

Generating Resources Advisory Committee

Combined Cycle Combustion Turbines and
Utility Scale Solar PV

October 16 2013

Northwest Power and Conservation Council
Steven Simmons and Gillian Charles

Today's Agenda

9:30	Welcome & Introductions	Previous Meeting Minutes	Role of GRAC
9:45	Natural Gas Combined Cycle Technologies		
12:00	Lunch		
1:00	Utility Scale Solar PV Revisited		
2:00	2013 Natural Gas Price Forecast	2014 Electric Price Forecast	
2:30	Update on Hydropower Potential Study		
2:45	Next GRAC in January		
3:00	Adjourned and Farewell		

Role of GRAC

- Advisory committee established to assist in development of Council's Power Plans
- Two year charter, filed May 2012
- GRAC serves in advisory capacity
 - No votes are taken
 - Role is to review information, vet assumptions and information, and make recommendations to the Council
- Aim for active participation and exchange of ideas and information

Afternoon Slides

Next GRAC Meeting

When: January 2014, date TBD

What:

1. Preliminary Resource Evaluation of Natural Gas Fired Peaking and Flexibility Units
2. Follow up to Combined Cycle Technologies

Proposed: Resources to Assess

Significant	Commercial w/ Limited Avail	Long-Term Potential
Natural Gas Combined Cycle	Biogas Technologies (landfill, wastewater treatment, animal waste etc.)	Engineered Geothermal
Wind	Woody residues	Offshore Wind
Solar PV	Conventional hydrothermal Geothermal	Modular Nuclear Units
Natural Gas Simple Cycle, Recip Engine	New Hydropower	Wave Energy
	Waste heat recovery and CHP	Tidal Energy
	Hydro Upgrades	Coal Technologies w/ CO Separation
		CO2 Sequestration
		Storage Technologies