RHWM Process Workshop

BP-16 Rate Period –
Pre-Final Determination Discussion

Rates Hearing Room
October 3, 2014
Purpose of this workshop

What is the purpose of this workshop?

- Evaluate a change to the forecast implementation of a maximum transport operation on the Snake River dams during the FY 2016-17 rate period.

- BPA has made its final determinations with respect to all other aspects relevant to the computations of RHWMs and associated RHWM outputs.
Spring Maximum Transport in Dry Years - Review

- In prior rate cases, BPA assumed that the maximum transport operation called for in the 2008 BiOp would occur because the available data showed transported fish returned at higher rates than fish that migrated in-river.

- The maximum transport (no spill) operation at the Snake River collector projects (Lower Granite, Little Goose and Lower Monumental) in years with forecasted flows of less than 65 kcfs called for in the 2008 BiOp was never implemented.

- The 2014 BiOp now calls for an annual review of the available information to determine what operation would be best for fish, and establishes a general goal of transporting about 50 percent of the fish.

- While a maximum transport operation is still possible – if it is determined to be best for fish – it was not assumed in the original BP-16 rate case firm hydro forecasts.
Spring Maximum Transport Potential Assumption Change

- Max transport (no spill) will occur half the time in VERY dry years.

- This assumption would be applied in years when the average April – June flow is less than 55 kcfs at Lower Granite Dam.

- No spill would be assumed to occur at Lower Granite, Little Goose and Lower Monumental Dam April – June 5.

- For modeling purposes BPA will assume max transport in fiscal year 2017.
Spring Maximum Transport Potential Assumption Change

- While there are many factors to consider in determining what operation will be best for fish, it is likely that water supply will be a more influential factor when flow forecasts are very low.

- Revising the assumption increases the amount of firm energy and helps relieve some of the impacts that customers would otherwise shoulder due to changing assumptions that are inherently subject to a large degree of uncertainty.

- This option would reduce spill and increase generation in 1937 water conditions and seven other years.
Spring Maximum Transport Potential Assumption Change

- The BiOp calls for an annual review of information, including but not limited to forecasted river flow, to determine what operation would be best for fish.

- In 2010, the ISAB considered a forecasted flow of 50 kcfs in making its recommendation that a max transport operation should **not** occur.

- While recent survival information continues to show a benefit for transport, that benefit is smaller than in prior years before significant improvements were made to increase survival at the dams.
### Spring Maximum Transport - Potential Assumption Change

<table>
<thead>
<tr>
<th>Year</th>
<th>Sorted April-June Average flow in kcf</th>
<th>47.2 kcf</th>
<th>8 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976-77</td>
<td>36.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991-92</td>
<td>41.4</td>
<td></td>
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<tr>
<td>1930-31</td>
<td>46.3</td>
<td></td>
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<tr>
<td>1986-87</td>
<td>46.8</td>
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<tr>
<td>2000-01</td>
<td>47.0</td>
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<tr>
<td>1993-94</td>
<td>51.4</td>
<td>47.2 kcf</td>
<td>8 years</td>
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<tr>
<td>1936-37</td>
<td>53.7</td>
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<tr>
<td>1940-41</td>
<td>54.6</td>
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<tr>
<td>1943-44</td>
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<td>1972-73</td>
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<tr>
<td>2006-07</td>
<td>56.8</td>
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</tbody>
</table>

**2010 Forecast – 50 kcf**

**55 kcf**
Would a change in this assumption affect implementation of the BiOp?

- No – this is not an operational decision. It is only a forecast for use in the RHWM Process and used in the 7(i) process for establishing eligibility of customers to purchase power at different rates, consistent with the TRM.

- The decision regarding max transport will continue to be made on an annual basis to determine what operation will provide the best survival for returning adult fish, consistent with the biological opinion.

- The water supply forecast will be an element in that decision, but decision makers will continue to consider other available information in determining the operation that is best for fish.

- Decisions regarding how these projects will operate are made by U.S. Army Corps of Engineers (the entity that owns and operates the dams), in coordination with BPA, the Bureau of Reclamation, NOAA Fisheries and the sovereigns that are members of the Regional Implementation Oversight Group or RIOG.
The original BP-16 RHWM Process forecast of firm average annual regulated hydro energy is ~180 aMW lower than the BP-14 RHWM Process.

The alternative BP-16 RHWM Process forecast of firm average annual regulated hydro energy is ~142 aMW lower than the BP-14 RHWM Process. Due to the different maximum transport assumption in FY 2017, which increases generation in April through June, the alternative BP-16 RHWM Process forecast is ~38 aMW higher than the original BP-16 RHWM Process on an annual average basis.
Customer Impacts

- The increase of 38 aMW would affect Above RHWM load service of about one third of BPA’s customers.

- The increase would further move about 5 customers with Above RHWM loads previously in excess of 1 aMW to less than 1 aMW in at least one of the two years of the rate period. These customers would be eligible to serve these loads at relatively low load shaping rates and would not be locked into a purchase of Tier 2 or need to secure self-supply resources.

- All customers share in a slightly lower Tier 1 rate due to increased PF sales.
  - This assumption change would not induce higher system augmentation expenses, since the additional energy is forecast to exist and would be assumed in the Initial Proposal.
Next steps

- Customers have from Oct. 3, 2014, until Oct. 8, 2014, to submit comments on BPA’s Public Comment website:
  [http://www.bpa.gov/comment](http://www.bpa.gov/comment)

- BPA will evaluate these comments and decide in October.

- BPA will announce and repost its final determinations, along with a close out letter to the region by Oct. 28, 2014.

- Customers will have 10 calendar days following the date of this reposting to seek nonbinding third party review related to factual matters in the T1SFCO study.

- Contractual deadlines related to the RHWM outputs have been extended by roughly one month due to the delay in the posting of RHWM final determinations.

- The rate case schedule has been delayed until early December.