

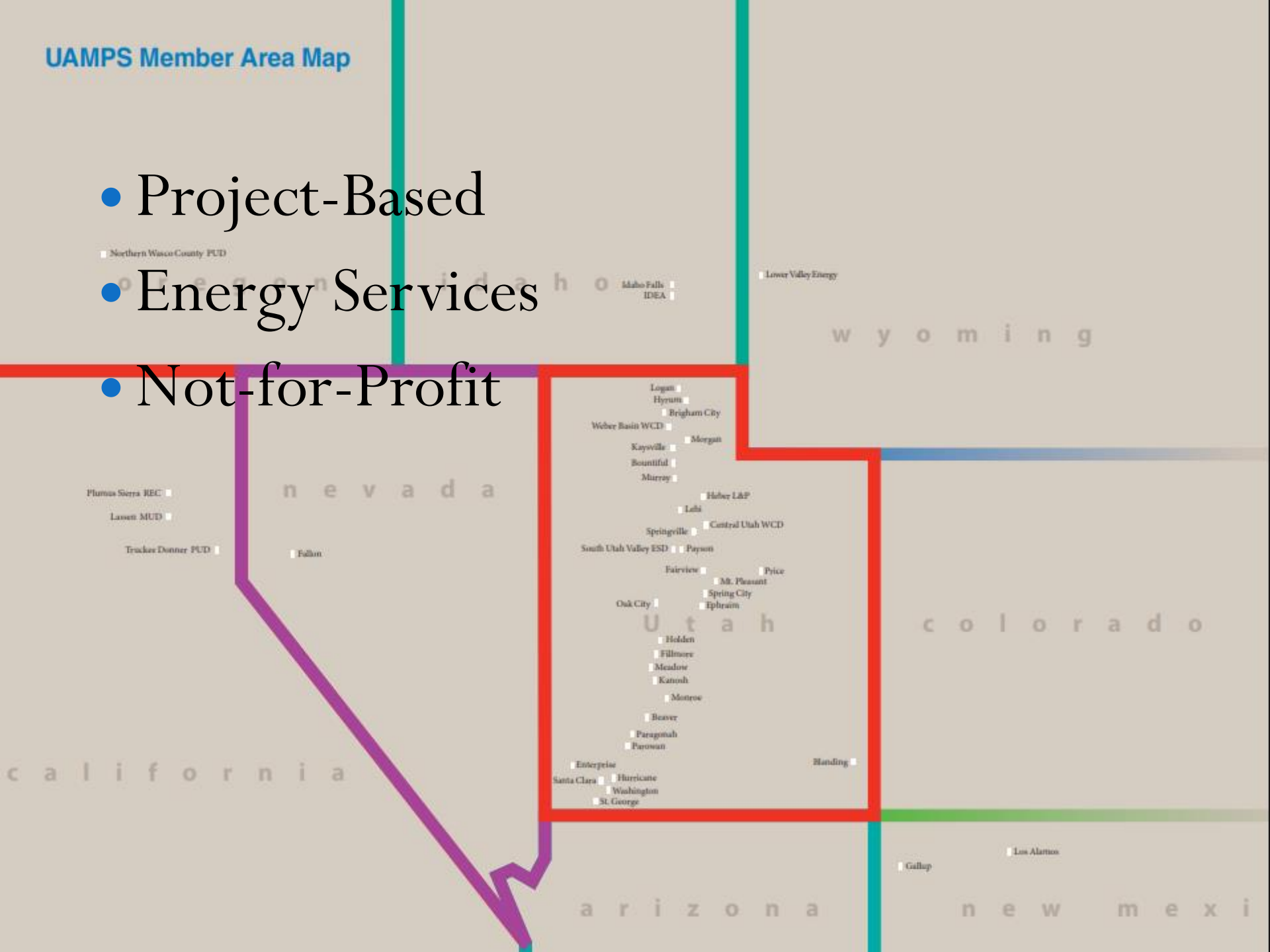
# NCSL Nuclear Legislative Working Group

June 17, 2016



# UAMPS Member Area Map

- Project-Based
- Energy Services
- Not-for-Profit

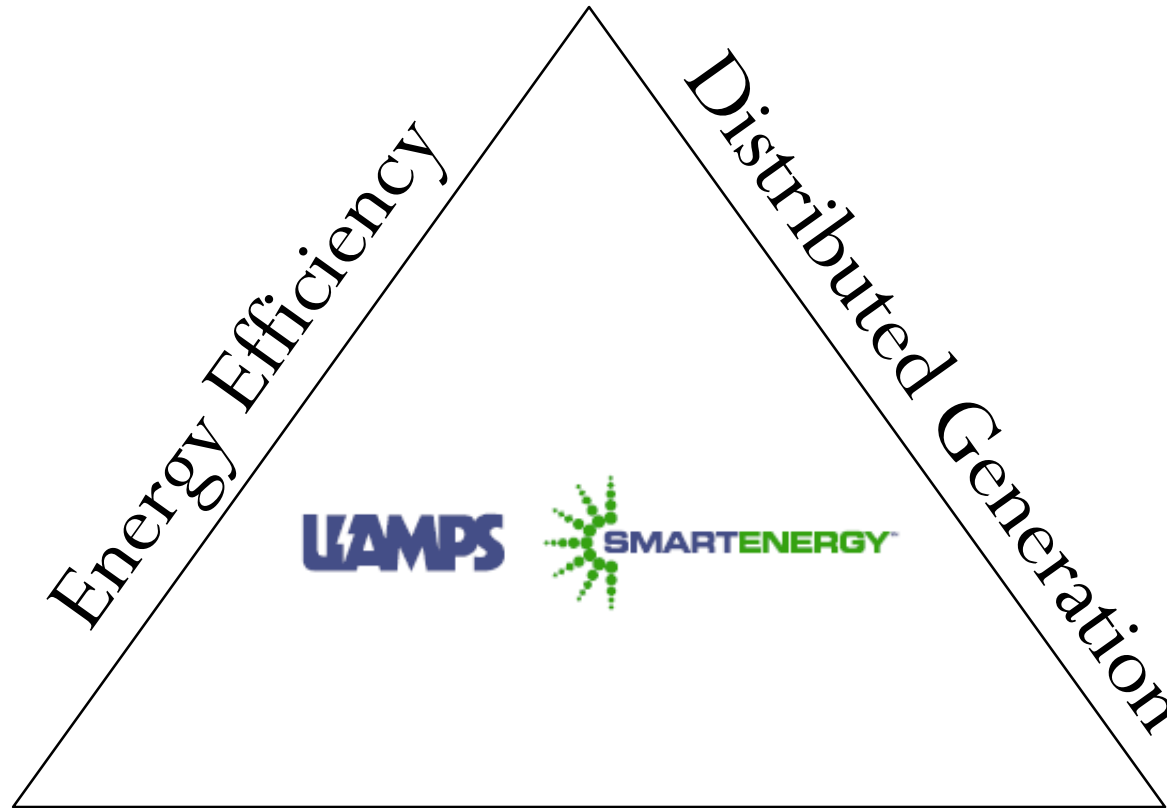


# Market Complexities

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- Load growth
- Regulation
- Distributed Generation
- Changing Markets
- Replacement Capacity
- Future of Coal fueled generation
  - Clean Air Act
  - Clean Power Plan
- Future of power market
  - Derivative of coal fueled generation
- Future of natural gas fueled generation
  - What is the end-goal for CO<sub>2</sub> reduction
  - Fuel price volatility

# Carbon Free Power Project



Small Modular Reactors

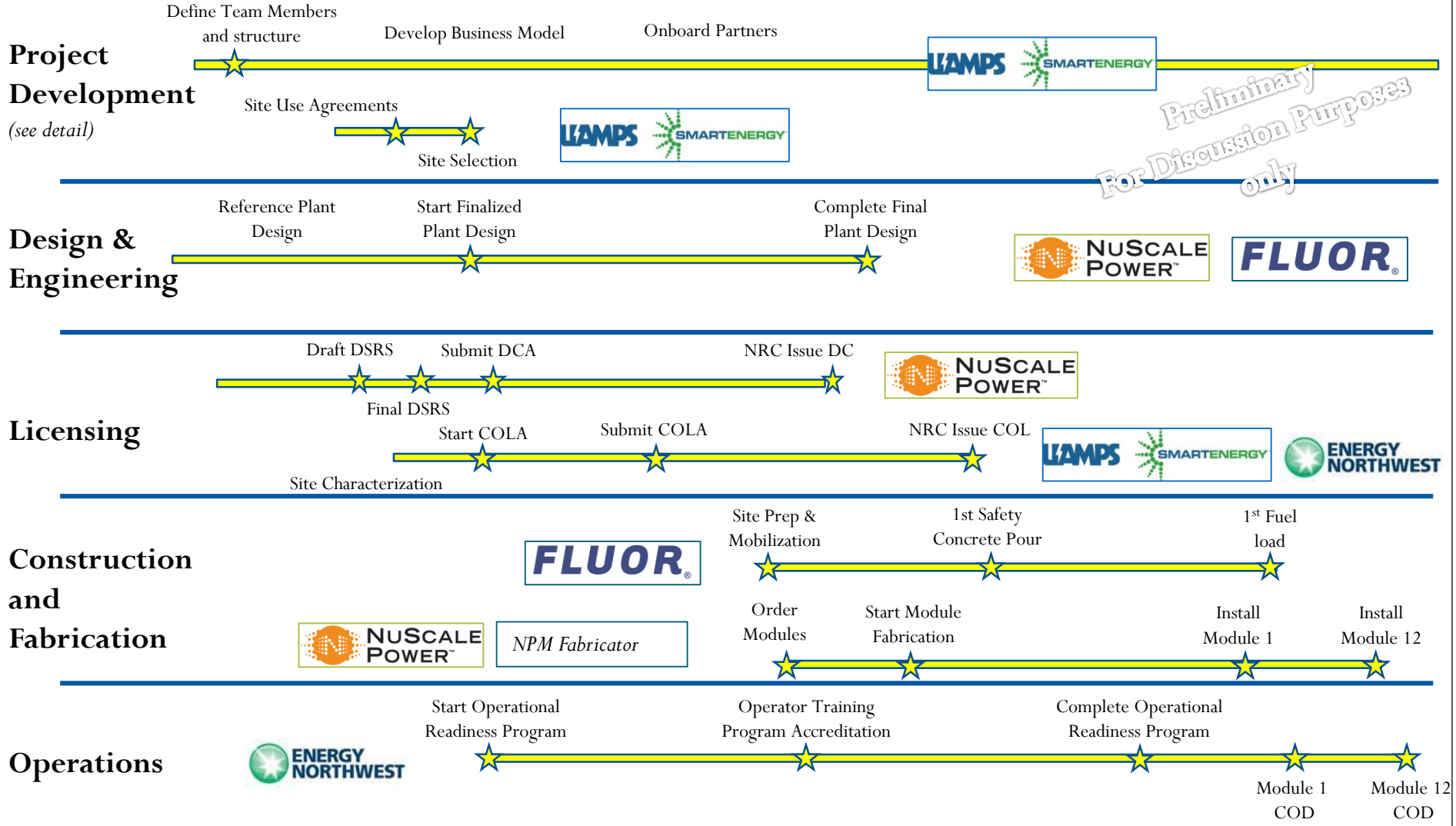
# USE Agreement

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- UAMPS and DOE has entered into a use agreement February 2016
  - Use agreement would serve as the vehicle to allow UAMPS to explore certain sites at INL
  - Final site for CFPP would not be designated in the use permit until after NRC NEPA is complete
    - NEPA strategy—DOE conditionally agrees to the future actions pending NRC completing its permitting process
  - Other Provisions
    - Site Access
    - Security Plan
    - Emergency Planning
    - Licensee Control of CFPP Facility
    - Fuel Transport
    - Spent Fuel Storage—on site storage covered under NRC COL issued to CFPP
    - Decommissioning
    - DOE Orders

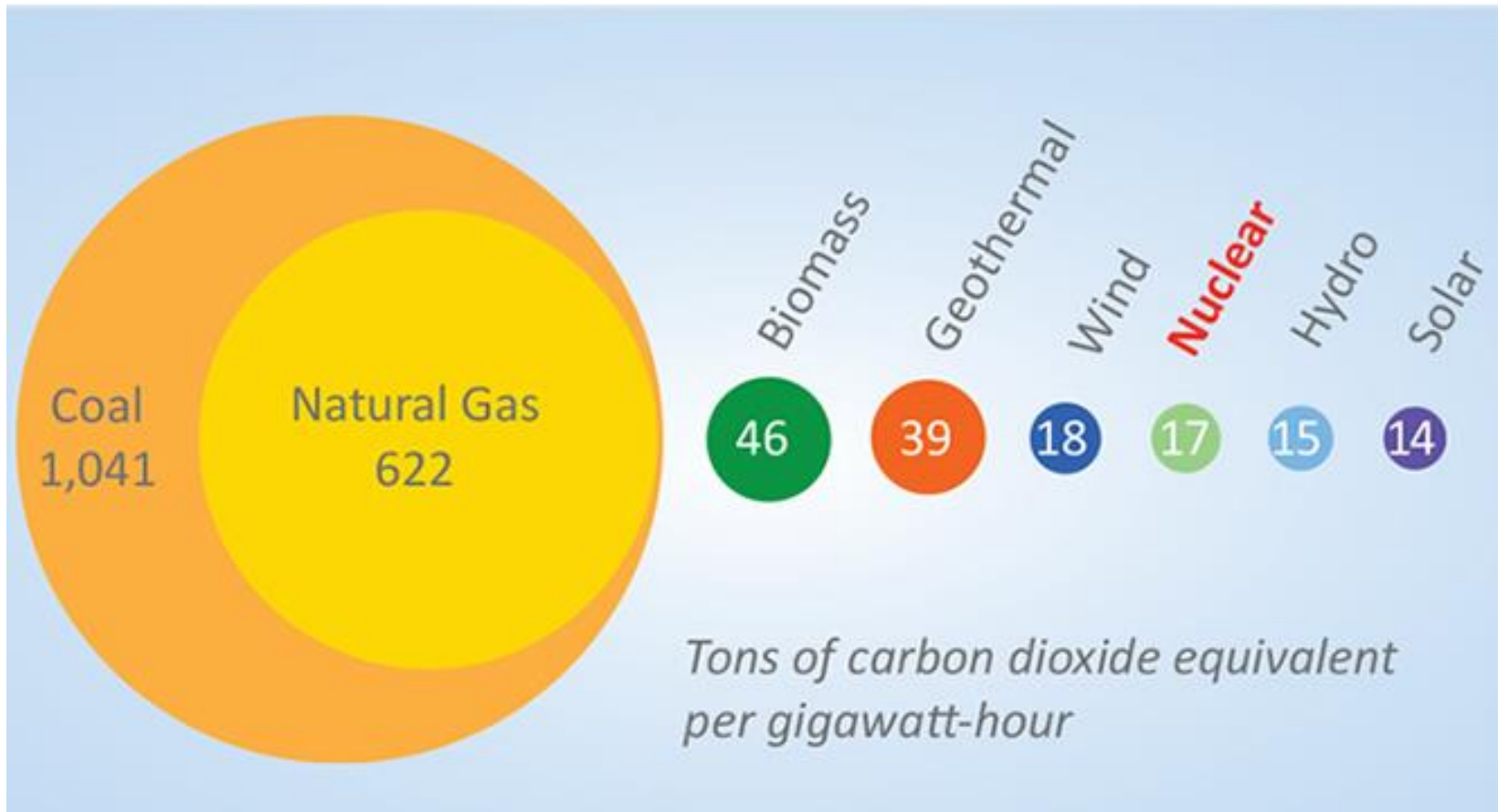
# Overall UAMPS CFPP Project Schedule

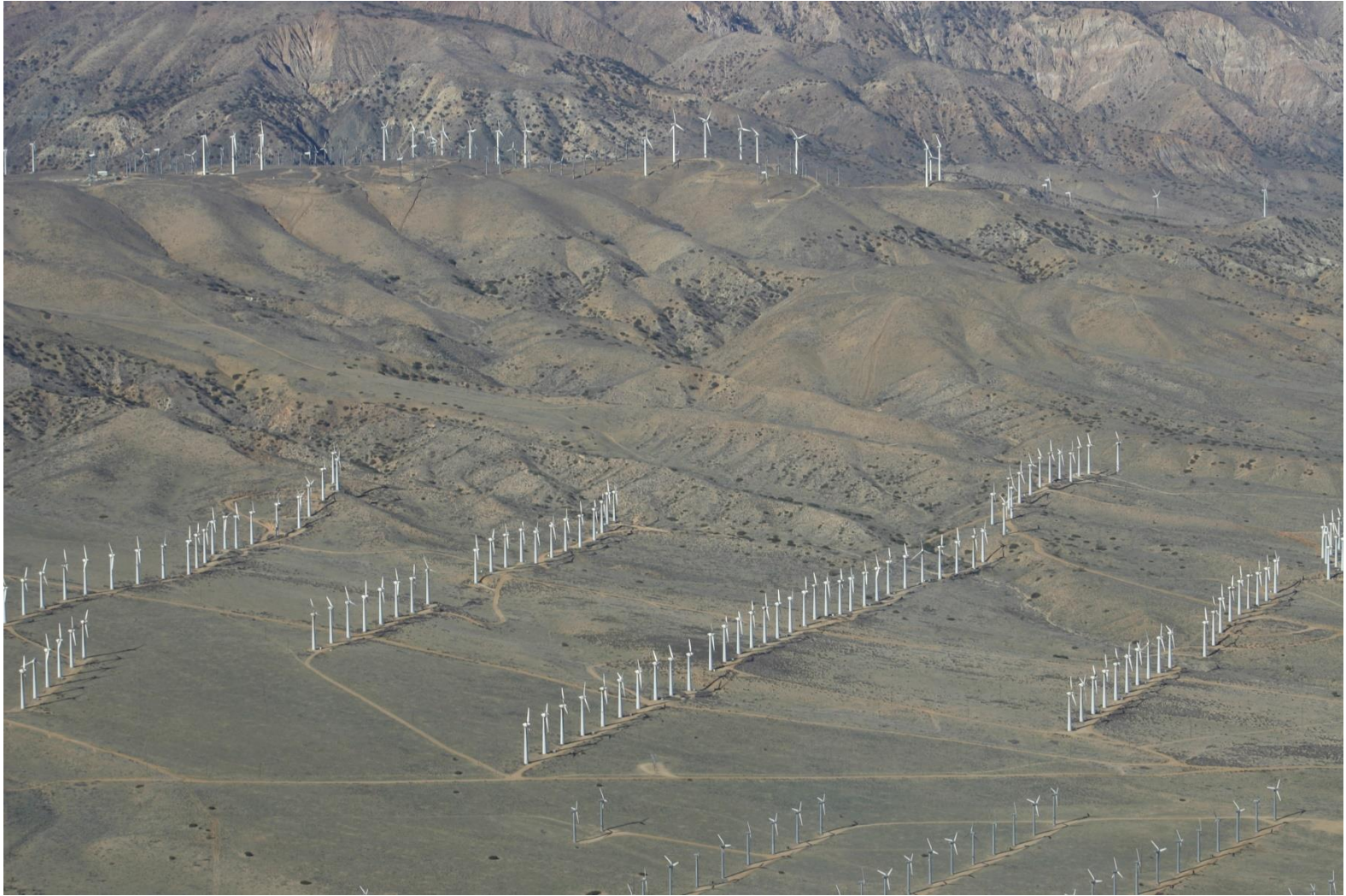
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
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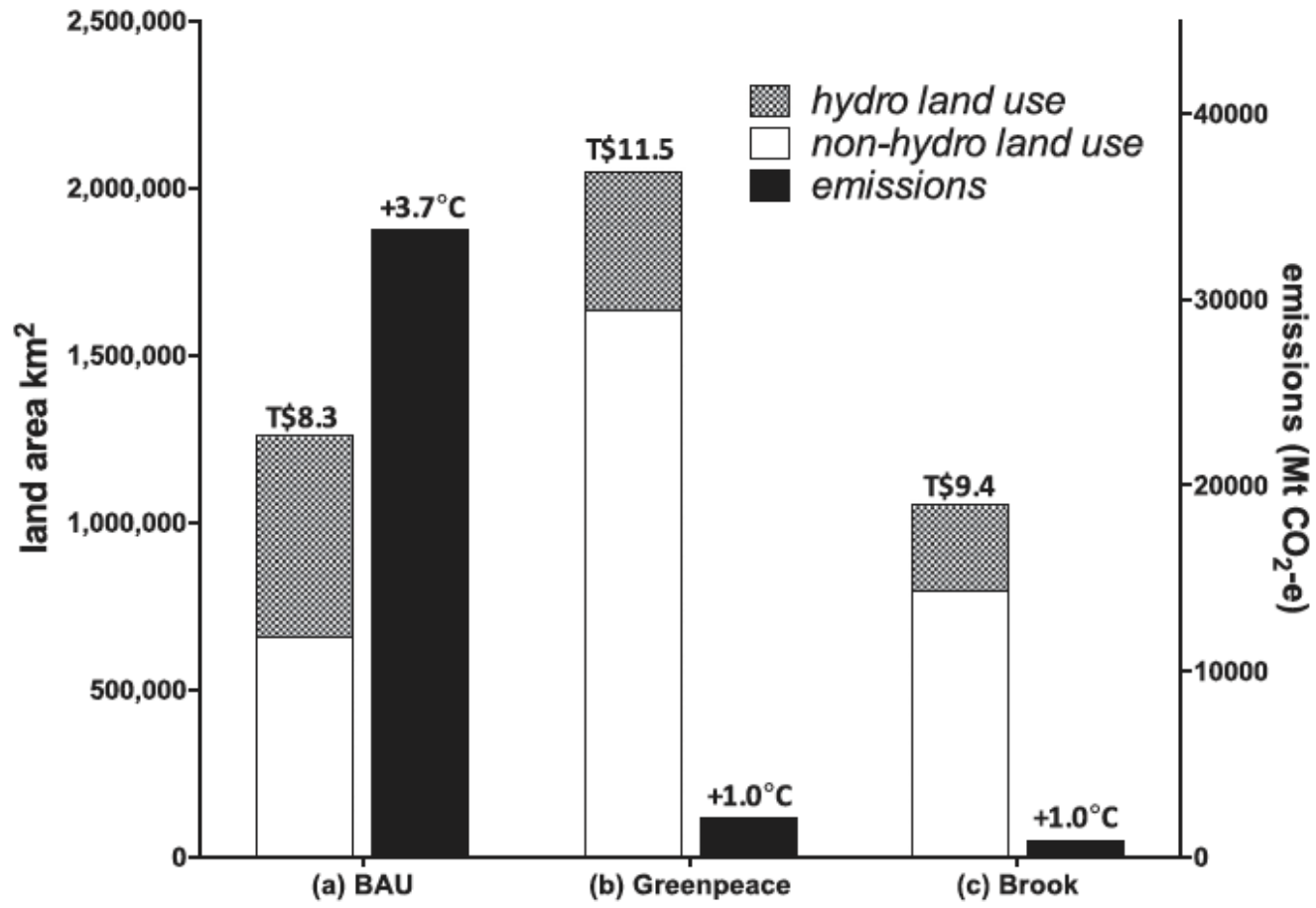
*Preliminary  
For Discussion Purposes  
only*

# Lifecycle CO2 Emissions from Electric Sources









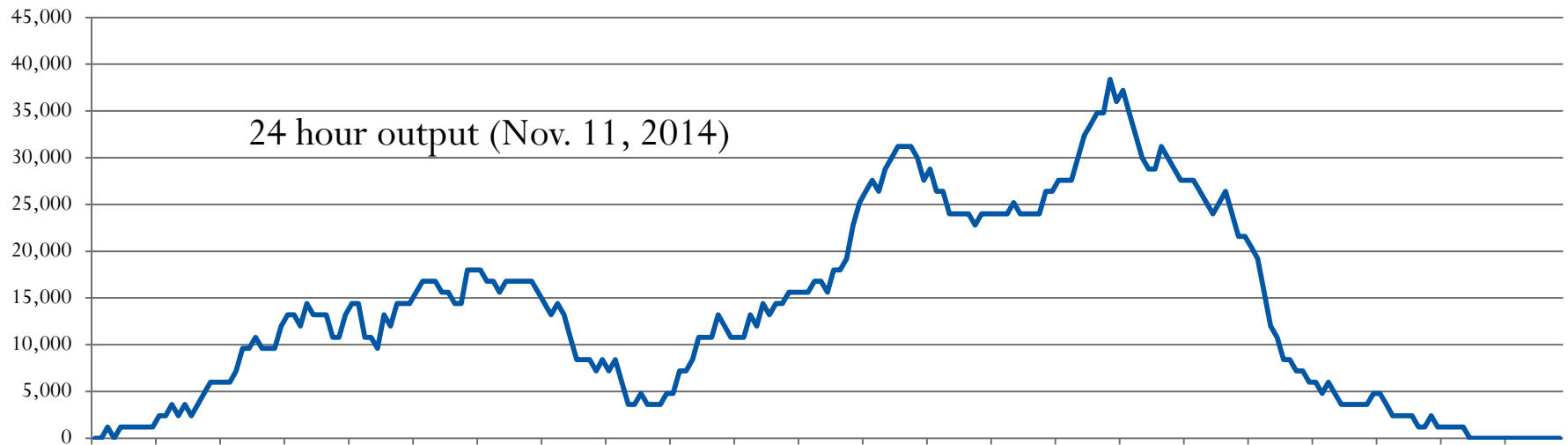
# Integration With Wind Farm

- NuScale includes unique capabilities for following electric load requirements as they vary with customer demand and rapid output variations from renewables: NuFollow™
- There are three means to change power output from a NuScale facility:
  - **Dispatchable modules** – taking one or more reactors offline for extended periods of low grid demand or sustained wind output
  - **Power Maneuverability** – adjusting reactor power for one or more modules (intermediate time frames)
  - **Turbine Bypass** – bypassing turbine steam to the condenser (short time frames)
- Explored integration with Horse Butte wind farm in Idaho
- Partnered with Utah Associated Municipal Power Systems and Energy Northwest

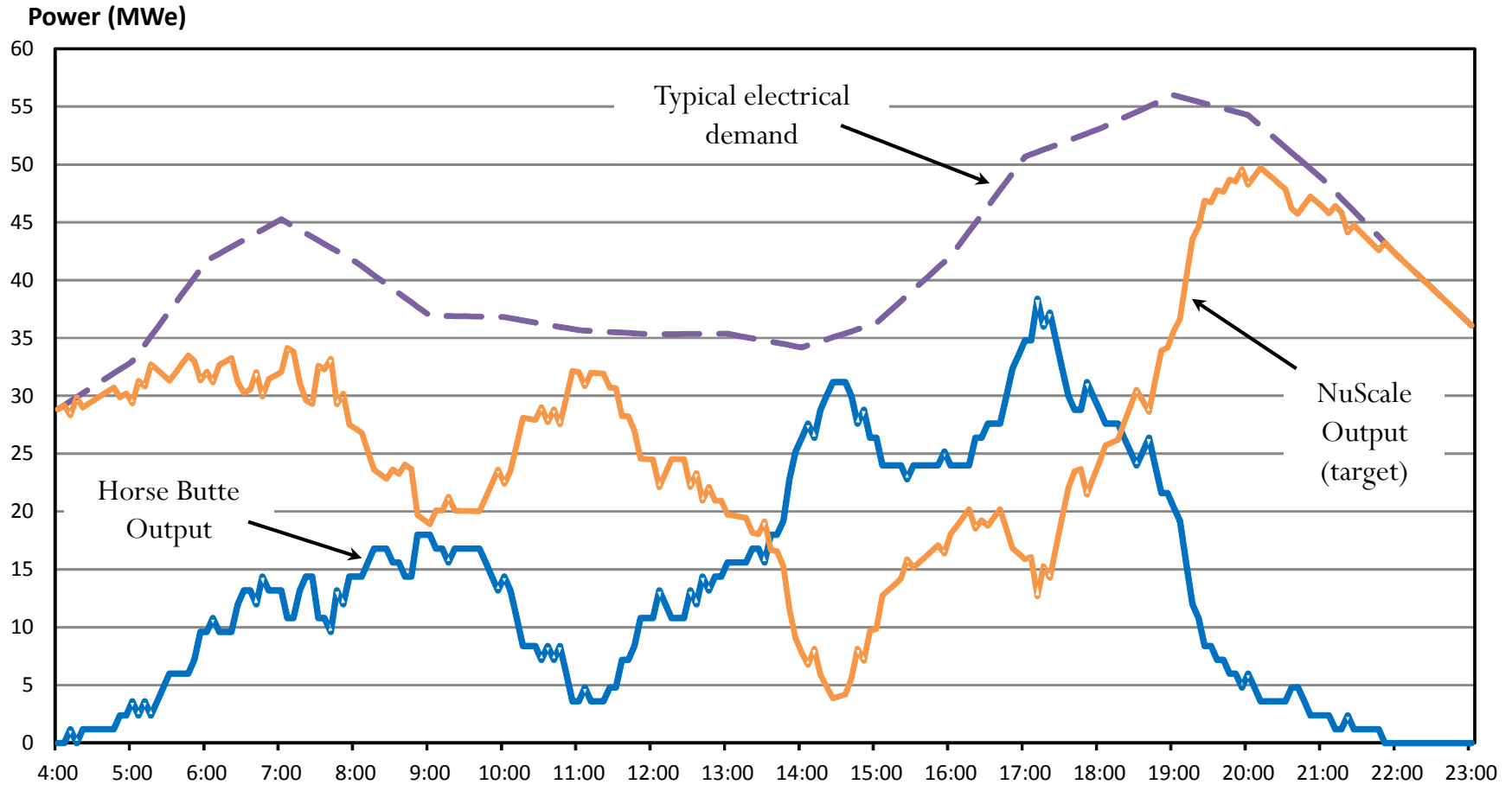


# Horse Butte Wind Farm

- Commissioned in 2012
- 32 Vestas V100 turbines
- 1.8 MWe capacity per turbine
- 57.6 MWe total capacity
- 17,600 acres



# Target Output for NuScale Module



# Contact Information

Douglas Hunter  
155 North 400 West, Suite 480  
Salt Lake City, UT 84103  
801-214-6401  
[doug@uamps.com](mailto:doug@uamps.com)