

Basin Electric Power Cooperative

Expanded Summary of Board of Directors Meeting

Nov. 8-9, 2021

At Basin Electric Headquarters in Bismarck, North Dakota

1. Committees did not meet this month.

2. Dakota Gasification Company

- Dale Johnson, Synfuels Plant manager, said the ammonia plant turnaround began Oct. 7 and was mechanically complete Nov. 3. The duration was about a week longer than expected mostly due to weather. The urea and ammonia plants ran at nearly maximum rate the first week of the month before being taken offline for the turnaround.
- Tyler Schilke, supervisor of mechanical engineering, gave an update on the Dakota Carbon Pipeline project, which is being built to take advantage of 45Q tax credits. Contracts have been awarded for construction inspections of coatings, welds, and soil compaction. The construction contractor, Willow Creek, mobilized in early October. CarbonVault and the Energy & Environmental Research Center have completed developing the reservoir model and have begun simulations. Basin Electric is working with landowners to obtain permissions for the seismic survey. The pipeline is expected to be in service by fall 2022.
- Kimberly Miller, senior business analyst, presented the draft 2022 operating and capital budget. Ventura gas, high sulfur fuel oil, and Northern Plains fertilizer prices are all budgeted above forecast for 2022. The budget shows net income after tax to be \$31.8 million, which is \$84.5 million above the approved financial forecast.
- Daniel Schaaf Gallagher, manager of commodity sales and trading, said anhydrous ammonia is still a good deal compared to urea and supply will be short through next spring in North America. Urea pricing has increased about \$300/ton since August; plant turnarounds, Hurricane Ida, and limited imports due to high European gas have significantly impacted urea supply. Pricing continues to look bullish for DAK SUL 45. October sales of diesel exhaust fluid will be extremely limited due to the plant turnaround. The Bakken has very few drilled but uncompleted wells left and will require more drilling rigs to be brought online if it is going to continue to grow production next year.
- Production (see slides below)

3. Dakota Coal Company

- Joe Leingang, superintendent of fuel and transportation, said the coal pile at Leland Olds Station is at 276,861 tons or 30.1 days of burn at the end of October (target is 39.9 days of burn). At Laramie River Station, the coal pile is at 1,373,641 tons or 52.8 days of burn (target is 34.6 days).
- Melissa Hatzenbuhler, business analyst III, presented the draft 2022 operating and capital budget.

4. Basin Electric

- Joe Leingang, superintendent of fuel and transportation, gave a Western Fuels update. Controllable costs were reduced by 19% from 2021 to 2022.
- Mark Foss, senior vice president and general counsel
 - The nomination of Willie Phillips to the Federal Regulatory Energy Commission was approved by the Senate Energy and Natural Resources Committee.
 - On Oct. 29, the Supreme Court granted certiorari on 111(d), which applies to new power plants. The Court asked for briefing by Dec. 13, 2021, on whether EPA's authority in this case is limited to "inside the fence."
 - A meeting is planned for Nov. 18 in Pierre, South Dakota, in regards to transmission easements on the Crow Creek Reservation.
 - ACTION: Todd Telesz was appointed as a representative to the N-7, LLC, board of directors.
 - Dale Niezwaag, vice president of government relations
 - Pres. Joe Biden is expected to sign the Bipartisan Infrastructure Bill, which includes \$100 billion focused on grid reliability, clean energy, and energy efficiency; \$8 billion to establish four regional clean hydrogen hubs, \$2.5 billion in forgivable loans for transmission development to enable renewables, and \$12 billion for carbon capture development, including large scale demonstration and pilot projects, storage, and transportation infrastructure.
 - On reconciliation, the House vote is contingent on receiving official score from Congressional Budget Office, but no later than the week of Nov. 15. Senate consideration is expected to go into late November or early December. With the current text, Dakota Gas remains eligible for \$50/ton under current law, and would be eligible for direct pay if the project satisfies the 80/20 rule.
 - Basin Electric, Minnkota, Otter Tail, and Montana-Dakota Utilities sent a letter to congressional delegations seeking assistance with the executive order regarding the COVID-19 vaccination mandate.
- Troy Tweeten, senior vice president of Operations
 - Actual Generation (see slide below)
 - Some employees at Laramie River Station and Dry Fork Station have protested the potential COVID-19 vaccine mandate.
 - ACTION: Basin Electric directors authorized the Pioneer Generation Station Unit 3 Hot Section Replacement.
 - ACTION: Basin Electric directors authorized the Pioneer Generation Station Unit 3 combustor replacement.

- Becky Kern, director of long-term utility planning
 - A District Manager Meeting was held Oct. 27. Discussion points included the 2022 Load Forecast status, the Dakota Gas sale and Bakken Energy updates, resource planning update, load incentive rate usage, rate discussion for 2023, and an update on progress on the west regional transmission organization.
 - The District Manager Meeting to be held Dec. 9 will include discussion on the 2022 load incentive rate language and usage and the Federal Energy Regulatory Commission hearing process and update.
 - Val Weigel, director of asset management and commodity strategy
 - According to the Southwest Power Pool State of the Market report, coal generation was the primary fuel type with over 42% while wind was 24% and natural gas was 24%. Day ahead prices increased from \$20.32/MWh in 2020 to \$33.30/MWh in 2021, with Basin Electric's load serving area seeing slightly less than average market prices.
 - The Western Energy Imbalance Service (WEIS) Summer State of the Market report shows coal as the primary fuel type with over 60%; hydro is second largest with 27%; and wind is at 6%.
 - Annual U.S. coal-fired electricity generation will increase for the first time since 2014. 22% more coal-fired generation is expected in 2021 than 2020 but the increase is not likely to continue given no new coal-fired capacity has come online since 2013.
- Gavin McCollam, vice president of engineering and construction
 - Large Capital Projects (see slide below)
 - ACTION: Basin Electric directors approved the Neset-to-Northshore 230-kV construction contract.
- Chris Baumgartner, senior vice president of Member Services and Administration
 - There are 776 people registered for annual meeting, which includes 64 registered to watch the livestream (as of Nov. 8).
 - There are 409 people registered to attend the Members-Only Meeting on Nov. 11 (as of Nov. 8).
- Kelly Bergquist, senior financial analyst
 - The "Great Resignation" shows 4.3 million people quitting nonfarm jobs in August. 2021. Theories as to why this is happening include burnout brought on by the pandemic, people searching for more purpose and meaning in their jobs, a higher paycheck, and people continuing to work remotely at least part of the time.
 - The financing plan for 2021 and beyond continues to be executed.

- ACTION: Basin Electric directors authorized the retirement of patronage capital credits in the amount of \$34,504,693.62 associated with year 2004 business.
- Darla Jensen, manager of financial reporting and planning, presented the draft 2022 operating and capital budget.

Generation

Total energy available for sale in October was estimated to be 2.6 million megawatt hours (MWh). (Note: This line used to signify total generation from Basin Electric's resource portfolio. This number now includes purchases in the Southwest Power Pool.)

Electricity sold to member systems during October was estimated at 2.2 million megawatt-hours, compared to the forecast of 2.4 million. Surplus sales were estimated at 434,000 megawatt-hours, compared to the forecast of 326,000.

At the Great Plains Synfuels Plant, deliveries to the pipeline averaged 88.9 million standard cubic feet per day of natural gas produced from coal. The plant operated at 77.8 percent of capacity during the month.

Total tons of saleable fertilizer produced was 14,552 tons. That includes anhydrous ammonia, granular urea, urea content in diesel exhaust fluid, and ammonium sulfate.

Synfuels Plant production

Production data for October 2021 for selected products at the Great Plains Synfuels Plant were as follows:

Anhydrous ammonia – 5,062 tons produced

Urea – 7,315 tons produced

Dak Sul 45 (ammonium sulfate) – 6,285 tons produced

Carbon dioxide – About 3,096 million standard cubic feet were delivered during the month.

Financial data

Basin Electric Consolidated

NET INCOME AFTER TAX

UNAUDITED

October 2021

(in millions)

| | Monthly Actuals | Monthly Budget | Over/(Under) Budget | YTD Actuals | YTD Budget | Over/(Under) Budget |
|---|--------------------|-------------------|------------------------|-----------------|-----------------|------------------------|
| Basin Electric | \$ 8.2 | \$ 0.1 | \$ 8.1 | \$ 177.0 | \$ 102.3 | \$ 74.7 |
| Dakota Gasification Company | (3.3) | (5.8) | 2.5 | (19.4) | (63.7) | 44.3 |
| Dakota Coal Company | 1.0 | (3.4) | 4.4 | 17.5 | 0.3 | 17.2 |
| Nemadji River Generation | - | - | - | - | - | - |
| Interco. Eliminations & Other* | 3.4 | 5.9 | (2.5) | 19.6 | 64.0 | (44.4)* |
| Consolidated Net Income/(Loss) After Tax | \$ 9.3 | \$ (3.2) | \$ 12.5 | \$ 194.7 | \$ 102.9 | \$ 91.8 |

* Includes elimination of income/loss on investment in DGC.

Basin Electric

For the month of October, Basin Electric reported an after-tax margin of \$8.2 million compared to a budgeted after-tax margin of \$0.1 million.

- Member sales were under budget; an unfavorable variance of \$16.5 million mainly due to lower demand and energy volumes.
- Surplus sales were over budget; a favorable variance of \$9.1 million mainly due to higher volumes and prices.
- Operating expenses were lower than budget; a favorable variance of \$3.1 million.
 - Lower transmission wheeling, transmission operations and production expense partially offset by higher purchased power.
- Maintenance expenses were lower than budget \$8.4 million related primarily to LOS.
- DGC's results were better than expected; a favorable variance of \$2.5 million.

Dakota Gas

For the month of October, Dakota Gasification reported an after-tax net loss of \$3.3 million compared to a budgeted net loss of \$5.8 million.

- Synthetic natural gas revenue was higher than budget due to pricing (+\$1.78/dt) as lower volumes (-387k dt) were sold; a favorable variance of \$5.3 million.
- By-product and co-product sales were higher than budget; a favorable variance of \$6.4 million.
 - Ammonia revenue was \$4.1 million higher, Sulfate revenue was \$1.1 million higher both related to higher pricing offset by lower volumes, Tar Oil revenue was \$3.2 million higher as a result of higher prices and higher volumes, and Urea revenue was (-\$1.8 million) lower as a result of lower volumes sold, pricing was higher than budget.
- Operating expenses were higher than budget; an unfavorable variance of \$8.8 million.
 - Inventory (-\$5.7 million), contracted services (-\$2.9 million), natural gas purchases (-\$1.5 million), coal \$1.6 million.

Dakota Coal

For the month of October, Dakota Coal Company reported after-tax net income of \$1.0 million compared to a budgeted net loss of \$3.4 million.

- Lignite coal purchases were \$1.6 million lower than budget.
- An unrealized gain of \$3.7 million was recorded on mine closing fund investments.

Slides of interest:

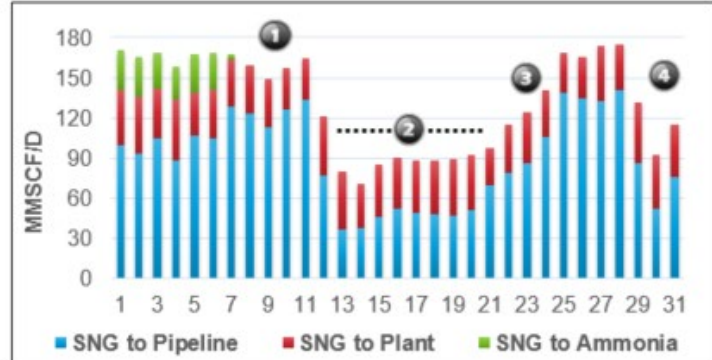
Synthetic Natural Gas (SNG)

| | |
|----------------------------|-------|
| Actual Capacity Factor | 77.8% |
| Budgeted Capacity Factor | 92.0% |
| YTD Actual Capacity Factor | 81.4% |
| YTD Budget Capacity Factor | 87.3% |

| | |
|--------------|-------|
| Availability | 89.2% |
| Utilization | 87.2% |

| | |
|-----------------------------|------------|
| Actual Production (dts) | 2,701,651 |
| Budget (dts) | 3,122,506 |
| YTD Actual Production (dts) | 21,401,395 |
| YTD Budget (dts) | 28,181,865 |

| | |
|----------------------------|------|
| Delivery Average (MMSCF/D) | 88.9 |
|----------------------------|------|

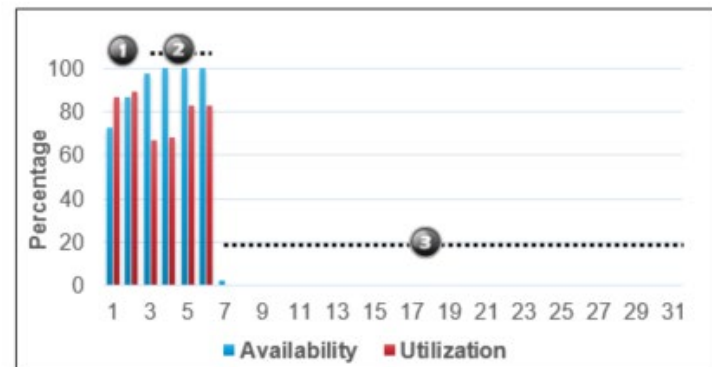


| Production Impacts (MMSCF) | |
|--|-----|
| ① S-Riley boiler outage | 8 |
| ② Oxygen plant B-train main air compressor motor rotor failure | 663 |
| ③ Phenol purification trip | 90 |
| ④ Oxygen plant B-train main air compressor trip | 132 |

Ammonia

| | |
|------------------------|-------|
| Actual Capacity Factor | 14.8% |
| YTD Capacity Factor | 74.8% |

| | |
|------------------------------|---------|
| Ammonia Production (tons) | 5,062 |
| Ammonia Budget (tons) | 30,349 |
| YTD Actual Production (tons) | 250,252 |
| YTD Budget (tons) | 282,922 |



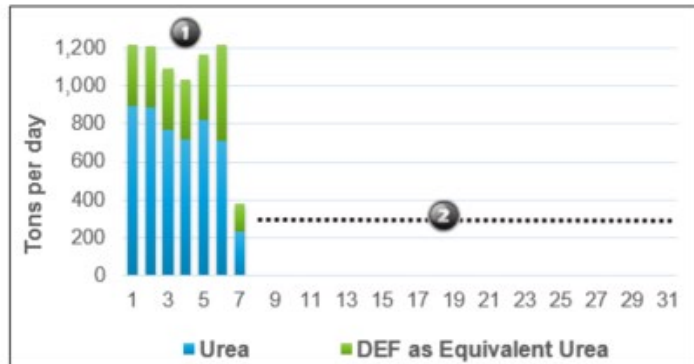
| Production Impacts (tons) | |
|--|--------|
| ① Ammonia refrigeration compressor trip due to deluge system | 343 |
| ② Hot water circulation pump seal failure | 429 |
| ③ Scheduled fertilizer turnaround | 24,515 |

| | |
|----------------------------------|-------|
| Actual Capacity Factor | 21.5% |
| YTD Capacity Factor | 83.3% |
| Urea Independent Capacity Factor | 21.5% |

| | |
|---|---------|
| Actual Equivalent Production (tons) | 7,315 |
| DEF as Equivalent Urea (tons) | 2,285 |
| Budget (tons) | 32,581 |
| YTD Actual Equivalent Production (tons) | 278,641 |
| YTD Budget (tons) | 298,070 |

| | |
|-----------------------------|---------|
| Ammonia Consumed (tons) | 4,110 |
| YTD Ammonia Consumed (tons) | 157,901 |

Urea



Production Impacts (tons)

| | |
|--|--------|
| ① Reduced rate - hot water circulation pump seal failure | 19 |
| ② Scheduled fertilizer turnaround | 25,894 |

Diesel Exhaust Fluid (DEF)

| | |
|-------------------------------|------------|
| Total Actual Production (gal) | 961,186 |
| Budget (gal) | 1,482,854 |
| YTD Actual Production (gal) | 26,226,697 |
| YTD Budget (gal) | 13,824,010 |

Production Impacts (gal)

| | |
|---|-----------|
| Metal found inside blow off valve - could not close off | 85,668 |
| Scheduled fertilizer turnaround | 1,148,018 |



Ammonium Sulfate (Dak Sul 45®)

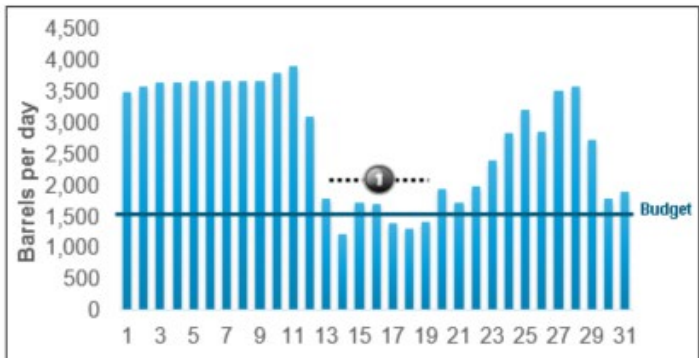
| | |
|------------------------------|--------|
| Actual Production (tons) | 6,285 |
| Budget (tons) | 10,509 |
| YTD Actual Production (tons) | 84,423 |
| YTD Budget (tons) | 98,667 |

| Production Impacts (tons) | |
|---|--|
| Low gas path rate | |
| High CO ₂ flow to Canadian customers | |



Fuel Grade Tar Oil

| | |
|-----------------------------|---------|
| Actual Production (bbl) | 84,517 |
| Budget (bbl) | 45,000 |
| YTD Actual Production (bbl) | 706,712 |
| YTD Budget (bbl) | 450,001 |



| Production Impacts (bbl) | |
|---|-----|
| 1 Low crude tar oil production due to low gas path rate | 472 |

Co-Products

| | CO ₂ | Naphtha | Phenol | Cresylic Acid | Krypton Xenon | Liquid CO ₂ | Nitrogen |
|------------------------------|-----------------|-----------|-----------|---------------|---------------|------------------------|----------|
| | MMSCF | gallons | gallons | gallons | liters | tons | gallons |
| Actual Production | 3,096 | 597,130 | 219,460 | 228,598 | 26,519 | 809 | 19,886 |
| Budget | 2,790 | 717,464 | 307,369 | 281,770 | 282,627 | 1,054 | 78,988 |
| YTD Actual Production | 25,784 | 5,957,476 | 2,021,866 | 1,961,251 | 2,065,444 | 5,933 | 568,304 |
| YTD Budget | 27,060 | 6,677,585 | 2,775,138 | 2,544,010 | 2,630,470 | 9,840 | 461,188 |

Production Impacts

- Co-products were primarily impacted by reduced gas path rate
- Krypton/xenon was primarily impacted due to failure of elimination heater and subsequent delays for the replacement

Actual Generation

Actual Generation

| Facilities | 2021 October | | % | 2021 Year-to-Date | | % |
|------------------|-------------------|-----------------|--------------|-------------------|-------------------|--------------|
| Coal Plants | Budgeted MWh | 1,517,373 | -13.1 | Budgeted MWh | 17,834,570 | -8.8 |
| | Actual MWh | 1,318,999 | | Actual MWh | 16,263,806 | |
| | Difference | -198,374 | | Difference | -1,570,764 | |
| Oil / Gas Plants | Budgeted MWh | 130,610 | 13.1 | Budgeted MWh | 1,182,329 | 62.4 |
| | Actual MWh | 147,676 | | Actual MWh | 1,919,763 | |
| | Difference | 17,066 | | Difference | 737,434 | |
| Wind | Budgeted MWh | 85,373 | -17.0 | Budgeted MWh | 759,922 | -22.3 |
| | Actual MWh | 70,885 | | Actual MWh | 590,689 | |
| | Difference | -14,488 | | Difference | -169,233 | |
| Fleet | Budgeted MWh | 1,733,356 | -11.3 | Budgeted MWh | 19,776,820 | -5.1 |
| | Actual MWh | 1,537,560 | | Actual MWh | 18,774,258 | |
| | Difference | -195,796 | | Difference | -1,002,562 | |

*Coal Plants includes 100% of DFS and LRS / Wind, Oil and Gas include only Basin Electric Owned/Operated Facilities

Large Capital Projects

| Project Name | Approved Budget (M) | Total Committed (M) | Forecast at Completion (M) | Completion Date |
|--|---------------------|---------------------|----------------------------|-----------------|
| Lonesome Creek 6 | \$63.7 | \$42.0 | \$42.0 | December 2021 |
| DGC 45Q CO2 Pipeline and Injection Wells | \$31.1 | \$23.6 | \$29.5 | October 2022 |
| Neset to Northshore 230kV | \$57.4 | \$28.2 | \$53.5 | December 2022 |
| LRS U3 480V Switchgear Upgrade | \$13.5 | \$7.1 | \$12.0 | June 2023 |
| LOS 345kV Equipment Upgrades | \$21.8 | \$1.0 | \$21.8 | January 2024 |
| LRS CCR Holding Ponds Closure and Reconstruction | \$41.9 | \$20.5 | \$36.0 | October 2025 |