



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Mital, Simpson, Helgeson, Manning and Brown
FROM: Dave Churchman, Manager Power Operations
DATE: February 20, 2015
SUBJECT: 2015: Annual Power Market Update
OBJECTIVE: Information Only

Issue

The purpose of this backgrounder is to provide an annual update of power market conditions and hedging activities.

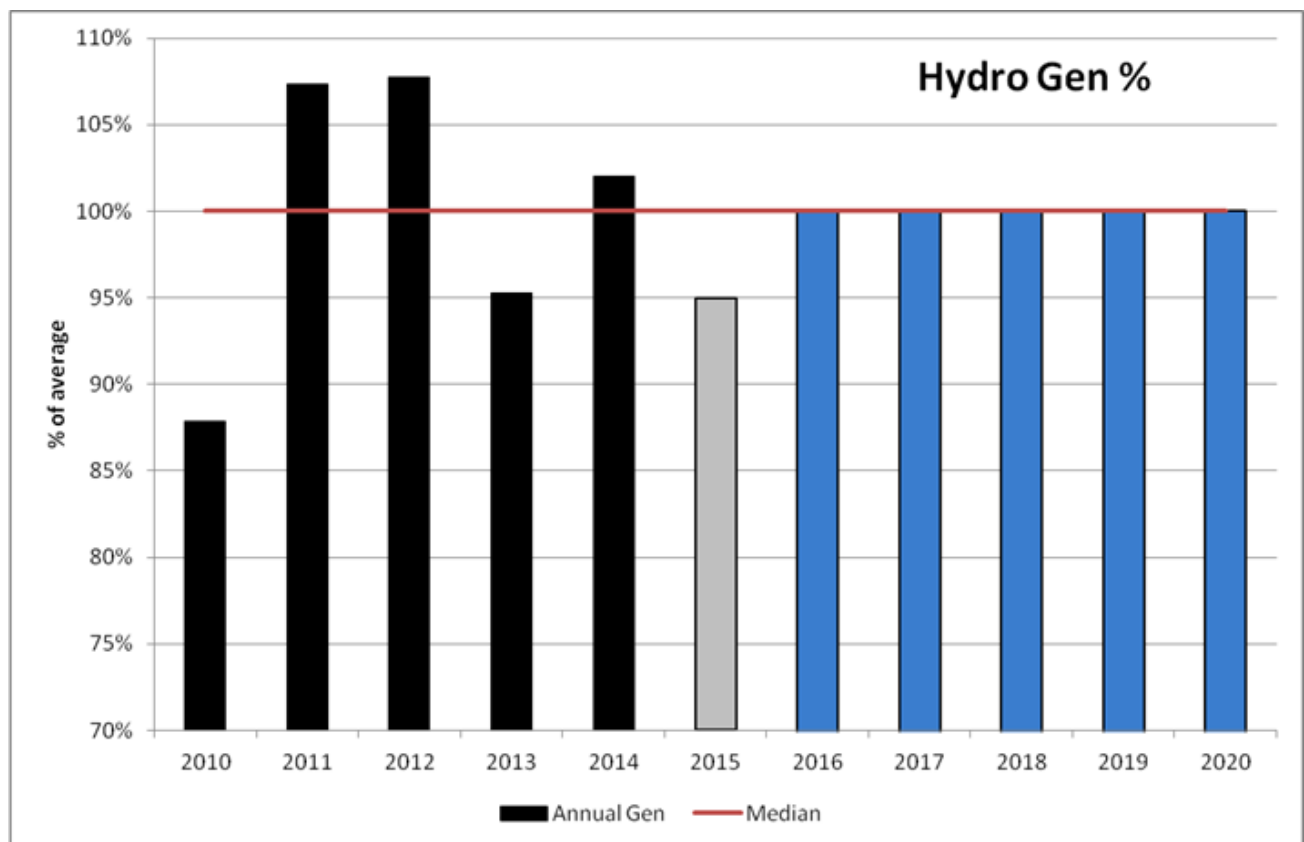
Background

The Power Operations department executes hedge trades consistent with utility financial objectives and in accordance with Board Policy contained in SD8, and as further described in the EWEB Energy Risk Management Procedures.

Discussion

EWEB Hydro Generation Update

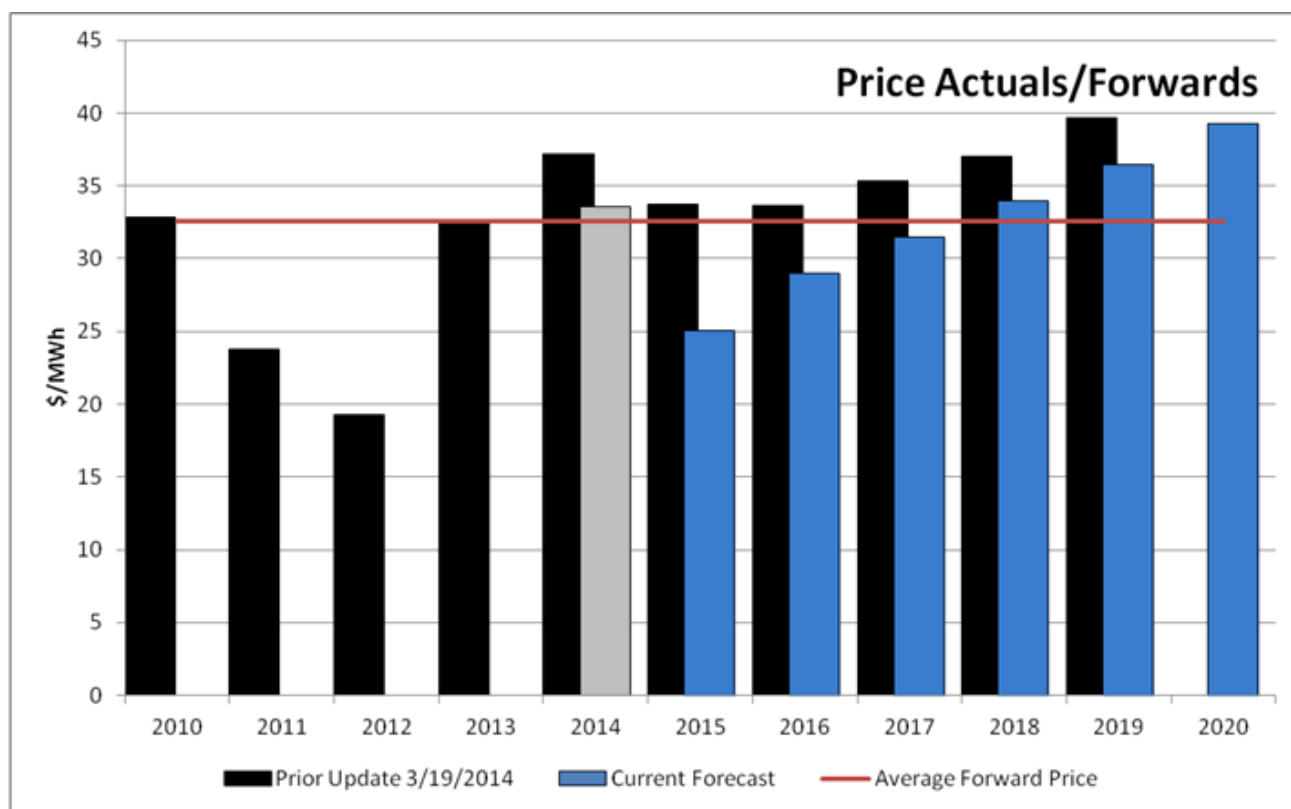
The EWEB hydro season has had a fair start. Precipitation is close to normal after an early February storm which impacted much of the Columbia River Basin. However, due to continued warm temperatures, snowpack is incredibly low, especially in the Oregon and Washington cascades. This has the effect of boosting near term generation at the expense of late season generation. EWEB's hydro gen forecast includes both EWEB owned generation (Carmen Smith, Trailbridge, Walterville, Leaburg, and Smith Creek) and contracted Slice generation from Bonneville Power Administration. EWEB owned and Slice generation are currently projected to be 95% of average (expected) generation for 2015. The generation forecast is normally somewhat lower than the hydro forecast as some of this water will be spilled during the spring runoff period to assist in anadromous fish migration.



Market Price Update

Market prices fell sharply in the latter half of 2014 as natural gas prices moved downward in response to increased natural gas supply and consumer energy demand remained soft. Prices through the first two months of the year have remained low as unseasonably warm temperatures led to above average runoff and below normal loads. Though current 2015 prices are lower than 2013 and 2014, we have not yet reached the level the region experienced in 2012. Prices beyond 2014 continue to trend upward but have fallen in response to lower natural gas prices and increased renewable resources coming onto the market. Utility generated solar in California reached nearly 5,000 mw of generation in 2014 (<http://www.eia.gov/todayinenergy/detail.cfm?id=16851>).

In the chart below, prior prices are an average of daily prices throughout the course of the year. Future prices reflect the market price that can be transacted right now for delivery in those future years.

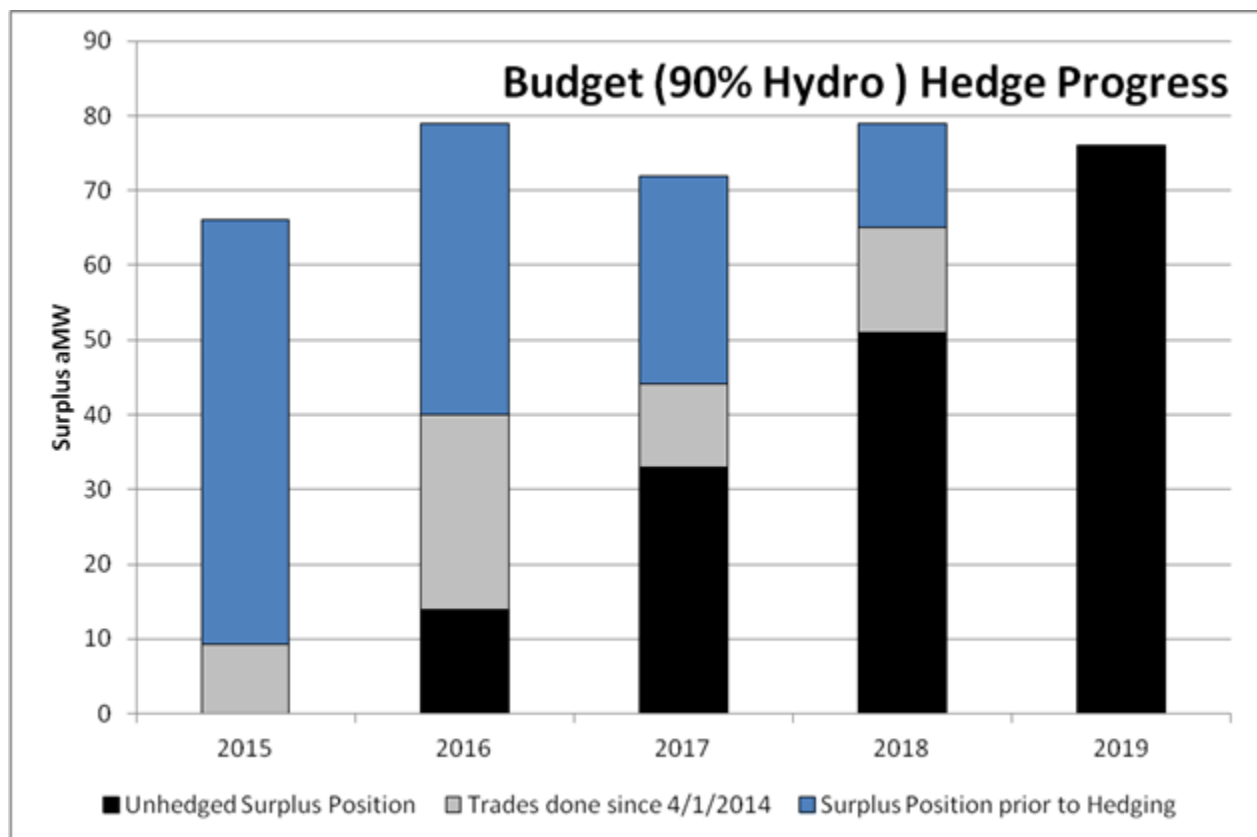


Surplus Positon Hedging Update

The chart below shows EWEB's surplus power position for 2015-2019. The top of the chart indicates EWEB's original surplus position. The gray band represents sales made since March, 2014. The black band represents still unhedged energy surplus.

The Trading Floor sells a portion of EWEB's surplus position up to five years in advance. This provides two benefits: 1) it provides the opportunity to sell surplus energy at higher prices relative to near term years; and 2) it results in sales executed at various times which diversifies the sales price by dollar cost averaging through time. This strategy results in near term years being fully hedged while year five is the least hedged, with interim years somewhere in between. Beyond five years the Trading Floor does not hedge any surplus energy. This surplus energy is based upon 90% hydro planning. If we receive expected hydro those additional surpluses are sold within the current water year.

The value of all executed hedges from this point forward is approximately \$15M when compared to prices at which we could hedge today. Said another way, EWEB has benefited by \$15M compared to not hedging at all for the period from today through 2018.



Risk Management Review

EWEB's Risk Management Committee (RMC) has initiated a process to more clearly define EWEB's power supply risk management objectives, review current power related financial exposure, and determine whether existing policy is adequate and effective. As part of this effort, staff will evaluate the impact of volatility in EWEB's hydro generation, wholesale market prices, and retail sales.

Current risk policies and financial practices such as the 90% of normal generation assumption for planning were established when wholesale power prices were higher and power related risks were dominated by generation uncertainty. Now, with lower prices, generation risk has decreased substantially while retail sales risk has increased substantially. For example when retail sales fall EWEB must sell additional surplus generation at wholesale prices much lower than retail rates. Given the changes described above the RMC has asked staff to review existing policies and practices to determine if they are still providing EWEB effective financial stability.

Requested Board Action

This memo is for informational purposes. No Board action is requested.