



Minutes
Utilities Policy Advisory Committee (UPAC)
Wednesday, Oct. 2, 2024
Blue River Board Room
5th floor, 121 S. Tejon Street
Colorado Springs, CO
and Microsoft Teams Virtual Meeting

Committee members present in the Boardroom or via Microsoft Teams:

Scott Smith, Gary Burghart, Michael Borden, David Watson, Katherine Danner, Chris Meyer, Tom Carter and Albert Badeau

Utilities Policy Advisory Committee Members Excused: Chair Larry Barrett

Staff members present in the Boardroom or via Microsoft Teams:

Travis Deal, Lisa Barbato, Tim Benedict, Renee Adams, Tristain Gearheart, David Longrie, Marcela Espinoza, Natalie Watts, Bethany Schoemer, Al Wells, Jason Reynolds, Jaqueline Nunez, Kathryn Rozwod, Amy Lewis, Jay Anderson, Will Russell, Heather Tocci, Troy Bass, Gabe Caunt, Kerry Baugh, JerrieAnn LaLond, Kaitlin Haslam, David Dalton and Steve Berry

Utilities Board members present in the Boardroom or via Microsoft Teams:

Chair Dave Donelson

City of Colorado Springs staff present in the Boardroom or via Microsoft Teams:

David Beckett and Jill Burris

Citizens present in the Boardroom or via Microsoft Teams:

Will Russell and Bryce Greenfield

1. Call to Order

Committee Member Gary Burghart called the meeting to order at 8:04 a.m. and called the roll.

2. Approval of September 4, 2024, UPAC Meeting Minutes

Committee Member Burghart made a motion to approve the Sept. 4, 2024, meeting minutes after a requested modification. Committee Member Scott Smith seconded the motion. The motion passed unanimously.

3. Generational Fuel Preference from 2020-2024

Ms. Leslie Smith, Analyst Supervisor, presented on the Colorado Springs Utilities customers' public perception of nuclear energy. This included survey data on public preferences for energy sources. Solar, wind and natural gas remain top preferences for

both residential and business customers. Nuclear showed a slight increase in interest among business customers. The committee discussed the need for further public engagement on nuclear topics.

4. Small Modular Nuclear Reactors

Mr. Bryce Greenfield, Nuclear Engineer from Grant County Public Utility District, presented information on small modular reactor (SMR) technology, focusing on NuScale and X-Energy designs. Mr. Greenfield presented two main SMR designs: NuScale (water-cooled) and X-Energy XE-100 (helium-cooled).

He explained SMRs offer higher power density than traditional energy sources - one uranium pellet equals a ton of coal. Both designs feature safety systems that eliminate the need for pumps in accident scenarios. SMRs can be load-following, operating between 40% and 100% of rated power. The safety features of SMR designs have safety systems that allow reactors to shut down safely without human intervention.

Mr. Greenfield said that X-Energy fuel design (TRISO) makes fuel meltdown "almost impossible". NuScale design places reactor modules in a large underground pool for additional safety. X-Energy uses TRISO fuel with multiple containment layers. These are fuel enriched to about 15.5% for X-Energy design, compared to 3%-5% for traditional reactors.

There is a current uranium supply challenge due to sanctions in Russia. The estimated production cost is around \$60 per megawatt hour for X-Energy design, and the total project cost is estimated at roughly \$3 billion for Grant County PUD's planned SMR. There is also the potential for long-term power purchase agreements with data centers to help finance construction. NuScale is currently the only SMR design with an approved license in the United States. X-Energy is working through the licensing process, and the regulatory approach for SMRs is still evolving.

5. Customer Comment

There were no customer comments.

6. Committee Member General Discussion

The committee discussed the importance of understanding community needs, regarding potential military involvement and data center demands from companies like Microsoft and Amazon. There was an emphasis put on the necessity for further study and exploration of nuclear technologies. Concerns about costs, complexity, and public perception were raised, with a consensus on the need for a clear set of recommendations moving forward. The committee recommended that the next steps would involve potential future presentations and outreach to local military installations.

7. Adjournment

Committee Member Burghart adjourned the meeting at 9:49 a.m.

Next meeting: Wednesday, Nov. 6, 2024, at 8:00 a.m. in the Blue River Board Room