

February 2019 NuScale Power Business Update

NuScale continues to make progress at home and abroad in our work to commercialize our groundbreaking nuclear technology. Below is a confidential summary of recent activity.

LICENSING

- In April 2018, the U.S. Nuclear Regulatory Commission (NRC) completed the first and most intensive phase of review for NuScale's design certification application (DCA).
- The review progresses on schedule, and NuScale has recently advanced several DCA chapters to Phase 3 of the NRC review process.
- As the first and only SMR technology to ever undergo NRC design certification review, NuScale is well ahead of its nearest rivals.
- NuScale has also signed a service agreement with the Canadian Nuclear Safety Commission (CNSC) to submit an application under the CNSC's pre-licensing vendor design review process. NuScale expects to make its first submittal by the end of 2019.
- In November 2017, NuScale signed a contract with Concurrent Technologies Corporation (CTC) that covered prototyping advanced manufacturing processes for NuScale's innovative helical coil steam generators. The first phase of the contract was successfully executed, and future work is being planned in concert with BWXT.
- In November 2018, NuScale announced that Minnesota-based PaR Systems, LLC would begin engineering work for the manufacturing of its Reactor Building Crane (RBC).
- In January 2019, NuScale and Ultra Electronics Energy unveiled a safety display and indication system using field programmable gate array (FPGA) technology, representing the first application of FPGA technology for real time display and monitoring in the U.S. commercial nuclear industry.

DEPLOYMENT PLANNING & SUPPLY CHAIN DEVELOPMENT

- NuScale's design is expected to be NRC approved by September 2020 with its first operational plant in Idaho by the mid-2020s.
- NuScale used its Concept of Operations to inform the design through the performance of Integrated Systems Validation (ISV) tests. This is the first time a U.S. nuclear plant supplier has performed an ISV during the design certification phase.
- In September 2018, NuScale entered the manufacturing phase for the country's first SMR by selecting Virginia-based BWX Technologies, Inc. (BWXT) to start the engineering work to manufacture the NuScale Power Module[™]. BWXT expects to use Pennsylvania-based Precision Custom Components as a component manufacturing contractor.

ENSURING COST-EFFECTIVE RESILIENCY

- In January 2018, NuScale announced that the NRC concluded that application of NuScale's novel safety design approach eliminates a need for class 1E power for its SMR.
- In June 2018, NuScale announced that its SMR can generate 20 percent more power than originally planned. Increasing the power generating capacity of a 12-module NuScale plant by 20 percent, with very minimal change in capital costs, lowers the cost of the facility on a per kilowatt basis from an expected \$5,000 to approximately \$4,200. It also lowers NuScale's levelized cost of electricity by up to 18 percent, making it even more competitive with other electricity generation sources.
- At the American Nuclear Society (ANS) Annual Meeting in June 2018, NuScale unveiled a collection of landmark NuScale resiliency studies proving

NuScale's SMR design is more resilient than any currently operating reactor. The findings indicate the design's impressive resilience to a variety of events and ability to provide first responder power.

- NuScale successfully completed its electromagnetic pulse (EMP) study, showing a new level of resilience to EMP events.
- NuScale and Lightbridge Corporation are negotiating an MOU to explore the use of next generation nuclear fuel technology in NuScale's SMRs. While NuScale's plant design is already the most resilient nuclear reactor in the world, Lightbridge Fuel™ could spur improvements in core design and performance.
- NuScale is also negotiating an MOU with Prodigy Clean Energy and Bruce Power to explore the feasibility of deploying SMR nuclear power plants on Prodigy's marine platform concepts. These platforms are targeted at remote community and mining locations.

INTERNATIONAL BUSINESS DEVELOPMENT

- In addition to focusing on other business development in the U.S., there are promising opportunities internationally. NuScale is a leading contender for bringing its SMR to the United Kingdom market and continues to work with the UK government in its efforts to establish appropriate market and investment conditions.
- NuScale is also exploring opportunities in Canada, Eastern Europe, Southeast Asia, Africa, and the Middle East.
- In November 2018, NuScale announced a memorandum of understanding (MOU) with Ontario Power Generation Inc., Ontario's public electricity generator, who will support NuScale in its vendor design review (VDR) with the CNSC.
- Additionally, in November 2018, NuScale also announced an MOU with Bruce Power L.P., Canada's first private nuclear generator, to develop a business case to introduce its SMR to the Canadian market.
- In January 2019, NuScale announced an MOU with the Jordan Atomic Energy Commission (JAEC) to evaluate its SMR nuclear power plant for use in Jordan.



- NuScale is negotiating an MOU with Kazatomprom, Kazakhstan's majority state-owned uranium production company, to evaluate the development, licensing and construction of a NuScale SMR power plant in Kazakhstan.
- NuScale also has draft MOUs under evaluation by prospective customers in Romania (Nuclearelectrica) and the Czech Republic (Cez).
- NuScale is negotiating a three-party MOU with two Japanese engineering firms to collaborate and jointly participate in an expected Japanese government funding initiative that will examine topics related to the deployment of advanced nuclear technologies in Japan.
- NuScale is also in the process of signing an NDA with Google to discuss the development of a business relationship whereby NuScale plants would provide highly reliable (e.g., 24x7) carbon-free power for Google Data Centers located in the U.S. Western Interconnection.

INVESTMENT

- Greenhill continues to facilitate opportunities for investment in NuScale Power.
- NuScale received a \$40 million proposal from Doosan to be a part of our international module supply chain, including the fabrication of two NPMs for the Carbon Free Power Project plus international fabrication. Negotiations are expected to commence in June 2019.

UAMPS

- Utah Associated Municipal Power Systems (UAMPS) is planning to deploy a NuScale 12-module plant at the Idaho National Laboratory through a DOE site-use agreement.
- UAMPS plans to commence site preparation in 2020. Nuclear construction (i.e., first safety related concrete) will commence in 2023 with the first module operational by 2026. The full 12-module plant will be operational by 2027.
- The project will provide high-quality jobs and economic development to the region. In January 2019, the Idaho State Journal reported NuScale’s “project during the construction phase would have a fiscal impact of over \$36 million and employ about 2,000 people.”
- In December 2017, UAMPS approved distribution of power sales contracts to the thirty-four UAMPS members considering participation in the CFPP.
- In December 2018, UAMPS, DOE, and the Battelle Energy Alliance executed an MOU for the dedication of the first two NuScale Power Modules (NPMs)

for DOE use. Through the Joint Use Modular Plant Program, INL-DOE will lease one of the NPMs in the 12-module nuclear reactor, giving them unprecedented research opportunities.

U.S. GOVERNMENT SUPPORT

- In 2013, NuScale was selected as the sole winner of the second round of the U.S. DOE’s \$226 million, five-year financial assistance award to develop nuclear SMR technology.
- In 2015, the DOE awarded an additional \$16.6 million to NuScale Power for the preparation of a Combined License Application (COLA) for UAMPS. Work under this award continues.
- In April 2018, in continued support, the DOE’s Office of Nuclear Energy awarded NuScale \$40 million in cost-sharing financial assistance under its “U.S. Industry Opportunities for Advanced Nuclear Technology Development” funding opportunity.
- After completing that work, NuScale received a second award in July 2018 from the DOE’s Office of Nuclear Energy under the FOAK Nuclear Demonstration Readiness Project pathway to support the next phase of the U.S. product realization effort required to bring the NuScale design to market.
- NuScale is currently applying for DOE cost share at 50/50 to ensure our applications are award review compliant. NuScale expects that the cost share will be contracted for at 60/40, after the award is granted.

