

# BPA Financial Crisis

*“If there is an axis of nonchalance (on one end) to panic (on the other), I think it’s important that we don’t get into a panic mode, I’m not in a panic mode, but I am in a very very significant sense of urgency mode.”* Elliot Mainzer, BPA Administrator, to NPCC, March 2018, <https://vimeo.com/260456507>

Here are some of specifics which reinforce Mainzer’ statement on the urgency of the financial issues:

## Financial

1. The Columbia River Fish Mitigation program **spent about \$1 billion since the year 2000** on bypass improvements on the 4 lower Snake River Dams (4LSRD’s) to improve salmon survival. It **failed to improve survival** and added \$1 billion to BPA’s debt load.
2. BPA’s total **debt load is \$15-\$16 billion**. Their **interest payments on the 4LSRD’s are \$43 million**, versus revenues of around \$200 million (see BPA 2018 Strategic Plan and charts noted below).
3. The BPA 2018 Strategic Plan reported that BPA’s **debt-to-asset ratio was 95% last year** (Elliot Mainzer stated it is 99% today). This is far higher than any public utility in the country.
4. **Approximately 50% of BPA debt is owed to the Treasury**. BPA’s primary source of financing is its U.S. Treasury borrowing authority. This works like a revolving line of credit and is capped at \$7.7 billion.
5. The financial debt will continue to build resulting in ever-increasing interest payments. BPA annually repays Treasury debt, but is borrowing money from other sources in the region to make these debt payments. About 90% of this is done through refinancing.

## Environmental

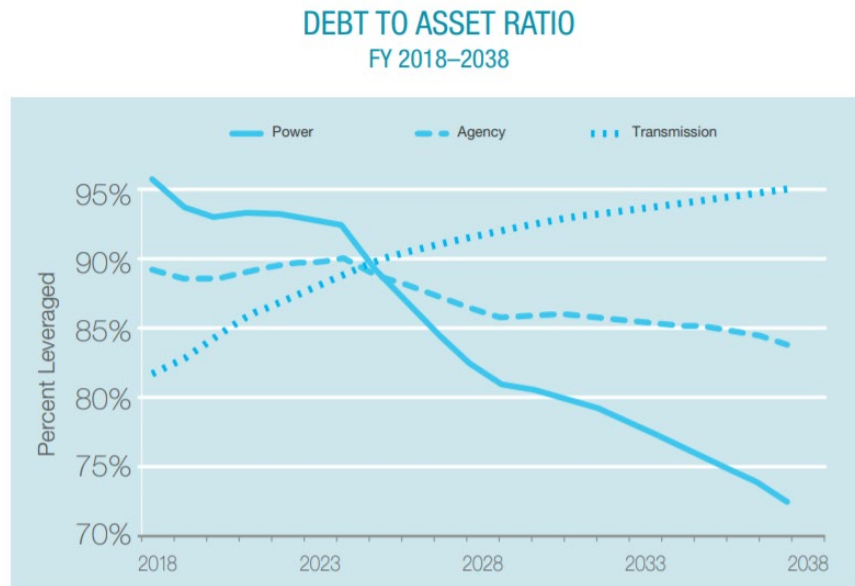
1. **Snake River dams will continue to deteriorate**. The cost of dam and fish passage improvements will continue to increase quicker, beyond BPA’s fiscal means to maintain and repair them. This will lead to increased fish mortalities as the expensive to maintain bypass systems degrade and impair the fragile juvenile salmon. This could only be reversed with significant rate increases, which of course makes LSRD’s hydro power more expensive thus driving off more customers.
2. Habitat restoration projects with no or low returns are claimed as “project failures” when the reason is more likely that dams are not allowing fish passage for habitat use. Lack of sufficient fish passage, market shifts, and Federal Court decisions are used as an excuse to cut funding on Fish and Wildlife programs, (ex. the recent \$40 million cut). In reality, **BPA is simply going broke trying to keep the entire hydro-system going** and paying for mitigation on the 4LSRD’s.

## Power Production

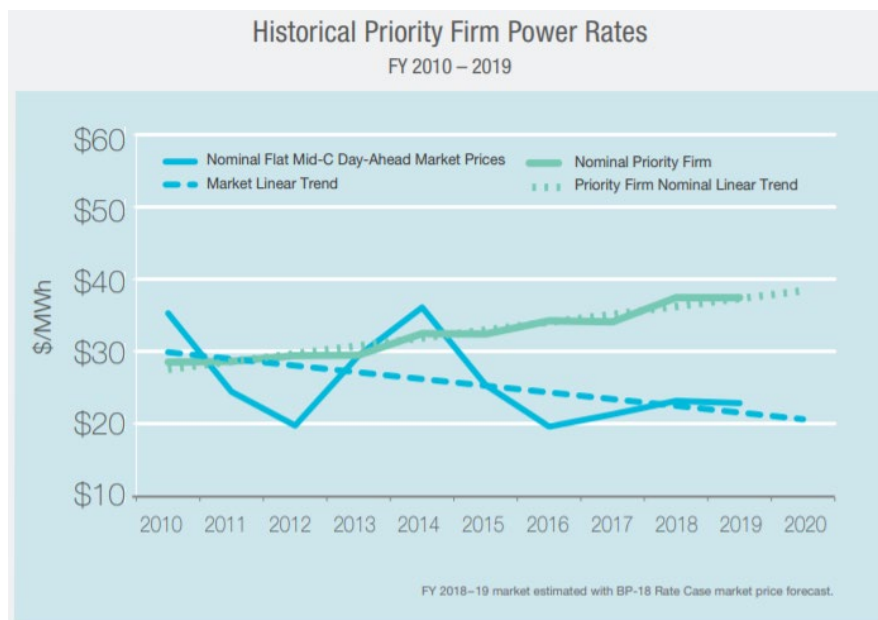
1. The 4LSRDs add about 1,000 Mwh’s to the significant surplus of energy in the Pacific Northwest. For example, **only 2 out of the last 93,000 hours were needed by BPA customers**. This surplus energy is sold below BPA’s current and projected firm priority rates, thus at a loss.

2. The **average annual cost of power production from the 4 LSRD's is higher** than the much larger dams on the Columbia River.
3. During spring runoff, all but a few dams, have no choice but to spin the generators or face massive fish kills. Surplus hydropower from the 4LSRD's for the past several years is **sold below the BPA firm priority rate** at a tremendous loss, and at times BPA must pay California to take the power. We know it has been as low as -\$16 Mwh, noted in May, 2018. Since 2012, California has installed 9,000 megawatts of solar power (The equivalent of 12 Snake River Dams). This situation will continue to rapidly decrease the viability of surplus sales and thus further bankrupt BPA's hydropower assets (see BPA Strategic Plan graph, pg. 35).
4. Because of surplus energy on the grid last year, there have been **50 curtailments of wind turbines**. Breaching the 4LSRD's frees 1000 Mwh's of energy on an annual basis makes it easier to integrate and use additional wind power, which is \$10 cheaper than hydropower. **Current wind production provides 3 times the production of the 4LSRD's** (15 years ago wind was not economically superior).
5. **If the BPA does not abandon losing assets such as the 4LSRD's, they will likely never recover.** Even with dam breach, it will still be difficult.
6. Due to surplus energy, there is **zero impact to the power network after dam breach**, and a cost saving for BPA. If the dams are breached, and the power production was replaced (although it doesn't need to be), there is still an economic benefit of \$4 to 1, if power was replaced with 50% solar in eastern Washington and open market (includes wind). *However*, it is a \$19 to 1 benefit/cost ratio if this surplus power is not replaced because it has already been replaced and is not needed. To be clear, breaching the 4LSRDs should decrease rates, not increase rates, as proposed by the Northwest Energy Coalition in a recent report.
7. BPA is relying on large PUD contracts that will not expire until 2028. Aluminum plants pulled out of contracts with BPA and could happen with PUDs. Some of these PUD's may break contracts, take the penalty, and still be better off in the open market. But, with a smaller customer base, rates will continue to increase for those still holding BPA contracts.
8. **Breaching can be financed through existing debt reduction and credit mechanisms** as a fish mitigation action by BPA. New appropriations are not needed. If the "4h10c fish credit" mechanism is used it will not cost BPA and its ratepayers anything.
9. BPA appears to be borrowing money to make annual interest payments. The only option to make a significant debt payment in their \$16 billion debt, is to significantly increase rates and further drive customers away.

## BPA Charts



**Figure 1** “While the downward debt-to-asset ratio trajectory for Power Services is positive, the upward trajectory for Transmission Services is a significant risk to the future financial health of BPA.” BPA Financial Plan 2018, pg. 12



**Figure 2** “As wholesale market prices (blue) have trended downward, BPA’s Priority Firm power rates (green) have trended upward.” BPA Strategic Plan 2018-2023, pg. 35

Shift in California power demand

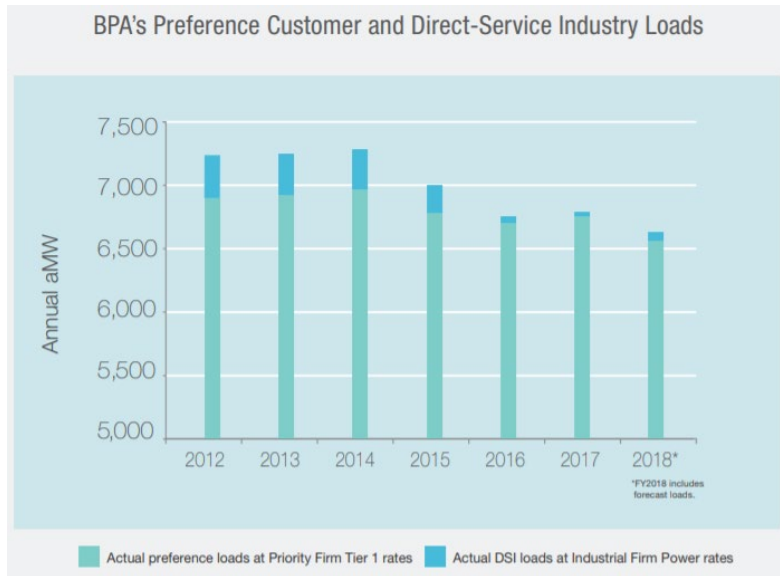
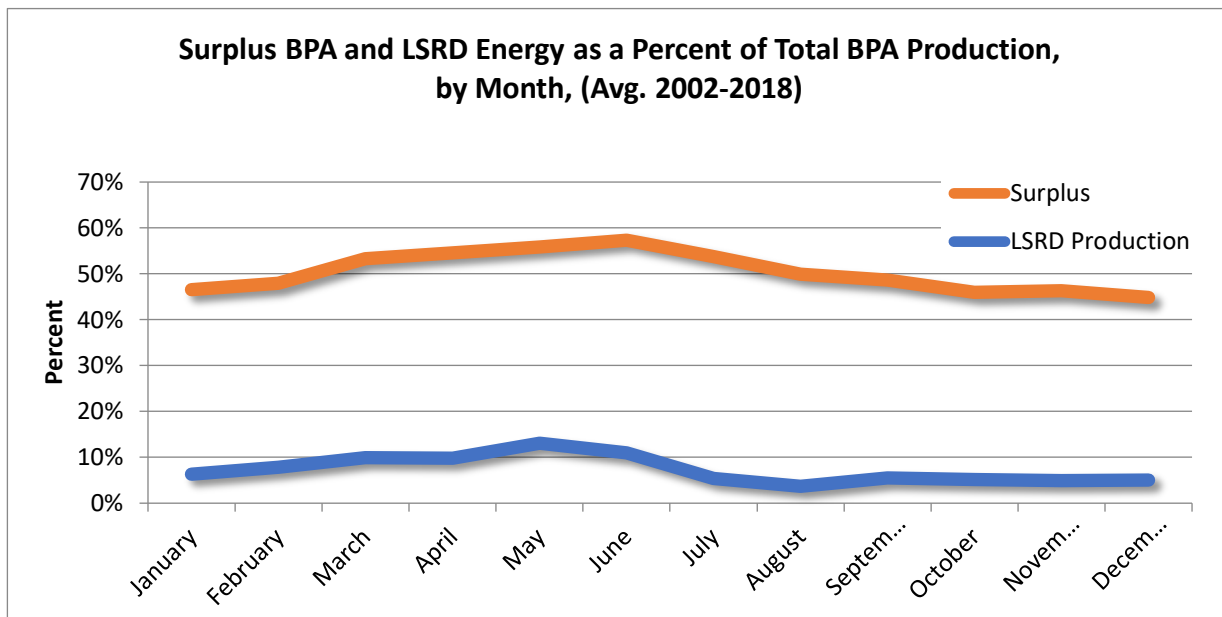


Figure 3 “BPA’s preference customer and direct-service industry loads have steadily declined since 2014.” BPA Strategic Plan 2018-2023, pg. 37



Source: Rocky Mountain Economics

BPA has generated nearly 50% surplus power since 2002. The LSRDs have contributed to this surplus and are therefore unnecessary. Operations of the LSRDs should be halted immediately.

### NP15 DAM Prices, 2016 - Current.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann.
2016	28.54	24.01	19.60	21.23	20.76	28.09	32.80	34.85	34.66	34.03	30.17	36.60	28.81
2017	34.90	29.23	22.11	22.13	28.81	33.12	35.84	45.20	39.72	41.19	36.28	34.22	33.61
2018	32.95	30.48	30.05	24.91	20.75	28.14	54.92	59.21					33.95

Red = Prices below LSRD cost of production. Yellow = Prices at or above BPA current priority firm rates.  
Green = Prices at or above RME estimated LSRD cost of production.

Note, these are OASIS, DAM prices for NP15. NP15 DAM tend to trade about \$3/MWh higher than MID-C DAM. And, Both NP15 and MID-C DAM tend to be \$3 - \$5 higher than the respective RTM markets. In other words, the prices shown here are approximately \$6-\$10/MWh higher than the prices BPA gets when it dumps its surplus power on the MID-C wholesale market (Rocky Mountain Economics).

To view the financial and strategic plans created by BPA, please visit the links below.

[Strategic Plan, 2018-2023: https://www.bpa.gov/StrategicPlan/StrategicPlan/2018-Strategic-Plan.pdf](https://www.bpa.gov/StrategicPlan/StrategicPlan/2018-Strategic-Plan.pdf)

[Financial Plan, 2018:](https://www.bpa.gov/Finance/FinancialInformation/FinancialPlan/Documents/Financial-Plan-2018.pdf)

<https://www.bpa.gov/Finance/FinancialInformation/FinancialPlan/Documents/Financial-Plan-2018.pdf>

### However, a remedy is at hand: The Army Corps of Engineers can breach now!

1. With a benefit to Cost ratio well below 1, the **Army Corps has jurisdiction to breach immediately**. They need **no new authorities** to place the 4 LSRDs into a “non-operational” status while normative river flows are reestablished by removing the dams’ earthen portions.
2. The Corps’ **2002 Environmental Impact Statement and Record of Decision provide the necessary NEPA coverage for breaching**, although some updating may be required. Breaching of the 4LSRD’s was included as the alternative with best chance of salmon recovery.
3. The ongoing litigation over the 2014 Federal Biological Opinion nor the Court’s order for a new Columbia River Systems Operations review/EIS constrains the Corps from breaching the dams through channel bypass now.
4. **Breaching is far easier than originally planned**, making it possible to move from a “decision to breach” to “breaching” in a matter of months (not years).
5. Breach will **cost \$300-340 million** (not \$1 or \$2 billion) with contingencies for adaptive construction. Mitigation for rail and irrigation improvements could add \$90 million to the breach costs.
6. The **financial and biological urgency calls for breaching to begin** with at least one dam in 2018. Breaching two dams is possible and improves the chances of salmon recovery and should be the goal for 2018.