



## Energy Resources Council

### Draft Minutes

April 5, 2024

7:30 AM - 1:30 PM

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#### ATTENDANCE

##### Energy Resources Council (ERC)

*Chairman Cindy Crane, Senator Jim Anderson, Carl Bauer, Representative Don Burkhart, Dave Emery, Charlene Russell, Vello Kuuskraa (online)*

**Ex Officio and Liaisons:** *Mike Smith, Dave True (online)*

##### School of Energy Resources (SER) Staff & Members of the Public

*Holly Krutka, Scott Quillinan, Rachel Ferrell, Eugene Holubnyak, Kami Danaei, Christine Reed, Fred McLaughlin, Kyle Summerfield, Jerry Evans, Kristi Russow, Kara Fornstrom, Trina Igelsrud Pfeiffer, Tanner McClure, Martha Reisch, Sarah Buckhold, Angela Ver Ploeg, Joe Evers, Autumn Eakin, Don Schwartz, Charles Nye, Anja Richmond, Maryam Lakjaa, Senator Dan Dockstader, Esther Wagner (online), Ken Burnes (online), Frankie Vogt (online), Anna Robertson (online), James Amato (online), Jake Dippel (online), Brice Freeman (online), Carrie Ver Burg (online), Kit Wendtland (online), Ayla C. (online), Resham Thapa (online), Marie Dudgeon (online), Kimmie Takaki (online), Kaleb Peterson (online), Kim Lau (online), Kam Ng (online), Teddi Freedman (online)*

#### ERC REGULAR MEETING: ITEMS BY DETAIL

##### Call to Order

Chairman Crane called the Regular Session to order at 7:28 AM.

##### Approval of November 2023 Minutes

Chairman Crane requested one edit to the minutes that the motion to adjourn from executive session be removed.

**Motion** - Chairman Crane moved to approve the minutes as amended.

Senator Anderson seconded the motion.

The motion passed without objection.

## SER Executive Director Report

### **Overview and Updates - Holly Krutka**

- Executive Director Krutka provided an update on the budget requests for FY25-26. All SER requests were funded by the legislature.
- SER received an extra \$750,000 tranche of funding from the legislature for the development of a Lithium Extraction XPrize (innovator competition). Wyoming and Alberta are each putting up \$10 million for the prize.
- Executive Director Krutka provided an update on the Integrated Test Center.

**Motion** - Representative Burkhardt made a motion to request that SER be involved in the processes leading up to the legislative committee session, and engage in the education and outreach process to help legislators understand what SER does and how it does it. The motion was seconded by Chairman Crane. The motion passed without objection.

### Exception Funding Request Recommendations and Discussion

#### **Wyoming Rare (USA) Inc. - Don Swartz and Joe Evers**

Wyoming Rare (USA) Inc. ("Wyoming Rare"), a wholly owned subsidiary of American Rare Earths Ltd. seeks to create a secure supply chain and domestic market for rare earth products mined, processed, and separated in Wyoming. Wyoming Rare proposes to develop and construct a rare earth processing facility at Western Research Institute (WRI) in Laramie, WY. This facility would demonstrate the viability of Wyoming Rare's flowsheet design and metallurgical processing for its Albany County mineral resource, with a focus of building on the preconcentration work that has already been done.

Wyoming Rare requested \$7.1 million in matching funds, and will be working with WRI, SER, UW, and the Wyoming Energy Authority.

The Exception Review and Recommendation Committee (ERRC) made a recommendation to approve the request with an exception in how it was submitted, and instead would like to see the matching funds spread over the phases of the project, with the exception of operations.

**Motion** - Chairman Crane made a motion to approve the state matching funds requested in the amount of \$7.1 million for the Wyoming Rare project, but to be ratably spread over the first five phases of the project with tracking and progress reporting as necessary. The motion was seconded by Dave Emery. The motion passed without objection.

#### **Membrane Technology Research - Brice Freeman and Tim Merkel**

This funding request is to provide cost share to MTR and the University of Wyoming School of Energy Resources, who are the prime and subrecipient, respectively, of a new DOE Office of Clean Energy Demonstration (OCED) Phase I award, which supports the front-end engineering and design (FEED) study for a full-chain CCS project at Basin Electric's Dry Fork Station (DFS) - a coal-fired power plant located near Gillette. This project advances prior DOE-sponsored work performed by MTR to design a membrane-based carbon capture plant for DFS to develop CO<sub>2</sub> transport and saline storage infrastructure at this location. The aim of the project is to bring the program to the final investment decision stage (ready for a DOE OCED Phase II commercial demonstration award).

MTR requested \$3.5 million in matching funds for the FEED project at DFS.

The ERRC made a recommendation to approve the request.

**Motion** – Chairman Crane made a motion to approve the state matching fund request of \$3.5 million for the FEED project at DFS from the WEA CCUS fund.

The motion was seconded by Representative Burkhart.

The motion passed unanimously.

## **Echo Spring CarbonSAFE - \$300,000 - Charles Nye**

This funding request would provide cost share to the School of Energy Resources to perform a CarbonSAFE Phase II study near Wamsutter, Wyoming with industry partner Williams. The project would be the first CarbonSAFE project in Wyoming to reuse oil and gas field infrastructure with the intent to store CO<sub>2</sub> underneath the deepest layers containing oil and gas. The project will also move at a faster pace than other CarbonSAFE projects and will simultaneously finish work in its second year while also applying for Phase III. The project will provide much needed carbon storage characterization for the Washakie Basin in south-central Wyoming.

SER requested \$300,000 for the Echo Spring CarbonSAFE project which would cover SER's cost share obligations and the ERRC recommended approval of the request.

**Motion** – Chairman Crane made a motion to approve \$300,000 specifically to support SER's role in the Echo Springs CarbonSAFE Project.

The motion was seconded by Dave Emery.

The motion passed unanimously.

## **Reports/Motions**

Full copies of the following SER reports are available in the April ERC Folio or upon request.

## **Questions for Non-Presenting Directors**

- Academics – Kami Danaei
- 3D Visualization Center – Kyle Summerfield
- Center for Energy Regulation and Policy Analysis – Kara Fornstrom

## **Presenting Director Reports**

- Research – Scott Quillinan
- Center for Carbon Capture and Conversion – Trina Igelsrud Pfeiffer
- Center for Economic Geology Research – Fred McLaughlin  
Chairman Crane made a suggestion to address any negative impacts of CO<sub>2</sub> transportation and use any opportunity to show that Wyoming is ahead of those concerns.
- Hydrogen Energy Research Center – Eugene Holubnyak
- Enhanced Oil Recovery Institute – Lon Whitman
- Outreach – Christine Reed

## SER Financial Report - Carrie Ver Burg and Holly Krutka

### New Business

CERPA is preparing a summary report on energy-related bills in the legislature.

### Executive Session

**Motion** - Representative Burkhart made a motion to move to an executive session.

Carl Bauer seconded the motion.

The motion passed without objection.

The executive session was called to order at 12:27 PM.

Regular session resumed at 1:33 PM.

### Adjournment

**Motion** - Carl Bauer moved to adjourn the quarterly meeting.

The motion was seconded by Senator Jim Anderson.

The meeting adjourned at 1:34 PM.

## NEXT MEETING DETAILS

June 6-7, 2024

### Tasks and Assignments

- Include a development update at June meeting.
- Work on a Nuclear Capacity Building plan.
- Coordinate with Rita Meyer to make sure that SER is present and involved in the TerraPower groundbreaking ceremony on June 10.
- Reach out to NTEC to have them reach out to their customer base to invite them to the ITC Technology Showcase.
- Schedule the Center for Produced Water Management to present at the Minerals Committee meeting about the use of water for hydrogen production and research to clean up produced water.
- Provide data to the ERC showing which (if any) heavy metals are pulled up in food from biochars.
- Schedule a field trip to the Lutz Building for the ERC at the June meeting.
- Provide an update on 'coal rebranding.'

RESPECTFULLY SUBMITTED:

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Cindy Crane  
Chairman

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James Anderson  
Vice Chairman