

Enhanced Oil Recovery Commission



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MEETING MINUTES

Wednesday, June 28, 2023, 1:00 -4:00 PM MST

EORI Conference Room, 2435 King Blvd, Casper

Or via ZOOM: <https://uwyo.zoom.us/j/93342712040>

I. Call to Order – Chairman Hendricks

a. Roll Call/Quorum – Chairman Hendricks

EORI Conference Room: Chairman Ken Hendricks, Commissioner Robert King, Commissioner Dave True, Commissioner Eli Bebout, Commissioner Erin Campbell – State Geologist. Other attendees include SER Director Holly Krutka. EORI staff present include Director Lon Whitman, Roger Hillibush, Gabe Tullis, Eric Robertson and Stephen Whitaker.

ZOOM Attendees: Randall Luthi, Governor’s Office, EORI staff include Kellie Cairns Vlastos.

Absent: Rep. Don Burkhart, Commissioner; Chad Brister, Commissioner

II. Minutes – Chairman Hendricks

March 15, 2023 EORC Minutes provided for perusal and were approved by the Commission.

Chairman Hendricks requested the order of the agenda be modified by inserting the Executive Session after the IT Technical Report. Once the Executive Session is complete, the Commission will reconvene the Public Meeting portion and cover the Technical Project Reviews.

The EORC Chairman position will be changing early in 2024. Chairman Hendricks’ term on the EORC and Wyoming Oil and Gas Conservation Commission both end at the end of February 2024. Chairman Hendricks suggests the Commission discuss and vote when Commissioner Brister is present. This discussion and vote should be scheduled for the August 28, 2023 EORC Meeting or at the latest November 8 EORC meeting which will be final Commission meeting this year.

III. Director’s Report – Director Lon Whitman

Director Whitman thanked everyone for joining the meeting.

DIRECTOR’S FOCUS

- Team Unity
- Supporting each person’s needs
 - Project related
 - Work/life rhythm balance

- Continued Legislative work
- 2nd Quarter reviews of goals and performance completed for all team members
- Adding Staff
 - Discussion with current Team shows agreement and support to proceeding, for the immediate future, with Contract staff to ensure the right person is brought onto the team before hiring someone permanently.
 - Possible Positions:
 - Business Development Manager
 - Could be a Deputy Director
 - Senior Geologist – many have reached out showing interest
 - Geo-Tech (would provide significant support for both geology and reservoir engineering (modeling) project work
- On-going UW Bridge Building
 - Focused on work on questions at UW with EORI contracts agreements for services, sole source and how these documents were done in the past and assuring all documents meet UW parameters
- EORI Staff Raises
 - EORI State Allocation: FY 2024: \$137,000 -pre-Fringe (38%) (Effective July 1, 2023); Allocation information received June 6, 2023
 - Developed under SER parameters for salaries by job category
 - As a note: We received the actual allocation for raises implemented on July 1, 2022 on May 18, 2023
- Focused Industry Project Development with:
 - Denbury
 - Contango
 - Ballard Petroleum

FINANCIAL REPORTS – OVERVIEW

- No issues to report. (See May 2023 Financial reports prepared by Gabe Tullis.)
- EORI Financials remain in agreement with UW Accounting numbers.
- The EORC allocation for the Governor’s Raise Program (effective July 1, 2022) was put into our account on May 18th. (\$218,000)
- No activity in the Re-Allocated \$2.2M Fund. The Account Balance is \$1,859,486.
- The “Non-State” Appropriation Accounts saw an increase of \$3,264 from quarterly indirect cost revenue posting. Account Balance is \$263,100.
- Current estimate EOY Balance on State Funding is ~\$298,000.

Commissioner Bebout asks about expenditures from the \$2.1 million reallocated funds. Commissioner Bebout pointed out that there is always the chance that the legislature might change their minds about the money if we are not actively using those funds. Commissioner Bebout asks if we have a plan or any projects on the horizon. Director Whitman explains we have many developing projects with funding including: an MEOR pilot project with Amplify Energy for approximately \$100,000, a core and evaluation

project from Kitty Field for about \$250,000. There'll be additional pilot projects that are being developed soon. Our hold up has largely been due to delays in paperwork approvals at UW. Our goal is to spend all the \$1.85 million on pilot projects and field demonstrations. Commissioner Bebout is pleased that EORI shows activity and is moving ahead with projects.

Non-state appropriated accounts have seen an increase from the indirect costs from the DOE projects. That balance now is at about \$263,000 and we've used some of that funding for new promotion and marketing materials.

Our end of the year state-funding balance is approximately \$298,000. This surplus is largely due to open staff positions and challenges to hire appropriate new hires. At the March 15, 2023 EORC meeting, Representative Burkhart clarified for the EORC that they can keep the excess funds. To keep the money, we must make a request to the legislature that the funds be rolled over. There had been questions about the roll over monies because the University does not allow roll overs. EORC funding is not tied to nor controlled by the University and the EORC has the ability to request a roll over of surplus funding. This is advantageous and gives EORI flexibility, particularly with hiring new employees.

IT DATA TECHNOLOGY – OVERVIEW

Roger Hillibush prepared an IT Data Report for the Commission similar in format to the Financial Report. The IT Data Team (Roger Hillibush, Kellie Cairns Vlastos, Vandy Jones and Shane Singleton) does a significant amount of work that is critical and continues to grow in importance to what EORI does.

EORI's New Website was launched on May 7, 2023, and continues to undergo development and modifications.

The Casper Log Library is being integrated into EORI's database and is moving along.

The CO₂ initiative and Pipeline Services at EORI was named by Governor Gordon. There's been a lot of work on the data end to migrate and bring in all the activities of the pipeline infrastructure into our system and possibly ready to go in July 2023.

Wyoming Reservoir Information Tool continues to be improved and developed. We are working on internal QC of the product with more work to do before it is made public. The original WYRIT application is still running on our website.

Director Whitman states that he will not go into great detail about the Technical Projects. Today we have Eric Robertson and Stephen Whitaker giving detailed project presentations during the second portion of the public meeting.

Project Overview:

- **Denbury**
 - **Hartzog Draw**
 - Plans are advancing for a 6-well pilot CO₂ EOR project which looks promising and would be the first new CO₂-EOR project in Wyoming.
 - A meeting was held in Dallas with Denbury (geology and reservoir departments) with Randi Martinsen on April 25, 2023
 - EORI will provide support to the project specifically with the geology of the Shannon formation.
 - A Shannon geology field trip for Denbury will be organized for late this summer or early fall with Randi.
- **Developing CO₂ EOR Projects in Wyoming**
 - Currently, EORI is involved with 4 developing CO₂ EOR projects all in the PRB
 - Denbury – Hartzog Draw
 - TR Operating – Halverson, Raven Creek, Dillinger Ranch
- **WY CO₂-EOR Field Study and Full-State CO₂ Upside Potential**
 - At the request of the Joint Minerals Committee, EORI was asked to develop a report on CO₂-EOR in the State as part of a larger report and in collaboration with PAW and SER (Tim Considine). The report at EORI had two components:
 - Detailed evaluation of EORI CO₂-EOR in 5 specific fields (PRB) and
 - CO₂-EOR upside potential from across the State.
 - Denbury supported the work at EORI and supplied significant industry cost information and evaluation parameters to ensure industry accuracy in the EORI report.
 - Information from the EORI report will be used by Tim Considine (SER) to develop economics and specifically severance tax revenues to the State from the associated CO₂-EOR production
 - EORI, PAW and SER will present the findings to the Joint Minerals Committee on July 17th in Rock Springs

Director Krutka adds that the Minerals Committee requested the study because they wanted to examine the 45Q tax credit and its changes at the federal level, now considered a federal tax credit for CO₂ storage. CO₂ storage combined with EOR will fetch \$60/ton, whereas the credit increases to \$85/ton if the CO₂ is used for dedicated storage. The difference in the tax credit will take CO₂ intended for storage that could be used for oil production.

Director Krutka would like the Commission to realize that EORI has made a major contribution to the study by taking the lead and making the case to ensure that CO₂ will be available for oil producers, this entire report on a very short time-line.

Director Whitman explains that there are potentially avenues to bridge the 45Q difference of \$25/ton between CO₂-EOR and dedicated storage. There are ways the State could level out the 45Q playing field and not lose captured CO₂ to dedicated storage when there are large resources that could be CO₂ flooded. All Wyoming basins (including the Big Horn Basin) will be included in state-wide 30,000-foot overview. The “field cluster” perspective changes the dynamic of how we look at economics for CO₂-EOR. Some smaller, individual fields that would not be economic as stand alone projects but put into a cluster of multiple smaller fields the economics improve significantly.

Commissioner Bebout asks to hear more about the issue of American easterners being anti fossil fuels and raising the credit higher from \$85 to \$95 or higher just to ensure that the CO₂ is not used to further produce fossil fuels. Commissioner Bebout voices concern that a huge producer (i.e. Shute Creek) might want to do just that, strictly from a business perspective but may be detrimental to Wyoming. For Wyoming, the CO₂ is much better served for tertiary recovery. In terms of royalties and severance versus a deep storage, a solution would be to have a legislative bill that says if you're going to store deep, it costs you. It's a risk to do something like that, it's punitive, but EORI needs to think about that.

Director Whitman states that in addition to the financial benefits to the State from CO₂-EOR, the oil you produce through CO₂-EOR is net negative carbon footprint or as it is referred to as “Blue Oil”.

Blue Oil Concept: There's a lot of development in this area and Denbury has adopted it as the company's mantra. We'll be hearing more about the benefits of using oil from CO₂-EOR versus standard oil. Commissioner Bebout mentions net negative also pertains to the point at which the CO₂ is captured. Director Whitman explains Shute Creek is a good example to highlight and clarify. Exxon did not do a Class VI well permit, only a Class II which does not allow for an \$85/ton credit, you must have a Class VI well however, Exxon is receiving 45Q tax benefits at Shute Creek with Class II wells (not at the \$85/tonne rate). Director Whitman added that Exxon has stated that they are committed to continuing to provide CO₂ for EOR in Wyoming. They're actively managing their CO₂ contracts with operators in Wyoming because they would like to expand their operation. To do that, they need to sell a significant portion of the produced CO₂ for EOR. Director Whitman agrees with Commissioner Bebout that Exxon could apply for Class VI well.

Director Krutka adds one more point about the study which is to figure out what portion of the severance tax from oil production would be needed to narrow that difference between that \$60 and \$85/ton tax credit is analogous to the carrot approach and is part of the study as well.

WY Gas Injection EOR Project with Piri Tech

- Awaiting the opening of the RFP process by Dr. Piri
- Dr. Piri will report on the status of the project to Joint Appropriations in July (10th or 11th in Cheyenne)
- Review and revisions to geology for geologic model and reservoir modeling (Stephen Whitaker and Shuiquan Li)
- A review meeting with Sunshine Valley was held on June 12, 2023
- Lack of data and poor data are significant issues

- Project funding for the project (XOil / OneOK) has faced issues so the project has slowed down from original timelines while new funding is secured.

Director Whitman asks the Commission if there are any questions about the Financial or the IT Data Report submitted in the Commissioner's packets of which there were no questions about the individual reports.

Randall Luthi asked if their summer intern could listen in on the meeting to learn about CCUS and energy issues. Chairman Hendricks said the Intern could listen in on the second portion of the public meeting.

VI. Executive Session

Chairman Hendricks motioned to go into Executive Session with a public session after the Executive Session.

VII. Public Meeting (Part II)

The Public Meeting re-convened.

Chairman Hendricks expressed the need for a motion to state that the EORC and the EORI will use the RFP process without exception for all projects that we engage in. Commissioner True requests that "reconsideration" be included in the language. Chairman Hendricks believes that decision to be made by the EORC will use the RFP process.

Commissioner Bebout mentions the Bureau of Land Management's Big Horn Basin Resource Management Plan (RMP) excluded the right to have any CO₂ pipelines. Comment letters submitted urged the BLM to include CO₂ infrastructure in the RMP. Commissioner Bebout suggests that EORC should get involved in sensitive issues and a comment letter submitted on behalf of the EORC regarding the new Sage Grouse Initiative and its expanded core areas.

Director Krutka explains the School of Energy Resources has this applied role, but because SER is part of the University, typically SER prepares comments that are provided to the Wyoming Energy Authority and the Governor's office to use on behalf of the WEA and/or the Governor's office. Director Krutka explains that if the expertise resides in EORI, then it is part of EORI's role, its Mission to increase oil production Wyoming. But if EORC has bandwidth and can provide support, it would be a good venue, and timely, to submit comments at the federal level.

Director Whitman suggests coordination with Randall Luthi's office, after which Director Whitman will meet with Chairman Hendricks and the Commission about a potential process for a letter developed from EORC for the governor's office. Director Krutka agrees and mentions that SER's Kara Brighton Fornstrom is the main lead on those practices. Technical information is key in providing comments on RMP's and Ms. Fornstrom's office can help sculpt those comments into what's needed. Commenting on the RMP's for Wyoming's industry is paramount to express both sides of the issues.

Commissioner True feels it might be better to submit two letters than just one longer letter. Commissioner True feels each agency might provide a little more clarity and insight into their issues with the RMP than just one over-arching comment letter.

Commissioner Campbell reminds the Commission of the importance of remaining in-step with the Governor's office before submitting anything. Representatives from the Joint Minerals Committee should also be included to ensure continuity.

Chairman Hendricks invited Eric Robertson and Stephen Whitaker to present on their Technical Projects.

VIII. Next EORC Meeting August 28th – 1pm

The Public Meeting was adjourned at 3:48 PM.



Ken Hendricks, Chairman

8-28-23
Date