

## Expanded Summary of Board of Directors Meeting

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Sept. 13-14, 2022

At Basin Electric Headquarters in Bismarck, North Dakota

### 1. Basin Electric committees met Tuesday morning:

- Finance: The group talked about the 2021 federal and state income tax returns, an investment manual update, cyber security, and the Sustainability Report.
- Marketing and Planning: The group talked about Southwest Power Pool renewable accreditation methodology, MISO resource adequacy changes, and Deer Creek Station commitments.
- Operations: The group talked about labor negotiations, replacement of a turbine hot section at Groton Generation Station, upgrades to hardware and software at Deer Creek Station, and reconstruction of the Gillette Transmission System Maintenance facility.

### 2. Dakota Gasification Company

- Dakota Gas directors are reviewing board policies and will take action to adopt in October.
- ACTION: Dakota Gas directors authorized the 2022 amendment and restatement of the 401(k) Plan.
- Dale Johnson, vice president and Synfuels Plant manager
  - A boiler feed water piping leak in the ammonia plant needed repair, which impacted urea production.
  - Production (see slides below)
- Fuel Switching Fundamentals
  - Daniel Schaaf Gallagher, director of commodity sales and trading, and Trinity Turnbow, process operations and assistant Synfuels Plant manager, presented on options for producing varying quantities of products. They showed how cost of production breaks even across certain products, and how decisions are made about when to shift production.
- Lucas Teigen, manager of field services
  - The FEED study for the primary reformer is complete.
  - The project would take 51 months from approval to commercial operation and estimated project cost is \$402.5 million.
  - If an EPC (engineering, procurement and construction) contract is awarded Q2 2023, construction would begin Q2 2024, and start-up would occur Q4 2026.

- Daniel Schaaf Gallagher, director of commodity sales and trading
  - U.S. natural gas production in August increased and is stronger than August 2021.
  - Urea production in Europe is shutting down temporarily. U.S. manufacturers are exporting urea and ammonia. Global nitrogen demand is expected to be good.
  - Pipeline carbon dioxide customers are taking less product than usual due to demand.
  - Demand for beverage-grade carbon dioxide was at an all-time high in August.

### 3. Dakota Coal Company

- Jacob Dow, engineer III
  - The coal pile at Laramie River Station is at 42.7 days of full-load burn (target is 34.6 days).
  - The coal pile at Leland Olds Station was at 12.2 days of burn (target is 39.9 days of burn) or 152,953 tons on Aug. 31. As of Sept. 13, it was up to 204,000 tons. Trucking has begun to bring coal fines from Antelope Valley Station to supplement until rail deliveries can bring the pile back to target.

### 4. Basin Electric

- Western Fuels Association (WFA) and Western Fuels Wyoming update
  - There have been small improvements on BNSF Railway, but United Pacific hasn't shown recovery.
  - Coal traffic may take a back seat to agricultural products this fall.
  - WFA is conducting a candidate search for CEO.
- Mark Foss, senior vice president and general counsel
  - Dakota Energy filed a reply brief Sept. 1 which repeated the points from its initial brief.
  - In FERC's review of Basin Electric rates, the judge has issued three sets of bench questions totaling 201 questions in total which is unusual. Trial date is set for Feb. 6, 2023.
  - Rural Utilities Service is struggling with how to answer Environmental Protection Agency's (EPA) comments submitted during public comment period.
  - In a conference call with EPA, NRECA, and other utilities, EPA confirmed it is considering lowering the mercury limit for lignite coal.
  - ACTION: Basin Electric directors updated the banking resolution for Nemadji River Generation to Choice Bank as depository for funds of Nemadji River Generation LLC.

- Troy Tweeten, senior vice president of Operations
  - Actual Generation (see slide below)
  - Tom Stalcup, Dry Fork Station plant manager, says there were some issues with the bag cage assembly in the baghouse which therefore caused issues with plugging in the scrubber.
  - ACTION: Basin Electric directors authorized the Groton Generation Station Unit 1 hot section replacement.
- Valerie Weigel, vice president of Asset Management and Commodity Strategy
  - Prices in Southwest Power Pool's monthly average day-ahead load zone pricing in August were at their highest point since February 2021 and more than double August last year.
  - MISO's monthly average day-ahead load zone pricing continues to trend up as well.
  - Basin Electric's risk exposure is changing and as the cooperative's generation portfolio grows, fixed fuel dispatchable resources become a smaller percentage of the overall generation portfolio. These resources provide mitigation against market prices.
  - ACTION: Basin Electric directors authorized delegation to commit proposed energy transactions.
- Tom Christensen, senior vice president of Transmission, Engineering, and Construction
  - Black Hills Power and Cheyenne Light Fuel & Power were added to WEIS in September.
  - Southwest Power Pool West commitment agreement deadline is March 1, 2023. Go live estimate is Q3 or Q4 2025.
- Pius Fischer, vice president of Transmission
  - ACTION: Basin Electric directors authorized to formally accept the Notice to Construct associated with the SaskPower Northern Border Transmission Project.
- Gavin McCollam, vice president of Engineering and Construction
  - Large Capital Projects (see slide below)
  - The Nemadji Trail Energy Center project is facing escalation and inflation pressures, a sharp increase in major equipment pricing, likely major budget increases, and a delay in construction and commercial operation.
  - ACTION: Basin Electric directors authorized a project to replace the Gillette Transmission System Maintenance shop.
  - ACTION: Basin Electric directors authorized a land purchase for the Gillette Transmission System Maintenance shop.

- ACTION: Basin Electric directors authorized a project to replace the control system at the Deer Creek Station.
- ACTION: Basin Electric directors authorized Pioneer Generation Station Phase 4 Open Book Phase to procure major equipment and detailed engineering.
- ACTION: Basin Electric directors authorized Pioneer Generation Station Phase 4 property purchase.
- ACTION: Basin Electric directors authorized Pioneer Generation Station Phase 4 Open Book EPC contract to Burns & McDonnell.
- ACTION: Basin Electric directors authorized Pioneer Generation Station Phase 4 contract to Siemens for two F-class combustion turbines.
- ACTION: Basin Electric directors authorized Pioneer Generation Station Phase 4 contract to Wartsila for six 18.8-megawatt reciprocating engines.
- Chris Baumgartner, senior vice president of Member Services and Administration
  - Basin Electric 2022 Annual Meeting keynote speaker will be Willis Sparks to discuss current geopolitical conflicts and political developments.
  - An additional Basin Electric 2022 Annual Meeting speaker will be Rusty Braziel to focus on hydrocarbon markets.
  - Central Montana and Corn Belt Power toured Basin Electric facilities in August.
  - Next strategic planning session is planned for Oct. 10-11.
  - Raad Alkadiri of Eurasia Group spoke with the board regarding energy markets.
- Tyler Hamman, vice president of Government Relations
  - U.S. Sen. Joe Manchin conditioned support of IRA on future consideration of permitting reform, and agreement between Manchin and Majority Leader Chuck Schumer was that it would be put onto government spending bill which needs to be passed by Sept. 30 to avoid a government shutdown.
  - Senate to consider nomination of FERC Chairman Richard Glick.
  - DC Fall Fly-in is scheduled for Sept. 27-29. Topics include a thank you to delegations for support of direct pay, energy tax incentives, and other IRA/infrastructure provisions, and give an update on reliability issues.
  - The new North Dakota Commerce Commissioner is Josh Teigen.

- Telesz, Hamman, and Tweeten met with Wyoming Gov. Mark Gordon and University of Wyoming representatives to discuss carbon dioxide capture initiatives.
- Miles McGrew, senior vice president and chief Human Relations officer
  - Human Resources will review and update all safety programs where applicable and aim to lower TCIR and DART rates by 10% in 2023.
  - A timeline for Performance Management Implementation includes performance appraisals, functional goals, and manager/employee check-ins.
- Todd Brickhouse, senior vice president and chief financial officer
  - Sustainability Report targeted completion in November.
  - Review and discussion will be started regarding net margin and equity targets necessary to maintain an 'A' rating.
  - Basin Electric's "accounting" system needs to be replaced, which will be a multi-year project.
  - Due to some resource constraints and significant risk due to carbon disclosure regulation uncertainty, Basin Electric will revisit SEC registration in 2024.
  - ACTION: Basin Electric directors adopted a revised Investment Manual.
  - ACTION: Basin Electric directors authorized and directed to execute and deliver the federal and state income tax returns for 2021.
- Becky Kern, vice president of Resource Planning and Rates
  - There may have been a new summer peak achieved on Sept. 6, which will be confirmed when member billing is complete.
  - An industry consultant will be onboarded to work through large load and blockchain rates, and staff will work with the board and members over the next several months on rate concepts.
  - ACTION: Basin Electric directors approved the revised 2023 FERC Jurisdictional Standby Rate.

## Generation

Total energy available for sale in August 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 August was estimated at 2.6 million megawatt-hours, compared to the forecast of 2.6 million. Surplus sales were estimated at 560,000 megawatt-hours, compared to the forecast of 400,000.

At the Great Plains Synfuels Plant, deliveries to the pipeline averaged 89.5 million standard cubic feet per day of natural gas. The plant operated at 90.6% of capacity during the month.

Total tons of saleable fertilizer produced was 43,123 tons. That includes anhydrous ammonia, granular urea, urea content in diesel exhaust fluid, and ammonium sulfate.

## Synfuels Plant production

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

Anhydrous ammonia – 22,884 tons produced

Urea – 26,432 tons produced

Dak Sul 45 (ammonium sulfate) – 8,963 tons produced

Carbon dioxide – About 2,422 million standard cubic feet were delivered during the month.

## Financial data

### Basin Electric Consolidated NET INCOME AFTER TAX UNAUDITED

(in millions)	August 2022					
	Monthly			YTD		
	Actuals	Budget	+ /(-) Budget	Actuals	Budget	+ /(-) Budget
Basin Electric*	\$ 39.8	\$ 35.7	\$ 4.1	\$ 165.0	\$ 135.0	\$ 30.0
Dakota Gasification Company	17.4	(2.5)	19.9	132.8	38.5	94.3
Dakota Coal Company	0.3	2.0	(1.7)	8.4	4.2	4.2
Interco. Eliminations & Other	(0.1)	-	(0.1)	0.2	0.2	0.0
<b>Consolidated Net Income/(Loss) After Tax</b>	<b>\$ 57.4</b>	<b>\$ 35.2</b>	<b>\$ 22.2</b>	<b>\$ 306.4</b>	<b>\$ 177.9</b>	<b>\$ 128.5</b>

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

### Basin Electric

For the month of August, Basin Electric reported an after-tax margin\*\* of \$39.8 million compared to a budgeted after-tax margin\*\* of \$35.7 million.

- Member sales were above budget; a favorable variance of \$9.5 due to higher volumes.
- Surplus sales were above budget; a favorable variance of \$25.6 million due to higher volumes and prices.
- Operating expenses were higher than budget; an unfavorable variance of \$30.7 million related to higher purchased power and fuel.

### Dakota Gas

For August, Dakota Gasification reported an after-tax net income of \$17.4 million compared to a budgeted net loss of (\$2.5 million).

- Synthetic natural gas revenue was higher than budget due to higher pricing +\$4.03/dt, and an additional 149 thousand dekatherms sold; a favorable variance of \$16.2 million.
- By-product, co-product, and other revenue was higher than budget; a favorable variance of \$21.4 million primarily related to higher pricing and additional fertilizer volumes sold.

- Ammonia revenue was \$9.7 million higher, sulfate revenue was \$5.8 million higher, urea revenue was \$4.1 million higher, DEF revenue was \$2.3 million higher, and tar oil revenue was \$1.4 million higher, as a result of higher prices and higher volumes sold.
- CO<sub>2</sub> revenue was (-\$2.5 million) under budget related to 45Q project.
- Operating expenses were over budget; an unfavorable variance of (-\$13.4 million).
  - Inventory clearing (-\$8.1 million), higher utilities expense (-\$4.2 million), higher natural gas purchases (-\$3.2 million); offset by labor +\$0.8 million, contracted services +\$0.6 million, and coal +\$0.6 million.
- Income tax expense was (-\$4.6 million) higher.

### Dakota Coal

For the month of August, Dakota Coal Company reported after-tax net income of \$0.3 million compared to a budgeted net income of \$2.0 million.

- An unrealized loss of \$3.1 million was recorded on mine closing fund investments.
- Lignite coal purchases were \$1.5 million lower than budget.

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

### Slides of interest:

### Dakota Gas Production

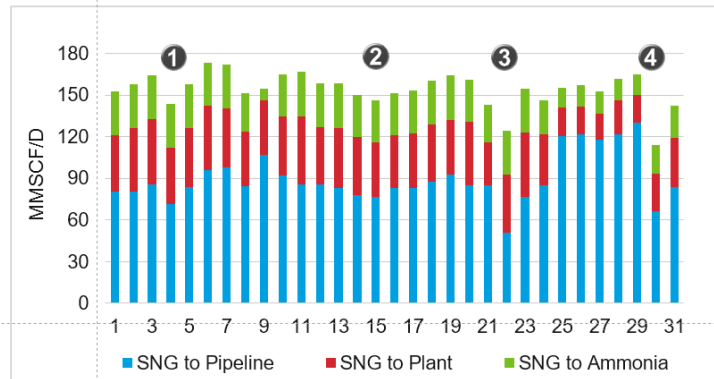
## Synthetic Natural Gas (SNG)

Actual Capacity Factor	90.6%
Budgeted Capacity Factor	87.6%
YTD Actual Capacity Factor	88.3%
YTD Budget Capacity Factor	86.4%

Availability	96.2%
Utilization	94.2%

Actual Production (dts)	2,720,363
Budget (dts)	2,803,516
YTD Actual Production (dts)	17,881,102
YTD Budget (dts)	21,839,837

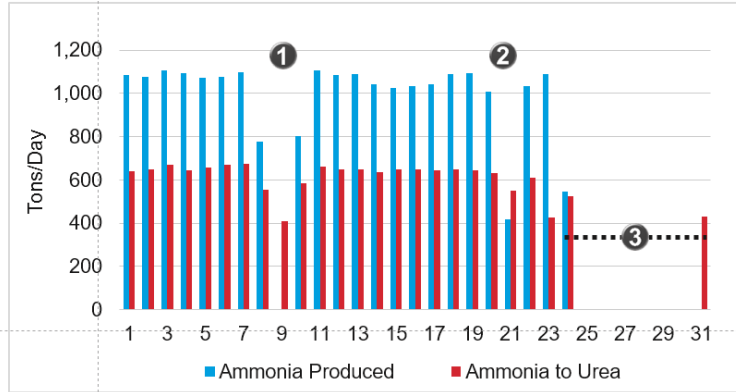
Delivery Average (MMSCF/D)	89.5
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Production Impacts (MMSCF)	
① A-train Rectisol down due to loss of methanol flow	5
② High cooling water temperatures	6
③ Oxygen leak - damaged bleed valve	25
④ A-train oxygen compressor tripped while swapping lube oil pumps	42

# Ammonia

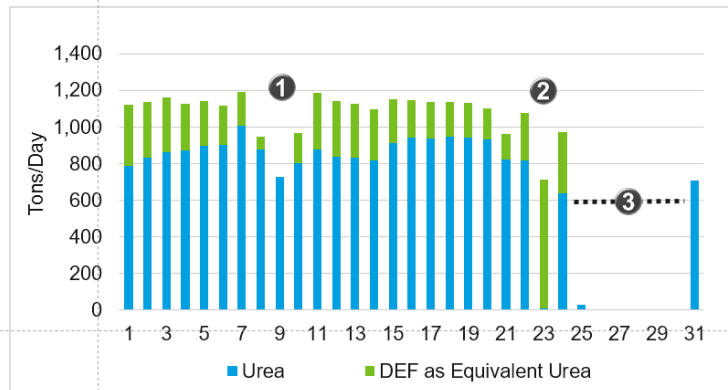
Actual Capacity Factor	67.1%
YTD Capacity Factor	87.1%
Ammonia Production (tons)	22,884
Ammonia Budget (tons)	27,962
YTD Actual Production (tons)	232,895
YTD Budget (tons)	219,186



Production Impacts (tons)	
1 Surface condenser repairs	1126
2 Main lube oil pump trip	483
3 Boiler feed water piping leak repair	6671

# Urea

Actual Capacity Factor	77.5%
YTD Capacity Factor	92.2%
Urea Independent Capacity Factor	95.2%
Actual Equivalent Production (tons)	26,432
DEF as Equivalent Urea (tons)	5,885
Budget (tons)	28,985
YTD Actual Equivalent Production (tons)	246,571
YTD Budget (tons)	233,434
Ammonia Consumed (tons)	15,156
YTD Ammonia Consumed (tons)	141,545



Production Impacts (tons)	
1 Cut rate due to ammonia plant repairs	210
2 One-day outage for routine cleaning of granulation equipment	222
3 No CO <sub>2</sub> production from the ammonia plant	5,806

# Diesel Exhaust Fluid (DEF)

Total Actual Production (gal)	2,475,476
Budget (gal)	2,420,387
YTD Actual Production (gal)	24,262,343
YTD Budget (gal)	18,972,711



Production Impacts (gal)	
No production impacts for the month	N/A



# Ammonium Sulfate (Dak Sul 45®)

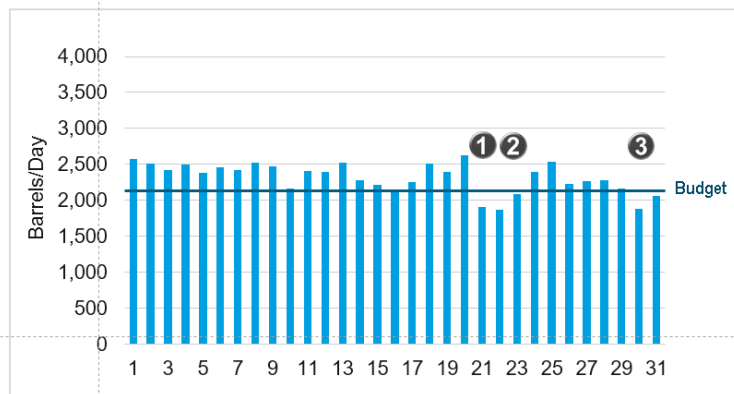
Actual Production (tons)	8,963
Budget (tons)	7,099
YTD Actual Production (tons)	57,555
YTD Budget (tons)	68,566



Production Impacts (tons)	
One-day outage for miscellaneous repairs	163
Bucket elevator motor replacement & brake locked up in gearbox	176

# Fuel Grade Tar Oil

Actual Production (bbl)	71,827
Budget (bbl)	66,020
YTD Actual Production (bbl)	649,658
YTD Budget (bbl)	510,205



Production Impacts (bbl)	
① Methanation compressor trip due to ground fault	222
② Oxygen leak due to damaged bleed valve - reduced gas path rate	300
③ Reduced gas path rate due to oxygen compressor trip	315



# 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
Actual Production	2,422	611,951	237,621	213,095	259,164	1,849	0
Budget	4,495	665,136	216,022	209,033	251,875	434	31,000
YTD Actual Production	22,620	4,821,054	2,185,375	1,957,247	1,812,013	8,192	188,441
YTD Budget	25,250	5,140,283	1,607,195	1,555,179	1,946,461	3,402	362,000

Production Impacts	
CO <sub>2</sub>	Customer reduced nominations
Naphtha	Low customer demand
Liquid CO <sub>2</sub>	High customer demand

## Actual Generation

# GENERATION (MWh)

FUEL SOURCE	August				YTD				
	BUDGETED	ACTUALS	OVER / (UNDER)		BUDGETED	ACTUALS	OVER / (UNDER)		
 COAL	AVS	612,418	557,402	(55,016)	(8.98)%	4,549,257	3,863,473	(685,784)	(15.07) %
	DFS	274,828	295,904	21,076	7.67%	1,911,648	1,769,351	(142,297)	(7.44) %
	LOS	355,810	409,099	53,289	14.98%	2,305,400	2,563,433	258,033	11.19 %
	LRS	905,558	1,146,593	241,035	26.62%	5,784,076	6,304,258	520,182	8.99 %
	<b>2,148,614</b>	<b>2,408,998</b>	<b>260,384</b>	<b>12.12 %</b>	<b>14,550,381</b>	<b>14,500,515</b>	<b>(49,866)</b>	<b>0.34 %</b>	
* Reported generation for coal is based on sales calculations.									
 WIND	41,437	51,482	10,045	24.24 %	396,403	536,282	139,879	35.29 %	
* PWND, Minot Wind / PWSD, Chamberlain									
GAS / OIL	163,711	335,338	171,627	104.8 %	1,265,435	1,648,448	383,013	30.27 %	
* CGS, DCS, GGS, LCS, PGS, SMS, WDG									
FLEET TOTALS:	<b>2,353,762</b>	<b>2,795,818</b>	<b>442,056</b>	<b>18.78 %</b>	<b>16,212,219</b>	<b>16,685,245</b>	<b>473,026</b>	<b>2.92 %</b>	

# Large Capital Projects

Project Name	Approved Budget (M)	Total Committed (M)	Forecast at Completion (M)	Completion Date
Neset to Northshore 230kV	\$57.4	\$41.6	\$48.5	December 2022
AVS Solid Waste Landfill Cell 5	\$11.6	\$10.5	\$10.5	December 2022
AVS 345kV Equipment Upgrades	\$13.5	\$0.7	\$13.5	June 2025
East Fork 345/115kV Substation	\$28.5	\$4.7	\$28.5	December 2025
LRS U3 480V Switchgear Upgrade	\$13.5	\$7.3	\$12.0	December 2025
LRS 345kV Equipment Upgrades	\$19.3	\$10.0	\$19.3	December 2025
Roundup to Kummer Ridge 345kV	\$95.0	\$2.3	\$79.0	October 2026
East Loop 345kV Transmission	\$417.2	\$15.0	\$347.6	December 2026
Nemadji Trail Energy Center	\$260.0	\$31.1	\$260.0	Fall 2027