



Overgeneration Management Ideas Suggested at October 12, 2010 Public Workshop

- Do provisional hydro drafts ahead of high water, backed up by options to replace energy from other sources if high runoff does not materialize. Seek more flexibility on use of Canadian storage.
- Reduce inc reserves for wind as well as dec reserves.
- Establish a work group to develop an environmental redispatch mechanism.
- Consider adding an environmental dispatch requirement to interconnection agreements.
- Get irrigators to pump more or time-shift their pumping load. This would potentially require changes in BPA rates to avoid a disincentive due to demand charges. It could also require change in retail rate structures by local utilities.
- Do some advance collaborative arrangements for coal displacement, since it appears that lots of coal was running when BPA was offering zero-cost energy. Consider information exchange, bulletin boards/communication to allow advance arrangements to displace coal.
- Improve use factor of transmission, interties.
- Resolve the current disconnect between the lead time for CAISO nominations (90 minutes before the delivery hour) and the BPA deadline for releasing transmission capacity (50 minutes before the delivery hour).
- More advance coordination on release of transmission rights.
- Pay wind generators to reduce their generation or buy options from wind generators in advance that give you the right to displace them.
- Pursue legislative REC modification and possibly PTC.
- Improve coordination with Idaho Power.
- Consider whether differential arrangements/costing should apply to new loads coming on to the system or additional wind.
- Improve north to south inertia efficiency by, for example, figuring out how to bring operating transmission capacity up when Klamath Falls is not running, which it is generally not during excess generation periods, and/or adding capacitors or making other physical improvements.
- Look at algorithms and protocols for assigning transmission to avoid inadvertent flow seizing inertia.
- Use the southern Oregon to Wyoming line to send excess power east to displace coal.



- Automate RAS.
- Seek or create district heating load that could absorb excess generation off-peak.
- Get rights to reshape municipal water pumping.
- Increase BPA's water heater pilot many-fold.
- Seek or create dual-fuel loads that can switch to electric on short notice.
- Examine fuel switching to electric to create more demand similar to mid-1980s BPA program for interruptible service to ship electricity to gas and oil-fuel boilers, district heating, things with faster response than a coal plant.
- Look at what it costs just to dump the energy. The Chief Joseph breaker can absorb 1,200 MW for 1/2 second. Small scale hydro facilities routinely build in dummy loads.
- Work with appliance manufacturers to put control chips in appliances to reduce demand-side cost.
- Create electrolysis load to make hydrogen to use to run cars.
- Increase diversions to replenish irrigation aquifers. This would take water out of the river and create additional pumping load.
- Collaborate with fish interests on things such as temporary relief from maximum turbine efficiency operation and TDG. Start a broader collaborative dialogue on dissolved gasses and how to manage them with NOAA Fisheries, CRITFC, Canada, etc. Include operating levels of storage, use of Canadian water.
- Take out the lower Snake River dams.
- Add operations staff in Power or Transmission.