

Update on Council's Regional Hydropower Potential Scoping Study

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12/18/14

Background

March 2012 – Information gathering session

September 2013 – GRAC Hydropower subgroup meeting

June 2014 – Presentation to Power Committee on staff proposal for study

July/August 2014 – Release of RFP and selection of contractor

August → November 2014 – Study duration

November 2014 – GRAC hydropower mtg

December 2014 – Council Meeting

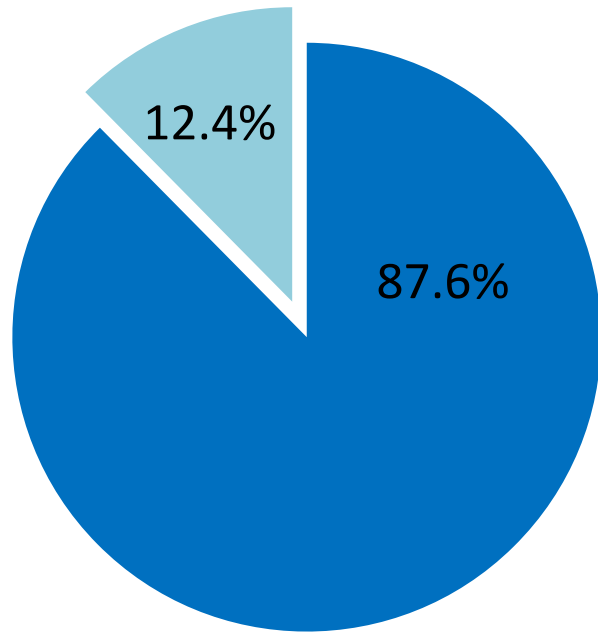
Questions Asked

- Can a reasonable physical potential of energy and capacity be drawn for the PNW from the existing studies?
 - Does this potential integrate the Protected Areas?
- Is there enough information available to apply cost assumptions to the technical potential?
- If a supply curve (potential and cost) cannot be derived, what approach is recommended as a potential next step?

Council's Intent

- How does this inform our analysis and the development of the draft Seventh Power Plan?
- Council staff issued a memo describing objective of report
 - Report will be **one** of the resources used in our analysis of hydropower potential for the Plan
 - Report is not a direct input into the Plan
 - Further analysis is needed to digest results and decide what next steps of analysis need to be performed

Only 12% of potential identified in DOE study (>1MW) not in protected areas



- In Protected Areas
- Outside of Protected Areas

Capacity

PNW Potential	25,226 MW
> 1 MW	15,996 MW
In Protected Areas	14,006 MW
Outside Protected Areas	1,990 MW
< 1 MW	9,230 MW

“Realistic, Reasonable” Hydropower Potential (2015-2035)

Category	Capacity (MW)	Energy (MWh)
Non-powered Dams	57	148,248
Conduit and Hydrokinetic	64	226,107
Pumped Storage	2,640	33,084
General Assessments	90	429,947
Upgrades to Existing Projects	388	1,461,168
Total:	3,239	2,298,554

The contractor did not include any of the potential identified in the US DOE study as realistic and reasonable because it is not site-specific and requires further analysis.

Next Steps

- Staff proposal: Analyze hydropower as a secondary resource
 - Does not appear to be enough potential for inclusion in the RPM, but enough for a resource analysis of cost and potential for inclusion in the Seventh Power Plan
- Analyze pumped storage potential in more detail for Seventh Power Plan
 - GRAC discussion planned for future meeting

For More Information...

See <http://www.nwcouncil.org/energy/grac/hydro/> for:

- Final NWhA report to the Council
- NWhA presentation to GRAC
- Council staff memo on intent of study
- Council staff presentation to Council (Dec 2014)
- And more background