon, including instream flow claims within the Project area (from Link River Dam to the Oregon-California border), to protect the Tribes’ fishing and water rights reserved to them pursuant to their 1864 Treaty with the United States. In addition, the Hoopa Valley and Yurok Tribes have confirmed reserved fishing rights in the lower Klamath Basin, and the water necessary to protect those rights may likewise be determined in a subsequent proceeding.

Any condition or prescription required for this Project’s license, including those to protect federal interests, must be consistent with these reserved rights. Additional data or other information, including a binding decree resulting from the State of Oregon’s water rights adjudication, may require modification to the license conditions. Thus, the Department is submitting these reservations of authority. The Department’s other recommendations do not ask FERC to take any action or otherwise engage in the issues being addressed in the water rights adjudication.

**Description of PacifiCorp Alternative**

The licensee proposes to delete these conditions in their entirety, arguing that because East and Westside power houses will be taken off-line and because Keno Dam and Reservoir operations do not add to power generation capability that Reclamation has no legal authority to prescribe 4(e) conditions. Reclamation does not agree with PacifiCorp’s proposal or rationale.

With respect to Condition 7, the reservation of authority, the preamble to the Joint Regulations implementing the EP Act states that license parties cannot request a hearing regarding the reservation of authority itself, or submit alternative to such reservation.” 70 Fed. Reg. 69804, 69808 (November 17, 2005). Moreover, the effects of a reservation of authority, by its nature, are indeterminate. Reclamation has not considered PacifiCorp’s proposed alternative to Condition 7 as a formal alternative.
B. Comparison of PacifiCorp’s Alternative to Reclamation’s Conditions Under Statutory Criteria

Condition 1a – Link River Dam O&M:

Criteria 1 – Would the Alternative, as compared to the Reclamation Condition adequately protect the reservation?

The licensee’s alternative eliminates any requirement to operate and maintain Link River Dam. This alternative does not adequately protect the reservation. Storage in Upper Klamath Lake is vital to the continued operation of the Klamath Irrigation Project. Additionally, PacifiCorp must operate Link River Dam consistent with the Klamath Irrigation Project Annual Operations Plans because Reclamation is mandated to meet obligations under the Endangered Species Act and Tribal Trust, in addition to delivering water to project irrigators. Continued operations and maintenance of Link River Dam in coordination with the operations plans is vital to fully protect Reclamation’s reservation. Operating within the operating plan guidelines is necessary to provide an appropriate water level in Upper Klamath Lake to protect the endangered suckers, and allow for full water deliveries at A Canal; control necessary to maintain Lake Ewauna at an elevation appropriate to provide the necessary head to make deliveries in the Lost River Diversion Channel and North and Ady Canals; and to provide the required flows at Iron Gate Dam to meet Reclamation’s responsibilities under its biological opinion from NOAA Fisheries. Additionally, in April 2006 PacifiCorp voluntarily entered into an annual contract with Reclamation to continue operation and maintenance of Link River Dam. PacifiCorp’s willingness to enter voluntarily into this contract exhibits their interest in and desire to operate Link River Dam to benefit hydropower generation.

Criteria 2 – Would the Alternative, as compared to the Reclamation Condition, be significantly less costly to implement or result in improved operation for electricity production?

PacifiCorp has in the past conducted Operations and Maintenance (O&M) at Link River Dam, under the previous contract between PacifiCorp and Reclamation. They are currently conducting O&M under a year-to-year contract. This O&M is being undertaken at PacifiCorp’s cost and for their benefit as well as Reclamations’. PacifiCorp’s predecessor, Copco, constructed Link River Dam to provide more flexibility in power production and transferred the dam to Reclamation upon completion of construction. Reclamation’s condition is not more costly than current operations because it is anticipated that PacifiCorp will continue to operate and maintain Link River Dam to the benefit of its power production facilities downstream. PacifiCorp failed to provide a viable alternative to this Reclamation condition that addresses its operation of Link River Dam. PacifiCorp should be expected to incur costs for its continued operation and associated maintenance of Link River Dam in support of its downstream power production. Reclamation’s proposed condition addresses this ongoing obligation of PacifiCorp’s and is reasonable and cost effective alternative.
Condition 1b – Power Rates:

Criteria 1 – Would the Alternative, as compared to the Reclamation Condition adequately protect the reservation?

It is necessary for the adequate protection and utilization of the Klamath Reclamation Project to maintain Klamath Project cost-based rates in the basin to provide pumping of return water from the irrigation project to the Klamath River for downstream uses and power generation by PacifiCorp.

These cost-based rates allow Reclamation to return a substantial quantity of water to the Klamath River via the Lost River Diversion Channel, D Plant, and Pumping Plants F and FF. These return flows are important to the annual operations of the Klamath Project for several reasons including flood control and continued reclamation of project lands. Unlike most Reclamation Projects, the Klamath Project is essentially a drainage project, not a large water storage project. Lands were developed for irrigation by draining Lower Klamath Lake and Tulelake.\(^1\) To accommodate this, Reclamation developed Clearlake and the Lost River Diversion Channel to reduce flows to Tulelake to allow evaporation of the lake and development of the lakebed as irrigated agricultural lands.

The Klamath Reclamation Project depends on pumping of Klamath River water for use on and for drainage of Project lands. Without such pumping, which depends on electrical power, the purposes of the Project would be significantly impacted. Thus, a condition to require electrical power rates no higher that the cost of service from Project 2082 is necessary for the protection and utilization of the Klamath Reclamation Project.

Criteria 2 – Would the Alternative, as compared to the Reclamation Condition, be significantly less costly to implement or result in improved operation for electricity production?

PacifiCorp only provided a summary statement to support its proposed alternative condition to Reclamation’s condition 1(b) regarding furnishing electric power at rates no higher than the cost of service. PacifiCorp’s proposed alternative eliminated Reclamation’s condition and did not offer a substitute. PacifiCorp supported its conclusion that eliminating the Reclamation condition would cost significantly less to implement than Reclamation’s condition because the proposed rates in the Reclamation condition would generate revenues that are less than those provided for in PacifiCorp’s approved tariff (that is, the rates set by the California and Oregon public utilities commissions), seemingly ignoring the likelihood that any changes in rates would be reflected in future revenue requirements and therefore be revenue neutral.

PacifiCorp also did not address whether its proposed alternative condition would result in improved operation of the project works for electricity production as compared to Reclamation’s condition and whether its proposed alternative condition provides for the adequate protection and utilization of the reservation as compared to Reclamation’s condition. 43 CFR § 45.73 (b).

Since PacifiCorp did not provide any evidence to support its proposed alternative, Interior has

\(^1\) Cessions Act, 33 Stat. 174, Dated February 9, 1905
reviewed other evidence available to it and comments received on its preliminary conditions from other parties in deciding whether to adopt PacifiCorp’s proposal. Interior has determined that it will not adopt PacifiCorp’s proposed alternative condition and adopts Reclamation’s preliminary condition as its modified condition in accordance with section 33 of the Federal Power Act.

The Klamath Project (the reservation at issue) provides significant benefits that are critical to PacifiCorp’s power production on the Klamath River. Without these benefits PacifiCorp’s costs to generate power from Project 2082 would significantly increase. Additionally, without Reclamation’s condition, the costs to operate Klamath Project facilities and to provide a water supply for irrigation and refuges and to properly provide drainage of irrigated lands, including the refuge lands (the specific utilization of the reservation) will significantly increase. This significant increase in Project costs also does not provide adequate protection for the Klamath Project, the reservation at issue. PacifiCorp has recently been granted approval to increase power rates for Project power users that are approximately 13 to 17 times greater than the rates in place prior to 2006.2 See Decision by the California Public Utilities Commission regarding PacifiCorp’s Application no. 05-11-022, dated December 11, 2006 and Oregon Public Utility Commission Order in UE-170, dated April 12, 2006. Thus, PacifiCorp’s proposed alternative condition will cost significantly more to implement than Reclamation’s condition.

Interior provided support for its conditions in its March 27, 2006 Filing of Comments, Preliminary Terms, Conditions, Prescriptions and Recommendations which is incorporated here by reference. That information showed the significant benefits to PacifiCorp’s power production from the operation of the Klamath Project, benefits that will not be available with PacifiCorp’s proposed alternative condition. Without these benefits, PacifiCorp will not be able to generate power at the same level as it currently does which will adversely affect the operation of its project works for electricity production as compared to Reclamation’s condition.

Independent of any benefits that PacifiCorp derives from the operation of the Klamath Project which was fostered by the pre-2006 power rates, PacifiCorp’s proposed alternative condition would cost significantly more to implement than Reclamation’s condition because the power costs are significantly higher under PacifiCorp’s proposed condition. This significantly increased cost also adversely impacts the utility of the reservation by affecting the use and efficiency of irrigation water and refuge water supplies of the Klamath Project.

To use 2003 as an example, the total power consumption on the Klamath Project for irrigation related uses for calendar year 2003 was approximately 88,200,000 kWh. This includes uses in both California and Oregon and uses directly by Reclamation and the individual Project water users. At pre-2006 rates, the total cost paid by the Project was approximately $500,000.00. At current tariff rates (after the phase in periods end), the total cost would be approximately $8,170,000.00. If the comparison is to the projected cost of service at a rate of approximately

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2 The rates in place prior to 2006 were generally .6 cents per kWh. The new rates, that will be in effect after a phase in period (Oregon and California each have separate and different phase in rates and periods), are on the order of 7.928 cents per kWh, or approximately 13 times the pre-2006 rates in California and 10.25 cents per kWh or approximately 17 times the pre-2006 rates in Oregon. This represents a significant cost to the Klamath Project water users in carrying out the purposes of the reservation.
4.25 cents per kWh in Oregon and 1.9 cents per kWh in California the increased cost of implementing PacifiCorp’s proposed alternative condition is approximately $2,900,000.00 or a difference of $5,270,000.00 annually in additional power costs for Klamath Project purposes. Thus, PacifiCorp’s proposed alternative condition is significantly more costly than Reclamation’s condition.

**Condition 1c – “A” Canal approach O&M:**

**Criteria 1 – Would the Alternative, as compared to the Reclamation Condition adequately protect the reservation?**

The intake for the ‘A” Canal is just upstream from Link River Dam and the operations of Link River Dam can affect diversions to the “A” Canal if not properly monitored and maintained. Any adverse affect to the “A” Canal approach channel will likewise adversely affect the ability of Reclamation to deliver water to the lands within the Reclamation Project. Therefore, the licensee’s alternative condition to discontinue maintenance of the “A” Canal approach does not protect Reclamation’s reservation.

**Criteria 2 – Would the Alternative, as compared to the Reclamation Condition, be significantly less costly to implement or result in improved operation for electricity production?**

PacifiCorp has in the past conducted Operations and Maintenance (O&M) of the “A” Canal approach, under the previous contract between PacifiCorp and Reclamation. They are currently conducting O&M under a year-to-year contract. This O&M is being undertaken at PacifiCorp’s cost to mitigate any possible impacts to irrigation operations due to operations of Link River Dam. PacifiCorp’s predecessor, Copco, constructed Link River Dam to provide more flexibility in power production and transferred the dam to Reclamation upon completion. For the reasons stated above for condition 1a, Reclamation’s condition is not more costly than current operations, and is expected to be the status quo in the future. PacifiCorp’s alternative would not result in improved operation for electrical power production.

**Condition 1d – Link River Dam O&M Liability:**

**Criteria 1 – Would the Alternative, as compared to the Reclamation Condition adequately protect the reservation?**

In 1917, Copco (now PacifiCorp) proposed development of Link River Dam as a feature of the Klamath Reclamation Project. Reclamation agreed to the project, and in 1917 the parties entered into a contract for Copco to build the dam and transfer it to Reclamation. The construction of Link River Dam was originally initiated by the licensee to take full advantage of power generation opportunities. As a result of the power generation benefit, the licensee agreed to fully fund O&M requirements. It should be noted that incidental Klamath Project benefits were realized by Reclamation. In order to protect the Reclamation reservation; that is, to ensure proper elevations and diversions, the licensee should be required to continue operation and maintenance of the facility as has been required, under contract, since 1917.
Criteria 2 – Would the Alternative, as compared to the Reclamation Condition, be significantly less costly to implement or result in improved operation for electricity production?

PacifiCorp has in the past assumed Operations and Maintenance (O&M) for Link River Dam, under the previous contract between PacifiCorp and Reclamation. They currently assume O&M liability under a year-to-year contract. This O&M liability is being undertaken at PacifiCorp’s cost to mitigate any possible impacts to lands adjacent to Upper Klamath Lake and Link River due to operations of Link River Dam. PacifiCorp’s predecessor, Copco, constructed Link River Dam to provide more flexibility in power production and transferred the dam to Reclamation upon completion of construction. Copco also constructed or improved many of the dikes protecting agricultural lands adjacent to Upper Klamath Lake, and has a responsibility to continue to protect and indemnify those lands. Reclamation’s condition is not more costly than current operations, and is expected to be the status quo in the future. The alternative would not result in improved operation for electrical power production. Reclamation’s condition is reasonable as long as PacifiCorp operates and maintains Link River Dam, which it is anticipated to do for the term of any new license for Project No. 2082. PacifiCorp offered no alternative condition that addresses the potential for damages in the future to Reclamation’s resources due to its operation and associated maintenance of Link River Dam. PacifiCorp’s failure to provide any commitment for any adverse effects of its operation is contrary to normal business practice and would not provide adequate protection to the Klamath Project.

Condition 1e – Federal Klamath water rights maintained:

Criteria 1 – Would the Alternative, as compared to the Reclamation Condition adequately protect the reservation?

Reclamation holds water rights for the Klamath Reclamation Project that are senior to the water rights for Project No. 2082 except for a 250 cfs water right of PacifiCorp’s for power generation from Link River. Reclamation’s reservation; that is, to deliver water to the Klamath Project, must be protected by ensuring consistency with existing statute and water rights declarations. Any operations inconsistent with the annual operating plan, existing statute, or water rights requirements could jeopardize the reservation.

Criteria 2 – Would the Alternative, as compared to the Reclamation Condition, be significantly less costly to implement or result in improved operation for electricity production?

With the exception of approximately 250 cfs acquired by Copco from Moore Brothers, all of Reclamation’s water rights are senior and higher in priority to any rights held by PacifiCorp. It is anticipated that this senior priority will become part of the final determination by the state of Oregon in the pending Klamath Basin Adjudication, and thus, PacifiCorp will be required by Oregon State Law to recognize Reclamation’s priority and seniority of water rights. Reclamation’s condition will not be more costly to implement than the existing conditions which are equivalent to PacifiCorp’s proposed alternative condition. PacifiCorp has not
demonstrated how Reclamation’s condition would be more costly to implement than either Reclamation’s preliminary condition or PacifiCorp’s proposed alternative condition which is merely to delete Reclamation’s preliminary condition. Reclamation’s condition is consistent with project operations for the past 100 years and Reclamation is not aware of any circumstances that would result in more cost to PacifiCorp to implement the Reclamation condition or that the PacifiCorp’s proposed alternative condition would result in improved operation for electrical power production as compared to Reclamation’s condition.

**Condition 1f – Keno Dam O&M:**

**Criteria 1 – Would the Alternative, as compared to the Reclamation Condition adequately protect the reservation?**

This specific control is necessary to maintain Lake Ewauna at an elevation appropriate to provide the necessary head to make deliveries in the Lost River Diversion Channel and North and Ady Canals which are essential to the proper operation of the Klamath Project for both agricultural lands and lands within the National Wildlife Refuges.

**Criteria 2 – Would the Alternative, as compared to the Reclamation Condition, be significantly less costly to implement or result in improved operation for electricity production?**

PacifiCorp is the owner of, and is currently operating and maintaining Keno Dam, under a contract between PacifiCorp and Reclamation. This operation requires that the water level upstream of Keno Dam shall be as specified in the contract, which level is designed to protect Klamath Project operations. PacifiCorp has not provided any information that would demonstrate that the cost to implement this condition is more costly than PacifiCorp’s proposed alternative condition (which is to have no such operational level) or any other possible alternative condition. Based on the contract and expected future operations, the requirements of this condition are anticipated to carry forward in any new license issued to PacifiCorp. Not providing for this requirement would significantly increase the cost to operate the Klamath Project for irrigation and other purposes while not affecting the costs to PacifiCorp.

**Condition 1g – Keno Dam discharge rate:**

**Criteria 1 – Would the Alternative, as compared to the Reclamation Condition adequately protect the reservation?**

Reclamation’s reservation includes maintaining a discharge rate at Keno Dam to control flooding of the Project and surrounding lands. Any changes to operational activities; that is, the discharge rate at Keno Dam could jeopardize flood control capability causing adverse affect to the Klamath Project and surrounding lands. Removing Keno Dam from the license and leaving its future uncertain would jeopardize Reclamation’s reservation.
Criteria 2 – Would the Alternative, as compared to the Reclamation Condition, be significantly less costly to implement or result in improved operation for electricity production?

As discussed above for condition 1f, PacifiCorp is the owner of, and is managing the discharges at Keno Dam, under a contract between PacifiCorp and Reclamation. This discharge management is being undertaken at PacifiCorp’s cost and for their benefit as well as Reclamation’s. PacifiCorp’s predecessor, Copco, constructed Keno Dam to provide more flexibility in power production, and to aide in flood control for the Klamath Basin. Reclamation’s condition is not more costly than current operations, and is expected to be the status quo in the future because PacifiCorp is contractually required to operate Keno Dam to meet these discharge requirements. Reclamation’s condition is consistent with current and anticipated future requirements for Keno Dam and is thus, not more costly to implement than PacifiCorp’s proposed alternative condition. PacifiCorp did not provide a viable alternative to this condition that addresses the necessary operational requirements of Keno Dam.

Condition 2 – Develop operating criteria for Link River Dam and Project No. 2082:

Criteria 1 – Would the Alternative, as compared to the Reclamation Condition adequately protect the reservation?

Reclamation’s responsibilities under the ESA as well as its responsibilities for Tribal Trust require that measured flows be provided into the Lower Klamath River (currently below Iron Gate), while specific water levels are maintained in Upper Klamath Lake. To adequately protect its resources, coordinated operations are imperative. Without coordinated operations, flow variations could have a deleterious effect on threatened species, or other resources valuable to downstream and upstream tribes. Ramping rates and flow variations that are currently under the control of PacifiCorp could cause stranding, or crowding of fish that could lead to disease, or death if these facilities are not operated in a coordinated manner to fulfill the responsibilities and needs of all parties. Further, if these operations are not coordinated for the purposes stated above, the operations of the Klamath Reclamation Project would be adversely affected. This could result in curtailment of irrigation deliveries or deliveries of water to the National Wildlife Refuges. Removing Keno Dam from the license and leaving its future uncertain would jeopardize Reclamation’s reservation.

Criteria 2 – Would the Alternative, as compared to the Reclamation Condition, be significantly less costly to implement or result in improved operation for electricity production?

It is important to both Reclamation and PacifiCorp that the water resources of the Klamath Basin are managed in a coordinated manner. Both have responsibilities for endangered species in the area and both need the cooperation of the other to meet those responsibilities in the most expeditious manner. This requirement will not increase costs over that of the existing conditions. PacifiCorp’s proposed alternative would not result in improved operation for electrical power production. Reclamation’s proposed condition for coordination in operations between PacifiCorp’s project and Reclamation’s Klamath Project would be less costly than PacifiCorp’s
proposed alternative condition of no coordination because such coordination will make operation of the two projects more efficient, thus, saving cost by eliminating unnecessary overlap in operations and making more efficient use of the available water resources.

**Condition 3 – Develop operating criteria for Keno and Iron Gate Dams:**

**Criteria 1 – Would the Alternative, as compared to the Reclamation Condition adequately protect the reservation?**

In addition to the justification in 2 above, management of operations at Keno is critical to delivery of water to Project lands along Link River to Keno reach, in the Lower Klamath Lake area and to the Lower Klamath Lake Wildlife Refuge. Approximately 41 percent of the lands irrigated by the Klamath Irrigation Project and the Lower Klamath Lake National Wildlife Refuge receive their water directly or indirectly by gravity flow from the Link River to Keno reach. Coordination of these operations to meet the criteria listed in the attachment are necessary to meet minimum elevations for charging North and Ady Canals to meet demands throughout the year, as these facilities are operated year round. In addition, coordinated operations should minimize impacts to salmonids and suckers from low flows and fluctuations by Project operations at Keno Dam. Removing Keno Dam from the license and leaving its future uncertain would jeopardize Reclamation’s reservation.

**Criteria 2 – Would the Alternative, as compared to the Reclamation Condition, be significantly less costly to implement or result in improved operation for electricity production?**

As with Reclamation’s condition 2 above, this condition is also important to both Reclamation and PacifiCorp and furthers the management of water resources of the Klamath Basin in a coordinated manner. Both have responsibilities for endangered species in the area and both need the cooperation of the other to meet those responsibilities in the most expeditious manner. For the same reasons stated for Reclamation’s condition 2, this condition will not result in increased costs of implementation over that of the existing conditions, nor will PacifiCorp’s proposed alternative result in improved operation for electrical power production.

**Condition 4 – Provide area capacity curves for all P-2082 facilities:**

**Criteria 1 – Would the Alternative, as compared to the Reclamation Condition adequately protect the reservation?**

Area capacity curves and real time operational data are necessary for Reclamation to plan for releases from the Lost River Diversion Channel and the Straits Drain. This coordination would allow Reclamation to protect its reservation and encourage the best use of a limited resource, water. Reclamation is bound by project contractual, ESA, and Tribal Trust responsibilities to deliver water for competing needs. The availability of area capacity curves will assist Reclamation in ensuring all requirements are met.
Criteria 2 – Would the Alternative, as compared to the Reclamation Condition, be significantly less costly to implement or result in improved operation for electricity production?

Without the information required by this condition, Reclamation’s operation of the Klamath Project, such as releases from the Lost River Diversion Channel or the Klamath Straits Drain, would be severely impacted. This would result in increased costs to Reclamation over the proposed alternative of PacifiCorp’s which is to not provide this necessary operational data. PacifiCorp has not provided a viable alternative that makes this essential operational data available. There is no indication that by not providing this information that PacifiCorp’s operation for electric power production will be improved.

Condition 5 – Prohibits changes that affect the Klamath Reclamation Project:

Criteria 1 – Would the Alternative, as compared to the Reclamation Condition adequately protect the reservation?

Changes in operations or modifications to Project No. 2082 could impact Reclamations ability to meet its contractual responsibilities within the Reclamation Project, as well as its ESA and Tribal Trust responsibilities downstream. To protect the reservation, operations and maintenance must be in line with the annual operating plans.

Criteria 2 – Would the Alternative, as compared to the Reclamation Condition, be significantly less costly to implement or result in improved operation for electricity production?

PacifiCorp has not provided any information that Reclamation’s condition would be more costly to implement or that PacifiCorp’s proposed alternative will result in improved operation for electrical power production. This condition merely requires PacifiCorp to ensure that its operations do not affect Reclamation’s Klamath Project operations unless such operation by PacifiCorp is approved by Reclamation. Because PacifiCorp’s water rights are junior to Reclamation’s water rights for the Klamath Project, except for a 250 cfs right, and Reclamation has, by statute, been authorized to store water in Upper Klamath Lake and adjust the levels of that lake for irrigation deliveries, PacifiCorp cannot reasonably assert that Reclamation’s proposed condition is more costly to implement than without the condition in place. This condition ensures that the relative priority of Reclamation’s operations is properly considered by PacifiCorp in its operation under any new license.

Condition 6 – No claim against the U.S.:

Criteria 1 – Would the Alternative, as compared to the Reclamation Condition adequately protect the reservation?

PacifiCorp’s Project No. 2082 has limited water rights, and is a subsequent user of surplus water from the Klamath Reclamation Project. Reclamation has no responsibility for delivery of water to Project No. 2082 beyond those limited water rights that are senior to Reclamation’s water
rights. Any operation of the Klamath Project is senior to operations of Project No. 2082, and has precedence over its operations.

**Criteria 2 – Would the Alternative, as compared to the Reclamation Condition, be significantly less costly to implement or result in improved operation for electricity production?**

The reasons for this condition are the same as for condition no. 5 recognizing that Reclamation’s operation has priority over PacifiCorp’s operation. Thus, this recognition of existing priorities will not increase the cost to implement the condition over that proposed by PacifiCorp which is not to recognize these existing priorities. Also, merely by stating that it does not recognize these existing priorities will not result in improved operation for electrical power production.

**C. Equal Consideration of Effects**

The Department has conducted the appropriate analysis in accordance with 43 C.F.R §45.73 and has determined the following:

1. **Energy supply, distribution, cost, and use**

PacifiCorp asserts that Keno Dam and Reservoir results in an overall loss of downstream generation potential. The opposite is the case, as Reclamation has explained elsewhere. Nevertheless, there is no difference between keeping the 4(e) conditions, or excluding them, with respect to overall energy supply, distribution, cost, and use, as explained below.

**Supply:** Any energy impact of the conditions is insignificant when compared to the total customer requirements, and *de minimis* in the context of regional energy supply. The project is a system resource, and has no function other than the provision of electric energy to the applicant's system as a whole. Since PacifiCorp is only one of a number of energy suppliers in the Northwest, the impact on total regional energy supply must be considered *de minimis*. Although PacifiCorp provided no information regarding the impact of its proposed alternative on energy supply, we note that Klamath generation, in total, represents less than 1 percent of total system generation. Accordingly, Klamath, itself, makes a insignificant contribution to PacifiCorp's energy supply, and makes a *de minimis* contribution to regional energy supply. Thus, no alternative regarding Klamath would have a significant impact on energy supply, either in the region or on the applicant's system.

**Distribution:** The Department's mandatory condition does not address energy distribution facilities, and therefore does not have any direct impact on the distribution of energy. Moreover, as regional energy supply impacts are *de minimis*, there are no indirect impacts on energy distribution. PacifiCorp provided no information regarding the impact of its proposed alternative on the distribution of energy and the Department had no information indicating any impact of PacifiCorp's alternative on energy distribution.

**Cost:** The impact of the Department's mandatory condition on energy cost is judged not to be significant. PacifiCorp presented information in its recent rate-setting case before the California
Public Utilities Commission explaining that Klamath is an unreliable source of power and that its energy, when available, is used to displace other, more expensive sources; accordingly, PacifiCorp views the replacement value of Klamath energy as PacifiCorp's decremental generation cost, which is unaffected by any changes in Klamath Project operations.

As to costs associated with Reclamation condition 1(b), see the above discussion.

**Use:** Neither the Department's mandatory condition nor PacifiCorp's proposed alternative are expected to have any impact on energy use.

### 2. Flood control

Because the Project’s reservoirs are relatively small compared with the Klamath River’s annual runoff (e.g., Iron Gate reservoir impounds only 4 percent of annual runoff, and Copco No. 1 reservoir only 5 percent), the Project reservoirs are generally not operated for flood control (PacifiCorp 2004, Ex E, Page 3-181). While Project reservoirs are drawn down to some extent prior to spring runoff, this can provide only very limited flood control during high flow events. (PacifiCorp 2004, Ex B Page 2-7).

PacifiCorp did not identify any effect of their proposed alternative (PacifiCorp 2006, Page 121). None of the alternatives analyzed in this section would result in any change to the currently very limited flood control.

### 3. Navigation

There is no large-scale commercial navigation on the Klamath river, Keno Dam is not equipped with locks for barges. PacifiCorp did not identify any effect of their proposed alternative (PacifiCorp 2006, Page 121).

### 4. Water Supply

PacifiCorp’s Final License Application did not identify any Project-induced effects on municipal or irrigation water supply (PacifiCorp 2004, Exhibit E, Page 9-54). PacifiCorp did not identify any effect of their proposed alternative (PacifiCorp 2006, Page 121). Nevertheless, it is clear that Reclamation’s condition protects the water supply for the federal irrigation project and refuges, while the PacifiCorp alternative provides no protection. Reclamation must ensure that Keno Reservoir elevations remain at levels to accommodate agricultural deliveries. Any modification to the operations criteria, the structure itself, or the diversion points as a result of this FERC process would be detrimental to Reclamation’s responsibility to deliver water to Federal water contractors and the wildlife refuges.

### 5. Air Quality

PacifiCorp did not identify any effect of their proposed alternative (PacifiCorp 2006, Page 121). None of the alternatives analyzed in this section would result in any change to air quality.
6. Preservation of Other Aspects of Environmental Quality

PacifiCorp did not identify any other anticipated effects of their proposed alternative (on environmental quality (PacifiCorp 2006, Page 122). None of the alternatives analyzed in this section would result in any change to other aspects of environmental quality.

Section 4: Response to Comments

No comments were received on the DEIS that warranted modification to Reclamation’s 4(e) conditions.

Some comments were received that focused on items beyond Reclamation’s requested 4(e) conditions. An example is the identification of water quality issues within the Keno impoundment. Water quality issues in this reach of the river are the responsibility of the licensee as the Keno Dam and the resulting impoundment area were initially constructed and created to benefit hydropower generation by the licensee. As such, any water quality remediation is the responsibility of the licensee. A second example is fish passage at Keno Dam. Again, because the dam was constructed by and is owned by the licensee, the licensee carries the burden of constructing fish passage facilities for salmonids and resident fish species.

PCFFA comments state that it is outside of FERC’s authority to address power rates. Reclamation is not asking FERC to set retail power rates. Reclamation is asking FERC to condition any license, in order to protect its reservation; that is, to provide power to irrigators to continue current operations of the project. That is, Reclamation is proposing a section 4(e) preliminary condition that is necessary for the adequate protection and utilization of the relevant federal reservation as set forth in its section 4(e) conditions filed with FERC.
1) The Licensee shall enter into new or amended contract with Reclamation for the operation and maintenance of Link River and Keno Dams under terms and conditions satisfactory to the Secretary of the Interior. Such terms shall be substantially similar to the terms of the current contract and shall specifically include the following terms necessary for the protection of Klamath Reclamation Project operations:

   a. The Licensee shall continue to operate and maintain Link River Dam. Such operation shall be consistent with the Klamath Reclamation Project Annual Project Operations Plans.

   b. For the period of the contract the Licensee would agree to furnish electric power for the purposes of pumping Klamath Water for use on Project Land and for drainage of Project Land at rates no higher than the cost of service from Project 2082.

   c. The Licensee shall, at its own expense, maintain the approach channel to the “A” Canal of the Klamath Reclamation Project to the satisfaction of Reclamation so far as may be necessary to carry a flow of not less than 1200 cfs into the “A” Canal with the water of Upper Klamath Lake at an elevation of 4137 (USBR datum).

   d. The Licensee shall assume any and all liability for damages resulting from operation of the Link River Dam by the Licensee or resulting from its regulation and control of the water levels of Upper Klamath Lake. The Licensee would undertake to hold the United States harmless from any and all liability for damage arising out of the operation by the Licensee of Link River Dam and the regulation and control by the Licensee of Upper Klamath Lake provided for in the contract.

   e. Nothing in the contract shall curtail or in anywise be construed as curtailing the rights of the United States to Klamath Water or to the lands along or under the margin of Upper Klamath Lake. No Klamath water shall be used by PacifiCorp when it may be needed or required by the United States or any irrigation or drainage district, person, or association obtaining water from the United States for use for domestic, municipal, and irrigation purposes on Project Land.

   f. PacifiCorp shall operate Keno Dam so that the upstream water level will not be below the minimum normal objective operating height of elevation 4085.0 (USBR Datum), at or near the location of the present Highway No. 66 bridge at Keno, Oregon.
g. PacifiCorp shall operate Keno Dam to accommodate the discharge of three thousand (3,000) cubic feet per second from the Lost River Diversion Channel, and six hundred (600) cubic feet per second from the Klamath Straits Drain.

2) The Licensee, in consultation with Reclamation, shall develop operating criteria that provides for coordination with the operations of Link River Dam and Iron Gate Dam, or the most downstream dam within Project No. 2082 to allow Reclamation to meet its responsibilities.

3) The Licensee, in consultation with Reclamation, shall develop operating criteria that provides for coordination with the operations of Keno Dam and Iron Gate Dam, or the most downstream dam within Project No. 2082, as in Attachment 2.

4) The Licensee shall provide Reclamation with area capacity curves for all facilities within Project No. 2082, and will provide Reclamation with real time access to reservoir elevations and releases for facilities within Project No. 2082.

5) Any operations or modifications to Project No. 2082 that could affect the federal Klamath Reclamation Project are prohibited unless approved by Reclamation.

6) The licensee shall have no claim against the United States arising from the effect of any changes in releases from, operations of, or elevation changes in Upper Klamath Lake or Lake Ewauna related to the federal Klamath Project operations or use of water for the Upper Klamath, Lower Klamath or Tule Lake National Wildlife Refuges.

7) Authority is reserved to the Commission to require the Licensee to implement such conditions for the protection and utilization of Reclamation reservations as may be provided by the Secretary of the Interior, pursuant to Section 4(e) of the Federal Power Act, 16 U.S.C. § 797(e).