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MINUTES
Enhanced Oil Recovery Commission
Public and Executive Sessions

Wednesday, December 14, 2022 – 1-4pm MT
EORI Conference Room, 2435 King Blvd, Casper
Or via ZOOM:
<https://uwyo.zoom.us/j/92936075310>

1. Call to Order – 1pm
- Roll Call / Quorum

Chairman Hendricks
Chairman Hendricks

At EORI office: Chairman Hendricks, Commissioner King, Commissioner True, Director Whitman, Eric Easton and Stephanie Sneesby from the Attorney General's office and Roger Hillibush (EORI)

Zoom: Commissioner Brister, Representative Don Burkhart, Commissioner Campbell, Commissioner Bebout, Randall Luthi, Gabe Tullis and Kellie Vlastos of EORI

We have a quorum.

2. Approval of Minutes
- September 9, 2022
- November 4, 2022 (Special Meeting)

Chairman Hendricks

The minutes were approved for both meetings.

3. Directors Report

Director Whitman

In the hopes of creating a more efficient meeting, Director Whitman would like to experiment with approaching the meetings differently and suggests we only discuss project and financial details if necessary. The Commission agrees and suggests that the meetings can be more efficient if we don't review the details and let commissioners read the packets and ask any questions they may have.



DIRECTOR'S PRIORITIES

- **With UW HR Support and Collaboration:**
 - **Focus on Team Building and Unity at EORI:**
 - Developing Team Cohesion and Clarity of the Team's Purpose
 - With HR direction, we are developing responses to the following 4 questions:
 1. **What is our team's purpose?**

Our Team's purpose is to "Work collaboratively and strive for successful EORI projects that add revenue to the state of Wyoming through increased oil and gas production."
 2. **What do we want our reputation to be?**

We aspire to be recognized as "Team of multidisciplinary professionals that provides cutting-edge technical support, insight and direction to Wyoming's oil and gas stakeholders."
 3. **What should we count on each other for?**

We count on each other for professional respect and courtesy
 4. **What do we need to do differently to achieve that reputation and fulfill our purpose**

Commissioner Bebout suggests what we want our reputation to be could include our level of integrity. Want integrity to be a high bar, that what we say is really the truth and that we know what we are talking about. Take time to search of the best word.

- **Goals**
 - To encourage and help the team move past the challenging situation of the past year, I have been working with UW HR to develop 4 primary goals for 2022 for all staff:

All team members will submit the same goals.

Goal 1 – Complete the Microsoft Teams Training via UW LinkedIn: Microsoft Teams Essential Training (Two additional Teams Training will be part of goals for everyone at EORI in 2023).

EORI also wanted to utilize MS Teams because it is more open and transparent. Director Whitman explains to Commissioner King what Teams is and why it works well for project management and helps us move our projects forward.



Goal 2 – Self-Identify 3 work successes and 3 work challenges in 2022.

Goal 3 – Complete the UW/HCM Goals Training Course with Renee Ballard (UW HR) scheduled via ZOOM on December 12, 2022.

To ensure everyone understand how goals and evaluations work.

Goal 4 - Develop Team Unity by presenting your “individual background and your areas of contribution to the Team” in scheduled team meetings to create collaboration among the team and in our project work.

What do they bring to the table, strengths and what they can provide to the bigger group to work together collaboratively.

Goal 5 – Participate in developing statements agreed to by all Team Members for the 4 Questions developed with HR to promote team cohesion and clarity on the team’s purpose (discussed above).

Need to participate as a goal and speak up during meetings.

These goals we hope will bring the team together and provide opportunities to bring the team together. EORI and UW HR needs positive goals for 2022. In 2023 we will have new goals in place

- **EORI Technical Advisory Board (TAB) (Upcoming Meeting - 1st Qtr. 2023)**
 - TAB members:
 - Brad Bauer (Merit Energy),
 - Glen Murrell (WY Energy Authority),
 - Vicki Stamp (Petroleum Engineer),
 - Steve Melzer (Melzer CO₂ Consulting),
 - Andy Finley (Encompass Energy Consultants),
 - Sallie Greenberg (Univ. of IL),
 - Charlie Carlisle (Chem Tracers, Inc.),
 - Robby Rockey (Frontier Carbon),
 - George Koperna (ARI),
 - Richard Middleton (Carbon Solutions, LLC),
 - Mike Blincow (Elysian Ventures),
 - Laura Nicholas/John Fanto (True Oil), John will participate when available
 - Chad Roller (Contango)

TAB Group covers many areas from CO₂ EOR to basic field and reservoir studies and support for CCUS. We plan to have a meeting set for the group set for 1st quarter of 2023.



Commissioner Brister asks about the process of selection of members in the EORI TAB. Director Whitman explains that the group was largely in place from Steve Carpenter since about 2019. During Covid there wasn't a clear path forward set in place and some members dropped off in focus. Denbury was approached and invited to be on our TAB. Denbury contacts for EORI have changed in the past 8 months and we've left them an open door. Thomas Boelens and others at Denbury have indicated their desire and interest to support and work with EORI.

Chairman Hendricks mentioned that EORI reached out to Denbury a long time ago to be on the TAB but they showed very little interest or opportunity to participate. Chairman Hendricks suggests Denbury would be great to have on the TAB if they would agree to be an active member. Director Whitman agrees with this approach and mentions new doors opening and a desire for collaboration between EORI and Denbury. The current question is in Denbury's court and who, from Denbury, will join the TAB.

Director Whitman explains that Denbury has done some incredible work on their CO₂ floods in Wyoming. Their production levels have more than doubled over the last months. Denbury is planning to flood new zones at Beaver Creek which have never been flooded and anticipate a significant production increase. Big Sand Draw has more than doubled in production and work has increased as well as at Grieve. The main door for EORI into Denbury is Hartzog Draw and the challenge of the difficult compartmentalized geology in the Shannon.

Estimated costs for a CO₂ flood at Hartzog Draw are at over \$40MM minimum and there may be challenges to obtaining CO₂ from Exxon. EORI will continue to develop positive relationships with Denbury.

Denbury also supported Eric Robertson's presentation at the Midland CO₂ Conference which was attended by about 300 people. Eric Robertson gave a well-received presentation on CO₂ EOR in Wyoming. EORI was included on an oil and gas panel with Denbury and Contango, each presenting on their projects and development of CO₂ EOR in Wyoming. Relationships appear to be deepening with Denbury and Contango.

- **Pipeline Commercial Expert - \$335K Biennium Supplemental Budget Request**
 - Governor Gordon and his advisors made the decision to move the \$335,000 Biennium request to the WEA Supplemental Budget Request. The GOVERNOR'S RECOMMENDATION:

I recommend approval of \$335,000 general fund for this request effective April 1, 2023, of this request I recommend \$50,000 general fund be one-time. I further recommend the remainder \$285,000 be on-going and biennialized for BFY 2025. Wyoming Energy Authority will enter into a MOU with Enhanced Oil Recovery Commission for delivery of the 0600 series funds.



- I attended and participated in the JAC Supplemental Budget hearing on December 8th with the WEA. Regarding this specific supplemental request, the hearing went smoothly and without questions.

A decision was made following the Governor's hearing requesting the \$335,00 be deposited early to the WEA supplemental budget request because of necessity. Fifty-thousand dollars would be a one-time funded amount and referring to the FERC payment by the WEA depending on if EORI receive the funding and hire the FERC expert, the \$50K will no longer be paid to WEA but the FERC management will no longer be needed and be handled by the FERC expert to continue the FERC funding. EORI will receive the funding from the WEA. The Joint Appropriation Committee was pleased as well as Glenn Murrell and happy to work through the MOU process with EORI. Director Whitman will monitor the legislative process and feels EORI is in a very good position.

Chairman Hendricks asks about the process for getting an MOU constructed between EORI and WEA. Chairman Bebout advises it would be easier to have Director Murrell and Director Whitman work out the MOU and avoid each agency's council work on the MOU. Chairman Hendricks agrees it's a good idea and Director Whitman will look at the MOU with Chairman Hendricks.

- **WEA Legislative Energy Luncheon – January 18, 2023 - Cheyenne**
 - The Wyoming Energy Authority is hosting an Energy Luncheon for Legislators on Wednesday, January 18th (Capital Extension Rooms 53 and 54).
 - Any EORC Commissioners that are available are asked to join me
 - We are developing an "EORI Information" Tri-Fold brochure with basic EORI information to hand out

Lon invites all commissioners to join him at the Luncheon.

- **Governor's Prayer Breakfast – February 15, 2023, 6:30am – Little America Cheyenne**
 - Governor's office invited all agencies to support the Prayer Breakfast and after discussion with Chairman Hendricks, EORI sponsored a table of 10 for \$500.00.

The \$500 was paid for by the non-allocated funding

- I will not be participating nor will EORI staff. The table can be filled via invitations or by the team preparing the event at the Governor's office.

Director Whitman can invite people to fill the table but if there are no takers, the Governor's office is pleased to fill the table.



- **Governor Gordon and Agency Directors** (WYOGCC, WEA, Office of State Lands and Investments, DEQ, Business Council, WY State Geological Survey) **will be invited to join an EORI Team meeting. Scheduling being developed to begin in January 2023**

We would like to have the governor attend a meeting to recognize and support the EORI Team. The invitation is extended through the year in person or Zoom. Director Whitman believes the recognition and support will help EORI move forward with the Governor's energy plan.

Commissioner True asks why SER was not referenced and Director Whitman explains that the interface already exists. Commissioner True mentions Director Krutka would be an important presence. Director Whitman agrees and proposes regular meetings with the outside agencies. Similar to regular meeting with CCUS, Director Whitman proposed regular meetings for Oil and Gas. It's paramount for everyone to be unified and understand the direction forward and who's doing what. Director Whitman mentions a major move for the UW Petroleum Department to find their path forward. Director Whitman feels it's necessary for us to find new pathways were we support what's happening and avoid duplicative work and research.

- **EORC/EORI Luncheon and Meeting**
 - I would like to schedule an EORC Quarterly Meeting in 2023 and have a luncheon with Commissioners and EORI Staff followed by the quarterly EORC meeting. My goal is to have all Commissioners "live" at this meeting. The 2nd Quarter of 2023 is probably the most practical and I will work with the EORC to find best dates after the 1st Quarter EORC meeting.

Opportunity to have the EORC meet with EORI staff. Commissioner True asks to start planning the luncheon early to ensure it is well attended.

COLLABORATIVE WORK WITH SER AND UW

- **Continued Support and Development of Strengthened Pathways with SER**
 - Holly – regular check-ins. Progress in communication and protocols
 - Rachel – financial and accounting world
 - SER Technical Staff
- **Ongoing Outreach to University of Wyoming Officials**
 - President Seidel meeting went well and personal cell numbers were exchanged.
 - Alex Kean, VP, Budget and Finance, VP for Administration Office. He has been promoted
 - Mike Smith, Vice President, Gov. Affairs and Community Engagement talked about background and possible connections in years past.



4. Review - Financial Report

Gabe Tullis

Director Whitman explains we had some expenditures/refunds/deposits that have been floating in the UW books, about \$10,000, and not yet appearing on our balance. These have been clarified and the amount given back to us. Our budget matches the UW to the penny. Accounts match across the board, including all the DOE funded projects.

Director Whitman explains Director Carpenter was being paid \$220,000 and EORI was also paying \$170,00 for the Outreach position. The Outreach position shifted into Director role for \$190,000 leaving a balance of roughly \$200,000 applied and moved into new positions. Part of the additional surplus was coming from DOE paid salaries at EORI for those projects.

Director Whitman says our forecasted DOE salary budget was largely inflated, possibly intentionally, but it has affected our State budget balances. Right now, projected surplus of this year's biennium cycle is roughly \$270,000 but we are working to provide a clearer forecast end of year balance. Depending on the surplus amount, we can fund positions that we need.

During the JAC budget hearing, the WEA was requesting 2 new additional positions and received funding for only one position. It was explained that it is important that agencies are request supplemental dollars for hiring people through the supplemental budget process, done during legislative budget cycle years. However, Governor Gordon felt it was paramount to fund the pipeline expert at this time.

Director Whitman wants to be prepared as we go into budget cycle year to request some of the positions we lost. It's a challenge to get industry experienced people at a rate we, and other agencies, are willing to pay.

Gabe Tullis discusses the estimated surplus forecast in our State Budget as of the end of October and that accurate forecast is difficult with few data points. Based on expenditures from July – October 2022 from our State Budget, we anticipate will end up with a surplus on June 30th, 2023

We are looking at \$270,000 for a surplus at the end of the year based on October numbers. This is different from last month's report because of the transfer of \$100,000 out of our state budget over to the \$2.2MM fund. This changes the surplus forecast.

Director Whitman mentions that if we have \$270,000 we are more than able to hire an Outreach Manager and a higher level geology position but with caution to prevent going over budget.

Hendricks mentions our intent was never to use the \$2.2MM funds to hire and pay salaries. It needs to be clear that we are not going to do that. Director Whitman answers that the \$270,000 is the forecasted State Budget surplus for this year ending June 30, 2023.

Director Whitman says we have \$2.2MM largely for cost share project and in regards to the \$2.2MM account: to date, the largest expense paid out of the \$2.2MM are transfers to cover previous state



budget deficits. Director Whitman explains that it is preferable that we refer to this as the \$2.2MM and not the \$1.9MM. The audit that was done showed the full amount of \$2.2MM and that number was reduced to \$1.9MM because of an approximate \$300,000 transaction to cover budget deficits from as far back as 2019. However, that transaction actually never occurred as stated in the audit. Director Whitman prefers that we show a starting balance of \$2.2MM and include a transaction reduction of \$329,000 (budget deficits) from the \$2.2MM to make the books accurately reflect what has actually occurred.

Hendricks says the original salary for Outreach Director was \$116,000+ and was the adjusted number for Director Whitman to take over as temporary Director, not \$170,000.

Commissioner Bebout mentions budgets are authorized number of positions in budget or is it a block grant? Director Whitman answers it is a block grant, and we can receive x amount to do with what we want. Commissioner Bebout suggests we spend the money on giving raises and creating a cushion. It's customary that there are no new hires unless it's an emergency. Commissioner Bebout suggests we use for raises and save a bit.

Commissioner Brister asks for clarification on how we got to the \$270,000 surplus by June 30 from where we are today. Gabe Tullis replies he took fiscal year expenses to date \$609,000, for 4 months multiple 3x we come up with just over \$1.8MM and the \$2.1MM ends up with that surplus under state funded budget only.

5. Review - Technical Projects Report

Director Whitman

TECHNICAL PROJECT HIGHLIGHTS

- **Cost-Share project for development of a Microbial EOR (MEOR) pilot(s) with Rockwater Energy Solutions (Houston, TX)**

This uses some of the \$2.2MM returned funding and focuses on field reservoir options for a microbial test. EORI has visited Rockwater's lab and found their approach and technology significantly superior to what we've seen in with microbial EOR in the past; we are aware that those tests have not been successful in Wyoming but see that there are considerable differences on how Rockwater approaches the pilots and tests. EORI agreed with Rockwater that we would pay for a water sample and testing by Rockwater to determine if the sample reservoir is a good candidate for successful MEOR. EORI is working with a variety of operators looking at their field/reservoir combinations. Currently there is an agreement with Amplify Energy for Lost Soldier/Wertz fields. We are looking at 3 other field options appropriate for MEOR. We do not have any operators who have agreed to a full MEOR project at this point. We believe it would be good to test water samples from the Minnelusa, Tensleep/Phosphoria and



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Denbury considering a Shannon test. The lab cost per sample is about \$2,000. EORI agreed to a maximum of \$10,000 for the MEOR water sample test and may not spend the full amount. EORI thought this number was prudent to stay involved with potential pilots moving forward.

- **On-Line EORI Inter-Active Project and Reports Dashboard**
 - Kellie Vlastos will provide an overview

Wanted to provide a platform of greater clarity and visual support for current EORI projects where they are located and the current status of the project and reports we've published.

Kellie Cairns Vlastos presented the EORI Current and Recent Projects Dashboard. KCV gives a tour and tutorial on the Dashboard, it's content and capabilities. Director Whitman encourages the EORC test the dashboard out and provide any suggestions and ideas via email.

- **Alpha Field (Minnelusa) Operator – Principal Petroleum/ATR (Cost Share Pilot)**
 - 3D Seismic was shot on the field and is being interpreted. Initial information and results look very promising. Updates to follow (Stephen Whitaker)

John Frederick will provide evaluation and clearer understanding of what changes they could make moving forward.

- **WY Gas Injection EOR Project with Piri Tech – (\$25MM State / Matching Funds)**
 - Plan to inject the gas in the form of **foam with high viscosity**. Hydrocarbon foam increases the viscosity significantly in the fracture network thereby substantially enhancing the recovery from the pore matrix. We will use the existing wells (no new wells needed). The foam can be created with both natural gas and CO₂ (carbon storage)
 - Proposal is in final development and should be ready for review this week. I will meet with Dr. Piri when the proposal is finalized. Updates for EORC to follow.

Commissioner Bebout asks if there is an additional \$25MM referred from last year, 2 x \$25MM that we were going to try to be able to utilize. Representative Burkhardt nor Director Whitman have received any word on the additional \$25MM. Director Whitman will find out and confirm if we are spending from the original \$25MM vs the new \$25MM. Commissioner Bebout would like a full understanding of the monies.

Randall Luthi also asks if the \$25MM is different than the \$25MM from last year. Luthi has confirmed that Dr. Piri has not talked to anyone else other than Senator Kinskey who directed him to work with the



University. There is no matching for the first \$25MM yet. Commissioner Bebout thinks it could be difficult to get the moneys pushed through the legislature. Director Whitman will gather additional information and provide it to the EORC.

COMPLETED REPORTS AND PUBLICATIONS

- **Rozet Field** – (Muddy) - Osborn Heirs (Stephen Whitaker, Shuiquan Li)
- **Hirsch Field** – (Muddy) – Maximus Operating, LLC (Stephen Whitaker)
- **Wyoming CO₂- EOR Report** – (Eric Robertson)
- **Viper Drilling** – Thompson Creek – (Stephen Whitaker)

All are available for download on our website.

6. Review - IT DATA Technology Report

Roger Hillibush

DATA/IT PROJECT HIGHLIGHTS

- **New EORI Website** – Planned startup of new website February 2023

Website will have option to include dashboard as well as other revisions
- **Casper Log Library** – Continued integration of data and information from the Casper Log Library into EORI data system
- **Wyoming Pipeline Information and GIS Services** – New map subscriber portal is in development and will be integrated into the new EORI website.

If funding is approved, the new pipeline expert will advise how to move a pipeline website forward to include pipeline information and data. Director Whitman and Roger Hillibush are in agreement to have a separate website for the pipeline information with links to EORI and another website. Director Whitman believes we should separate the EORI and pipelines information. Director Whitman requests thoughts and suggestions.

- **Technology and Hardware Refresh**
 - Deployment of new workstations for all staff completed.
 - New laptop deployments nearly finished.
 - New Eclipse reservoir modeling server ready to install.



- Negotiated new contract on primary copy machine saving nearly \$1500 annually on the machine lease.
- **EORI Software Review for 2023**
 - Review and evaluation of software needs for 2023 and cancelation of currently unused software resulted in a savings of over \$23,000.
 - Since 2019, this process of evaluating software needs and reviewing costs for software subscription costs has saved approximately \$234,000.
- **Microsoft Teams** – EORI is moving to focused use of Microsoft Teams to provide improved project management, increased and clearer project communication and increased collaboration between EORI team members.

EORC likes the new format of the meeting. Director Whitman would like to get the packets 2 weeks prior to the meeting, at least a week ahead.

Commissioner King is looking for OneDrive clarification. Director Whitman mentions the challenges with link to OneDrive site, need to enter in code that was emailed with a quick turnaround. Director Whitman will include the link with each email. Director Whitman likes OneDrive because it saves time printing and will accommodate special requests. OneDrive is secure and can handle large documents.

Commissioner Bebout is receiving spam requesting bogus email from Director Whitman requesting a favor. Roger Hillibush explains that EORI personnel has also experienced the same spam. Training is in place on how to verify if the email is authentic and will help the EORI employee analyze for spam. Cyber security is in place as well as local training to keep staff refreshed. You can verify through email if it is valid, the address and the non-UW banner.

Commissioner True would like to hear from an EORI employee about one project/meeting. He would like to hear the highlights and lowlights of the project. Commissioner True wants the anomalies pointed out. He would also like to know understand who's doing what and who are we working with. Pick one project and have it explained in more detail would be helpful and interesting.

7. Future Meeting Date

Director Whitman

Chairman Hendricks asks how Commissioners want to receive meeting dates to choose from. March is the next opportunity to meet. Chairman Hendricks likes Commissioner True's suggestion to lunch with the staff, start early and get in front of everyone asap.

Commissioner True would like meeting dates scheduled for the entire year to protect the EORC meeting dates set and suggests a pattern for the EORC meeting (i.e. 3rd Thursday of every quarter), on a fixed rhythm and to be sensitive around the set/suggested dates.



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The meeting was adjourned at 2:38 pm on December 14, 2022.

Ken Hendricks
Ken Hendricks (Aug 9, 2023 09:52 MDT)

Ken Hendricks, Chairman

3-15-23

Date