

Expanded Summary of Board of Directors Meeting

Mar. 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 cold weather in February was hard on the plant. Through the energy emergency, the plant was able to keep natural gas production rates up, and the plant burned naphtha, tar oil, cresylic, to supplement the natural gas. The steam system on the ammonia plant came down, which caused ammonia and urea production to come offline for a time. During the need for energy conservation, the urea plant was brought down which impacted production a bit.
 - Lucas Teigen, manager of field services, said a prebid meeting for the primary reformer FEED study is set for Mar. 11, with bids due Mar. 26 and interviews the week of Apr. 5. The field has been narrowed to three bidders. 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 team has completed a Class 4 cost estimate, and issued a request for proposal for long lead time valves. Environmental services received comments on the project scoping letters on Mar. 3. The detailed pipeline route will be completed in March, and the Public Service Commission permit application will be submitted in March. A Class 3 estimate will be completed in April. Full authorization will be requested pending a decision on the project's economics, tentatively in May.
 - Daniel Gallagher, manager of commodity sales and trading, gave an overview of the impacts of the February energy emergency weather event. Natural gas stocks are below the five-year average for the first time since 2019. The physical gas market has a new degree of risk in that gas production growth over the last several years has been matched with increased demand, but storage capacity has not grown, which increases the risk of winter freeze-off impacts. Appears that oil prices will continue to rise over the summer. Nitrogen supplies were tight before February, and then the energy emergency event brought down production in many facilities. That coupled with the early spring planting season will increase demand. N-7 has been selling small blocks of urea, which has taken advantage of higher prices through spring. Petrochemical production and terminals were offline, and Dakota Gas deliveries of tar oil, naphtha, cresylic acid, and tar acids have been impacted by terminal impacts.
 - ACTION: Dakota Gas directors accepted the 2019 Dakota Gas and Souris Valley Pipeline audits.
 - 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 214,287 tons or 17.1 days of burn at the end of February (target is 47.9 days of burn). At Laramie River Station, the coal pile is at 76.8 days of burn (target is 34.6 days), and this is trending in the right direction though at a slower pace than desired.
- Dean Bray, manager of Dakota Coal, said the #902 dragline tub deliveries are ahead of schedule due to good weather. Assembly is set to begin the week of Mar. 15.
- ACTION: Dakota Coal directors accepted the 2019 Dakota Coal audit.

4. Basin Electric

- Board audit committee
 - Deloitte and Touche auditors Judith Dockendorf and Adam Krasnoff presented the 2020 Basin Electric and Dakota Gas audits to directors and answered questions.
 - ACTION: Basin Electric directors accepted the 2020 Basin Electric audit.
 - ACTION: Basin Electric directors ratified 2020 tax consulting services with Deloitte and Touche.
 - ACTION: Basin Electric directors approved the Internal Auditing 2021 work plan.
- Mark Foss, senior vice president and general counsel
 - Staff attended the initial settlement conference for Upper Missouri FERC filing on Feb. 26.
 - In the McKenzie Electric vs. Basin Electric and Upper Missouri case, McKenzie Electric is opposing Mountrail-Williams Electric's motion to intervene in the case.
 - On Feb. 18, FERC issued an order granting clarification and addressing arguments raised on rehearing. Issues under review include the 2075 term of the wholesale power contract and the five-year notice requirement.
 - Dakota Energy and Meeker Electric had appealed FERC's initial Basin Electric order to the D.C. Circuit Court of Appeals, and both cooperatives have now withdrawn their appeals.
- Dale Niezwaag, vice president of government relations
 - More than a dozen electric cooperatives, including Basin Electric, signed on to a letter sent to Pres. Joe Biden on Feb. 16 in support of the Keystone XL pipeline.
 - NRECA organized a call with the Wyoming Integrated Test Center partners to discuss government relations needs, the potential for Department of Energy funding, getting more technology companies to

use the test site, and ways to leverage the USE IT Act provisions for permitting and funding.

- A write-up summarizing bills staff is tracking in all states can be found at: [Government relations team tracking 2021 legislative bills impacting Basin Electric](#)
- Troy Tweeten, senior vice president of Operations
 - Actual Generation (see slide below)
 - Leland Olds Station Unit 2 tripped on Feb. 14 due to a switchyard breaker failing to open. The unit lost service power, and Leland Olds Station electricians and transmission system maintenance lineworkers were dispatched. The unit was tied back online Feb. 15.
 - Laramie River Station remained online throughout the energy emergency despite several tube leaks and Unit 3 becoming severely plugged with slag.
 - Dry Fork Station remained online through the energy emergency despite bottom ash pluggage causing the bottom ash conveyor to trip.
- Dave Raatz, senior vice president of Asset Management, Resource Planning, and Rates
 - Basin Electric reached a new all-time high peak of 4,223 megawatts (estimated), which is about 163 megawatts higher than the previous peak, during February.
 - The Basin Electric board decided to not move further with investigating participation in Bakken Midstream.
 - Val Weigel, director of asset management and commodity strategy
 - Southwest Power Pool reached a new wind peak on Feb. 2, and a new renewable peak on Feb. 4.
 - Southwest Power Pool is working to define the products the market needs, and determining how they should be compensated appropriately; this considers not necessarily fuel type but resources that can support the market. A reliability study will look into voltage support, frequency response, and inertia.
- Tom Christensen, senior vice president of Transmission, Engineering, and Construction
 - Drivers of the temporary service interruptions during the SPP energy emergency were generation availability due to lack of fuel supply and icing and cold weather-related outages, rapid reduction of energy imports due to transmission congestion and tightening supply in neighboring areas, and record wintertime energy consumption.

- During peak conditions, gas generation contributed to about 60% of total unavailability, and there were wind generation outages about five times more than during the first week of February. In total, about 35,000 megawatts were unavailable over six days to meet demand, with about 2.5 times more outages than the first week of February.
- Of the total megawatts that were interrupted, by transmission operators, Western Area Power Administration was 13.5% of the total, Corn Belt Power Cooperative was .83% of the total, and Tri-State G&T was .13% of the total.
- During the weather event in Texas, ERCOT saw about 48.6% of generation was forced offline. Controlled outages were implemented, but local utilities were limited in their ability to rotate outages due to the magnitude of generation unavailability and the number of circuits with critical load.
- Gavin McCollam, vice president of engineering and construction
 - Large Capital Projects (see slide below)
 - On the Dickinson 2nd transformer, transmission system maintenance energized the 230/115-kV transformer, and cutover to 115-kV Green River line by Mar. 12.
 - The turbine and generator enclosures for Lonesome Creek Station Unit 6 are set. The turbine/generator package arrived. The generator step-up transformer and power control module both arrived and have been set as well.
 - Easement acquisition continues on the Neset-to-Northshore 230-kV transmission line. There is a tentative date set (May 6) for the North Dakota Public Service Commission hearing on the application.
- Chris Baumgartner, senior vice president of Member Services and Administration
 - 95 members attended the virtual member managers conference in February.
 - Staff assisted members with communications materials related to the SPP energy emergency.
- Steve Johnson, chief financial officer and senior vice president
 - ACTION: Basin Electric directors authorized the deferral of an additional \$33.7 million of surplus sales revenue earned in 2020 to be recognized in 2021.
 - ACTION: Basin Electric directors allocated 2020 combined Basin Electric/Basin Cooperative Services margin to patrons of Basin Electric in accordance with Basin Electric's bylaws.

Generation

Final generation totals are not yet available for February. They will be sent separately.

At the Great Plains Synfuels Plant, deliveries to the pipeline averaged 69 million standard cubic feet per day of natural gas produced from coal. The plant operated at 82.9 percent of capacity during the month.

Total tons of saleable fertilizer produced was 45,435 tons. That includes anhydrous ammonia, granular urea, urea content in diesel exhaust fluid, and ammonium sulfate.

Synfuels Plant production

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

Anhydrous ammonia – 21,962 tons produced

Urea – 27,275 tons produced

Dak Sul 45 (ammonium sulfate) – 10,995 tons produced

Carbon dioxide – About 2,377 million standard cubic feet were delivered during the month.

Financial data

With the uncertainty with the cold weather event and market prices, the February books are being held open until better information is available. As such, the February financial results were not presented to the Board.

Slides of interest:

Dakota Gas Production

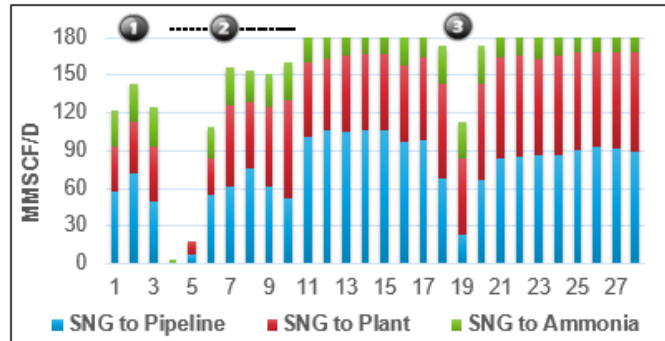
Synthetic Natural Gas (SNG)

Actual Capacity Factor	82.9%
Budgeted Capacity Factor	91.0%
YTD Actual Capacity Factor	85.5%
YTD Budget Capacity Factor	91.0%

Availability	92.0%
Utilization	90.1%

Actual Production (dts)	1,930,968
Budget (dts)	2,752,064
YTD Actual Production (dts)	4,303,457
YTD Budget (dts)	5,822,087

Delivery Average (MMSCF/D)	68,963
----------------------------	--------



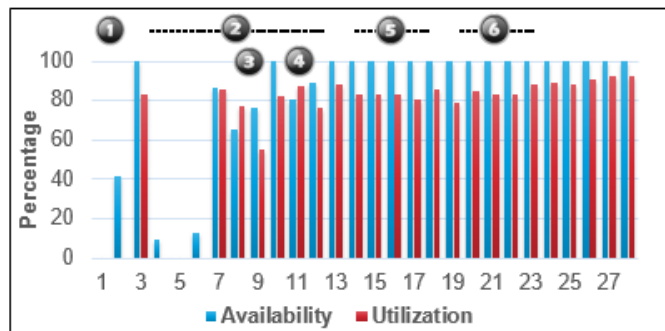
Production Impacts (MMSCF)

1 Gas liquor quality	70
2 Plant trip - cold weather, <u>superheater</u> tube failure, coal belt failure	379
3 A-Riley boiler tube repair	94

Ammonia

Average Capacity Factor	71.3%
YTD Capacity Factor	73.5%

Ammonia Production (tons)	21,962
Ammonia Budget (tons)	27,412
YTD Actual Production (tons)	47,714
YTD Budget (tons)	57,761



Production Impacts (tons)

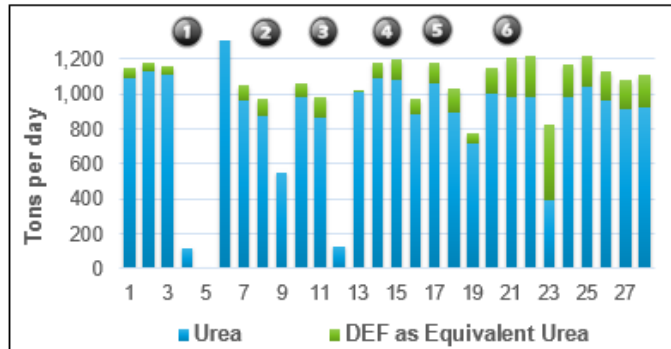
1 Drier valve repair	1,598
2 Plant trip	3,163
3 Trip - frozen transmitter	503
4 Trip - frozen instrument/leak	369
5 Gas optimization and steam conservation	120
6 Amine system limitation	93

Average Capacity Factor	88.6%
YTD Capacity Factor	87.8%
Urea Independent Capacity Factor	101.3%

Actual Equivalent Production (tons)	27,275
DEF as Equivalent Urea (tons)	3,107
Budget (tons)	29,428
YTD Actual Equivalent Production (tons)	57,010
YTD Budget (tons)	62,009

Ammonia Consumed (tons)	14,797
YTD Ammonia Consumed (tons)	31,541

Urea



Production Impacts (tons)		
1	Plant trip	1,984
2	Ammonia trip/CO ₂ supply	577
3	Ammonia trip/CO ₂ supply	1,039
4	Power conservation effort	78
5	A-Riley boiler tube repair	294
6	Roughrider Electric power supply	227

Diesel Exhaust Fluid (DEF)

Total Actual Production (gal)	1,307,102
Budget (gal)	1,339,352
YTD Actual Production (gal)	2,959,047
YTD Budget (gal)	2,822,206

Production Impacts (gal)	
Revenue optimization	



Ammonium Sulfate (Dak Sul 45®)

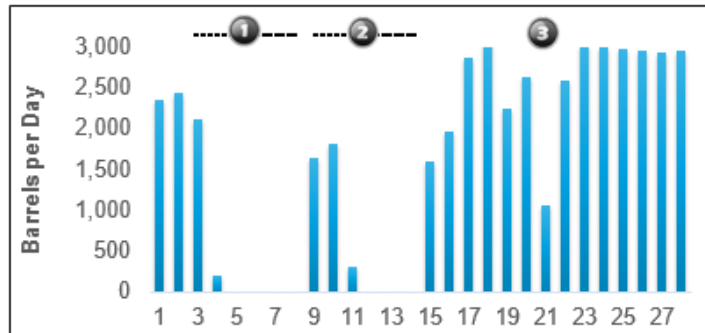
Actual Production (tons)	10,995
Budget (tons)	10,500
YTD Actual Production (tons)	20,223
YTD Budget (tons)	20,699

Production Impacts (tons)	
None	



Fuel Grade Tar Oil

Actual Production (bbl)	46,909
Budget (bbl)	45,000
YTD Actual Production (bbl)	111,487
YTD Budget (bbl)	90,000



Production Impacts (bbl)	
1 Plant trip - cold weather	7,840
2 Pipeline gas optimization	6,110
3 Operational error	530

Actual Generation

Actual vs Budget

Facilities	2021 February		%	2021 Year-to-Date		%
Coal Plants	Budget	\$		Budget	\$	
	Actual			Actual		
	Difference			Difference		
Oil / Gas Plants	Budget			Budget		
	Actual			Actual		
	Difference			Difference		
Wind	Budget			Budget		
	Actual	\$		Actual	\$	
	Difference	\$		Difference	\$	
Fleet	Budget	\$		Budget	\$	
	Actual	\$		Actual	\$	
	Difference	\$		Difference	\$	

Management decided that February 28, 2021, accounting reports will not be prepared for the March 2021 Board of Directors meeting due to the February cold weather event and uncertainty surrounding the volatile market prices.

Large Capital Projects

Large Capital Projects

Project Name	Approved Budget (M)	Total Committed (M)	Forecast at Completion (M)	Completion Date
Dickinson Second Transformer	\$12.6	\$8.6	\$9.6	August 2021
Lonesome Creek 6	\$63.7	\$35.8	\$43.7	December 2021
Neset to Northshore 230kV	\$57.4	\$3.4	\$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	\$41.8	\$19.6	\$36.6	October 2025