

Basin Electric Power Cooperative

Expanded Summary of Board of Directors Meeting

Feb. 9-10, 2021

At Basin Electric Headquarters in Bismarck, North Dakota, and via WebEx

1. There were no Basin Electric committees meeting this month.
2. Dakota Gasification Company
 - Dale Johnson, vice president and Synfuels Plant manager, said an audit was completed in January for a railcar maintenance certification. There was a power failure that affected urea and ammonia production. Pieces of the gauge PIG that was stuck in the carbon dioxide pipeline have been recovered, but there are more pieces left in the pipe that need to be recovered.
 - ACTION: Dakota Gas directors approved a resolution regarding trading authority.
 - Lucas Teigen, manager of field services, said the FEED prequalification survey responses for the primary reformer at the Great Plains Synfuels Plant were due Feb. 5, and Basin Electric received 16 responses; staff is now reviewing and following up with respondents to narrow the list. Bid documents will be issued by end of February. Partial project authorization will be brought to the board in May.
 - Tyler Schilke, supervisor of mechanical engineering, gave an update on the Dakota Carbon Pipeline. The engineering contract was awarded to Sargent & Lundy. Environmental services has mailed project scoping letters seeking input from public agencies for phase one of the project. Right-of-way has begun performing title searches along the planned route. Full project authorization will be brought to the board in May.
 - Daniel Gallagher, manager of commodity sales and trading, said the world market for ammonia is getting tight, and pricing is more favorable than predicted. Dakota Gas is in a good product position through spring. Urea demand continues to be strong. Urea strategy is to sell small blocks at a time so we can take advantage of marketing increases through spring. Also, prices for urea in the upper Midwest are going up. Dak Sul 45 pricing has increased, and the canola crop outlook is forecasted to be strong in 2021. Diesel exhaust fluid pricing is expected to go up in February, and Dakota Gas will have higher volumes in February-March and lower volumes in Apr-May to capitalize on the urea market.
 - Production (see slides below)
3. Dakota Coal Company
 - Joe Leingang, superintendent of fuel and transportation, said the coal pile at Leland Olds Station has now fallen to 276,297 tons or 22.1 days of burn at the end of January (target is 47.9 days of burn). At Laramie River Station, the coal pile is at 82.6 days of burn (target is 34.6 days), and this is trending in the right direction though at a slower pace than desired.

4. Basin Electric

- Daniel Graham, chief security and compliance officer
 - Over the past year, several actions have been taken to reduce the “surface area” that hackers could use to get into Basin Electric’s system, including forcing contractors to remotely enter via only designated computers and reducing software on some critical systems.
 - Basin Electric has experienced unemployment fraud, but not at higher levels than the rest of the state in which the fraud occurred.
 - Graham gave an update on actions taken to mitigate any SolarWinds malware impacts, and how the situation continues to be monitored.
 - Deer Creek Station is on the verge of increasing in compliance level. If it moved up a level, it would go from three regulations to 105 regulations.
- Mark Foss, senior vice president and general counsel
 - An initial settlement conference for Upper Missouri FERC filing is scheduled for Feb. 26.
 - In the McKenzie Electric vs. Basin Electric and Upper Missouri case, a tentative pre-trial schedule has been reached. Mountrail-Williams filed a Motion to Intervene on Feb. 8, and requested a hearing on their motion.
 - In the Dakota vs. East River case, the judge has ruled that discovery will not commence until he has ruled on Basin Electric’s Motion to Intervene, which was filed Jan. 8.
 - The DC Circuit Court has vacated the ACE Rule (EPA rule regarding carbon dioxide emissions during the Trump administration). The EPA will be developing a replacement.
 - Basin Electric has asked for a technical correction to Section 45Q, which was published in the Federal Register on Jan. 15.
 - ACTION: Basin Electric directors approved Class A membership for Wyoming Municipal Power Agency.
 - ACTION: Basin Electric directors authorized the purchase of a land parcel for the Neset-to-Northshore substation.
 - ACTION: Basin Electric directors selected Troy Presser and Steve Johnson as the delegate and alternate for the Minnkota 2021 Membership Meeting.
- Dale Niezwaag, vice president of government relations
 - Richard Glick named FERC Chairman.
 - Nominations hearings held for Jen Granholm (Energy), Michael Regan (EPA), and Tom Vilsack (Agriculture).
 - North Dakota: Bill introduced to require public meetings for power plant closures, and the Public Service Commission to develop rules for

bonding and reclamation. Basin Electric and other utilities were able to introduce an amendment to that bill to make it more palatable to the industry. Bill introduced to require dispatchable backup for non-dispatchable generation projects, and Basin Electric opposed the bill. As introduced, bills required state legislature approval on state implementation plans for federal greenhouse gas and Regional Haze regulations. Basin Electric opposed these bills. The bills were amended and Basin Electric changed its position from 'opposed' to 'neutral.'

- South Dakota: No legislation directly impacting electric cooperatives introduced.
- Montana: Bill introduced to raise tax on wind generation, eliminate 10-year tax abatement on new large-scale wind and solar projects; bill would not impact Basin Electric solar project in Montana.
- Minnesota: Bill introduced to allow co-ops more flexibility to meet energy savings goals. Clean Energy First bill introduced, similar to bill introduced last session. Clean Energy Standard bill introduced, would require 100% clean energy by 2040; not expected to pass.
- Iowa: Vegetation management bills introduced which would allow defined distances where an unrecorded easement exists.
- Troy Tweeten, senior vice president of Operations
 - Actual Generation (see slide below)
 - Joe Fiedler, Basin Electric manager of distributed generation, talked about maintenance work on the Lonesome Creek Station Unit 1 turbine, maintenance work on some of the Wartsila engines at Pioneer Generation Station, and a turbine replacement at Culbertson Generation Station.
- Dave Raatz, senior vice president of Asset Management, Resource Planning, and Rates
 - Work continues on the Williston Basin Energy Center (aka Bakken Midstream). The Phase 2 Early Development Engineering Report was received Jan. 5. A decision will potentially be brought to the March board meeting on moving forward with Phase 2, after which Basin Electric would take over management of future activities. The final project decision would be brought to the board before or at the December 2021 board meeting. Overall project economics are subject to delivered ethane supply cost and need for the facility.
 - The Jan. 21 Class A District Manager meeting will be held virtually Feb. 17-18.
 - Becky Kern, director of long-term utility planning
 - Kern gave an overview of Basin Electric's renewable energy credits (REC), or green tags. One REC is created for every megawatt-hour of electricity generated from a renewable energy source. At end-of-year 2020, Basin Electric has more than 1,800 megawatts of renewables. The Basin Electric

board policy on renewable resource obligations was presented, with more discussion to come.

- Val Weigel, director of asset management and commodity strategy
 - The Western Energy Imbalance Service went live Feb. 1.
 - Total WEIS generation: 7,529 MW
 - Laramie River Station Units 2 and 3, and Dry Fork Station, account for 50% of the total coal generation. Basin Electric's share is 35%.
 - Current registered renewables: less than 500 MW
 - Current load and obligation levels: about 3,500 MW
 - About 1/3 of the hydro in WEIS is currently operational
- 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
 - ACTION: Basin Electric directors authorized staff to formally accept the Southwest Power Pool Notice to Construct for a transformer replacement and a metering replacement at the Watford City substation.
- Derik Johnson, manager of transmission system maintenance
 - A high wind event in North Dakota caused a surge arrestor mount failure on the Leland Olds Station 230-kV substation and an east bus failure on the Antelope Valley Station 345-kV substation.
- Gavin McCollam, vice president of engineering and construction
 - Large Capital Projects (see slide below)
 - Work is completed in the 115-KV expansion area of the Dickinson 2nd transformer, and transmission system maintenance is commissioning equipment to energize the 230/115-kV transformer.
 - The turbine generator for Lonesome Creek Station Unit 6 is on its way, after being shipped from Hungary and off-loaded in Houston.
 - Easement acquisition continues on the Neset-to-Northshore 230-kV transmission line.
- Chris Baumgartner, senior vice president of Member Services and Administration
 - A strategic planning session is scheduled for March 8.

- Work has begun on the 2020 Annual Report.
- Work continues on the new Basin Electric website.
- The board reviewed a video that is planned to be part of a new series called Listen and Learn. The first video will address ratings agencies visits.
- Diane Paul, senior vice president of Human Resources
 - Twenty-four employees have announced retirements in 2021.
 - There have been 403 employees (including four contractors) who have tested positive for COVID-19.
 - A year-end report on the employee assistance program showed the following categories employees sought help for: 39.7% relationships, 20.6% emotional well-being, and 17.5% anxiety. North Dakota employees used the service more than any other location.
 - Basin Electric paid out 93.91% of its budget for medical claims in 2020.
 - Shelly Wanek gave an update on affirmative action goals in 2020 and upcoming goals for 2021.
 - ACTION: Basin Electric directors approved the Affirmative Action Plan for 2021.
- Steve Johnson, chief financial officer and senior vice president
 - ACTION: Basin Electric directors authorized a modification of the Investment Manual.

Generation

Total energy available for sale in January was estimated to be 2.8 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 2.4 million MWh compared to the forecast of 2.8 million MWh. Surplus sales were estimated at 429,400 MWh, compared to the forecast of 299,000 MWh.

At the Great Plains Synfuels Plant, deliveries to the pipeline averaged 77.9 million standard cubic feet per day of natural gas produced from coal. The plant operated at 88 percent of capacity during the month.

Total tons of saleable fertilizer produced was 47,969 tons. That includes anhydrous ammonia, granular urea, urea content in diesel exhaust fluid, and ammonium sulfate.

Synfuels Plant production

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

Anhydrous ammonia – 25,752 tons produced

Urea – 29,734 tons produced

Dak Sul 45 (ammonium sulfate) – 9,227 tons produced

Carbon dioxide – About 2,912 million standard cubic feet were delivered during the month.

Financial data

Basin Electric Consolidated						
NET INCOME AFTER TAX						
UNAUDITED						
January 2021						
(in millions)	Monthly Actuals	Monthly Budget	Over/(Under) Budget	YTD Actuals	YTD Budget	Over/(Under) Budget
Basin Electric	\$ 11.9	\$ 19.4	\$ (7.5)	\$ 11.9	\$ 19.5	\$ (7.6)
Dakota Gasification Company	(7.7)	(5.5)	(2.2)	(7.7)	(5.5)	(2.2)
Dakota Coal Company	1.9	3.5	(1.6)	1.9	3.5	(1.6)
Interco. Eliminations & Other*	7.8	5.6	2.2	7.8	5.5	2.3 *
Consolidated Net Income/(Loss) After Tax	\$ 13.9	\$ 23.0	\$ (9.1)	\$ 13.9	\$ 23.0	\$ (9.1)

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

Basin Electric

For the month of January, Basin Electric reported an after-tax margin of \$11.9 million compared to a budgeted after-tax margin of \$19.4 million.

- Member sales were under budget; an unfavorable variance of \$21.7 million mainly due to lower demand and energy volumes.
- Operating expenses were lower than budget; a favorable variance of \$12.6 million.
 - Mainly due to lower purchased power, production expenses, and administration.
- Maintenance expenses were lower than budget; a favorable variance of \$2.5 million.
- DGC's net loss was higher than expected; an unfavorable variance of \$2.2 million.

Dakota Gas

For the month of January, Dakota Gasification reported an after-tax net loss of \$7.7 million compared to a budgeted net loss of \$5.5 million.

- Synthetic natural gas revenue was lower than budget due to lower volumes (-339k dt) and lower prices (-\$1.43/dt); an unfavorable variance of \$6.5 million.
- By-product and co-product sales were lower than budget; an unfavorable variance of \$3.0 million.
 - Urea revenue was \$2.2 million lower and ammonia was \$0.5 million lower as a result of lower volumes as prices were slightly above budget.
 - Tar oil revenue was \$0.4 million higher due to higher prices and higher volumes.
- Operating expenses were less than budget; a favorable variance of \$7.1 million.
- The income tax benefit for the month was \$0.4 million more than budgeted due to a greater net loss than budgeted.

Dakota Coal

For the month of January, Dakota Coal Company reported after-tax net income of \$1.9 million compared to a budgeted net income of \$3.5 million.

- An unrealized loss of \$0.8 million was recorded on mine closing fund investments.
- Lignite coal sales were \$2.1 million lower than budget as a result of fewer tons sold.

Slides of interest:

Dakota Gas Production

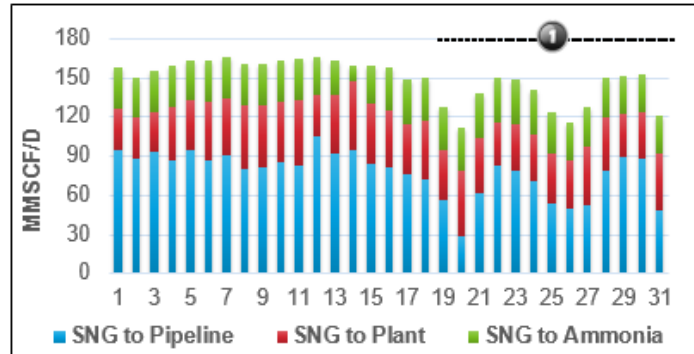
Synthetic Natural Gas (SNG)

Actual Capacity Factor	88.0%
Budgeted Capacity Factor	91.0%
YTD Actual Capacity Factor	88.0%
YTD Budget Capacity Factor	91.0%

Availability	95.8%
Utilization	91.9%

Actual Production (dts)	2,372,489
Budget (dts)	3,070,023
YTD Actual Production (dts)	2,372,489
YTD Budget (dts)	3,070,023

Delivery Average (MMSCF/D)	77.884
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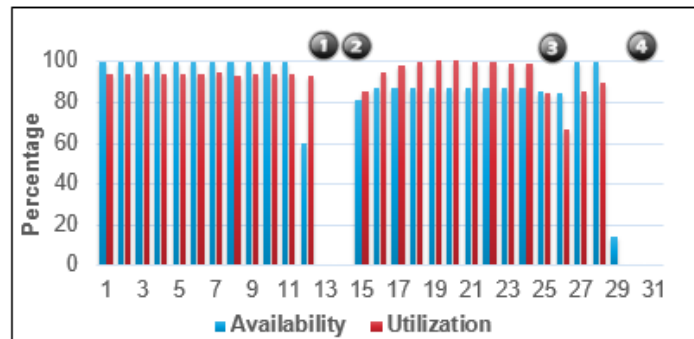


Production Impacts (MMSCF)	
1 Gas liquor quality	257.13

Ammonia

Average Capacity Factor	75.5%
YTD Capacity Factor	75.5%

Ammonia Production (tons)	25,752
Ammonia Budget (tons)	30,350
YTD Actual Production (tons)	25,752
YTD Budget (tons)	30,350



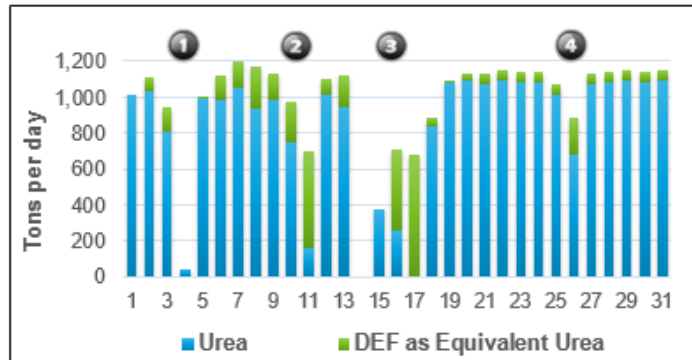
Production Impacts (tons)	
1 Heat exchanger repairs	347
2 Power failure	2,144
3 Flow controller failure (frozen transmitter)	607
4 Drier valve repair	2,805

Average Capacity Factor	87.2%
YTD Capacity Factor	87.2%
Urea Independent Capacity Factor	95.3%

Actual Equivalent Production (tons)	29,734
DEF as Equivalent Urea (tons)	3,927
Budget (tons)	32,572
YTD Actual Equivalent Production (tons)	29,734
YTD Budget (tons)	32,572

Ammonia Consumed (tons)	16,744
YTD Ammonia Consumed (tons)	16,744

Urea



Production Impacts (tons)	
1 Ammonia feed pump trip	1,164
2 Granulation screen repairs	425
3 Roughrider Electric power failure	2,606
4 Ammonia plant flow controller failure/urea crusher repair	165

Diesel Exhaust Fluid (DEF)

Total Actual Production (gal)	1,651,090
Budget (gal)	1,482,854
YTD Actual Production (gal)	1,651,090
YTD Budget (gal)	1,482,854

Production Impacts (gal)	
Revenue optimization	N/A



Ammonium Sulfate (Dak Sul 45®)

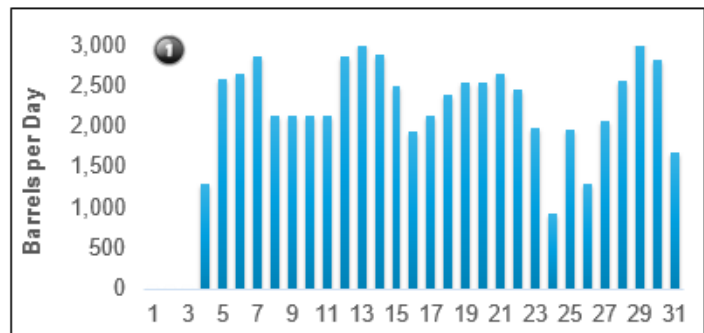
Actual Production (tons)	9,227
Budget (tons)	10,373
YTD Actual Production (tons)	9,227
YTD Budget (tons)	10,373

Production Impacts (tons)	
Gas path rate impacts	1,145



Fuel Grade Tar Oil

Actual Production (bbl)	64,578
Budget (bbl)	45,000
YTD Actual Production (bbl)	64,578
YTD Budget (bbl)	45,000



Production Impacts (bbl)	
High sediment resulting in off-spec product	4,509

Co-Products

	CO ₂	Naphtha	Phenol	Cresylic Acid	Krypton Xenon	Liquid CO ₂	Nitrogen
	MMSCF	gallons	gallons	gallons	liters	tons	gallons
Actual Production	2,912	658,863	203,105	242,046	305,101	360	85,026
Budget	2,790	709,683	304,029	278,707	279,558	1054	78,988
YTD Actual Production	2,912	658,863	203,105	242,046	305,101	360	85,026
YTD Budget	2,790	709,683	304,029	278,707	279,558	1054	78,988

Production Impacts

- Co-products were primarily impacted by reduced gas path rate throughout the majority of the month

Actual Generation

Actual vs Budget

Facilities	2020 End-of-Year		%	2021 January & YTD		%
Coal Plants	Budget	\$ 717,667,078	-25.83	Budget	\$ 56,222,079	-15.04
	Actual	\$ 532,265,482		Actual	\$ 47,763,876	
	Difference	\$ -185,401,596		Difference	\$ -8,458,203	
Oil / Gas Plants	Budget	\$ 98,792,186	-17.22	Budget	\$ 6,142,290	32.19
	Actual	\$ 81,780,089		Actual	\$ 8,119,227	
	Difference	\$ -17,012,097		Difference	\$ 1,976,937	
Wind	Budget	\$ 11,389,353	-9.48	Budget	\$ 870,483	-30.31
	Actual	\$ 10,309,676		Actual	\$ 606,640	
	Difference	\$ -1,079,677		Difference	\$ -263,843	
Fleet	Budget	\$ 827,848,617	-24.58	Budget	\$ 63,234,852	-10.67
	Actual	\$ 624,355,247		Actual	\$ 56,489,743	
	Difference	\$ -203,493,370		Difference	\$ -6,745,109	

Large Capital Projects

Project Name	Approved Budget (M)	Total Committed (M)	Forecast at Completion (M)	Completion Date
LOS Bottom Ash Dewatering/Pond Closure/Coal Pond Expansion	\$81.6	\$73.3	\$73.3	February 2021
Dickinson Second Transformer	\$12.6	\$7.9	\$9.6	August 2021
Lonesome Creek 6	\$63.7	\$36.1	\$43.7	December 2021
Neset to Northshore 230kV	\$57.4	\$2.2	\$50.8	December 2022
LRS U3 480V Switchgear Upgrade	\$13.5	\$7.0	\$12.0	June 2023
LOS 345kV Equipment Upgrades	\$21.8	\$0.4	\$21.8	January 2024
LRS CCR Holding Ponds Closure and Reconstruction	\$41.9	\$19.4	\$36.5	October 2025