

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

February 11, 2026

Facilitator's Summary

Facilitation Team: Emily Stranz & Colby Mills, DS Consulting

The following Facilitator's Summary is intended to capture basic discussion, decisions, and actions, as well as point out future actions or issues that may need further discussion at upcoming meetings; it is not intended to be the "record" of the meeting. Official minutes can be found on the TMT website: <https://public.crohms.org/tmt/agendas/2026/>. Suggested edits for the summary are welcome and can be sent to Colby at colby@dsconsult.co.

Review Meeting Summaries & Minutes – TMT Members approved the official meeting minutes and facilitator's summary from the January 28 meeting with no additional edits.

Official Water Supply Forecasts – Chris Runyan, Reclamation, reported the official February water supply forecast for Hungry Horse Dam (HGH), starting with an update on basin conditions. February 1 snowpack was average/slightly above average in higher elevations and significantly below average in lower elevations. YTD precipitation remains above average at 121%, but a dry January observed only 50% of average precipitation. WY-to-date inflows are above average at 220%, resulting from 500% of average inflows in December.

February through July was 2,060 kaf, or 95% of average; April through August was 1,861 kaf, or 91% of average; May through July was 1,450 kaf, or 87% of average; and May through September was 1,562 kaf, or 88% of average. Chris noted that the forecast has seen a 15% decrease since January's dry conditions. Based on current forecasts, minimum flows are 3,500 cfs at Columbia Falls, and 900 cfs below the dam.

In response to a query from Tom Lorz, CRITFC/CTUIR, regarding how/if models can incorporate this year's unique precipitation situation, Chris responded yes, and emphasized that longer-term forecasts like the May through September may offer more realistic runoff outlooks. Brian Marotz, MT, agreed, adding that with this unique year there is virtually no snow at lower elevations; snow at higher elevations is persisting while compressing.

Doug Baus, Corps, reported the official February water supply forecasts for Corps of Engineers projects:

- **The Dalles (TDA):** NWRFC April to August volume forecast is 83 maf, or 93% of average.
- **Lower Granite (LWG):** NWRFC April to July volume forecast is 15 maf, or 75% of average.
- **Libby (LIB):** Corps February runoff forecast 6,831 kaf, or 112% of average.
- **Dworshak (DWR):** NWRFC April to July volume forecast is 1,752 kaf, of 71% of average.

Chum Operation - Doug reported on the current conditions and forecasts for chum. The chum incubation phase (as coordinated by TMT) will continue through April 9, unless otherwise coordinated by TMT.

WY observed precipitation in the Snake River Basin above Ice Harbor Dam is 9.9 inches, or 92% of normal; the upper Columbia Basin above Arrow Dam is 30.6 inches, or 117% of average; the Columbia River mainstem above The Dalles is 13.6 inches, or 100% of normal; and the Willamette River Basin above Portland is 30.1 inches, or 77% of average.

Doug highlighted the impact that warmer temperatures have had on precipitation, leading to seasonally above average temperatures. The Snake River Basin above Ice Harbor (IHR) has been 9 °F above average for the current month, and 4.8 °F above for the season. The upper Columbia Basin above Arrow Dam has been 9.2 °F above average this month. The Columbia River mainstem above The Dalles has been 8.5 °F

above average this month, 4.4 °F above seasonally. Finally, the Willamette River Basin above Portland has been 6 °F above average this month, 2.8 °F above seasonally.

Bonneville (BON) at 0700 hours this morning had a tailwater elevation of 15.7 feet with 176 kcfs outflow. The RFC inflow forecast over the next 10-day period shows a low of 179 kcfs on February 14 and a high of 182 on February 17.

The 6-10-day climate outlook shows a probability of below average temperatures in the western Columbia Basin, near normal in the central, and above average in the east; precipitation looks better with a probability of above average throughout the basin. The 8-14-day outlook is similar, with a probability of below average temperatures and above average precipitation. Doug noted that the seasonal averages are indicative of the WY, which begins on October 1.

Operations Review – Reservoirs – Chris reported on Bureau of Reclamation projects:

- **HGH:** inflows yesterday were 1.3 kcfs and continue to recede. Outflows are at 2.2 kcfs and will decrease this week to 1.2 kcfs on Thursday to level out the reservoir and get Columbia Falls streamflow to near 4 kcfs. Next week Columbia Falls may be near the minimum of around 3.5 kcfs; current projections show outflows following minimums for the remainder of the month unless water supply forecasts increase. Incoming snow and cooler temperatures starting this weekend may help conditions.
- **Grand Coulee (GCL):** inflows yesterday were 104.6 kcfs, averaging last week at 110% of normal. Outflows were 124.4 kcfs with a midnight elevation of 1,274. feet. The project has drafted about 2.3 feet since last week and storage is 105% of average this for this time of year. GCL is operating to meet chum flows below BON and is preparing for this year's required drum gate maintenance (~8 weeks), drawing the reservoir down to 1,255 feet by mid-March.

Kasi Underhill, Corps, reported on Corps of Engineers projects:

- **LIB:** midnight elevation was 2,388.15 feet, with average inflows of 4.5 kcfs, and outflows of 4 kcfs. LIB is currently holding minimum outflows to meet the end of February target of 2,383.9 feet.
- **Albeni Falls (ALF):** midnight elevation was 2,053.5 feet, with average inflows of 16.1 kcfs, and outflows of 25.1 kcfs. ALF is gradually releasing flexible winter power operations storage to reach the winter operating band, likely in early March, targeting an average draft of 0.1 feet/day through the powerhouse.
- **DWR:** midnight elevation was 1,557.9 feet, with average inflows of 5.7 kcfs, and outflows of 1.6 kcfs; DWR is expected to remain on minimums this month. Project FRM included a shift in FRM space, 18 kaf on March 31 and 68 kaf on April 15, representing a 100% shift. This may be refined in coming months; the project will need sufficient water to fully implement this shift.
- **LWG:** average outflows of 28.5 kcfs.
- **McNary (MCN):** average outflows of 144.9 kcfs.
- **BON:** average outflows of 156.4 kcfs.

In response to a query from Tom regarding the maximum elevation for DWR if there was a deviation and shift, Kasi noted the maximum FRM shift is 1,591.8 feet on April 15. The Corps will continue to monitor for places where deviation may be appropriate.

Water Quality – Dan Turner, Corps, noted that tailwater gauges are all reporting data and all are currently less than the 110% water quality standard.

Fish – Kelsey Swieca, NOAA, reported that the three projects currently reporting for adults (BON, TDA, IHR) are all seeing a handful of steelhead, similar to the last few weeks. Dave Swank, USFWS, reported little activity with lamprey, there could be a few adults holding in the river, but no passage has been observed.

Charles Morrill, WA, added that reporting from Hamilton Springs on chum emergence will likely be available by the next TMT meeting. Normally this starts mid-February, given the warmer temperatures emergence may be observed earlier this year.

Power System – Tony reported no issues, there is a significant amount of water in the river as drafting for drum gate maintenance continues.

Questions and Comments from Non-TMT Members – There were no questions or comments from members of the public.

The next TMT meeting will be on February 25, 2026, at 9:00 AM.

A DSC Process Meeting will follow the TMT Business Meeting.

**Columbia River Regional Forum
Technical Management Team
OFFICIAL MINUTES
Wednesday, February 11, 2026**

Today's TMT meeting was held via Microsoft Teams and conference call, chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting. Minutes were collected by Andrea Ausmus, BPA (contractor, CorSource Technology Group). A list of today's attendees is available at the end of these minutes.

1. Review Summary and Minutes – Emily Stranz, DS Consulting

a. January 28 Facilitator Summary and Minutes

- Approved

2. Official Water Supply Forecast – Chris Runyan, BOR; Doug Baus, Corps-NWD

Reclamation Update

- Hungry Horse – January Final Forecast
 - Basin Conditions:
 - February 1 snowpack ranged from average to slightly above average in the higher elevations, but significantly below average in the lower elevations.
 - Water YTD precipitation remains above average
 - 121% of median.
 - January was dry.
 - 50% of median precipitation.
 - Water YTD inflows to the reservoir are still above average.
 - 220% of average
 - December Inflows:
 - 500% of average
 - Since January there has been a 15% decrease in the forecast, due to that dry January.
 - February – July
 - 2060 kaf
 - 95% of average
 - April – August
 - 1861 kaf
 - 91% of average
 - May – July
 - 1450 kaf
 - 87% of average

- May – September
 - 1562 kaf
 - 88% of average
- Minimum Flows downstream of HGH (based on April – August average)
 - Columbia Falls
 - 3500 cfs
 - Below HGH (South Fork)
 - 900 cfs

Tom Lorz, Umatilla/CRITFC, said that these are kind of weird rain events plus snow. He asked if Runyan's models are able to discern or are able to deal with the precipitation that came down as rain, but we did not get a lot of snow. He said that it was a very unique situation. He said that he was wondering if Runyan's models could deal with this kind of uniqueness.

Runyan said that he would say that they are unique for sure. He pointed out that we do have years with similar conditions, but it is still unique and some of the things that BOR brings into the models is precipitation just as a component or stream flow. He said that he thought that would be what Lorz was going to see. The forecasts might be a little more elevated than if you just looked at pure snow. He said that part of that is because we still have a lot of water in the System, kind of running off. He said that it does take it into account, but he would agree and say that it is a unique year.

Lorz asked because of that if there were ways that we could tweak or be more conservative in our outlooks going forward instead of saying it is 95, but actually if we were to look at just pure snow, it is going to be 80-something. He said that he was wondering how we would factor that into our decision making going forward, or if that were even a possibility.

Runyan said that he thought that was possible. He said what was nice about these forecasts, if we want to get at that, maybe we just look at the May through July or May through September. He said that was kind of what he was expecting more realistically for runoff, if conditions stay the same as they are right now. He said that we all know that they will change. He said that he would encourage Lorz to kind of look at those numbers too because it does show a little different picture.

Brian Marotz, Montana, shared some eyes on the ground from up in MT. He said that it was an understatement saying that MT has low snow in the lower elevations. He said that there was no snow in the lower elevations. He said that the snow up high, although it has been staying cold enough and they are not losing a lot of snow, there have been times, a few days, where it was well above freezing way up at the top of the mountain and so snow is compressing. He said that he was not sure about how much water loss they are seeing from that, but it is very unique there. They have not had any appreciable snow since he had talked to TMT last, a couple of weeks ago. He said at Blacktail Mountain, which is in the Flathead subbasin, they have not been able to ski the bottom of the runs all season and that is really unusual. He said that the top is just a few feet of coverage. He said that he thought that was definitely really good advice to look at the longer term, like

the May through September forecast moving forward because things have changed rapidly. He said that water supply forecasts can be fickle at this time of year because you only have a fraction of the annual snowfall on the ground by the time you get the forecasts, but when you are looking at no additional snow. We are definitely moving into a dry phase. He said that he hoped that we get some late season snowfall, fingers crossed.

Corps Update

- The Dalles
 - April to August
 - 83 maf
 - 93% of average
- Lower Granite
 - April to July
 - 15 maf
 - 75% of average
- Libby
 - February Runoff Forecast
 - 6831 kaf
 - 112% of average
- Dworshak (Clearwater Fork)
 - April to July
 - 1752 kaf
 - 71% of average

3. Chum Operations – *Doug Baus, Corps NWD; Tony Norris, BPA; Chris Runyan, BOR; Emi Milton, NOAA Fisheries; and Charles Morrill, WA*

a. Chum Incubation Phase Coordination

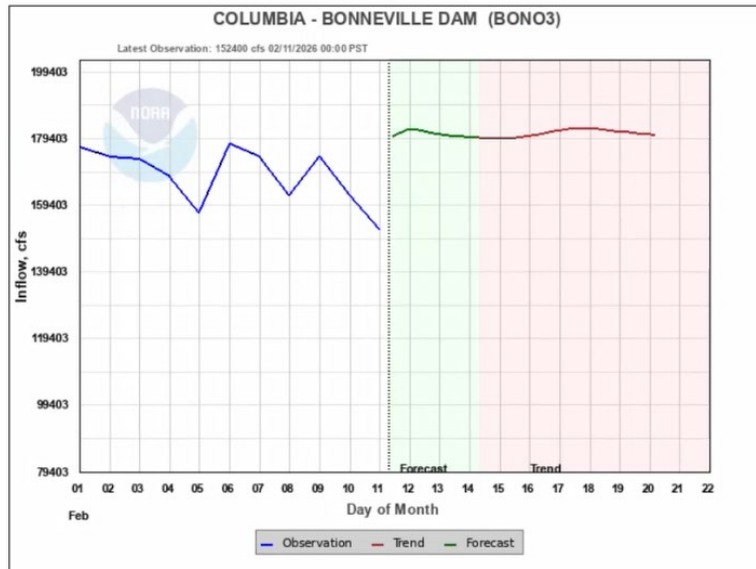
- Effective, Friday, December 26, 2025, at 1300 hours, until further notice, the Bonneville Dam minimum tailwater elevation is 11.4 feet during all hours through April 9, at 0000 hours.

b. NWRFC Monthly Precipitation Table (Water Year)

- Snake River Basin above Ice Harbor Dam
 - Observed inches: 9.9 inches
 - Percent of Normal: 92%
- Upper Columbia River Basin above Arrow Dam
 - Observed inches: 30.6 inches
 - Percent of Normal: 117%

- Columbia River Basin Mainstem above The Dalles
 - Observed inches: 13.6 inches
 - Percent of Normal: 100%
 - Willamette River Basin above Portland
 - Observed inches: 30.1 inches
 - Percent of Normal: 77%
 - There is a diversity of conditions depending on if you are in the Upper Columbia, the Mainstem, or the Snake basins.
- c. NWRFC Monthly Temperature Table – Deviation from Normal (*Seasonal Average*)
- Snake River Basin above Ice Harbor Dam
 - Monthly Deviation: +9.0°F above normal
 - *Seasonal Deviation*: +4.8°F above normal
 - Upper Columbia River Basin above Arrow Dam
 - Monthly Deviation: +9.2°F above normal
 - *Seasonal Deviation*: +3.5°F above normal
 - Columbia River Basin Mainstem above The Dalles
 - Monthly Deviation: +8.5°F above normal
 - *Seasonal Deviation*: +4.4°F above normal
 - Willamette River Basin above Portland
 - Monthly Deviation: +6.0°F above normal
 - *Seasonal Deviation*: +2.8°F above normal
- d. Bonneville Dam (BON) – Hourly Data – *Baus*
- Total Outflow (Hour 7): 176 kcfs
 - Tailwater Elevation: 15.7 feet

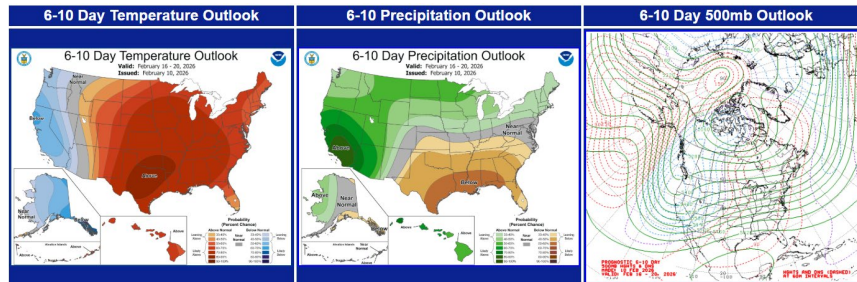
e. NWRFC – BON Inflow Forecast (10-day) - *Baus*



- Low: 179 kcfs (February 14)
- High: 182 kcfs (February 17)

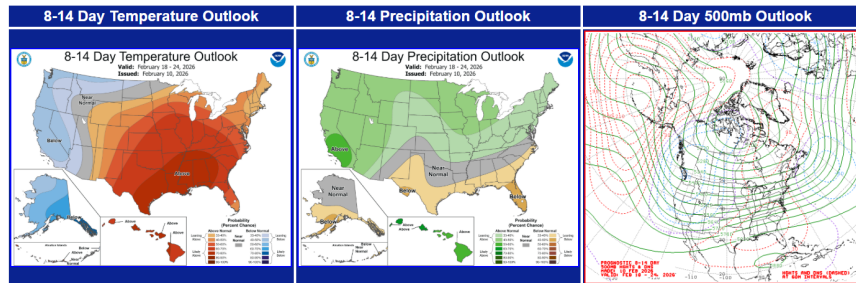
f. NWRFC Climate Forecast

6 – 10 Day



- Temperature
 - The forecast is showing a probability of below average temperatures in the western portion of the Columbia Basin, near normal in the Central, and a probability of above average temperatures in the Eastern portion of the Columbia Basin.
- Precipitation
 - Probability of above average precipitation through the Columbia Basin.

8 – 14 Day



- Temperature
 - Probability of below average temperatures.
- Precipitation
 - Probability of above average precipitation.

Marotz asked Baus for a reminder of when Baus talks about the seasonal average temperature, how it was calculated and what months are included.

Baus said in the upper-left portion of the website the season is indicative of the water year which started on October 1. He said that the website is helpful in that you can look down month by month. You can observe the current month, the seasonal, and also the month-by-month breakdown. He said that the water year started on October 1.

4. Operations Review

a. Reservoirs

Reclamation – Chris Runyan

- Hungry Horse Dam
 - Inflows (2/10): 1.3 kcfs
 - Outflows: 2.2 kcfs
 - Thursday Outflows (2/12): 1.2 kcfs
 - Thursday Columbia Falls: 4.0 kcfs
 - Next week Columbia Falls: 3.5 kcfs
 - Conditions
 - Inflows continue to recede.
 - Future Conditions:
 - Positive weather is forecasted, there is a potential of a week or two of snow, and cooler temperatures.
 - Operations:
 - Outflows are being decreased this week. This will level out the reservoir and have Columbia Falls stream flows nearer to minimums.

- Projections show that outflows will be following Columbia Falls minimums for the remainder of the month unless the water supply forecast increases.
- Grand Coulee Dam
 - Inflows (2/10): 104.6 kcfs
 - Outflows: 124.4 kcfs
 - Midnight elevation: 1274.4 feet
 - From Full: 15.6 feet
 - Drafted: 2.3 feet last week.
 - Storage: 105% of average
 - Conditions:
 - Last week inflows averaged 110% of average.
 - Operations:
 - GCL is being managed to meet Chum flows below Bonneville, this has not been needed but is being kept in mind.
 - GCL is also preparing for drumgate maintenance.
 - The reservoir will need to be down at 1255' by mid-march for the typical 8-week maintenance.

Corps – Kasi Underhill, Corps

- Libby Dam (Lake Koocanusa)
 - Midnight Elevation: 2388.15 feet
 - Average 1-Day Inflows: 4.5 kcfs
 - Average Outflows: 4 kcfs
 - April to August WSF: 6.8 maf
 - End of February FRM Target: 2083.89 feet
 - Operations:
 - LIB is currently holding the minimum flow of 4 kcfs
- Albeni Falls (Hope)
 - Midnight Elevation: 2053.5 feet
 - Average 1-Day Inflows: 16.1 kcfs
 - Average Outflows: 25.1 kcfs
 - Operations:
 - ALF is gradually releasing the flex winter power operation storage to reach the winter operating band, aiming for early March.
 - Targeting an average draft of 0.1 feet per day through the powerhouse.

- Dworshak Dam
 - Midnight Elevation: 1567.9 feet
 - Average 1-Day Inflows: 5.7 kcfs
 - Average Outflows: 1.6 kcfs
 - Operations:
 - Expected to stay on minimums this month.
 - DWR FRM
 - Included a shift in FRM space
 - March 31: 18 kaf
 - April 15: 68 kaf
 - Represents a 100% shift.
 - The Corps will continue to look at this in later months, but it is a reminder that DWR will need sufficient water to fully implement that proposed shift.
- Lower Granite Dam
 - Average 1-Day Outflows: 28.5 kcfs
- McNary Dam
 - Average 1-Day Outflows: 144.9 kcfs
- Bonneville Dam
 - Average 1-Day Outflows: 156.4 kcfs

Lorz said at yesterday's meeting they were not quite able to figure out, he thought that there were some documents missing that people did not have, they were not able to figure out what the highest we can keep DWR at under current flood control documentation and plans.

Underhill asked for clarification if he meant highest flow.

Lorz said forebay elevation. He said that we could not run all the way to 1600'. He said there was some maxim allowed for them to refill to and no one could figure it out from their side.

Underhill said that she could give him the FRM for DWR. She said that the end of February they are looking at is 1567.2'. Underhill said that she understood what Lorz was saying, if DWR just ran to 1.6 kcfs what would be the elevation that DWR would end up at. She said that she would see if she could figure that out quickly. She said that she wanted to say that it was a couple of feet below.

Jonathan Ebel, Idaho, said that he thought that the question was the FRM but if she was able to get between deviations, shifts and everything else, how much space does DWR need to keep there, where DWR would not go any higher then that after they had exhausted moving things around the System. He said that it was a hard thing to phrase.

Underhill restated what she thought Ebel and Lorz were asking. She said that she thought they were asking what the maximum elevation that DWR can shift up to. She said that was what the Corps has in the FRM right now, the maximum shift. She said that she thought looking at the ESP traces, DWR could get into that. She said that obviously we run into what date refill is going to hit, the Corps will be keeping a really close eye on that when we get into April. She said that would really determine when that maximum elevation is. She said that she thought that the FRM shift is on April 15, and that is that max elevation which is the 1591.8'. She asked if that answered the question.

Lorz said that it got them and thank you.

Underhill said that it had come up earlier, but the Corps is keeping an eye out for places where things like deviation would be appropriate. She said obviously most reservoirs are on minimum flows so deviation to FRM for this month is not really beneficial. She said that the Corps would continue to keep an eye out for inflows to see if any of that changes. She said that there would be more to come on that.

Norris shared a link in the chat. He said that he shared 2015's FRM computation. If TMT wanted to know how bad it could get. There were some issues reaching the linked PDF. Norris said that they would be able to find the information on TMT's website under the Flood Control Management ([Columbia River Flood Risk and Forecast Information](#)). He said that they have FRM computations as far back as we have them in this form.

b. Water Quality – *Dan Turner, Corps*

- TDG
 - All of the tailwater gauges are reporting data.
 - Everything is less than the 110% water quality standard.

c. Fish

Salmon – Kelsey Swieca, NOAA

- Adult Salmon Counts
 - Steelhead
 - There have been a handful of Steelhead at the Projects that are currently reporting (BON, TDA, and IHR)

Lamprey Update – Dave Swank, USFWS

- Typical for the time of year, there are no lamprey passing the dams.
- There could be a few adults holding in the river, but they have not seen any passage.

Washington Update – Charles Morrill, WA

- By the end of the next TMT meeting Morrill should have some reporting from Hamilton Springs on the emergence of Chum.
- Chum emergence is normally expected to start sometime around the middle of February.

- Washington does not begin regular sampling until the abundance numbers increase to a higher threshold than what we may be seeing right now.
 - Given warmer river temperatures we may see earlier emerging this year as time goes on.
- d. Power System – *Tony Norris, BPA*
- There is a significant amount of water in the river as we are drafting for drumgate maintenance.
 - No issues to report.
5. **Set agenda for next meeting – *Wednesday, February 25, 2026***
- Meeting Location: Microsoft Teams
- a. Chum Update
 - b. Hamilton Springs Chum Emergence

Today's Attendees:

Agency	TMT Representative(s)
NOAA Fisheries	Kelsey Swieca
Oregon	Erick Van Dyke
Washington	Charles Morrill
Kootenai Tribe	
Confederated Tribes of Colville Reservation	Dennis Moore
Umatilla Tribe (CRITFC)	Tom Lorz, Pete McHugh
Yakama Nation	
Bureau of Reclamation (BOR)	Chris Runyan, Eric Rothwell
Army Corps of Engineers (COE)	Doug Baus (Chair), Lisa Wright, Aaron Marshall
US Fish & Wildlife Service	Dave Swank
Idaho	Jonathan Ebel
Montana	Brian Marotz
Spokane Tribe	
Nez Perce Tribe	Jay Hesse
Warm Springs Tribe	
Confederated Salish and Kootenai Tribes	Tom McDonald
Bonneville Power Administration (BPA)	Tony Norris, Ben Hausmann

Other Attendees (non-TMT members):

COE – Kasi Underhill, Jessika Solleder, Michelle Yuen, Dan Turner, Tiffany Stoeckig-Dixon, Megan Biljan, Leah Hamilton, Chris Peery, Alexis Mills, Patricia Madson

Unaffiliated – Shea Frantz, Miguel Verduzco, Bill Williams

BPA – Tammy Mackey

BOR – Ryan Fosness

Oregon DEQ – David Gruen

DS Consulting – Emily Stranz (Facilitator), Colby Mills

CorSource – Andrea Ausmus (BPA note taker, Contractor)

EKI – Eve James, Travis Togo

AVA – Steve Lentini, Patrick Maher

DCPUD –Andrew Gingerich

PGE – Phil DeVol

FPC – Erin Cooper, Noah Campbell

Energy EPS – Joshua Rasmussen