

## Basin Electric Power Cooperative

# Expanded Summary of Board of Directors Meeting

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Feb. 15-16, 2021

At Basin Electric Headquarters in Bismarck, North Dakota

1. There were no Basin Electric committees meeting this month.
2. Dakota Gasification Company
  - Dale Johnson, vice president and Synfuels Plant manager, said an outage in the ammonia plant was caused by a water line freezing and a heater trip. An outage in the urea plant was caused by a carbon dioxide compressor trip. Canadian carbon dioxide customers continue to have increased nominations.
  - Gavin McCollam, vice president of engineering and construction, said construction continues on Dakota Carbon Pipeline. The draft storage facility permit has been submitted, and a review by the North Dakota Industrial Commission is ongoing. Construction on the pipeline is expected to continue through August 2022.
  - ACTION: Dakota Gas directors authorized an amendment to the 45Q project budget.
  - ACTION: Dakota Gas directors authorized the 45Q pipeline construction contract to be awarded to Precision West.
  - Lucas Teigen, manager of field services, gave an update on the primary reformer FEED study. They received preliminary deliverables from KBR on the process design package in mid-January. The completion of the FEED study has been moved to mid-August, due to a delay in securing a technology licensor and to match the deliverables schedule from KBR.
  - Daniel Gallagher, director of commodity sales and trading, said supply chain issues are causing disruptions at historic highs. In late January, two labor unions representing BNSF Railway workers announced a plan to strike; the labor unions are in mediation with BNSF Railway management to come to an agreement over a new attendance policy. Ammonia sales have been light due to volatility in the urea market. Urea pricing has dropped drastically due to lower priced urea imports and interior production plants trying to keep imports out of their markets; Dakota Gas and N-7 are targeting sending out two unit trains per month in March and April to keep inventory at a comfortable level. Pricing for DAK SUL continues to look bullish based on competitor and market supply shortfalls.
  - Production (see slides below)
3. Dakota Coal Company
  - Colleen Peterson, superintendent of fuel and transportation, said the coal pile at Leland Olds Station has now fallen to 394,990 tons or 31.5 days of burn at the end of January (target is 39.9 days of burn). At Laramie River Station, the coal pile is at 65 days of burn (target is 34.6 days).

- ACTION: Dakota Gas directors approved the acquisition of two replacement dozers for the Freedom Mine.

#### 4. Basin Electric

- Board Audit Committee
  - ACTION: Basin Electric directors approved the 2022 Internal Audit Work Plan.
- Mark Foss, senior vice president and general counsel
  - The EPA filed a brief with the U.S. Supreme Court on Jan. 18 related to Section 111(d) litigation, arguing that there was never a regulation fully implemented under the Clean Power Plan or the Affordable Clean Energy rule, and therefore the petitioners never suffered harm and lack standing to petition the court.
  - On Feb. 7, a group of environmental organizations notified EPA Administrator Michael Regan of their intent to sue EPA concerning the failure of 39 states to submit their revised state regional haze implementation plans.
  - ACTION: Basin Electric directors authorized a right-of-way application to be signed and submitted to the Sisseton-Wahpeton Oyate of the Lake Traverse Realty Office for right-of-way for the Crocker-to-Watertown (South Dakota) 345-kilovolt transmission line.
- Tyler Hamman, vice president of government relations
  - Congressional outlook: Election year will reduce the amount of time in session, leaving government funding and confirming a Supreme Court justice as the majority of legislative action.
  - There is some momentum for preserving energy tax incentives from Build Back Better, potential action item during a lame duck session after the election.
  - Iowa: A digital sales parity bill would allow electric co-ops and municipalities to access the sales and use tax exemption for digital goods and services. A move over/slow down enforcement bill would allow a covered operator to report an incident to law enforcement within 72 hours of an event, and the peace officer would then be required to investigate the claim made.
  - North Dakota: An interim study is being conducted regarding coal conversion facility reclamation.
  - Minnesota: Key priorities of the session include frontline worker bonuses, public safety, and the \$8 billion surplus.
  - South Dakota: March 10 adjournment.
  - Wyoming: The carbon dioxide title bill has been filed. Legislation has been filed to require that investor-owned facilities include consideration of carbon capture and storage in their resource plans, and allows for cost recovery of such.

- The U.S. Dept. of Energy reinstated the National Coal Council.
- Troy Tweeten, senior vice president of Operations
  - Actual Generation (see slide below)
  - On Jan. 31, wind gusts up to 84 miles per hour were recorded at Laramie River Station, which broke two vehicle windows, damaged a rollup door on a truck bay, and seven rail cars were blown over.
  - ACTION: Basin Electric directors authorized the replacement of the Groton Generation Station Unit 2 generator rotor.
- Becky Kern, vice president of Resource Planning and Rates
  - A new all-time billing peak of 4,310 megawatts was likely reached in January.
  - ACTION: Basin Electric directors approved non-conforming service agreements with Members 1<sup>st</sup> Power Cooperative and Upper Missouri Power Cooperative, which were submitted under the 2022 Load Incentive Rate with modifications.
  - ACTION: Basin Electric directors terminated the Load Incentive Rate under the 2022 Rate Schedule A effective Mar. 1, 2022.
  - Ninety proposals were reached through the request for proposal that was published at the end of 2021. Staff is finalizing a short list for evaluation.
  - Additional negotiations are being conducted for the Wild Springs Solar Project. The project developers are facing delays with interconnecting with Southwest Power Pool, supply chain issues, and inflation.
- Val Weigel, vice president of asset management and commodity strategy
  - Purchased power was much higher in January than budgeted (\$35 instead of \$19) due to higher natural gas prices than budgeted and higher market load levels.
  - Effective Mar. 1, Southwest Power Pool will offer a ramp up/ramp down product which will provide more value to units able to ramp up and down more quickly, such as natural gas-based units.
  - The WBI North Bakken Expansion pipeline began deliveries Feb. 1, which will open up the possibilities for more gas gathering and gas processing.
- Tom Christensen, senior vice president of Transmission, Engineering, and Construction
  - Integrated Transmission Planning is ongoing with Southwest Power Pool.
- Pius Fischer, vice president of transmission
  - The Southwest Power Pool (SPP) 2021 Project Portfolio was approved by the SPP board. SPP has sent a Notice to Construct with Conditions to Basin Electric, with comments due back by Feb. 25. Then a final

Notice to Construct will be issued, and the board would consider action later this spring.

- Gavin McCollam, vice president of engineering and construction
  - Large Capital Projects (see slide below)
  - ACTION: Basin Electric directors authorized an amendment to the Neseet-to-Northshore conductor contract.
- Chris Baumgartner, senior vice president of Member Services and Administration
  - Seventy-five members are registered for the Member Managers Conference to be held Feb. 23-24 in Sioux Falls, South Dakota.
  - Jon Klein, vice president of procurement, gave an update on supply chain issues, exposure to freight increases and inflation, and mitigation measures.
- Shelly Wanek, interim director of Human Resources
  - Twenty-five employees have announced retirements in 2022.
  - A year-end report on the employee assistance program showed the following categories employees sought help for: 28.8% relationships, 25.89% emotional well-being, and 13.6% anxiety.
  - Basin Electric paid out 99.84% of its budget for medical claims in 2021.
  - ACTION: Basin Electric directors approved the Affirmative Action Plan for 2022.
- Steve Johnson, chief financial officer and senior vice president
  - Royal Bank of Canada presented as a guest on cryptocurrency and data mining.
  - Fundamental Advisors' ownership share of Antelope Valley Station Unit 2 is now 76%, after acquiring Citicorp's share. Basin Electric's ownership share remains at 24%.
  - ACTION: Basin Electric directors authorized a modification of the Investment Manual.
- ACTION: Basin Electric directors approved an amendment to the term sheet to conform the term sheet with the current negotiations with Bakken Energy.

## Generation

Total energy available for sale in January was estimated to be 3.2 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 January was estimated at 2.7 million MWh compared to the forecast of 2.8 million MWh. Surplus sales were estimated at 443,000 MWh, compared to the forecast of 394,000 MWh.

At the Great Plains Synfuels Plant, deliveries to the pipeline averaged 69.16 million standard cubic feet per day of natural gas produced from coal. The plant operated at 86.3 percent of capacity during the month.

Total tons of saleable fertilizer produced was 49,040 tons. That includes anhydrous ammonia, granular urea, urea content in diesel exhaust fluid, and ammonium sulfate.

## Synfuels Plant production

Production data for January 2022 for selected products at the Great Plains Synfuels Plant were as follows:

Anhydrous ammonia – 29,588 tons produced

Urea – 31,291 tons produced

Dak Sul 45 (ammonium sulfate) – 6,003 tons produced

Carbon dioxide – About 4,116 million standard cubic feet were delivered during the month.

## Financial data

Basin Electric Consolidated						
NET INCOME AFTER TAX						
UNAUDITED						
January 2022						
(in millions)	Monthly Actuals	Monthly Budget	Over/(Under) Budget	YTD Actuals	YTD Budget	Over/(Under) Budget
Basin Electric	\$ 26.8	\$ 11.5	\$ 15.3	\$ 26.8	\$ 11.5	\$ 15.3
Dakota Gasification Company	15.1	4.7	10.4	15.1	4.7	10.4
Dakota Coal Company	(0.1)	3.2	(3.3)	(0.1)	3.2	(3.3)
Interco. Eliminations & Other*	(15.1)	(4.7)	(10.4)	(15.1)	(4.7)	(10.4)*
<b>Consolidated Net Income/(Loss) After Tax</b>	<b>\$ 26.7</b>	<b>\$ 14.7</b>	<b>\$ 12.0</b>	<b>\$ 26.7</b>	<b>\$ 14.7</b>	<b>\$ 12.0</b>

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

### Basin Electric

For the month of January, Basin Electric reported an after-tax margin of \$26.8 million compared to a budgeted after-tax margin of \$11.5 million.

- Member sales were under budget; an unfavorable variance of \$3.3 million mainly due to lower demand and energy volumes.
- Surplus sales were over budget; a favorable variance of \$2.4 million mainly due to higher volumes.
- Operating expenses were higher than budget; an unfavorable variance of \$11.1 million related to higher purchased power.
- Maintenance expenses were \$2.0 million lower than budget related to timing of projects at Pioneer, Antelope Valley Station, and Dry Fork Station.
- Dakota Gas' results were better than expected; a favorable variance of \$10.4 million.
- The budget contemplated expense acceleration of \$14.5 million that was not utilized this month.

## Dakota Gas

For the month of January, Dakota Gasification Company reported an after-tax net income of \$15.1 million compared to a budgeted net income of \$4.7 million.

- Synthetic natural gas revenue was higher than budget due to pricing (+\$.39/dt) and higher volumes (+73k dt) sold; a favorable variance of \$0.4 million.
- By-product and co-product sales were higher than budget; a favorable variance of \$15.7 million.
  - Urea revenue was \$10.4 million higher and Tar Oil revenue was \$2.3 million higher as a result of higher prices and higher volumes; DEF revenue was \$1.3 million higher as a result of higher pricing offset by lower volumes sold; and CO<sub>2</sub> revenue was \$1.0 million higher as a result of higher volumes sold.
- Operating expenses were higher than budget; an unfavorable variance of \$2.3 million.
  - Natural gas purchase (-\$3.7 million), inventory (-\$1.9 million), labor +\$1.6 million, and contracted services +\$0.8 million.
- Income tax expense was \$3.4 million higher than budget due to higher income before taxes vs. budget.

## Dakota Coal

For the month of January, Dakota Coal Company reported after-tax net loss of \$0.1 million compared to a budgeted net income of \$3.2 million.

- An unrealized loss of \$5.5 million was recorded on mine closing fund investments.
- Lignite coal sales were \$1.6 million lower than budget as a result of fewer tons sold.
- Lignite coal purchases were lower; a favorable variance of \$1.6 million.

## Slides of interest:

### Dakota Gas Production

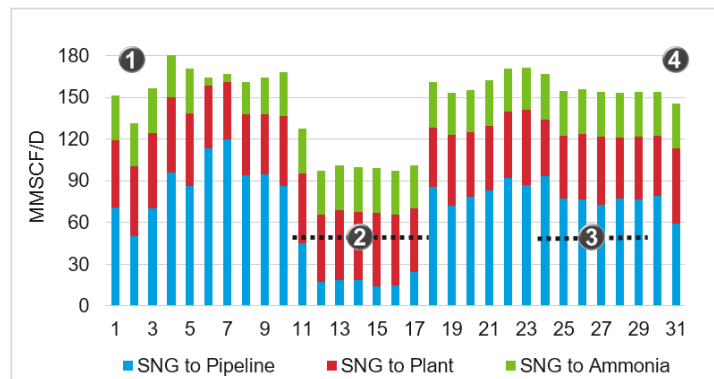
# Synthetic Natural Gas (SNG)

Actual Capacity Factor	86.3%
Budgeted Capacity Factor	89.0%
YTD Actual Capacity Factor	86.3%
YTD Budget Capacity Factor	89.0%

Availability	99.1%
Utilization	87.1%

Actual Production (dts)	2,102,857
Budget (dts)	2,918,309
YTD Actual Production (dts)	2,102,857
YTD Budget (dts)	2,918,309

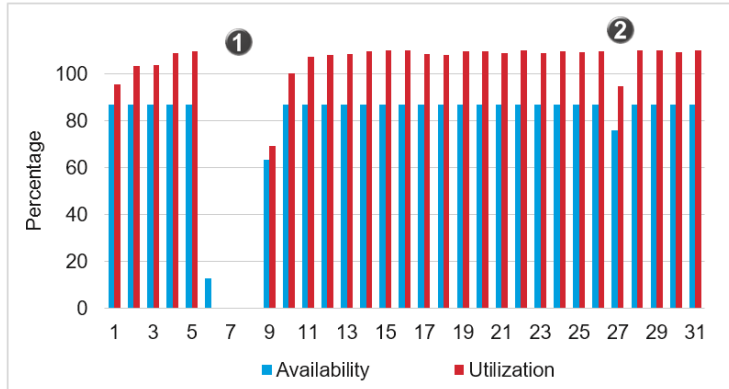
Delivery Average (MMSCF/D)	69.16
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Production Impacts (MMSCCF)	
1 Reduced rate for coal belt bearing repairs	20
2 Rectisol exchanger thaw and ammonia refrigeration motor repair	337
3 Phosam stripper column repair	--
4 CO <sub>2</sub> compressor trip	6

# Ammonia

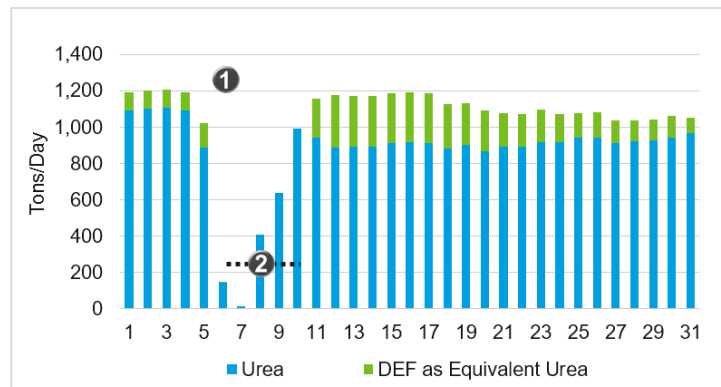
Actual Capacity Factor	86.8%
YTD Capacity Factor	86.8%
Ammonia Production (tons)	29,588
Ammonia Budget (tons)	27,962
YTD Actual Production (tons)	29,588
YTD Budget (tons)	27,962



Production Impacts (tons)		
1	Makeup water line froze and Born heater trips	2,937
2	Ammonia refrigeration compressor trip	78

# Urea

Actual Capacity Factor	91.8%
YTD Capacity Factor	91.8%
Urea Independent Capacity Factor	91.8%
Actual Equivalent Production (tons)	31,291
DEF as Equivalent Urea (tons)	4,671
Budget (tons)	30,442
YTD Actual Equivalent Production (tons)	31,291
YTD Budget (tons)	30,442
Ammonia Consumed (tons)	17,842
YTD Ammonia Consumed (tons)	17,842



Production Impacts (tons)		
1	CO <sub>2</sub> compressor trip due to high level in knockout	835
2	Plugged melt header and lumpy product	1,883

# Diesel Exhaust Fluid (DEF)

Total Actual Production (gal)	1,964,680
Budget (gal)	2,420,387
YTD Actual Production (gal)	1,964,680
YTD Budget (gal)	2,420,387



Production Impacts (gal)	
Declining market demand and limited railcar availability	378,090
CO <sub>2</sub> compressor trip, final product and melt header issues	389,344

## Ammonium Sulfate (Dak Sul 45<sup>®</sup>)

Actual Production (tons)	6,003
Budget (tons)	10,881
YTD Actual Production (tons)	6,003
YTD Budget (tons)	10,881

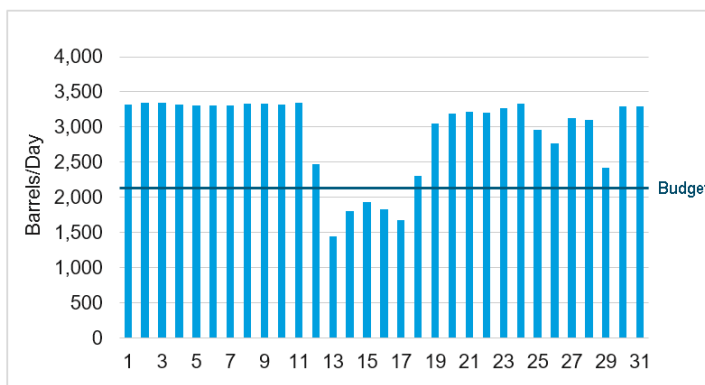


### Production Impacts (tons)

Outage to repair centrifuge feed valves and miscellaneous repairs	--
High CO <sub>2</sub> flow to Canadian customers	1,274

## Fuel Grade Tar Oil

Actual Production (bbl)	90,252
Budget (bbl)	67,038
YTD Actual Production (bbl)	90,252
YTD Budget (bbl)	67,038



### Production Impacts (bbl)

Low gas path rate and low crude tar oil production	--
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## Co-Products

	CO <sub>2</sub>	Naphtha	Phenol	Cresylic Acid	Krypton Xenon	Liquid CO <sub>2</sub>	Nitrogen
	MMSCF	gallons	gallons	gallons	liters	tons	gallons
<b>Actual Production</b>	4,116	622,168	284,896	270,080	236,429	863	28,221
<b>Budget</b>	2,790	675,397	219,358	212,256	255,750	434	62,000
<b>YTD Actual Production</b>	4,116	622,168	284,896	270,080	236,429	863	28,221
<b>YTD Budget</b>	2,790	675,397	219,358	212,256	255,750	434	62,000

### Production Impacts

Canadian CO<sub>2</sub> customers increased nominations




High yield of phenolic products

Naphtha is being sent to the boilers



Actual Generation

## GENERATION (Net MWh)

JANUARY (YTD)					
		<u>Budgeted</u>	<u>Actuals</u>	<u>Over / (Under)</u>	
 <b>COAL</b>	<b>AVS</b>	586,002	467,861	(118,141)	(20.16%)
	<b>DFS</b>	283,241	266,098	(17,143)	(6.05%)
	<b>LOS</b>	325,913	332,635	6,722	2.06%
	<b>LRS</b>	851,077	759,808	(93,970)	(10.72%)
		<b>2,046,233</b>	<b>1,826,402</b>	<b>(219,831)</b>	<b>(10.74%)</b>
<i>*Reported generation for coal is based on sales calculations.</i>					
	<b>WIND</b>	50,559	83,687	33,128	65.52%
	<i>* PWND, Minot Wind / PWSD, Chamberlain</i>				
	<b>GAS/OIL</b>	150,263	227,253	76,939	51.24%
	<i>* CGS, DCS, GGS, LCS, PGS, SMS, WDG</i>				
<b>FLEET TOTALS:</b>		<b>2,247,055</b>	<b>2,137,047</b>	<b>(114,709)</b>	<b>(5.10%)</b>

Large Capital Projects

## Large Capital Projects

Project Name	Approved Budget (M)	Total Committed (M)	Forecast at Completion (M)	Completion Date
Neset to Northshore 230kV	\$57.4	\$36.6	\$52.2	December 2022
LOS 345kV Equipment Upgrades	\$21.8	\$1.0	\$21.8	January 2024
LRS CCR Holding Ponds Closure and Reconstruction	\$41.9	\$19.9	\$35.5	October 2025
LRS U3 480V Switchgear Upgrade	\$13.5	\$7.3	\$12.0	December 2025