

ATTACHMENT A

DRAFT LICENSE APPLICATION RESPONSE-TO-COMMENTS MATRIX

COMMENT NO.	COMMENTS/ REQUESTER	COMMENT LETTER PAGE	STUDY REPORT OR RESOURCE AREA	STAKEHOLDER COMMENT	PACIFICORP RESPONSE TO COMMENT
1	Bridgerland Audubon Society	1	Fish & Aquatics	<p>As we've indicated in previous letters, Bridgerland Audubon's primary concern is how operational drawdowns of the reservoir have and could impact aquatic vegetation and the benthic invertebrates on which birds and fish depend. Throughout most of the process PacificCorp has maintained that this is not an issue because sediments would not be exposed.</p> <p>For example, in your May 2021 <u>Response to Comments</u> PacificCorp states "<i>almost all of the reservoir bed remains inundated under conditions representative of the proposed extended operations lower limit at water surface elevation (WSE) 4,405.0 feet.</i>" In this Response PacificCorp presented aerial photographs of launch areas that do show limited exposure of sediments during the drawdown. However, these boat launch areas are located in deep areas with steep banks that are not representative of reservoir as a whole.</p> <p>Similarly, in the early part of the <u>Draft License Application</u> (p. 3-124) you stated that "<i>PacificCorp's proposed operations would result in short-term, cyclical, reservoir fluctuations of 2.5 feet or less, which would not result in shoreline sediment exposure and would potentially have minor, temporary effects on the BMIs [benthic macroinvertebrates] in the form of drift and relocation to other parts of the reservoir.</i>" [emphasis is ours]. However, later in the Application (p. 3-168) the modeling analysis presented by PacificCorp indicates that 21% of the lakebed would be exposed at an elevation of 4,405 ft. and even more would be exposed with the additional 0.5 ft. of drawdown in the requested tolerance range. Notably, all of the emergent vegetation and invertebrates associated with them would be exposed during freezing conditions in winter. Because larger invertebrates such as dragonflies and mayflies are often associated with the macrophytes, and since diet analyses of fish in Cutler indicate that these are important prey items, the exposure of the emergent vegetation is an additional concern.</p>	<p>PacificCorp has included additional aerial photos illustrating the reservoir inundation area under the proposed operational ranges in Exhibit E, Attachment B. In addition, both the photos in Exhibit E, Attachment B, and the aerial photos of the boat launches included in Section 3.3.7 Recreation of Exhibit E, provide expansive views of Cutler Reservoir, further illustrating the lack of steep banks and deep water at the recreation site boat launches, and that virtually all of the reservoir remains inundated at WSE 4405.0. The additional aerial photos were taken from other viewpoints to further illustrate the inundation zone at several WSEs and the lack of exposed reservoir bed.</p> <p>Overall, statements made in the Draft License Application regarding changes to the reservoir as a result of proposed operations, such as those quoted in the comment, have been clarified with the addition of the word 'substantive', or similarly modified or expanded. Further, Table 3-23 on page 3-168, noted in the comment as being inconsistent with some of the text describing reservoir conditions during current and proposed operations, contains an area calculation that is based on predictions from the hydraulic model as opposed to empirical observations of reservoir inundation zones at the 4405.0 WSE. Table 3-23 contained a calculation error (now corrected in the FLA) which resulted in an overstatement of the calculated area potentially affected. In addition, several potentially confusing table headers have now been clarified to more accurately describe the observed conditions. Both of these table issues served to magnify the perceived inconsistency described by the comment. Most importantly however, the DLA version of the table and accompanying text did not do enough to clarify both the potential strengths and limitations of the hydraulic model, and the apparent differences between empirical observations of reservoir WSE operational ranges, and the hydraulic model's predictions. Accordingly, the specific accompanying text and Table 3-23 in the FLA (and, as needed, throughout Section 3 of the FLA) have been expanded with additional detail regarding this differentiation. This clarification regarding the model predictions is also covered in detail below.</p> <p>The hydraulic model was used, in part, to predict water depths throughout Cutler Reservoir across a range of operational WSE as measured at Cutler Dam. Direct observations during the full drawdown in the fall of 2019 (which exceeded over 20 feet, as measured at Cutler Dam, more than 17 feet lower than the lowest proposed operating range) provided empirical data that can be used to verify the accuracy of the modeling results and potentially identify limitations of the model. The data collected from direct observations indicates the hydraulic model tends to overestimate the area of exposed reservoir bed at a Cutler Dam WSE of 4405.0 feet, as noted below. Large areas of exposed reservoir bed were not observed as the Fall 2019 full drawdown progressed through elevation 4405.0.</p> <p>Specifically, the hydraulic model is limited when it comes to replicating observed shallow reservoir depths in what the FLA now refers to as the "transition zones" of Cutler reservoir. The model accuracy in these areas of the reservoir is limited due to the following: (1) the LiDAR data collected for developing the 2D model geometry, (2) the highly complex interaction between the reservoir's groundwater and bed</p>

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					<p>material at the end of the reservoir boundary, and (3) the inherent accuracy limitations of model output based on LiDAR data at shallow (<6”) depths (both the model and the LiDAR data have accuracy limitations ranging from 0.10-0.25 feet, resulting in a total limitation on model output accuracy of a minimum of 0.35 feet).</p> <p>Additionally, post-processing of the LiDAR survey data revealed that some portions of the reservoir bed had low levels of elevation survey returns due to the water saturation of the exposed bed material at the time of the 2019 full drawdown event. The low LiDAR survey returns (further complicated by ice formation during the unseasonably cold temperatures that occurred during the 2019 full drawdown) limited the level of elevation information in some of these areas which makes reporting model depths and velocities in these areas more difficult than in areas with full LiDAR coverage. During Project operations many of these same areas experience complex hydraulic phenomena, including increased groundwater inflow from the perched groundwater levels surrounding the reservoir, as well as capillary action from the bed material drawing moisture from the reservoir. The result is that many of these areas, now defined as “transition zones”, remain partially or mostly saturated even after the reservoir drops below the bed elevation in certain areas. Lastly, the uncertainty of the hydraulic model results increase as the depths of the reservoir approach zero in the transition areas. This increase in uncertainty is due to the complex physics involved with flow in shallow water conditions some of which is not accounted for in 2D hydraulic modeling.</p> <p>Lastly, the predicted inundation boundaries that were used to generate the percent of exposed reservoir bed do not display depths less than 0.1 feet. In a normal riverine environment very little of the channels’ inundated area is less than 0.1 feet and thus this limitation is not noticeable. However, in shallow, flat systems with noticeable groundwater interaction along the “transition zones” (the shallower areas between the reservoir banks and the reservoir open water), a portion of the reservoir bed may experience water depths at or less than the model accuracy range. The result can be an apparent discrepancy between the observed or known amount of “exposed reservoir bed” (based on aerial photos taken at or below the current and proposed operating ranges) and what the model is reporting. The results of the model simply do not consistently reproduce the observed shallow depths of water that exist in the transition areas of the reservoir for the reasons discussed above.</p> <p>The model is, however, extremely useful in providing the capability for comparisons between the proposed normal (which mirrors the existing operations range during most of the year) and the proposed extended range effects, particularly for the analysis of avian community potential effects of proposed Project operations. This analysis was indicated by the results of the ISR and is clarified in the FLA (compared to the DLA), with the expanded discussion noted above regarding the differentiation between model results and empirical data observations.</p> <p>Because all of the emergent vegetation and associated invertebrate community are already exposed to annual, variable, extended freezing temperatures, PacifiCorp believes that there would likely be relatively small, if any, changes from the current</p>

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					<p>existing conditions. That is, both the flora and fauna of the potentially affected communities have been pre-adapted to these conditions; much of the extant invertebrate community already burrow to escape freezing conditions that already are variable in nature. These adaptations would continue, resulting in little or no additional effect to these resources.</p> <p>Subsequent to BAS' comments being submitted, PacifiCorp met virtually with BAS in January of 2022 in order to better understand and address BAS' concerns. The photos added in Exhibit E, Attachment B are partly in response to this meeting, as they provide additional empirical data regarding potential effects at proposed normal (current) and extended reservoir operations ranges.</p> <p>In summary, the following edits were made in the FLA to address this comment:</p> <ul style="list-style-type: none"> • Clarified, corrected, and expanded information throughout Section 3 to indicate that proposed operations would not substantively change existing Project resources; also added details regarding source descriptions to any relevant resource section • Tables 3-23 and 3-43- clarified and corrected table headers, data, and calculations • Section 3.3: Added detailed descriptions of the hydraulic model (including limitations) and observations taken during the 2019 full drawdown • Attachment B to Exhibit E: added a photo log of aerial photographs at approximately (or below) WSE 4,405 feet (measured at Cutler Dam); these photographs are referenced throughout Section 3
2	Bridgerland Audubon Society	1	Fish & Aquatics	<p>In 2019 PacifiCorp conducted a significant drawdown of the reservoir with one of the objectives being to: <i>“determine potential effects of future Project operations on resident fish, macroinvertebrate, and mollusk habitat in Cutler Reservoir”</i>. A major impact of winter drawdowns on benthic invertebrates is desiccation and freezing of the exposed sediments (Carmignani and Roy 2017). Unfortunately, the PacifiCorp survey did not measure densities of macroinvertebrates in the areas of the reservoir exposed during the drawdown. Indeed, the <u>Initial Study Report</u> (2021, p. E-7) indicates that <i>“Transects were selected based on representativeness of the unit, accessibility during the drawdown, and further were not expected to be dewatered during the drawdown.”</i> Actually, one sample site was dewatered during the experimental drawdown, but it was <i>“not sampled because it was not representative of the conditions expected during the proposed operations, and thus negated the analysis assumptions.”</i> (PacifiCorp letter, Nov. 2021). That is, throughout their analyses PacifiCorp refused to understand or acknowledge that a significant portion of the reservoir would be dewatered by their current and proposed extended operation proposal and that this dewatering could have a significant impact on the macrophytes and benthic invertebrates in that zone.</p>	<p>As noted in the comment, one of the objectives of the study was to “determine potential effects of future Project operations on resident fish, macroinvertebrate, and mollusk habitat in Cutler Reservoir.” Future project operations will not result in substantial dewatering of the reservoir (see also comment response No. 1, above). In fact, the study anticipated and later confirmed with direct observations (see photographs in Attachment B to Exhibit E) that very little of the reservoir was dewatered at reservoir elevations associated with the proposed normal and extended operations. The single sampling location that was eliminated during data collection as noted by BAS, was dewatered only at the full drawdown in the Fall of 2019 at WSE 4,388.0 feet as measured at Cutler Dam, which is at least 17 feet lower than the proposed extended operations. As a result, it was not appropriate to sample locations dewatered during the full drawdown in the Fall of 2019 that were well beyond the proposed normal and extended Project operations, as that data would not be comparable to the sampling data collected from all other submerged sites.</p> <p>As previously noted in the Study Plan and the ISR, the study used the widely accepted Rapid Bioassessment Method as a means of determining species and density of Benthic Macroinvertebrate Index (BMI) in the permanently wetted zone of the reservoir. Only 1 site on transect 4 was found to be dewatered during the full 2019 drawdown, and the other remaining 3 sites in transect 4 remained submerged—as did the 15 other sampling sites for respective transects (19 total sites). That is, these specific transect site selections were made because current operations do not—</p>

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					<p>and future proposed normal and extended operating ranges would not—expose large areas of reservoir bed, as compared to the much larger magnitude drawdown in 2019. As demonstrated in other responses within this comment matrix, aside from model predictions (which are particularly useful in the comparison across species of potential effects to the winter avian community), actual observations in the form of photographic evidence confirm that largescale dewatering along the shorelines or reservoir bed do not occur.</p> <p>See also response to Comment No. 1.</p>
3	Bridgerland Audubon Society	2	Fish & Aquatics	<p>In previous comments we have asked PacificCorp to incorporate the findings of decades of published research on the impacts of reservoir dewatering on benthic invertebrates. Although the present Draft License Application acknowledges some of these publications and recognizes that winter drawdowns can cause benthic invertebrate and macrophyte die-offs, PacificCorp discounts their applicability to the proposed Cutler Reservoir drawdowns because most of the studies were of greater magnitude and longer duration than what is proposed for Cutler (Draft License Application p. 3-124). Additionally, they once again erroneously state that the studies are not applicable because <i>the “substrate along the shoreline would not be exposed to the physical factors described by other studies cited because the Cutler shoreline would not be dewatered and exposed to the elements.”</i> [Our emphasis]</p> <p>We agree that some of the other studies were different, but if PacificCorp feels they are not applicable, they need to do studies of their own to assess how dewatering and freezing impacts the invertebrates and macrophytes in the shallow areas of the reservoir that would be exposed. This has not been done. It is possible that the proposed winter fluctuating regime would not significantly impact the biota in Cutler’s littoral zone, but it is also possible that multiple dewatering and refreezing events would have more serious impacts on the exposed organisms than the single, longer dewatering events discussed in the literature. In lieu of such studies by PacificCorp, FERC should rely on the published literature that does indicate significant impacts of water drawdown.</p>	<p>BAS’ comment is based on the premise that large areas of the reservoir bed will be exposed under the proposed extended operations. In responses to comments Nos. 1 and 2 in this table, PacificCorp explained that observations during the 2019 drawdown demonstrate minimal exposure of reservoir bed associated with the proposed extended operations, and none related to the proposed normal (which mimic the current) operation range. Clarifications made regarding the description of potential effects to the reservoir resulting from proposed operations are detailed in comment response No. 1.</p> <p>The literature referenced by BAS provides valuable information for evaluating potential effects on the BMI community across a range of hypothetical reservoir elevations including the proposed normal and extended operations at Cutler Reservoir. The various studies reviewed and summarized in Carmignani and Roy (2017) discuss impacts to macroinvertebrates and macrophytes. BAS comments focus on impacts from studies where reservoirs are drawn down 2 to 3 meters (considered a large amplitude) and held at that level for a prolonged period over the winter. The impacts from those studies are not transferable to future operations at Cutler Reservoir because the proposed normal and extended operations are substantially smaller in amplitude, and shorter in duration. The Cutler Reservoir shoreline will not experience large-scale exposure as asserted by BAS. In fact, the Carmignani and Roy (2017) publication includes result from studies of aquatic biota where reservoir elevation changes are much smaller, in the range of 0.4 to 0.6 m, similar to Cutler proposed operations. These studies with narrower ranges of elevation change revealed higher submergent species richness. For macroinvertebrates, Carmignani and Roy (2017) found that chironomids possess short life history cycles with multiple generations per year, enabling them to avoid the effects of inhospitable conditions associated with large, prolonged winter drawdowns. The authors go on to state that other taxa such as amphipods, oligochaetes and ceratopogonids can physically tolerate freezing and burrow in sediment to inhabit relatively unaffected substrates. These four taxa dominate the Cutler Reservoir BMI community, suggesting pre-adaptation of this community, potentially as a result of previous reservoir conditions over the last 90-120 years, or perhaps from the marshy conditions that likely existed prior to the construction of even the Wheelon Dam, and that would have also been subject to extended, variable freezing conditions historically.</p>
4	Bridgerland Audubon Society	2	Recreation	Another lesser issue that should be addressed is that the License Application suggests that the proposed increase in reservoir fluctuations would have no	As noted in the Draft License Application, Cutler Reservoir remains accessible at the boat launches under all proposed operating ranges. Recreation opportunities such as

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				<p>effect on recreational use (p. 3-198). It is true that access to launch sites (Table 3-35) would not be impeded. However, if the proposed period of increased fluctuations includes the month of November, the lower reservoir levels would greatly reduce boating access to much of the reservoir for waterfowl hunters and other users. Even with the current 1 ft. fluctuation that is allowed, canoeing and other boating is difficult in many areas because of the extensive shallow sandbars. In November, most boating is by waterfowl hunters. If the proposed period of increased drawdown begins in December, as stated in some places in the Application, the impact would likely be considerably less, as the reservoir is usually frozen by then. Later in the Application (p. 3-249) PacifiCorp does acknowledge that “<i>waterfowl hunting, may be displaced for short periods in the 10-day cycle under proposed extended operations in the winter season requiring hunters to temporarily shift to other locations in the reservoir.</i>” That is, both recreational use and damage to the organisms in the littoral zone would likely be impacted by the proposed extended operation limits.</p>	<p>waterfowl hunting continue to exist on Cutler Reservoir under the proposed normal and extended operations. As previously described in the DLA, and referenced by BAS’ comment, navigation routes and preferred hunting locations on the reservoir may shift for short periods in the 10-day cycle under the proposed extended operations in the winter season. Because boaters and waterfowl hunters will still be able to navigate and hunt on the reservoir, these effects are considered minor and limited in both area and time, and therefore would not result in an overall impact to recreation use. This additional clarification has been made to Exhibit E (Section 3.3.7.2 and 3.3.7.4).</p> <p>Further, as noted in response to comments No. 1 and 3 above, PacifiCorp believes the proposed extended operations will not result in substantive additional impacts to organisms in the littoral zone.</p>
5	Bridgerland Audubon Society	2	Fish & Aquatics	<p>The Application requests that fish “spawning” be removed as an operational consideration for the reservoir because no endangered or threatened species inhabits Cutler Reservoir (p 1-3,4). However, many important sport fishes do spawn in the reservoir, so reproduction of these species should continue to be a consideration. Although the proposed water levels of the reservoir would not change from previous license agreement during the spawning season, a consideration of reproduction of these species should continue to be acknowledged in the license agreement.</p>	<p>PacifiCorp understands the importance of fish spawning in Cutler Reservoir but given that virtually all fish in the reservoir are introduced sport fish, and that any changes to the current operations would occur outside of the spawning season, we have chosen to remove that issue from the previous license-era visual representation of operational constraints.</p> <p>The highest priority constraint is the seasonal contractual obligations for irrigation water delivery, which restrict PacifiCorp’s operations. The proposed operations for Cutler Reservoir maintain those obligations with the additional 1 foot of elevation change occurring outside the irrigation season in the late fall and winter when irrigation has ceased (the extended range also cannot be used during high flow periods, which occur starting in the early spring). In the fall and winter period, fish spawning in Cutler Reservoir does not occur as the known introduced species present are either spring or summer spawners. Since there is no stranding potential with the proposed additional 1-foot elevation change, young-of-year fishes would also not be at risk.</p> <p>As stated in responses to BAS comments in the ISR and the USR, the proposed change from normal (which mimic current) operations to extended operations would only occur during the winter season for up to a 55-day period. During this potential maximum 55-day period, WSEs would fluctuate throughout the approved operating range (4,407.5 to 4,405.0 feet) and would not remain at 4,405.0 feet for the duration of the 55 days (the proposed future operations are best described in Section 1.3 of the ISR; see also Figure 1-3 of the ISR).</p>
6	Bridgerland Audubon Society	3	Recreation	<p>On a positive note, we applaud PacifiCorp’s prior and proposed efforts to provide recreational opportunities on Cutler Reservoir and in the surrounding lands. As indicated in the Application, these facilities are extensively used by a variety of recreationists, and we are pleased to see that the company will continue to support these uses.</p>	<p>Thank you. During the current license period, PacifiCorp has worked with local stakeholders, including BAS, to identify recreation user needs and improve recreation access balanced with preservation, protection of wildlife habitat, and visitor experience. PacifiCorp will continue this approach in the next license term, and appreciates BAS’ ongoing commitment as a long-time stakeholder, partner, and collaborator in balancing those interests.</p>

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7	Bridgerland Audubon Society	3	Fish & Aquatics	Bridgerland Audubon is supportive of PacifiCorp's and other utilities efforts to increase power generation with renewable sources rather than reliance on fossil fuels. The proposed extended operation limits at Cutler would allow greater peaking power to be generated and thus would represent a small step towards reducing global warming. Nevertheless, as we have indicated, we do not want to see this small increase in power generation result in significant impacts on the vegetation and macrophytes living in the shallow regions of the reservoir. As addressed above, the relevant studies have not been done to assess these impacts. Consequently, we urge FERC to disallow the proposed extended operation limits until such time that PacifiCorp can provide useful data on these likely impacts. If the impacts are minor, the extended operation limits could then be granted. In previous communications with PacifiCorp, we have indicated how experimental studies could be done on ponds located in the valley. Alternatively, assessments could be done during a trial period that allowed extended operation limits for the reservoir. The license could then be amended depending on the findings of the studies.	In their comments on the ISR in 2021, BAS requested additional experimental studies including a BACI study and/or repeat of the fall 2019 drawdown (BAS ISR Comment No. 6). FERC determined no additional study was needed in their Study Modification Determination filing on June 11, 2021. Study methods as approved were sufficient for the analysis of potential project effects. Furthermore, on January 25, 2022, FERC determined no study modification determination was warranted for the Updated Study Report (USR) because BAS's comments had been addressed previously in the ISR Study Modification Determination or were comments on interpretation of study results.
8	Bear River Canal Company	2		Bear River Canal Company fully supports PacifiCorp in the application of a new Federal Energy Regulation Commission (FERC) license. As the denial of the renewal of the Cutler license would decimate Box Elder County and the Bear River Canal Company, we, in the strongest language possible, request the renewal of the license by FERC.	PacifiCorp appreciates BRCC's support for the new license for the Cutler Hydroelectric Project.
9	Bear River Canal Company	2	Exhibit A: Project Description	In Exhibit A page 2-5, PacifiCorp states the following "The flow capacity of the Eastside and Westside canals is 165 and 735 cfs, respectively." We wish that this be edited to the following: "The since the construction of Cutler Dam, the greatest historic peak seasonal flows of the Eastside and Westside canals have been 180 and 750 cfs, respectively."	PacifiCorp delivers irrigation water to BRCC, from Cutler Reservoir, according to a contract executed in 1912 (1912 Agreement). At Cutler Dam, water is delivered to canals on the north (named the Westside Canal) and south (named the Hammond or East Canal) sides of the Bear River. PacifiCorp is obligated to deliver a flow of up to 900 cfs between May 1 and October 31, and up to 150 cfs the remainder of the year. While the canals may be physically able to accommodate, in aggregate, greater than 900 cfs (depending on conditions within the canals), PacifiCorp's contract obligations to BRCC are limited to 900 cfs and 150 cfs as noted above. Per the 1912 Agreement PacifiCorp "delivers a flow of nine hundred second feet of water continuously between and including May 1 st and October 31 st each year," and "a flow of one hundred and fifty second feet of water continuously between and including November 1 st of each year and April 30 th s of the next succeeding year..." The proposed future operation of the Cutler Project will not interfere with PacifiCorp's ability to meet the 1912 Agreement obligations. Exhibit A was written to describe the operation of the system, in accordance with the 1912 Agreement, and has been further clarified to reflect that.
10	Bear River Canal Company	3	Measurement of water flow delivered to BRCC	In our official comment to FERC concerning the relicensing process, dated 7/7/19, we introduced the concern about the steadiness of flow delivery and the accuracy of the real-time measurement of the canal flows. In all meetings and comments since that time concerning the relicensing of the Cutler facility, we have returned to this concern. PacifiCorp has addressed our concerns with the steadiness of flow delivery through some programmatic changes to their gate automation system. However, the accuracy of the real-time measurement is still disputed. Currently, a rated channel is used for both the Hammond Main and West Main Canals to measure the flow. These	PacifiCorp has been delivering irrigation water to BRCC, under the 1912 Agreement for over 100 years. PacifiCorp has been and continues to be in compliance with the terms of the 1912 Agreement. Based on BRCC concerns regarding the steadiness of flows within the irrigation canals, communicated following the onset of the Cutler relicensing process, PacifiCorp voluntarily modified its automated control gate software to better "smooth out" flows at the point of delivery to BRCC. As noted in BRCC's comments, this addressed BRCC's concerns regarding flow steadiness.

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				<p>rated sections are checked for accuracy every 30-45 days. This results in 4-5 measurements per year. Two of these measurements are undertaken by USGS and the remainder are conducted by PacifiCorp. [...]</p> <p>Thus, we requested that PacifiCorp provide accurate real-time measurement via the installation of broad crested weirs at or near the point of ownership change for both canals. There is disagreement upon who should be responsible for the costs of these installations. During the discussions of issues surrounding the new FERC license, BRCC offered to contribute 50% of the installation costs while still believing that the governing contract requires PacifiCorp to fully fund such improvements in measurement. This offer was rejected by PacifiCorp.</p>	<p>Regarding the accuracy of flow measurements (the volume of irrigation water being delivered to BRCC), PacifiCorp has met and continues to meet its 1912 Agreement requirements. In addition, PacifiCorp has gone above and beyond the contract requirements to ensure measurement of irrigation water delivered to BRCC meets USGS standards. As further noted in BRCC's comment, USGS is involved in checking the accuracy of flow measurements, and PacifiCorp meets or exceeds USGS standards for flow measurement accuracy. While there are multiple ways to measure flows in the irrigation canals, PacifiCorp's use of periodically rating the canal sections is a proven and acceptable method meeting current USGS and industry standards.</p> <p>As noted in additional detail below, the issue of flow delivery and accuracy of real-time flow measurements was addressed following our meetings with BRCC in 2019. A summary of those meetings and results is described below:</p> <p>BRCC participated in study plan consultation meetings for the Cutler Hydroelectric Project relicensing process hosted by PacifiCorp on October 28 and November 14, 2019. The meeting focused on BRCC's study plan requests submitted to the Federal Energy Regulatory Commission (FERC) in July 2019, and a discussion of PacifiCorp's Proposed Technical Study Plans (PSP) filed with FERC on September 11, 2019. The meeting purposes were to gain a better understanding of BRCC's study requests, demonstrate where comments were incorporated into the September 11, 2019 version of the PSP, and attempt to reach agreement on remaining study plan comments. PacifiCorp prepared a meeting summary along with a table of PacifiCorp's revised responses to BRCC's study plan requests and filed the correspondence with FERC as part of the Cutler relicensing consultation record.</p> <p>PacifiCorp and BRCC made considerable progress addressing BRCC's comments on the proposed study plans. One of BRCC's concerns and a primary focus during the October 28, 2019 meeting was related to irrigation water deliveries and the accuracy of real-time measurement of those deliveries. Specifically, BRCC contended in the October 28, 2019 meeting that PacifiCorp's measurements lacked sufficient accuracy. Staff from the United States Geologic Survey (USGS) participated in the discussion on October 28, 2019. The USGS measures flow at PacifiCorp's gages two times a year, in part, to confirm rating curves. USGS staff said that PacifiCorp's discharge measurements at the BRCC canals are +/- 5 percent accurate. USGS indicated that discharge measurements within +/- 5 percent are the industry standard and considered "good." PacifiCorp measurements generally meet or exceed USGS standards; see additional specific details below.</p> <p>At the October 28, 2019 meeting, BRCC informed the group that they contracted a third party (J-U-B Engineers) to measure discharge in the east and west irrigation canals on two dates in September 2019 to verify accuracy of the rating curves for each canal channel. According to BRCC, J-U-B Engineers estimated that on two dates in September 2019 the rating curve was off by approximately 3.5 percent on one date and 9 percent on the other from the discharge measures.</p>

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					<p>Following the October 28, 2019 meeting, PacifiCorp received J-U-B Engineers' September 2019 discharge data for review. PacifiCorp subsequently identified an error in J-U-B Engineers discharge calculations that omitted the final step necessary, per the USGS protocol, to provide better accuracy. Corrections to J-U-B Engineers' data, using the additional final step, were reviewed and approved by the USGS. The corrected discharge measurements indicated the canal rating curves ranged from 0.6 percent to 2.7 percent accuracy to the measured discharge value. This level of accuracy falls into the highest standard of measurement and is considered "excellent" by USGS.</p> <p>In summary, PacifiCorp's real-time flow measurements meet the highest industry standards for accuracy based on the USGS's independent assessment. Installation of broad-crested weirs in the canals is not needed to improve accuracy. Further, no such installation is required by the Contract, which is why PacifiCorp has noted previously, and again here, that although the company supports BRCC and its shareholders in pursuing any canal or irrigation system upgrades that it feels are warranted, including new measurement weirs, PacifiCorp customers should not be responsible to bear those costs.</p>
11	Bear River Canal Company	4	Land Use	<p>The draft license agreement Exhibit C page 3-272 states "Because it was determined that the proposed operations would not affect the BRCC withdrawals, they were not included in the water withdrawal infrastructure portion of the Land Use ISR." Exhibit C page 3-272 states "Proposed operations would not affect the BRCC withdrawals located at Cutler Dam because the proposed extended range would only be utilized outside the irrigation season, and the elevation range proposed would not fluctuate enough to affect the canal withdrawals." BRCC firmly states that no such determination was made or is defensible by PacifiCorp. BRCC would like to make it clear that the operational issues discussed in this comment are real issues that affect canal withdrawals both under the current license and under the proposed license. Edits should be made to the draft license to reflect the past and current status of this issue.</p>	<p>Note BRCC's references to Exhibit C should be Exhibit E.</p> <p>In the November 14, 2019, meeting with BRCC, PacifiCorp provided a cross-sectional view of Cutler Dam illustrating the location of the reservoir pool elevations during the proposed normal and extended range operations relative to height of canal gate structures. The canal intakes are located approximately 21 feet lower than the normal reservoir pool elevation, and as noted, no changes would occur from the current operations regime during the irrigation season. Therefore, PacifiCorp's determination that ongoing Project operations will not affect delivery of water to the BRCC canals is accurate. Further, the cross-sectional illustration eliminated the need for modeling potential impacts of future project operations on irrigation water delivery to BRCC canals.</p>

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12	Bear River Canal Company	4 & 5		<p>To this point, PacifiCorp has made the argument that the operations of the canals are outside of the FERC prevue. However, we would point to the history/creation of the project, current operating agreements, and the economics of the project as evidence supporting the opposite opinion. [...]</p> <p>There may be some argument that the current rated channel section is up to industry standard currently. We would point that the purpose of the relicensing process is to assess the value of the project for the future. During the term of the proposed license agreement, even proponents of the current measurement practices would have to agree these practices will be out-of-date during the next license period, thus canal measurement infrastructure should be upgraded as part of the issuance of a FERC license.</p>	<p>Water delivery obligations under the 1912 contract are, and will continue to be, completely fulfilled in operating the Cutler Hydroelectric project so long as available water permits. The proposed operations in the next license period do not interfere with those water delivery obligations.</p> <p>PacifiCorp disagrees with BRCC’s assertion that current measurement practices will be out of date during the term of the next license given the fact that these field techniques remain mostly unchanged despite substantial advancements in computing technology. The field methods associated with the accurate measurement of flow volume have been well established for over a century. New equipment has been developed to measure water velocity and depth such as acoustic doppler current meters, but the field data collection methods remain largely unchanged. In fact, the instruments used to measure velocity in the past (Price AA current meter) continue to be used in situations where it is appropriate and where they continue to be accurate. PacifiCorp utilizes newer equipment such as acoustic doppler current meters, as well as time-tested current meters such as the Price AA where applicable for field data collection.</p> <p>Standard license article 8 requires PacifiCorp to delegate supervision of their Project gaging efforts to the United States Geological Survey (USGS). The USGS sets the industry standard for hydrologic data collection methods and analysis. Any changes in the industry standards for Project hydrologic data collection will be directed by the USGS as needed during the next license period. As noted previously, PacifiCorp will continue to meet or exceed both the 1912 Agreement requirements, as well as USGS measuring standards. Further, PacifiCorp notes that measurement in these irrigation canals is not part of the FERC license process, in that they are not measurements of flow on a stream where the Project is located but are on irrigation canals downstream of the Project generation works, are not part of Project operations, and are governed by the 1912 Agreement.</p> <p>As to “measurement” using a weir, the USGS does not consider a weir a “measurement device” but a hydraulic control on the stage-flow relationship (rating curve) that requires the same frequency of discharge measurements to confirm the accuracy of the rating curve of the weir. Notably, weirs sometimes rely on standard computer-calculated or laboratory-derived empirical ratings, which may not match the actual rating curve of the installed weir due to variations in field conditions from the idealized conditions used to produce the standard rating curve.</p> <p>The need for new devices to measure water delivery within irrigation canals falls under water delivery contracts and is not a part of the FERC relicensing process. Further, PacifiCorp has demonstrated to the satisfaction of the USGS that the current water delivery measurement system is accurate, meets industry standards, and continues to comply with the 1912 contract.</p>
13	Bear River Canal Company	6		Bear River Canal Company has demonstrated that an issue exists with the accuracy of the current measurement system implemented by PacifiCorp in	See response to Comment No. 10. Also, see letter to BRCC dated November 30, 2019, and filed with FERC addressing the issues of water delivery timing and

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				its conveyance of water through the FERC project. We have established a nexus to the FERC regulated Cutler Project through the project's history, current operations agreements, and economic impact on the area. Further, we have made an attempt to resolve the issues outside of a request to include upgrades as part of the license agreement. However, we have been unsuccessful in those attempts. Therefore, we request that FERC consider including an update in canal delivery measurement as a required upgrade to the infrastructure as part of the license which will govern the Cutler Project for the next license period. If FERC feels that our request is valid and intends to provide for it in the license, BRCC would request a consultation between FERC, PacifiCorp, and BRCC to discuss infrastructure required by the license for the reasons delineated in "Bear River Canal Company Capital Improvements Plans and Goals" section of this document.	accuracy of real-time flow measurements. As a result of the meetings with BRCC on October 28 and November 14, 2019, PacifiCorp implemented changes to the automatic headgate control to use the primary streamflow gage as the primary flow input. Previously, a secondary water level sensor was used, resulting in some bias between the flow control set-point flow rate versus the provisional flow rate at the primary gage. This was implemented at the beginning of the 2021 irrigation season, which has reduced both the bias and variability between the requested flow control set-point and the delivered flow beyond the requirements of the 1912 Contract. That is, PacifiCorp complies with the obligations under the 1912 Contract. Although not required by the Contract, once the company was made aware of BRCC concerns, PacifiCorp also implemented additional system changes to further improve the water delivery system where feasible. As such, additional capital upgrades to BRCC's canal system are clearly the responsibility of BRCC and not PacifiCorp customers.
14	Bear River Canal Company	7	Exhibit C: Construction History	In Exhibit C Page 1.1 states the following: "The construction of the Project begins with the construction of the Hammond Canal (also known as the East Canal) and the West Canal to provide irrigation water to the dry bench lands of the east side of Bear River Valley (SWCA 2020). The larger West Canal serves those east-bench lands north of Cutler Canyon, while the Hammond Canal serves the lands located south of Cutler Canyon on the east bench." We feel that this was simply a misstatement but should be corrected to the following: "The construction of the Project begins with the construction of the Hammond Canal (also known as the East Canal) and the West Canal to provide irrigation water to the dry bench lands of the east side and west sides respectively of Bear River Valley (SWCA 2020). The larger West Canal serves those west-bench lands west and south of Cutler Canyon, while the Hammond Canal serves the lands located south of Cutler Canyon on the east bench."	PacifiCorp appreciates these clarifications, and has modified Section 1.1 of Exhibit C of the FLA.
15	FERC (Frank Winchell)	1	Draft HPMP	Figure 2-2, Page 2-8: FERC project boundary lines (red lines) look strange. Not sure if this is correct.	Figure 2-2 in the HPMP is zoomed in to provide detail of the Project facilities. The FERC Project Boundary is correctly delineated in Figure 2-2, and can be seen in its entirety in Exhibit G.
16	FERC (Frank Winchell)	1	Draft HPMP	Subsection 5.3: There should be an annual meeting within every anniversary of the issuance date of the license, among the participating parties to discuss the implementation of the HPMP. Add to Subsection 5.3 that the purpose of the annual meeting would be to share information regarding Project activities that have taken place during the preceding year, to discuss cultural resource concerns, to discuss site conditions, protection measures, and/or other activities that have been carried out that affect cultural resources; to provide an overview of anticipated upcoming Project activities; and to discuss any concerns with and proposed changes to the protocols established in the HPMP. Also add to Subsection 5.3 that every 5 th year, the annual report and meeting, will consider any possible cumulative effects to historic properties in the project's APE as a result of project operations that may have occurred or developed over the 5-year span.	PacifiCorp has modified Section 5.3 of the HPMP to address periodic reviews for cumulative effects. For efficiency and to align all substantive reviews (vs. annual reporting) of the HPMP administration and any necessary changes, the cumulative effects review has been incorporated into the 10-year HPMP review meeting (see Comment 17, below).

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17	FERC (Frank Winchell)	1	Draft HPMP	Subsection 5.4: Change from every 20 years following the acceptance of the HPMP by FERC, to every 10 years, PacifiCorp will review the HPMP for adequacy and continued applicability to the Project's operation.	PacifiCorp has modified Section 5.4 of the final HPMP.
18	FERC (Frank Winchell)	1	Draft HPMP	Section 4.0: Add another subsection before 4.3 on procedures and protocols for determining National Register of Historic Places eligibilities on any newly discovered cultural resource within the Project's APE. The procedures and protocols in this subsection should be consistent with the measures provided in subsection 4.7.1 and include standard consultation efforts between PacifiCorp and the Utah SHPO, and include involved Indian tribes concerning cultural resources of aboriginal origin.	PacifiCorp has added subsection 4.3 to the final HPMP.
19	FERC (Frank Winchell)	1	Draft HPMP	Subsection 5.5: Just state that any kind of dispute regarding this HPMP, implementation of its measures, or treatment of cultural resources with PacifiCorp and/or with any of the involved parties will be carried through the dispute resolution process provided in the associated PA.	PacifiCorp has modified subsection 5.5 of the final HPMP.
20	Utah State Historic Preservation Office	N/A	Cultural Resources	My main buildings' related item is to change your "Exemptions" section to "Streamlined Activities" (this terminology is more consistent with updated Advisory Council on Historic Preservation guidance) and I would also request you provide an annual (or biennial) report on those streamlined activities to be submitted to the Utah SHPO.	PacifiCorp has modified the final HPMP.
21	Utah State Historic Preservation Office	N/A	Cultural Resources	SHPO hasn't seen SWCA survey report or site forms.	All technical reports and supporting documentation were provided to the SHPO prior to submittal of the Final License Application.
22	Utah State Historic Preservation Office	Table 4-1, Column 1, first text cell	Draft HPMP	What is defined as "previously disturbed"?	PacifiCorp has added text to clarify the meaning of "previously disturbed" to Table 4-1, Column 1 of the final HPMP.
23	Utah State Historic Preservation Office	Table 4-1, Column 1, 2 nd text cell	Draft HPMP	Are these resources to be evaluated if over 50 years old?	PacifiCorp has added text to Table 4-1 to clarify that only resources less than 50 years old qualify for processing under this "exemption" criterion.
24	FERC	2	Exhibit B	On page 1-12, you state that the proposed extended range "would typically only be utilized during the November-to-March timeframe"; however, in Exhibit E, page 3-139, you state that the proposed operation changes would occur "typically between December and March." Please ensure that your FLA is consistent in the timing of your proposed operation changes.	PacifiCorp clarifies that the proposed extended operations would only be utilized outside of the irrigation season and cannot be used during high flows; these conditions generally occur during the November to March timeframe (and even more narrowly if extremely cold temperatures, such as those causing downstream ice damming conditions, or warmer temperatures contributing to low elevation runoff and subsequent higher flows, are present). The statements are not inconsistent as the conditions which could allow for the proposed extended operations are limited and somewhat variable (i.e., 'typically' starting in November or December) but generally only occur during the winter months as they are defined by excluding the irrigation season and higher water flows. The FLA has been clarified to reflect this (additional detail may also be found in Exhibits B (Section 1.3) and E (Section 2.2.2) regarding the Proposed Operations).

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25	FERC	2	Wildlife and Habitat	On page 3-149, you state that the littoral and open water habitat is a type of wetland/waters habitat that is “located adjacent to the reservoir.” However, on page 3-148 [<i>page number corrected by PacifiCorp</i>], you state that “[g]iven that much of the reservoir is shallow, a large portion of this open water habitat constitutes the littoral zone.” Please clarify in the FLA where in the project reservoir this habitat is located.	In Section 3.3.5.1 (DLA page 3-149) the text “...located adjacent to the reservoir...” has been clarified to read “...located on the margins of the reservoir where water is shallow...”
26	FERC	2	Fish and Aquatic, Botanical, Wildlife and Habitat	On page 3-124, you state that “the Cutler shoreline would not be dewatered and exposed to elements” and that proposed operations would “not result in shoreline sediment exposure” due to reservoir level fluctuations being short-term, cyclical, and 2.5 feet or less. However, on page 3-139, you indicate that “proposed operations would potentially decrease the lower WSE [water surface elevation] and increase the amount of exposed reservoir bank and shoreline”, and on page 3-149, you state that “littoral and open water habitat has the highest potential to be affected by proposed reservoir operations.” In addition, table 3-23 indicates that the proposed extended operations could result in up to 21 percent exposed reservoir shoreline. Please clarify this apparent inconsistency regarding the potential effects of the proposed reservoir operations in the FLA.	<p>Table 3-23 presents the results of the hydraulic model predictions, and as noted above in Comment Response No. 1, a calculation error was discovered in the table in that the model actually predicted that extended operations could result in less of a reduction in the area of open water at WSE 4,405.0 ft, compared to the current low of WSE 4,406.0 ft. The 21 percent difference noted in the DLA was calculated incorrectly and has been rectified in Table 3-23 and associated text.</p> <p>Also, as previously stated in Comment Response No.1, PacifiCorp notes the apparent inconsistency between DLA page 3-124 and other references to “exposed” reservoir bed including on DLA page 3-139, and have clarified the text to include the more accurate term “transition zone” in Section 3.3.5.2 (including on DLA page 3-139 and in Table 3-23), based on the empirical photographic evidence included in Attachment B of Exhibit E, as well as with staff experience with the reservoir at current operating WSE ranges. Further, relevant portions of the Section 3 text now have expanded and clarified descriptions regarding the strengths and limitations of the hydraulic model, and how it is expected to differ with empirical observations of reservoir elevation, particularly in the shallower portions of the reservoir.</p> <p>As described in detail in the response to Comment No. 1 above, the hydraulic model has certain limitations in the transition zones, including the shallower zones along the edge of the reservoir. The model is only able to predict the relative change in the amount and distribution of what is now defined more accurately as the “transition zone” (defined as the shallower areas between the reservoir banks and the reservoir open water). This edit clarifies the use of the term “exposed” as the change in open water does not necessarily translate directly to an increase or decrease in exposed reservoir shoreline. Rather, it could indicate a range of conditions within the transition zone from wet reservoir bed sediments, to flooded shallow water (not exposed but less than 0.4 feet in depth). As described above in the response to Comment No. 1, the latter condition is considered more probable, based on hydraulic processes, observations, and photos captured at various WSEs that occurred during the 2019 drawdown.</p> <p>To help clarify this change, a more detailed explanation of the limitations of the hydraulic model has been added to FLA Section 3.3, including its limitations in the transition zones along the reservoir shoreline. This description of limitations will be referenced in Section 3.3.5.2, and elsewhere in the FLA where model limitations are relevant.</p>
27	FERC	2	Fish and Aquatic	In your analysis on the effects of reservoir drawdowns on benthic macroinvertebrates (BMI) (page 3-124), you indicate that the studies for the peer reviewed articles you relied on as part of your literature research	As noted above in comment response No. 1, overall, statements made in the <u>Draft License Application regarding changes to the reservoir as a result of proposed operations, such as</u> those noted in the comment, have been clarified with the addition

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				<p>focused on the effects of long-term winter drawdowns, primarily with drawdowns greater than 5 meters. As such, you state that because the proposed water surface fluctuations in the Cutler reservoir would be significantly less in magnitude and duration, these studies do not appear to provide an accurate prediction of potential effects of the proposed reservoir drawdowns on BMI at the project. In addition, on page 3-124, you state that “substrate along the shoreline would not be exposed to physical factors described by other studies cited because the Cutler shoreline would not be dewatered and exposed of the elements.” As discussed in item 3 above, table 3-23 indicates that proposed operations could potentially cause up to 21 percent of the reservoir shoreline to be exposed. If the literature review studies are not applicable and the shoreline sediment will indeed be exposed during proposed extended operations, please provide further analysis of the potential effects of the shoreline exposure during proposed extended operations on BMI in the project reservoir. This may include using more applicable peer-reviewed studies for comparison, if available, or an estimation of effects based on the difference in magnitude and timing of the proposed reservoir drawdowns when compared to the drawdowns evaluated in the available studies.</p>	<p>of the word ‘substantive’, or similarly modified or expanded. However, with those caveats, the effect of the proposed operations (fluctuating by 0.3-0.76 m) would not be substantive, and would be limited in time and area, as described further in Section 3.3 of the FLA, in previous comment responses, and as shown on the photos in Exhibit E, Attachment B.</p> <p>The peer-reviewed studies indicated were actually referenced by commenters on both the ISR and the DLA, and were not relied on for the Cutler analysis specifically, although they are addressed in our various comment responses. In their comments on the ISR, BAS referenced a peer reviewed article by Carmignani and Roy (2017) that synthesized the results from a number of other published papers on the effects of winter reservoir drawdown on aquatic communities. In their comments, BAS focused in on the impacts to aquatic communities where reservoir drawdowns result in water surface elevation changes in the range of 3 to 4 meters and held there for relatively long periods of time. That range of water level fluctuations and prolonged drawdown are not representative of the Cutler proposed operating conditions. Interestingly, the paper by Carmignani and Roy (2017) also summarized results from studies where reservoir fluctuations were much smaller and over shorter durations (days). In fact, Carmignani and Roy (2017) point out that reservoir elevation changes in the range of 0.4 to 0.6 m, ranges similar to Cutler proposed operations, revealed <u>higher</u> submergent species richness. For macroinvertebrates, Carmignani and Roy (2017) found that chironomids possess short life history cycles with multiple generations per year, enabling them to avoid the effects of inhospitable conditions associated with large, prolonged winter drawdowns. The authors go on to state that other taxa such as amphipods, oligochaetes and ceratopogonids can physically tolerate freezing and burrow in sediment to inhabit relatively unaffected substrates.</p> <p>Regarding FERC’s reference to percent of inundation listed in Table 3-23 of the DLA please see the response to Comment Nos. 1 and 26 in this table.</p>
28	FERC	2	Exhibit F	The drawing and text on Exhibit Drawing F-1 titled: “Principal project works location drawing” is not legible and needs to be updated in the FLA.	The reservoir image and associated labeling in Exhibit F, Drawing F-1 of the Final License Application has been made more legible.
29	FERC	2	Exhibit G	All required maps and drawings must conform to the specifications of sections 4.39 and 4.41. As such, please provide the project boundary data in a geo-referenced electronic format (e.g., ArcView shape files, GeoMedia, files, MapInfo files) in your FLA.	PacifiCorp will provide Project Boundary data that conforms to FERC’s requirements for the final Exhibit G submittal.
30	Senator Sandall	1	Comment not part of DLA process	The purpose of my communication is to articulate my support of the Bear River Canal Company’s petition to update the measurement of their agricultural water right.	As previously noted, (see response to Comment No. 10, above), PacifiCorp also supports BRCC and its shareholders interest in pursuing any BRCC canal or irrigation system upgrades that it feels are warranted, including new measurement weirs; however, the company differs in noting that PacifiCorp should not be responsible to bear BRCC system upgrade costs.
31	Senator Sandall	2	Comment not part of DLA process	Bear River Canal Company has been using [the State Water Agricultural Optimization Grant program] and has been awarded grants for system improvements which have already been undertaken. They are taking very seriously the stewardship of their water rights through the implementation of	PacifiCorp also values improvements in water use efficiency, including investments in infrastructure that support these goals throughout the watershed. PacifiCorp disputes that the initial delivery of water to BRCC’s canal system is metered at a less accurate standard; see details provided in comment responses No. 10, 12, and 13.

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				leading-edge water measurement /automation equipment and economical canal liners and piping. I see the validity of their concerns with them making large investments in cutting-edge technology in downstream sections of the canal system while PacifiCorp's initial delivery of water is metered [to] a much less accurate standard.	
32	Senator Sandall	2	Comment not part of DLA process	I do not feel it is reasonable to expect the current rated channel measurement of the Bear River Canal Company's water right [to] remain acceptable to the State of Utah or its citizens for the duration of the next license period.	Regarding measurement of irrigation water deliveries, PacifiCorp will continue to meet or exceed USGS standards and 1912 Agreement requirements going forward, in the current and in any future license periods. See above comment response No. 30 regarding PacifiCorp support for BRCC upgrading its system.
33	Senator Sandall	2	Comment not part of DLA process	Our area is also developing. As a result, we, as public officials, are more and more concerned about canal safety issues and the effects of water movement in storm events as farm ground is converted to homes. The canal company is going to have to manage its system more precisely and more dynamically in the next license period than it ever has before in order to meet the needs of users' safety. A key to that is an accurate measurement of input water at Cutler Dam.	PacifiCorp also agrees that canal operational safety is important, and annually undertakes considerable operation and maintenance expense in maintaining the safe operation and delivery capability of its canal systems, including the portions of the Hammond and West canals which PacifiCorp is required to maintain by the 1912 Agreement. See previous comments (Nos. 10, 12 and 13) that thoroughly address the fact that water in the canals is accurately measured at Cutler Dam, at a level that meets or exceeds all USGS standards, as well as the requirements of the controlling contract, the 1912 Agreement.
34	Senator Sandall	2	Comment not part of DLA process	Bear River Canal Company has submitted cost information that supports that the power company will not bear additional cost over the license period as a result of the implementation of better measurement as it results in less required check measurements. This coupled with the changing needs of the canal company as well as the benefits to society in general by better measurement, I strongly support FERC's inclusion of improved measurement as part of a term of the next license agreement.	PacifiCorp has not seen the noted cost information and disputes the underlying premise of overall cost savings. Further, PacifiCorp has repeatedly stated to BRCC that no such cost savings would exist. Finally, and as noted previously (see comment responses No. 10, 12, and 13), existing canal measurements meet or exceed USGS standards and the 1912 Agreement, upgrades or improvements are neither warranted nor required by the Agreement, and are outside of the FERC relicensing process.