




# IDAHO LINE COMMISSION CFPP UPDATE

OCTOBER 14, 2020

Doug Hunter, CEO & General Manager

# SMR DESIGN APPROVED BY NRC



## NRC NEWS

Office of Public Affairs, Headquarters  
Washington, DC, 20555-0001  
[www.nrc.gov](http://www.nrc.gov) • [opa.resource.nrc.gov](http://opa.resource.nrc.gov)

No: 20-043  
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August 28, 2020

**NRC Issues Final Safety Evaluation Report for NuScale Small Modular Reactor**

- **August 2020 plant design approval:** NRC issues "Final Safety Evaluation Report" (FSER)<sup>1</sup>
- **August 2021:** Anticipated date by which NuScale will receive full design certification<sup>2</sup>
- **2022:** Anticipated date for "Standard Design Application" (SDA) for 60 MW-per-module design<sup>3</sup>

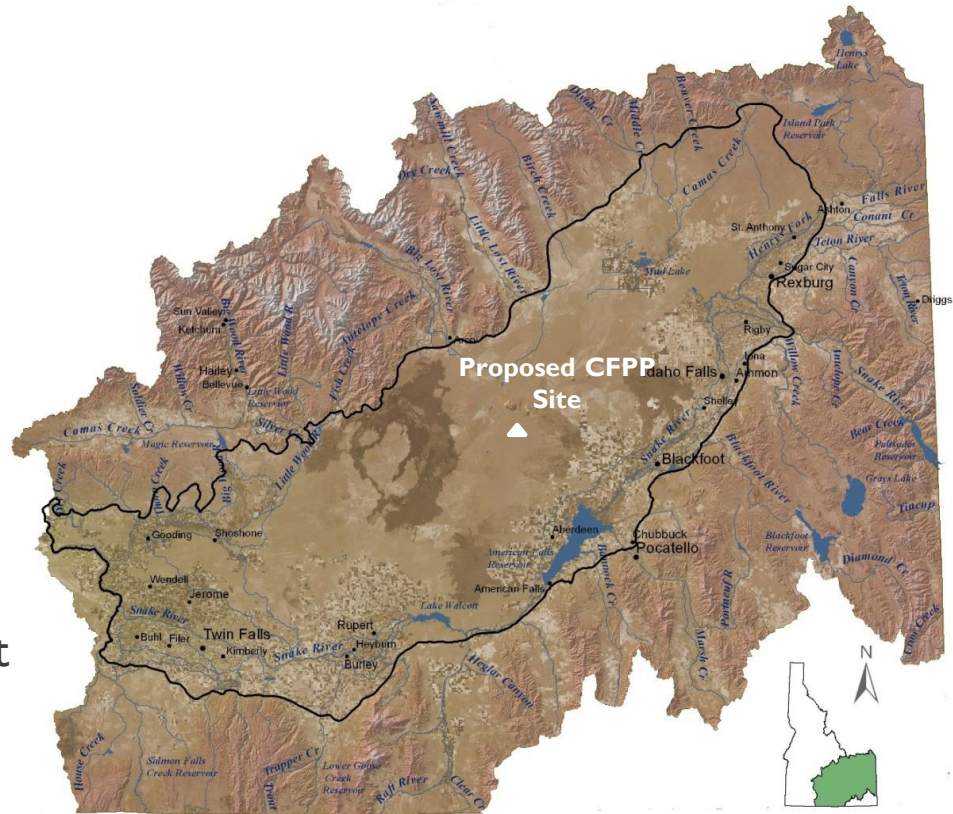


*Cut away of NuScale small modular reactor (SMR)*

1. NRC, FSER Notice, August 28, 2020 available at: <https://www.nrc.gov/docs/ML2023/ML20231A804.pdf>
2. DOE Office of Nuclear Energy, NRC Approves First SMR Design, available at: <https://www.energy.gov/ne/articles/nrc-approves-first-us-small-modular-reactor-design>
3. NRC, FSER Notice, August 28, 2020 available at: <https://www.nrc.gov/docs/ML2023/ML20231A804.pdf>

# UAMPS PURSUES DRY-COOLING

- **April 2020:** UAMPS CFPF project management committee adopts plan to pursue dry-cooling
- **Dry vs. Wet Cooling:** UAMPS determined 5,000 af/year versus 21,000 af/year utilizing wet
- **Environmental conditions:** The ambient air temperatures at the INL site



# TRANSITION FROM "JUMP" TO MULTI-YEAR AWARD

- **JUMP:** Funds would be specifically directed to the first NuScale Nuclear Power Module (NPM) at the CFPP as well as one-twelfth of the Balance of Plant. DOE would then lease NPMI for research purposes from UAMPS for a minimum of 15 years with a maximum of 30 years.
- **New Multi-Year Award:** DOE elected to provide a multi-year award in nominal amount of \$1.4 billion representing approximately 25% of the estimated development and construction costs of the CFPP, spread over a period of nine years.

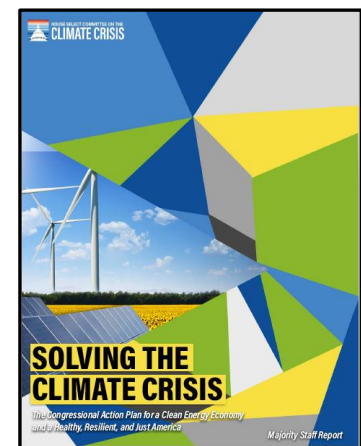
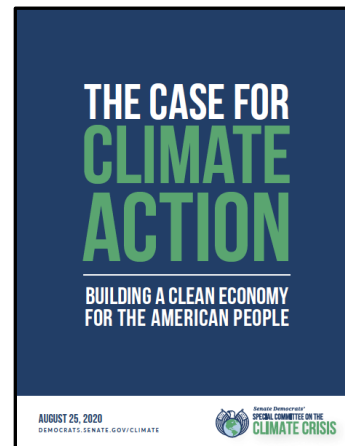


# CONTINUED STRONG LEGISLATIVE SUPPORT

- Bipartisan Executive/DOE Support
- Bipartisan and Bicameral Support
  - UAMPS provided congressional update to Idaho and Utah federal delegation staff (9.29.20)
- Democrats talk SMRs:
  - Former VP Biden’s climate plan includes SMRs
  - Senate Democrats: Include SMRs in their “The Case for Climate Action” plan
  - House Democrats: Include SMRs in their “Solving the Climate Crisis” plan

## U.S. CONGRESSIONAL APPROPRIATION

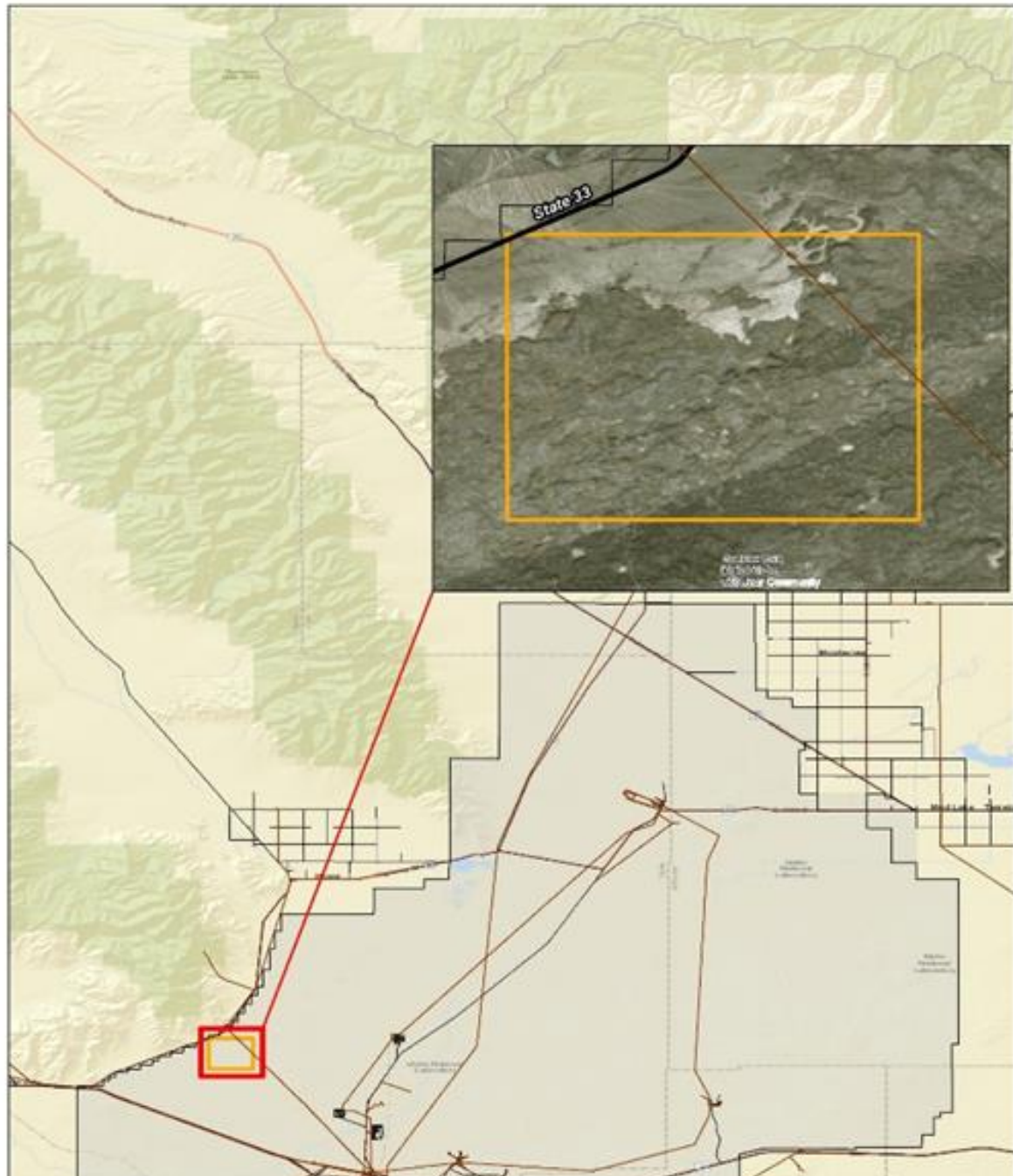
Recent Advanced SMR R&D Appropriations. Award History				
Year	President Request	House Mark	Senate Mark	Approps/Omnibus Conference
FY 2017	\$89.6 M	\$96.6 M	\$95 M	\$95 M
FY 2018	\$20 M	\$60 M	\$0	\$60 M
FY 2019	\$54 M	\$100 M	\$90 M	\$100 M
FY 2020	\$10 M	\$100 M	\$100 M	\$100 M
FY 2021	\$10 M	\$105 M	TBD	TBD





## SITE ACTIVITY UPDATE

- **2016 Site Use Permit:** DOE issued in 2016 a Site Use Permit to UAMPS to set up a framework to consider/identify and characterize a facility location on the Idaho National Laboratory (INL), and eventually construct/operate an electric power generating station on the INL
- **2019 Preferred Site Identified:** The site location for study is within a remote 2000-acre parcel on the western edge of the INL, in Butte County.



# 2020-2021 SITE WORK PLAN

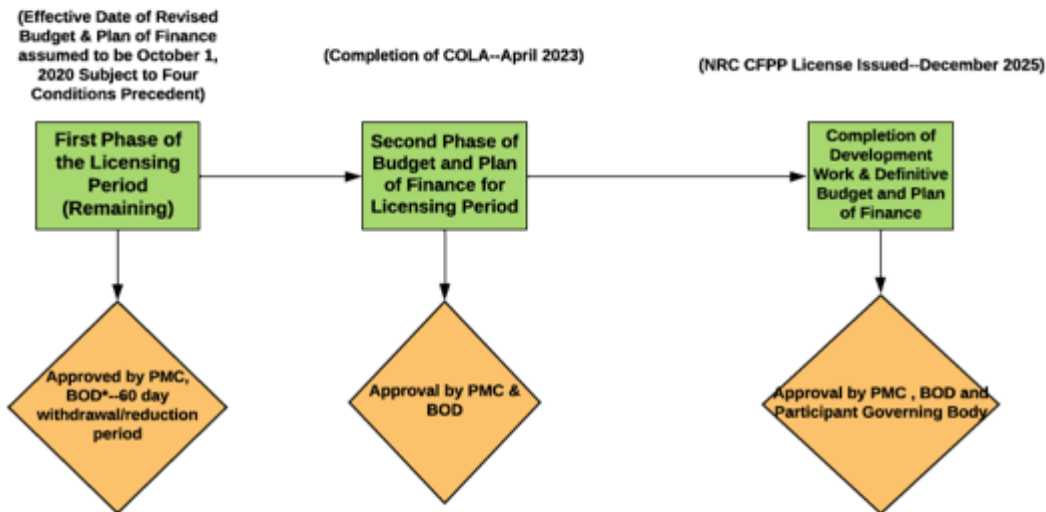
- 40 – 50 core borings at proposed plant building locations - depths from 100 feet to 1500 feet
- Geophysics/seismic testing of select bore holes
- 10 – 12 water wells planned to characterize underlying aquifer
- Environmental field studies needed to support development of Environmental Report for an NRC Combined License Application
- Continued gathering of meteorological data



*Preferred site with meteorological tower*

# PROJECT TIMELINE

## Participant Withdrawal & Reduction Rights under the Power Sales Contracts



\*BOD=Board of Directors

Each Approval (diamond shapes) Identified above provide a withdrawal option to each Participant as described in Section 204; Participants can notify intent to withdraw at any point during a Phase but effective date for the withdrawal will be the end of that Phase

- Subscription at Current CFPP Entitlement Shares equate to 213 MW of subscription or 29.7% of the 720 MW.
- UAMPS has incurred out of pocket costs of approximately \$2.3M or 20.5% of the total project costs included to date.
- CFPP continues to attract interest in a carbon-constrained world among businesses and utilities.
- COD 2029



# BUSINESS INTEREST IN ADVANCED NUCLEAR GROWS

“However, renewables can only do so much; decarbonizing Google’s electricity supply will also require deploying entirely new kinds of energy production and storage technologies. Near-term, this means we’ll scale our purchasing of battery capacity, but batteries are not themselves a panacea. To reach our goal in locations with limited land or renewable resources, or to address seasonal variations in wind or sunshine, we’ll explore opportunities to source power from emerging tools, such as advanced nuclear.”

(Google White Paper on going to 100% carbon free power 24/7 by 2030)



# STATE SUPPORT IN UTAH GROWS



*October 2019 LINE Commission Meeting with Idaho and Utah Officials*

- UAMPS continues to meet with and educate Utah legislators, policy officials, and other Utah leaders on the value of the CFPP for both Utah and Idaho



# QUESTIONS

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