Exhibit to Agenda Item #1

Provide the Board with informational external and internal presentations and discussion about the **Prospects of Nuclear Energy for Deep Decarbonization**.

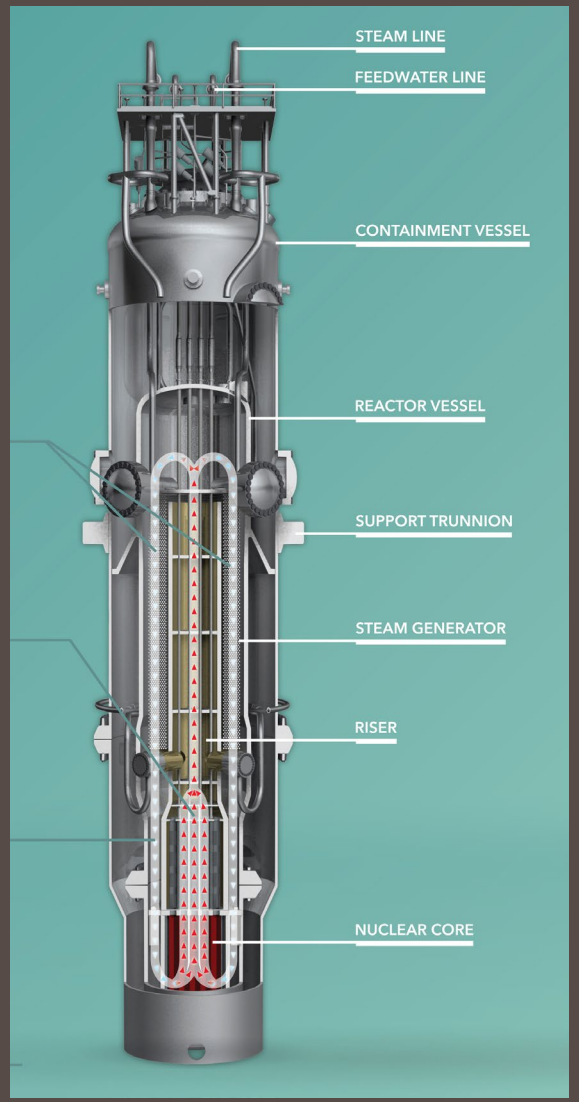
Board Energy Resources & Customer Services Committee and Special SMUD Board of Directors Meeting

Wednesday, October 15, 2025, scheduled to begin at 6:00 p.m.

Auditorium, SMUD Headquarters Building

Research & Development: Looking into the Future

- Global nuclear innovation and emerging technology continues
- Focus on increasing safety, reducing waste, and modularity
- Investment driven by hyper-scaler loads and federal priorities



Nuclear Maintains a Presence In Energy Markets

SMUD Power Content Label

Year	2019	2020	2021	2022	2023	2024
ENERGY RESOURCES						
Eligible Renewable1	27.8%	33.8%	29.6%	23.7%	45.0%	40.4%
Biomass & Biowaste	6.70%	7.0%	4.9%	1.6%	3.1%	5.7%
Geothermal	2.80%	3.5%	3.3%	3.8%	14.7%	31.1%
Eligible Hydroelectric	1.30%	0.6%	0.4%	0.8%	2.0%	3.0%
Solar	1.20%	0.5%	3.2%	2.8%	10.9%	15.3%
Wind	15.80%	22.2%	17.7%	14.7%	14.4%	44.9%
Coal	0.00%	0.0%	0.0%	0.0%	0.0%	0.0%
Large hydroelectric	44.30%	29.1%	17.7%	25.4%	32.6%	21.7%
Natural Gas	26.60%	35.2%	51.4%	45.6%	21.9%	37.7%
Nuclear	**0.90%**	**1.3%**	**0.8%**	**1.6%**	**0.3%**	**0.12%**
Other	0.00%	0.1%	0.1%	0.1%	0.0%	0.00%
Unspecified Source of Power	0.40%	0.5%	0.5%	3.6%	0.1%	0.05%
TOTAL	100%	100%	100%	100%	100%	100%

Panel Speakers:

PROSPECTS OF NUCLEAR ENERGY FOR DEEP DECARBONIZATION

Kati Austgen

Kati Austgen is a Director of Public Engagement & New Nuclear at the Nuclear Energy Institute. She specializes in advocacy for all new reactor technologies, including large light-water reactors, small modular reactors, non-light-water reactors, and micro-reactors.

Kati leads the NEI Advanced Nuclear Forum and Advancing Collaboration, Community Engagement & Public Trust (ACCEPT) Working Group – providing industry coordination and strategic guidance.

Kati holds a Bachelor and Master of Science in Nuclear Engineering from Oregon State University and the University of Missouri, respectively.

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Chad Boyer

Chad Boyer is the Senior Principle Technical Leader, Nuclear at EPRI. He leads the Project Development and Execution technical focus area in the Advanced Nuclear Technology Program within the Nuclear Sector at EPRI. He started at a nuclear utility and had roles that included core designer, reactor engineer and system engineer. Over a 12-year period, he supported the domestic design and construction of the Westinghouse AP1000. In 2012, Chad took a sabbatical to participate in the ANS/AAAS Congressional Fellowship program working in the U.S. House of Representatives on energy policy.

Chad holds Bachelor of Science degrees in Nuclear Engineering and in Physics as well as a Master of Science in Nuclear Engineering, all from NC State University. He is a licensed professional engineer in North Carolina and South Carolina.

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Mark Gake

Mark Gake is an **Associate Vice President** and Nuclear Portfolio Manager for Black & Veatch with 34+ years of experience in conventional generation/nuclear energy projects, including managing nuclear new build projects in the U.S., Taiwan, United Kingdom, and Canada. Mark has held engineering management, Nuclear Chief Engineer, project management, and project director roles for Black & Veatch's Nuclear Organization.

Mark has detailed experience in engineering design, procurement, construction, scheduling, and estimating for new nuclear projects, including Gen III, Gen III+, and Gen IV designs. Mark is a registered Professional Engineer (licensed in Kansas).

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