James Yost Chair Idaho

W. Bill Booth Idaho

Guy Norman Washington

Tom Karier Washington



Jennifer Anders Vice Chair Montana

> Tim Baker Montana

Ted Ferrioli Oregon

Richard Devlin Oregon

October 2, 2018

MEMORANDUM

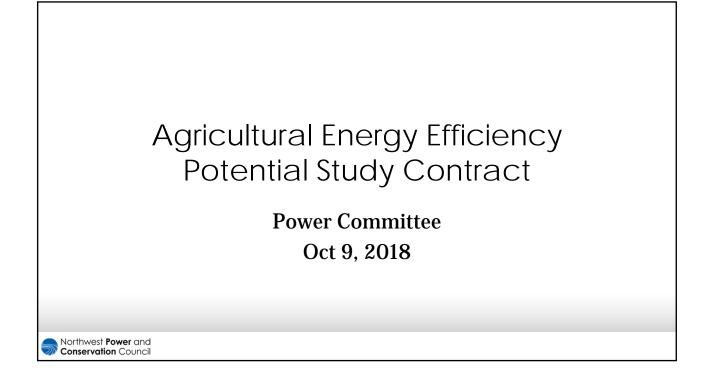
- TO: Power Committee Members
- FROM: Tina Jayaweera
- SUBJECT: Agricultural Energy Efficiency Potential Study

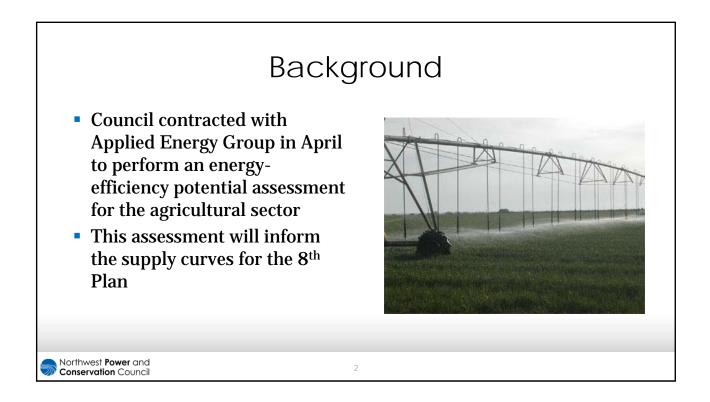
BACKGROUND:

- Presenter: Tina Jayaweera
- Summary: In April 2018, Council staff contracted with Applied Energy Group (AEG) to perform an energy-efficiency potential assessment for the agricultural sector. This work will be used as part of the development of the conservation supply curves in the Eighth Power Plan. The project has now concluded, and staff will provide a brief overview of the findings from the assessment.

In this study, AEG has identified approximately 87 aMW of technical achievable savings potential. Measure cost-effectiveness was not evaluated. The study includes many of the same measures identified in the Sixth and Seventh Plans, but added a few measures not previously analyzed, including variable rate irrigation, pump efficiency improvements, advanced ventilation and cooling fans (high volume slow speed and efficiency high speed fans), and circulating block heaters. The savings in this assessment are less than the Seventh Plan, primarily due to baseline efficiency improvements.

- Relevance: The Seventh Plan estimated cost-effective potential in the agricultural sector of around 121 aMW. The estimate was based on a staff-completed assessment, using methodology similar to the Sixth Power Plan.
- Workplan: C.1. Conservation Resources Data development to enhance or improve estimates for conservation supply curves.
- More Info: The Council decision memo to contract for this study is available here: <u>https://www.nwcouncil.org/sites/default/files/6agcons.pdf</u>





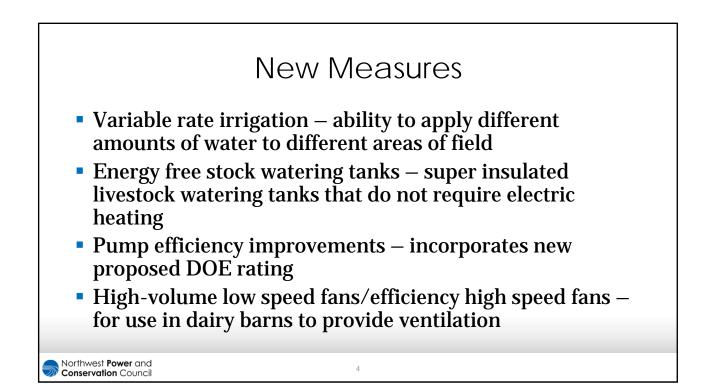
Project Tasks

- 1. Interview regional experts to explore potential new measures and measure applicability
- 2. Develop measure list

Northwest Power and

Conservation Council

- **3**. Estimate number of units
- 4. Estimate achievable technical potential



3

Lighting13Motors/Pumps8Other*1Total87	rigation 57 ghting 13 lotors/Pumps 8 ther* 1
Lighting13Motors/Pumps8Other*1	ghting 13 lotors/Pumps 8 ther* 1
Motors/Pumps8Other*1Total87	lotors/Pumps 8 ther* 1
Other*1Total87	ther* 1
Total 87	
	otal 87
*Other includes energy-free stock water tanks and circulating block heaters	
	Other includes energy-free stock water tanks and circulating block heater

