Hydropower Potential Report – WPIC July 2020

Summary Report 2012

In 2012 State Water Projects Bureau reviewed the feasibility of adding hydropower facilities to Cooney, Painted Rocks and Tongue River Dams. These, along with Ruby Dam, have the potential to produce hydropower. The Ruby Dam Outlet Work rehabilitation project, completed in 2013, included a bifurcation for future power generation should it become financially feasible in the future.

The conclusions of the Summary Report are that the addition of power generation at Cooney and Painted Rocks were predicted to return a positive cash flow (after cost recovery of development) 30 years after completion of construction. Therefore, these projects were determined to be not economically feasible. The barriers are the cost of transmission lines and principle spillway enhancements to meet FERC Dam Safety compliance.

The review of the Tongue River Dam determined that the project was not economically feasible at the time. A subsequent review was performed in 2019.

Painted Rock Review 2018

As part of the Painted Rocks Feasibility Study initiated in 2017, the Painted Rocks Dam was reviewed again in 2018. While there have been some additional transmission lines extended closer to the dam, the 30-year cost recovery gap is estimated to be reduced to 25 years. However, that is a best-case scenario and is contingent on construction costs and uncertain power purchase rates.

Tongue River Review 2019

The Tongue River Dam was reviewed in 2019. The review concluded that the cost recovery is projected to be 30 years and not feasible. The major investment costs include modifications to the outlet works, powerhouse addition, valve and turbine and gatehouse modifications. Since the review was completed after the Oroville Dam failure, the reviewer cautioned that FERC may be more conservative in examining the existing spillway and may require additional modifications.