Excerpt from March 2018 BEPC Board Minutes.

Resolution R03.03-13-18 restates Resolution R05.09-13-15 in its entirety as follows:

After discussion, a motion was made, seconded and carried that the following Resolution be adopted:

R03.03-13-18 RESOLVED, that Resolution No. 05.09-13-15 is hereby amended and restated in its entirety as follows:

"RESOLVED, in order to facilitate equity and equality with respect to the implementation of the Cooperative's transmission policy to the extent reasonably possible, the Chief Executive Officer and General Manager, or his designee, is hereby authorized to take all steps and incur all expenses reasonably necessary to compensate the Cooperative's members with electrical loads in the Western Interconnection in accordance with the following criteria:

- If and to the extent that an all supplemental requirements member owns 69 kV transmission facilities located in the Western Interconnection that would satisfy the Southwest Power Pool (**SPP**) Eastern Interconnection requirements for inclusion under the SPP Tariff for cost recovery (either by inclusion of associated costs and expenses in Annual Transmission Revenue Requirements (**ATRR**) or by eligibility for Facility Credits), but that member is denied the right to obtain cost recovery with respect to those assets by the administrator of a FERC-approved Open Access Tariff within whose footprint such facilities are physically located, such member (the **Eligible Member**) shall be eligible for compensation as described below.

- An Eligible Member must make a written request for compensation and demonstrate that it has been denied the opportunity to obtain cost recovery under the relevant transmission tariff.

- Upon appropriate application and demonstration as described above, the Cooperative will calculate the ATRR for the particular Eligible Member's facilities in accordance with the rules, practices and policies relating to the particular tariff involved and shall thereafter compensate the Eligible Member in an amount equal to the Cooperative's load ratio share (as computed under its Network Integrated Services Agreement with the relevant tariff administrator) times the ATRR of the Eligible Member's facilities.

- The Cooperative's commitment to compensate an Eligible Member in accordance with this resolution shall terminate automatically in the event that the Eligible Member's facilities become eligible for cost recovery (whether through ATRR, Facility Credits or otherwise) under a FERC-approved open-access tariff, even if the Eligible Member chooses not to pursue cost recovery by subjecting such facilities to the tariff.

- The Cooperative's commitment to compensate Eligible Members under this resolution shall be by an Agreement with Eligible Member not to exceed the term of the all supplemental requirement Wholesale Power Contract with the Eligible Member.

BE IT FURTHER RESOLVED, that Resolution 05-13-15 is terminated and replaced in its entirety by this Resolution."

Approved October 13, 2015

Basin Electric Power Cooperative
Bismarck, North Dakota

Minutes of the Regular Meeting of the Board of Directors
September 13-15, 2015

Basin Electric Power Cooperative
Bismarck, North Dakota

Minutes of the Regular Meeting of the Board of Directors
September 13-15, 2015

The Regular Meeting of the Board of Directors of Basin Electric Power Cooperative (the **Cooperative** or **Basin Electric**) was held at Basin Electric's headquarters building, 1717 East Interstate Avenue, Bismarck, North Dakota, beginning on September 13, 2015 at 6:25 p.m. CDT.

1. Call to Order

The meeting was called to order by President Wayne Peltier, who presided, and Secretary-Treasurer Gary C. Drost kept the minutes thereof.

2. Roll Call

After calling the roll, the Secretary reported the following Directors present:

Donald E. Applegate	Paul Baker
Leo Brekel	Gary C. Drost
Arden Fuher	Charles H. Gilbert
Mike McQuistion	Kermit Pearson
Wayne Peltier	Roberta Rohrer
Allen Thiessen	

Said persons being all of the Directors of the Cooperative. Also present were CEO & General Manager Paul M. Sukut, Assistant Secretary Mark D. Foss and Basin Electric staff members Tracie Bettenhausen, Tammy DeWitt, Mike Eggl, Casey Jacobson, Steve Johnson, Mark Kinzler, Mary Miller, Diane Paul, Mike Risan and Darlene Steffan.

3. Approval of the Agenda

The Directors considered the agenda for the conduct of the business of the meeting. After an opportunity for addition and deletion of items, it was moved by Director Drost, seconded by Director Pearson and carried that the agenda be approved as presented.

4. Approval of the Minutes

The minutes of the August 11-13, 2015 Regular Meeting of the Board of Directors were presented and after an opportunity for corrections, it was moved by Director Brekel, seconded by Director McQuistion and carried that the minutes be approved as revised.

5. General Manager's Report

General Manager Sukut reported that amendments to the wholesale power contracts have been executed or are expected to be executed shortly with all Class A members except Tri-State G&T Association (**Tri-State**). Staff from Tri-State and Basin Electric will meet on September 23 in Denver. Meetings regarding the Clean Power Plan (**CPP**) were held with

Senators Heitkamp and Hoeven and Representative Cramer during the Lignite Energy Council annual meeting in Washington, DC.

6. Transmission Report

Mike Risan, Senior Vice President-Transmission, reported that two Federal Energy Regulatory Commission (**FERC**) representatives will be in Bismarck tomorrow for meetings with the North Dakota Public Service Commission (**PSC**) and the Basin Electric board.

He reported on the issues pertinent to the October 1 "Go Live" date.

Mr. Risan described the overarching agreement (90-BAO-415) with Western Area Power Administration (**Western**) which provided for the creation of the Joint Transmission System (**JTS**), as well as joint marketing, firm electric service, interconnections, maintenance, balancing area and transmission operations. Western contract 98-UGPR-196 converted the JTS into the Integrated System. Western Contracts 90-BAO-415 and 98-UGPR-196 will both be terminated prior to October 1, 2015 and the new Interconnection Agreement with Western will be executed prior to that date.

He presented the Western interconnection map and noted that the August 25 meeting between the Southwest Power Pool (**SPP**) and the parties to the Joint Development Agreement on the west side went well. Staff will continue to monitor these discussions.

The Western Electricity Coordinating Council (**WECC**) compliance audit took place September 8-10 and resulted in three potential violations. As a result of the prior Midwest Reliability Organization audit, there was an alleged violation concerning utility ratings with a potential $75,000 fine. The WECC Critical Infrastructure Protection (**CIP**) audit staff was on-site September 8-9 to perform outreach for the upcoming CIP Version 5 standards. The audit staff visited three Basin Electric substations and two data centers during the visit.

At the request of Verendrye Electric Cooperative, Basin Electric staff briefed the U.S. Air Force on September 10 on missile site electrical problems. Mr. Risan went through the presentation given to the Air Force concerning the Cooperative's efforts to maintain a reliable electrical supply in the Bakken.

Mr. Risan then reported on the new Transmission System Maintenance (**TSM**) site and noted he would likely be back next spring with a proposal to build a new TSM facility at this location with an estimated move-in date at year-end 2017.

He noted that he had participated in hotline training and shared a hotline training video.

A. Termination of East River, Corn Belt and NIPCO Member Substation Lease Agreements Due to Southwest Power Pool Membership

Mr. Risan reported that East River Electric Power Cooperative (**East River**), Corn Belt Power Cooperative (**Corn Belt**) and Northwest Iowa Power Cooperative (**NIPCO**) have each filed to join SPP as Transmission Owners effective October 1, 2015.

He recommended authorization for the CEO and General Manager to execute terminations of the East River, Corn Belt and NIPCO lease agreements as they will no longer be needed with East River, Corn Belt and NIPCO joining SPP.

After discussion, it was moved by Director Applegate, seconded by Director Gilbert and carried that the following Resolution be adopted:

R01.09-13-15 RESOLVED, that the CEO & General Manager, or his designee, be authorized to execute the documents necessary to terminate the East River Electric Power Cooperative, Corn Belt Power Cooperative and Northwest Iowa Power Cooperative lease agreements.

B. Dry Creek Substation Agreement

Mr. Risan noted that Dry Creek Substation is a new 230/115 kV substation being built with Black Hills Electric Cooperative (**Black Hills**) on the Rapid City DC Tie Property (which Basin Electric owns with Black Hills Power). The Board approved this project in January 2013. Construction began in June of 2014 and the project is scheduled for completion in June of 2015. The 230/115 kV portion will be at Basin Electric's cost in order to provide support to the Rapid City area. The 115/69 kV portion will be at Black Hills' cost. The cost of the common facilities will be shared, including land costs. He recommended the CEO and General Manager be authorized to execute the agreement for the Dry Creek Substation.

After discussion, it was moved by Director Fuher, seconded by Director Baker and carried that the following Resolution be adopted:

R02.09-13-15 RESOLVED, that the CEO and General Manager, or his designee, be authorized to execute the Dry Creek Substation Agreement, as presented.

7. Communications & Administration Report

Mike Eggl, Senior Vice President-Communications & Administration, noted the upcoming Fall Fly-in scheduled for September 29-October 1. He presented the schedule for review of the Board Policies and noted that draft policies would be sent to the board one week prior to the board meeting for review. The policy on renewable resources and the Cooperative's fiscal policy will be reviewed in October. He reviewed proposed changes to the Statement of Ideals and Objectives. These had been reviewed on an annual basis from 1967 until 2001. He recommended they again be reviewed on an annual basis.

A. Communications Report

Mary Miller, Director of Communications & Creative Services, reported that the theme of the 2015 annual meeting is "People. Power. Purpose." We will have integrated staff reports centered on the Cooperative Plan by senior staff including joint reports surrounding the commitment to cooperative, supporting member growth, commitment to workforce and operational excellence. She circulated the draft annual meeting agenda. Highlights of the annual meeting will include an Environmental Protection Agency (**EPA**) town hall session on November 4 with participation from area states and an opportunity to publicly discuss the Clean Power Plan and a resource development panel of members and industry experts in lieu of a keynote speaker. The annual meeting dinner entertainment is by Hart Keene and includes interactive illusion, mind-reading and comedy. Mr. Keene has performed on the television program "America's Got Talent". Music during the social will be provided by local talent.

A joint press conference (Missouri Valley Family YMCA, CHI St. Alexius Health, Sanford and Basin Electric) announcing the daycare facility was held on August 20. Next steps are to determine a method to select which of the 108 interested Basin Electric employees will receive Basin Electric's 50 daycare spots. The daycare program will be set by the YMCA which needs to hire 90 employees. Basin Electric will assist the YMCA with employee recruitment.

Staff continues to research Mercer County daycare options given the 1,000 Basin Electric and Dakota Gasification Company (DGC) employees located there. Lutheran Social Services has agreed to contribute $100,000 for 25 Mercer County daycare spots.

The North Dakota Association of Rural Electric Cooperatives, Mor-Gran-Sou Electric Cooperative, Capital Electric Cooperative, CoBank ACB, Basin Electric and Bremer Bank have all made donations to the Bismarck-Mandan Community Foundation.

This year, more than 40 volunteers worked in Basin's Backyard Garden and have donated over 500 pounds of produce to area food banks and organizations.

B. IS&T Report

Mark Kinzler, Vice President & Chief Information Officer, reviewed the 2015 IS&T Work Plan and noted that SPP officially approved the entire Information Systems integration per the "Go/No Go" executive review forum on September 4. The first official market submissions start on September 24 for operating day October 1. All software/system interfaces are in production. Testing and tuning on any critical changes or enhancements continues. Staff continues to support the business units to prepare for the "Go Live".

Of potential concern is the end-to-end automation of necessary processes not functional within the various pieces of software. Market trials were successful, but are not a true indicator of a live market. General training and knowledge transfers on business systems and processes have taken a back seat to system implementation and configuration.

8. Executive Session

At 7:45 p.m., it was moved by Director Drost, seconded by Director Gilbert and carried that the Board retire into executive session to discuss Human Resources compliance matters. At 8:20, it was moved by Director Pearson, seconded by Director McQuistion and carried that the Board arise from executive session.

9. Recess and Reconvention

At 8:20 p.m., President Peltier recessed the meeting until 11:30 a.m. on September 14, 2015, at which time the meeting reconvened with President Peltier continuing to preside and Secretary Gary C. Drost continuing to keep the minutes thereof.

10. Roll Call

After calling the roll, the Secretary reported the following Directors present:

Don Applegate	Paul Baker
Leo Brekel	Gary C. Drost
Arden Fuher	Charlie Gilbert
Mike McQuistion	Kermit Pearson
Wayne Peltier	Roberta Rohrer
Allen Thiessen	

Said persons being all of the directors of the Cooperative. Also present were CEO and General Manager Paul M. Sukut, Assistant Secretary Mark D. Foss and staff members Tracie Bettenhausen, Shawn Deisz, Tammy DeWitt, Mike Eggl, Matt Greek, John Jacobs, Steve Johnson, Rod Kuhn, Gavin McCollam, Mary Miller, Anine Lambert, Dave Raatz, Mike Risan, Ken Rutter, Garrett Schilling, James C. Sheldon, Susan Sorensen, Tom Stalcup, Myron Steckler, Darlene Steffan, Steve Tomac and Kevin Tschosik. Also present was DGC director James Geringer.

11. Office of General Counsel Report

Mark D. Foss, Senior Vice President & General Counsel, reviewed certain legal matters concerning the Cooperative.

12. Clean Power Plan - Rule Outline and Implications

Matt Greek, Senior Vice President-Engineering & Construction, discussed the CPP and different options for State Implementation Plans (**SIP**). The CPP does not allow rate-based states to trade with mass-based states. A State Measures Plan has to meet the rate or mass goal for the state, but can use end-use efficiency and other measures to get there. He reviewed challenges with the rate-based and mass-based options, as well as challenges with the state measures approach. The EPA will either approve a SIP or impose a Federal Implementation Plan (**FIP**). Interim SIPs are due September 6, 2016, with final SIPs due September 6, 2018.

In conclusion, the CPP creates a shadow national renewable portfolio standard and likely creates a national cap-and-trade program for all states subject to a FIP.

Dave Raatz, Vice President-Cooperative Planning, provided a power supply analysis. Two bookend scenarios were developed with 1) to maintain and operate the fleet as we currently do by purchasing emission-reduction credits (**ERC**); or 2) to modify the fleet to achieve compliance. Under the first scenario, we would need to acquire approximately 18,000,000 ERCs by 2030 which equals about 4,500 MW of new wind. In the second scenario, we determined what the required breakeven price for CO_2 would need to be in order to replace one of our coal facilities with either combined cycle or combined cycle/wind under both current forecasted gas prices as well as a high case assuming twice the current forecasted gas prices. The two likely keys to determine a compliance path will be the cost of ERCs and the cost of natural gas.

Mr. Foss reported that the final CPP is on more sound legal footing than the proposed rule. It is anticipated that the final CPP will be published in the *Federal Register* in mid-to-late October. The key issue in litigation will be whether EPA can require "beyond the fence" measures under Section 111. Even EPA admits these standards cannot be met by any coal units. We will support NRECA's legal efforts but will file our own request for reconsideration with EPA and request for review with the D.C. Circuit Court of Appeals so as to preserve our rights on appeal based upon the comments we provided on the proposed rule. We hope to file our request for review with the DC Circuit Court of Appeals by early December.

Mr. Eggl presented a video of EPA Administrator Gina McCarthy's February 14 press conference at the Great Plains Synfuels Plant. None of her statements concerning the CPP proved to be accurate. Mr. Eggl and his staff have participated in Section 111(d) briefings in Washington, DC, North Dakota, South Dakota, Montana and Wyoming. He noted we are on a dual, "beat-the-rule/meet-the-rule" path.

13. Recess and Reconvention

At 12:20 p.m., President Peltier recessed the meeting until 1:05 p.m., at which time the meeting reconvened with President Peltier continuing to preside and Secretary Gary C. Drost continuing to keep the minutes.

14. Roll Call

After calling the roll, the Secretary reported the following Directors present:

Don Applegate	Paul Baker
Leo Brekel	Gary C. Drost
Arden Fuher	Charlie Gilbert
Mike McQuistion	Kermit Pearson
Wayne Peltier	Roberta Rohrer
Allen Thiessen	

Said persons being all of the directors of the Cooperative. Also present were CEO and General Manager Paul M. Sukut, Assistant Secretary Mark D. Foss and staff members Tracie Bettenhausen, Andy Buntrock, John Ciz, Shawn Deisz, Tammy DeWitt, Jason Doerr, Mike Eggl, Pius Fischer, Matt Greek, John Jacobs, Steve Johnson, Kasey Kaseman, Becky Kern, Janet Kubisiak, Rod Kuhn, Anine Lambert, Sharon Lipetzky, Gavin McCollam, Mary Miller, Deb Olafson, Curt Pearson, Dave Raatz, Mike Risan, Ken Rutter, Garrett Schilling, Kris Schmidt, Jim Sheldon, Susan Sorensen, Tom Stalcup, Myron Steckler, Darlene Steffan, Steve Tomac, Kevin Tschosik, Valerie Weigel, Michelle Wiedrich and Lyle Witham. Also present was Mor-Gran-Sou Electric Cooperative (**Mor-Gran-Sou**) director Vernard Frederick.

15. Recess for Meeting of the Board Audit Committee; Reconvention

At 1:30 p.m., the meeting recessed for a meeting of the Board Audit Committee. At 2:15 p.m., the meeting reconvened, with President Peltier continuing to preside and Secretary Drost continuing to keep the minutes.

16. Roll Call

After calling the roll, the Secretary reported the following Directors present:

Don Applegate	Paul Baker
Leo Brekel	Gary C. Drost
Arden Fuher	Charlie Gilbert
Mike McQuistion	Kermit Pearson
Wayne Peltier	Roberta Rohrer
Allen Thiessen	

Said persons being all of the directors of the Cooperative. Also present were CEO and General Manager Paul M. Sukut, Assistant Secretary Mark D. Foss and staff members Robert J. Bartosh, Tracie Bettenhausen, Kasey Kaseman, Tom Christensen, John Ciz, Shawn Deisz, Tammy DeWitt, Jason Doerr, Mike Eggl, Pius Fischer, Matt Greek, John Jacobs, Steve Johnson, Becky Kern, Janet Kubisiak, Rod Kuhn, Anine Lambert, Sharon Lipetzky, Gavin McCollam, Mary Miller, Deb Olafson, Curt Pearson, Dave Raatz, Mike Risan, Josh Rossow, Garrett Schilling, Kris Schmidt, Jim Sheldon, Susan Sorensen, Tom Stalcup, Myron Steckler, Steve Tomac, Valerie Weigel, Michelle Wiedrich and Lyle Witham. Also present was Mor-Gran-Sou director Vernard Frederick.

17. Operations Report

A. Monthly Operations Report

John Jacobs, Vice President of Operations, reported there was one Days Away Restricted or Transferred (**DART**) incident and three medical treatments in August.

He provided bus-bar costs for the coal-fired fleet and reviewed the equivalent forced-outage rate trends for the past 24-month period on the solid fuel units. He reviewed August generation totals.

He reported that generation for the owned and operated Basin Electric fleet came in 2% above budget in August and 2.3% below budget for year-to-date.

The Laramie River Station (**LRS**) has 28 days bum for all three units at full load. The Leland Olds Station (**LOS**) stockpile contains 700,000 tons.

Individual availability and capacity factors for the coal-based generation stations were as follows:

Unit	Avail-ability	Capacity Factor	Unit Rating	Comments
AVS #1	84.00%	93%	450 MW	Repair PAH Guide Bearing.
AVS #2	90.33%	92.20%	450 MW	Air Heater Cleaning.
DFS	100%	103.32%	386 MW	
LRS #1	99%	87.32%	570 MW	Loss of EHC fluid Pressure.
LRS #2	98%	92.76%	570 MW	Coal feeder issues; instrument fail on turbine trip detection system/fuse in PTs for generator.
LRS #3	100%	95.28%	570 MW	
LOS #1	96%	89.41%	221 MW	Burner J wall tube leak (continued from July); market-driven outages.
LOS #2	100%	78.84%	448 MW	Filter locked up due to river debris.

B. DFS Integrated Test Center

Mr. Jacobs reported that in June, he addressed the Board regarding Wyoming Governor Meade's inquiry as to whether the Dry Fork Station (**DFS**) would be willing to host Wyoming's Integrated Test Center (**ITC**). If Wyoming were to choose DFS, a host agreement would be developed outlining how the facility would be operated. The cost of the construction would be the responsibility of the state or the technology providers that intend to utilize the host site. The premise for the project is to find an economic solution to capture carbon dioxide from coal-fired power plants' flue gas.

He reviewed a diagram of the test center and a model of the tie-in ductwork. He reviewed the current state funded Sargent and Lundy feasibility study for the site which included the anticipated test center utilities and services, capital cost and operating cost estimates; the schedule for Phase I and Phase 2 engineering, and the schedule for Phase 1 and Phase 2 construction based on the test center being operational by June 1, 2017. He noted that Tri-State has contributed $5 million to this effort. This effort is supported by the Wyoming Governor, Wyoming Legislature and the Wyoming Infrastructure Authority and would demonstrate Basin Electric's proactive position.

He reviewed the services the Cooperative would provide and the services which will not be provided and reviewed capital costs, as well as the schedule should the state of Wyoming decide to move forward and elect to use DFS for the host site. He noted that the ITC would be responsible for its own air permit.

After discussion, it was moved by Director Pearson, seconded by Director Drost and carried that the following Resolution be adopted:

R03.09-13-15 RESOLVED, that subject to the agreement of the Wyoming Municipal Power Authority, the Cooperative offers to make the Dry Fork Station available to host the state of Wyoming's Integrated Test Center; and

BE IT FURTHER RESOLVED, that the CEO and General Manager, or his designee, be authorized to execute such agreements that he finds to be in the best interests of the Cooperative in order for the Dry Fork Station to host the Integrated Test Center.

C. Distributed Generation Report

Kevin Tschosik, Distributed Generation Manager, reported on natural gas prices at the Groton Generating Station, Deer Creek Station (**DCS**), Lonesome Creek Station (**LCS**), Pioneer Generating Station (**PGS**) and Wyoming Distributed Generation (**WDG**).

The August generation at the distributed facilities was as follows:

Unit	Monthly Availability (%)	Monthly Generation (MW)	Unit Rating (MW)	Comments
Culbertson	100%	8,886 MW	100 MW	For load demand.
DCS	100%	77,455 MW	300 MW	For load demand. No issues.
Groton Unit #1	100%	1,641 MW	100 MW	For load demand. No issues.
Groton Unit #2	100%	1,716 MW	100 MW	
LCS Unit #1	100%	2,768 MW	45 MW	For load demand and voltage control. One unit has run the entire month for McKenzie Electric load.
LCS Unit #2	100%	24,672 MW	45 MW	
LCS Unit #3	59.75%	6,236 MW	45 MW	

PGS Unit #1	98.84%	1,470 MW	45 MW	Load demand and voltage control.
PGS Unit #2	0%	0 MW	45 MW	
PGS Unit #3	100%	2,499 MW	45 MW	
PWND	97.93%	27,729 MW	123 MW	
PWSD	96.65%	46,859 MW	162 MW	
SMS Unit #1	100%	112 MW	60 MW	Ran for URGE tests.
SMS Unit #2	100%	91 MW	60 MW	
WY Dist. Gen.	97.83%	68 MW	54 MW	

The PGS #2 root-cause analysis has been completed, but the cause of failure cannot be determined. The engine will be repaired by General Electric under warranty and is expected to be back by mid-October or sooner. Staff will look again at the fuel nozzles on all of our LMS 100 units. The last set of nozzles are now in Houston and should arrive mid-October. Each LMS 100 unit will be boroscoped starting this month.

During August, PGS ran in synchronous condensing mode 97.70 hours and the LCS for 0 hours. There were 23 west-side spinning reserve events at WDG during the month.

PrairieWinds ND 1. Semi-annual maintenance is 74% complete. Padmount switching refresher training is taking place.

PrairieWinds SD 1. Weed spraying and base-bolt tension have been completed. Staff is now performing blade repairs.

The east-side peak occurred on August 14, 2015 at 1500 hours. At that time, wind generation was as follows:

Wind Project	**Load Factor during the Peak**	**Capacity Factor**		**Project Total**
		Month	**YTD**	
Baldwin	33 MW	27%	41%	99 MW
Day County	4 MW	42%	48%	99 MW
Edgeley	3 MW	23%	34%	40 MW
Highmore	2 MW	33%	35%	40 MW
Iowa Wind	3 MW	29%	38%	45.1 MW
Other Projects (Chamberlain & Pipestone)	0 MW	19%	37%	3.4 MW
PrairieWinds ND	38 MW	30%	42%	123 MW

PrairieWinds SD	12 MW	39%	46%	162 MW
Wilton	29 MW	27%	38%	99 MW
Total Monthly Wind Generation	125 MW	33%	42%	712 MW

D. Dry Fork Station Report

Tom Stalcup, DFS Plant Manager, reported there was one DART incident in August. DFS generation was 112.53% of budget in August with availability of 100%. Year-to-date generation was 103.08% of budget. The unit was called upon four times to provide spinning reserve and was dispatched 11 times to cover system needs. The unit was derated five times during the month. The Station was in environmental compliance the entire month. The quarterly particulate test occurred on August 19 as required by the Mercury and Air Toxics Standards rules. He noted that we are continuing to feed amended silicates and activated carbon for mercury removal. The new source review was sent to the Wyoming Department of Environmental Quality and we have received notice indicating the application is complete for adding an amended silicates skid and silo.

He reviewed 2014 safety statistics and reported on the "Our Power, My Safety" program, 2015 outages and the coal silo repairs. He presented photographs of the coal silo damage and repair. He then discussed activities and presented photographs of work areas during the September 8-13 outage.

E. Leland Olds Station Purchase of D9 Class Track Dozer

Kristofer Schmidt, LOS Coal & Yard Supervisor, noted that the principal need for this track dozer is for reclaiming frozen limestone to support scrubber operations, which historically has been a struggle. A larger track dozer would supplant the current D8 class machine and still fulfill its historical functions of earth movement for the plant site and landfill projects, landfill and ash pond dozing and back-up coal reclamation and feeding. The Project Review Team approved this purchase on April 20, 2015. He recommended the purchase of this dozer. After discussion, it was moved by Director Fuher, seconded by Director Gilbert and carried that the following Resolution be adopted:

R04.09-13-15 RESOLVED, that Capital Project Request #150194 for a D9 class track dozer presented to this meeting of the Board of Directors at a budgeted cost of $1,289,295 is hereby approved; and

BE IT FURTHER RESOLVED, that the CEO & General Manager, or his designee, be authorized to execute the documents necessary to acquire the D9 Class Track Dozer.

18. Marketing & Asset Management Report

A. Purchased Power and Non-Member Sales Report

Valerie Weigel, Manager of Marketing & Financial Analytics, reported that natural gas prices remain at very low levels. Significant fundamental pressure on prices continues.

Overall energy loads across the country are not resulting in the overall demand that was expected. Production signals remain bearish. Storage injections are still resulting in bearish fundamentals as well.

Lower-than-budgeted west-to-east tie transfers provided additional surplus sales in the west. Wind generation performed slightly under budget. Higher nonmember sales offset lower-than-planned member sales.

Excluding member demand, estimated Marketing and Asset Management energy management had a favorable variance of $2.8 million before any prior period adjustments primarily driven by surplus sales.

Owned generation produced approximately 8,000 MWh less than budgeted. Sales volumes were higher than expected due to lower member loads and favorable natural gas prices.

Ms. Weigel noted there are nine days until the first offers are submitted for the Market Go-Live with SPP. She then reviewed the timeline for the SPP cutover and discussed Basin Electric's readiness.

Mr. Rutter also discussed Basin Electric's readiness for the start of operations in SPP.

Ms. Weigel then discussed the marginal congestion cost in a regional transmission organization (**RTO**) market process.

19. Cooperative Planning Report

Dave Raatz, Vice President of Cooperative Planning, provided a follow-up with respect to the discussion and vote on the diversity credit last month. He reviewed the history of the diversity credit. After review of past documents, it has been the understanding of staff that the purpose of the diversity credit was to: (1) move unaffiliated distribution cooperatives into G&Ts; (2) reduce member competition for new loads; and (3) address concerns about District 9 voting dilution as new members have been added.

Powder River Energy Corporation's (**PRECorp**) has made a contract amendment request to add specific assignment language that would allow the Basin Electric/PRECorp all-requirements agreement to be assigned to a G&T formed by PRECorp and its Class C members.

It was noted that the PRECorp board will take action on their Basin Electric contact extension on September 17; the Fergus board is expected to take action on their power supply from PRECorp through Basin Electric on September 22; and the Tongue River Electric Cooperative board is expected to take action on their power supply from PRECorp through Basin Electric on September 25.

Mr. Raatz reviewed PRECorp's load growth forecast which is a work in progress. Due to CPP, low gas prices and other coal-related load changes (coal mine bankruptcies, direct loss of jobs, etc.), it is anticipated that PRECorp will likely experience approximately 150 MW of load reductions from now through 2035.

Mr. Raatz then discussed the two scenarios run in last year's load forecast regarding oil loads in the Williston Basin. Today, oil-related loads are between 1200-1300 MW in the Upper Missouri Power Cooperative (**Upper Missouri**), Central Power Electric Cooperative, and Grand Electric Cooperative areas. Staff had heard and read that in the fringe areas (Burke and Divide Counties) of the Bakken, oil companies are electing not to install the infrastructure to deal with flare gas due to low oil prices and are talking about installing gasfired generators. While Upper Missouri continues to grow, its forecast is down about 50-100 MW for the end of 2016. Staff is concerned that oil-related loads in this area may be reduced below the low case scenario set forth in last year's revised load projections.

20. Recess and Reconvention

At 5:10 p.m., President Peltier recessed the meeting until 8:00 a.m. on September 15, 2015, at which time the meeting reconvened with President Peltier continuing to preside and Secretary Gary C. Drost continuing to keep the minutes.

21. Roll Call

After calling the roll, the Secretary reported the following Directors present:

Don Applegate	Paul Baker
Leo Brekel	Gary C. Drost
Arden Fuher	Charlie Gilbert
Mike McQuistion	Kermit Pearson
Wayne Peltier	Roberta Rohrer
Allen Thiessen	

Said persons being all of the directors of the Cooperative. Also present were CEO and General Manager Paul M. Sukut, Assistant Secretary Mark D. Foss and staff members Tracie Bettenhausen, Andy Buntrock, Kasey Kaseman, Tom Christensen, John Ciz, Shawn Deisz, Tammy DeWitt, Jason Doerr, Pius Fischer, Matt Greek, John Jacobs, Steve Johnson, Becky Kern, Janet Kubisiak, Rod Kuhn, Sharon Lipetzky, Tracy McBride, Gavin McCollam, Darla Miller, Deb Olafson, Dave Raatz, Mike Risan, Josh Rossow, Jim Sheldon, Trenton Schwan, Susan Sorensen, Myron Steckler, Michelle Wiedrich, Lyle Witham and Roxanne Woeste. Also present were DGC Vice President David J. Sauer and Resolutions Committee members Doug Hardy and Melanie Roe.

22. Introduction of FERC Staff Members

Mr. Risan introduced FERC field staff members Patrick Clarey and Christopher Miller, who are in North Dakota to make a presentation to the North Dakota PSC.

Mr. Miller provided an overview of FERC and discussed FERC regulation. FERC is an independent government regulatory agency in the executive branch of the U.S. government. It was created by the Department of Energy organization act in 1977. Its predecessor was the Federal Power Commission which was formed in 1920.

Mr. Clarey discussed a number of topics concerning the electric industry and regional transmission organizations and then responded to questions.

23. Cooperative Planning Report, continued

Mr. Raatz reviewed the status of the extended wholesale power contracts and agenda items for the October Manager's Advisory Committee (**MAC**) meeting and the upcoming Rate Subcommittee meeting. He reported that the timeline for Minnkota Power Cooperative, Inc. membership remains on track, the due diligence tours went well and he reviewed the due diligence timeline.

Basin Electric will begin power scheduling for Wyoming Municipal Power Agency (**WMPA**) on October 1. Burns & McDonnell is performing an economic analysis on WMPA's joining Basin

Electric as a Class A member similar to Corn Belt. The study is scheduled for completion in October. Manager LaMaack will then discuss the issue with the WMPA board.

A. Transmission Service Policy

Jason Doerr, RTO Delivery Service Manager, provided an update on the Network Integrated Transmission Service Agreement (**NITSA**) with respect to NorthWestern in Montana, PacifiCorp in Wyoming, the MidContinent Independent System Operator (**MISO**) and SPP.

He reviewed the status of the Class A member Power Service Agreements, the reimbursement categories: resource adequacy, transmission services and losses. These are associated primarily with federal Western power deliveries to members.

These concepts were discussed at the January and April MAC meetings, as well as with each individual manager, and will also be discussed at the October MAC. Staff is preparing a white paper which will include cost estimates to assist the members.

If the members can have Western modify their points of delivery so they all are inside the Upper Missouri Zone (**UMZ**), then the issue of resource adequacy assessment resolves itself.

At a previous MAC meeting, Basin Electric proposed that if a member does not have a RTO or tariff option, Basin Electric should compensate the member for the load-ratio share of the member's annual transmission facility costs which would have qualified under SPP transmission tariff criteria. This would result in about a $2 million impact to Basin Electric if adopted. The MAC supported this concept in July.

After discussion, it was moved by Director Brekel, seconded by Director McQuistion and carried that the following Resolution be adopted, with Directors Gilbert, Applegate and Pearson voting against:

R05.09-13-15 BE IT HEREBY RESOLVED, in order to facilitate equity and equality with respect to the implementation of the Cooperative's transmission policy to the extent reasonably possible, the General Manager of the Cooperative, or his designee, is hereby authorized to take all steps and incur all expenses reasonably necessary to compensate the Cooperative's members with electrical loads in the Western Interconnection in accordance with the following criteria:

- If and to the extent that an all supplemental requirements member owns 69 kV transmission facilities located in the Western Interconnection that would satisfy the Southwest Power Pool (**SPP**) requirements for inclusion under the SPP Tariff for cost recovery (either by inclusion of associated costs and expenses in Annual Transmission Revenue Requirements (**ATRR**) or by eligibility for Facility Credits), but that member is denied the right to obtain cost recovery with respect to those assets by the administrator of a FERC-approved Open Access Tariff within whose footprint such facilities are physically located, such member (the **Eligible Member**) shall be eligible for compensation as described below.

- An Eligible Member must make a written request for compensation and demonstrate that it has been denied the opportunity to obtain cost recovery under the relevant transmission tariff.

- Upon appropriate application and demonstration as described above, the Cooperative will calculate the ATRR for the particular Eligible Member's facilities in accordance with the rules, practices and policies relating to the particular tariff involved and shall thereafter compensate the Eligible Member in an amount equal to the Cooperative's load ratio share (as computed under its Network Integrated Services Agreement with the relevant tariff administrator) times the ATRR of the Eligible Member's facilities.

- The Cooperative's commitment to compensate an Eligible Member in accordance with this resolution shall terminate automatically in the event that the Eligible Member's facilities become eligible for cost recovery (whether through ATRR, Facility Credits or otherwise) under a FERC-approved open-access tariff, even if the Eligible Member chooses not to pursue cost recovery by subjecting such facilities to the tariff.

- The Cooperative's commitment to compensate Eligible Members under this resolution is subject to revocation, termination or modification at the discretion of the Board of Directors, without notice or further obligation of any kind.

B. Northern Tier Energy Center Update

Becky Kern, Director of Utility Planning, reported that the key provisions of the draft Northern Tier Energy Center (NTEC) agreement create a management committee, set forth the rights of owners, specify minimum financial capability, set the terms for payments, defaults and restrictions on transfers, name a construction and operating agent, specify insurance coverage and address both term and decommissioning.

This would be an 850 MW combined-cycle facility with the preferred location near Superior, Wisconsin. This site is currently owned (and would be contributed) by Minnesota Power. The current participants are Basin Electric, Dairyland Power Cooperative and Minnesota Power, with each taking a one-third interest. Minnesota Power would manage construction and be the operating agent. Any partner in the project would be required to hold a minimum 10% interest, but Minnesota Power must have a minimum of 15% or the other participants could replace them as operating agent.

Each participant would have one representative on the Management Committee. Actions of the Management Committee would require the approval of the owners holding greater than 50% of the interests and the approval of at least two owners (double majority). Unanimous approval would be required for major items including construction and operating budgets, material contracts, permits, material changes to budgets, affiliate transactions and fuel plans.

Foundational items would require amendment to the basic agreements rather than simply approval of the Management Committee. These include such items such as fuel strategy applying to all owners and administered by the Operating Agent; unit dispatch into MISO as a whole; each owner responsible for its own fuel-cost hedging;

construction and operating agent compensation is limited to cost reimbursement; and all costs and capital paid based on percentage of ownership/interest.

Each owner would be entitled to: (1) a pro-rata portion of capacity, energy and revenue from products of the facility; (2) access to the facility; (3) have a representative located at the facility; and (4) audit the Construction & Operating Agent.

Each owner would be required to demonstrate a credit rating greater than BBB-, in the case of Standard & Poors, or Baa3, in the case of Moody's. If the entity is not rated, then similar creditworthiness would be based on rating agencies' financial metrics. Credit support would be required for failure to demonstrate financial capability via either a letter of credit and/or a cash escrow account in the amount of 12 months of the owner's share of expenses.

Each owner would be required to pay its pro-rata share of construction and operating costs. There would be terms allowing a lender to cure a participant's default. The remedy for a payment default would be that the other owners could each elect to purchase the pro-rata portion of the defaulting owner's interest at 85% of the lower of book value or fair market value.

She then reviewed the restrictions on transfer of the owners' interests, the requirements of the Construction & Operating Agent, insurance, term and decommissioning.

There will be weekly project agreement discussions through December. The steering committee will meet October 19-20, November 12 and December 12. The Chief Executive Officers will meet to discuss the agreement in mid-November and a steering committee meeting will be held on December 11. Ms. Kern then reviewed the project timeline for agreements, nominations and decisions. Full project commitment is planned for February of 2016, with the commitment to nominate for a specific share of the project and the anticipated signing the Definitive Agreements between April and June 2016. Assuming Basin Electric's 300 MW participation and commitment, she estimated the Cooperative's total project cost of approximately $300 million.

C. Gregory County Pumped Storage Update

Ms. Kern reported on a potential pumped storage project.

24. Engineering & Construction Report

A. Project Funding Chart

Matt Greek, Senior Vice President-Engineering and Construction, reported that one contract totaling $3.4 million (LRS Unit #2 Circulating Water Electrical Upgrade Contract) would be presented for approval this month. He then presented the listing of major projects including the approved budget amounts, total amounts committed and completion dates.

B. Pioneer Generation Station Phase III Update

Josh Rossow, Project Manager II, noted that last Board meeting he was asked if PGS Phase III could be utilized as an intermediate or base-loaded unit. He noted that the Wartsila engines require an overhaul every 16,000 hours. He presented a photograph of the PGS Phase III construction and reviewed Wartsila's engine service schedule.

C. LRS Unit #2 Circulating Water Electrical Upgrade Contract

Trenton Schwan, Electrical Engineer III, noted that the electrical equipment at each of the LRS cooling towers has reached the end of its useful life and requires replacement to ensure safe, reliable and maintainable operations. The scope of the project includes replacement of all the existing motor control centers, 480 kV switchgear, transformers and cable and wiring devices associated with the cooling towers.

The Board approved this $20.4 million project in March of 2014. The Unit #1 work was performed during the 2015 outage; the Unit #2 work is scheduled for the 2016 outage; and the Unit #3 work is to be done during the 2017 outage.

The Unit #2 construction contract includes demolition of the old equipment, installation of the new equipment, refurbishing of the existing electrical systems in the cooling towers (such as lighting, receptacles and junction boxes) and installation of new heat trace and associated control panels in the existing cooling towers. He provided photographs of the completed Unit #1 work.

He reported that Berwick Electric (**Berwick**) has offered to complete the Unit #2 work for the same price as for the Unit #1 work. Mr. Schwan noted that Berwick performed at a high level on the Unit #1 project and has developed a good working relationship with the plant staff and project team members. Berwick's high degree of familiarity with the work required to complete the Cooling Tower Electrical Installation will allow for completion of this project under the compressed Unit #2 outage schedule. Berwick has a strong safety record on-site and completed the work on Unit #1 with zero safety incidents. Mr. Schwan recommended the Unit #2 contract be awarded to Berwick.

After discussion, it was moved by Director Thiessen, seconded by Director Pearson and carried that the following Resolution be adopted:

R06.09-13-15 RESOLVED, that the construction contract for the LRS Unit #2 Circulating Water Pumphouse Electrical Upgrade be awarded to Berwick Electric in the amount not to exceed $3.4 million ($1.44 million Basin Electric cost); and

BE IT FURTHER RESOLVED, that the CEO & General Manager, or his designee, be authorized to execute the required documents.

D. Scanning the Horizon Update

James J. Sheldon, Senior Research & Development Engineer, reviewed the LP Amina BeneficiationPlus Technology, the potential benefit of which would reduce coal input to the boiler by possibly increasing unit efficiency; thereby reducing fuel cost; reducing SO_x, NO_x, Hg and CO_2; and reducing coal-handling maintenance. He reviewed the status of this technology and noted that the next step to demonstrate this technology is a pilot plant scaled to use 1 ton of pulverized coal per hour utilizing a 30-inch reactor. He noted that given the immature status of the technology, this technology is high risk with little direct benefit to Basin Electric and thus does not fit the Cooperative's business model. On August 31, staff responded that while it was interested in the technology, we were not prepared to participate as an equity partner. We did offer to host a pilot plant site and would consider a long-term purchase of processed coal.

He then provided an update on the Allam Cycle technology being developed by 8 Rivers Capital which is being commercialized by Net Power with assistance from Toshiba (which is developing the combustor/turbine process).

He discussed thermodynamic cycles. The Rankine Cycle is a coal-based plant yielding 33% efficiency. The Brayton Cycle uses simple-cycle natural gas turbines yielding approximately 35% efficiency. A natural gas combined-cycle (**NGCC**) plant (which combines the Rankine and Brayton cycles) yields approximately 50% efficiency. The Allam Cycle firing with oxygen and natural gas results in approximately 50% efficiency with CO_2 emissions that can be readily captured for sequestration or sale for beneficial use. The Allam Cycle firing with oxygen and a coal syngas yields approximately 45% efficiency with the same potential CO_2 capture and sale possibilities.

The advantages of the Allam Cycle is that it achieves high efficiency using CO_2 as the working fluid instead of water. CO_2 is captured as part of cycle design (and not an afterthought). The efficiency gain in cycle makes up for the parasitic load of CO_2 capture and compression. He said one could expect capital, operating and maintenance cost to be comparable to NGCC using pipeline natural gas.

Challenges of the Allam Cycle include materials limits, extremely high temperatures and pressures and the fact that CO_2-driven turbine blades require channel cooling which is highly sensitive to particulate.

Mr. Sheldon reported that a 100 MW-size Allam Cycle combustor/turbine facility is currently under construction and scheduled to start operating in 2017. It is budgeted for 8,000 hours of testing.

He then reported on developments in the efforts of Basin Electric, Minnesota Power, the UND Energy & Environmental Research Center (**EERC**) and the North Dakota Lignite Energy Council (**LEC**) concerning the Allam cycle for a coal facility.

The EERC and 8 Rivers have identified four key research and development areas with the Allam Cycle on a coal plant: (1) metallurgy/corrosion; (2) gasifier selection; (3) impurity removal; and (4) syngas combustor.

The LEC grant application is due October 1, 2015 and research and development work is scheduled for January through November of 2016. The Total Phase I estimated cost is allocated as follows: Basin Electric $125,000-$175,000; Minnesota Power/Allete $125,000-$175,000; LEC grant $1 million to $1.5 million; and Department of Energy (via EERC and/or 8 Rivers) $1 million for a total Phase I cost of $2.25 million to $2.85 million with the work to be completed by December 1, 2016.

Assuming the results of the study were positive, he reviewed the time schedule for pilot testing and engineering, procurement and construction of a first-of-a-kind commercial-size natural gas and coal unit.

In closing, he noted that the long-term consortium commitments and benefits are not well defined at this point in time.

25. <u>Financial Services Report</u>

Steve Johnson, Senior Vice President & Chief Financial Officer, distributed copies of the Long-Term Financial Forecast and discussed current economic statistics. The end-of-year margin projection is $70.3 million compared to the budget of $48.9 million. Meetings with the rating agencies have been scheduled for December 2 and 3, 2015.

A. Accounting Report

Darla Miller, Senior Accounting Analyst, reported that the August 2015 Statement of Operations reflected an estimated net margin of $13.9 million compared to the budgeted net margin of $16.2 million for an unfavorable variance of $2.3 million. The net margin for the same period last year was $16.2 million.

She also reviewed member sales, surplus sales, operations expenses, maintenance expenses, year-to-date consolidated net income/loss, changes to the balance sheet and month-end cash.

Basin Electric's equity-to-asset ratio at the end of August was 20.2%; at the end of July it was 20.3%.

At the end of August, the equity-to-capitalization ratio using Moody's Rating Service's methodology (both without the consolidation entry for The Coteau Properties Company) was 24.6%; at the end of July it was 24.9%.

At the end of August, the equity-to-capitalization ratio based on indenture requirements for patronage distribution was 20.4%; at the end of July it was 20.2%.

26. Voting Delegate & Alternate to Caucus to Elect NRECA Director Representing the State of North Dakota

Mr. Peltier noted that a caucus to elect the director to represent the state of North Dakota on the National Rural Electric Cooperative Association (**NRECA**) board of directors will take place on October 1, 2015 at 11:45 a.m. Central Time at the North Dakota Statewide headquarters building in Mandan, North Dakota. As a North Dakota member of NRECA, Basin Electric should name a voting delegate and alternate to this caucus. After discussion, it was moved by Director Pearson and seconded by Director Applegate that Directors Fuher and Thiessen serve as voting delegate and alternate, respectively. The motion carried.

27. Directors' Reports

Director Pearson thanked Messrs. Sukut and Rutter for attending the East River annual meeting.

Director Baker thanked Messrs Sukut and Tomac for attending the PRECorp annual meeting and discussing coal mine issues. He noted that the emergency coal supplier to the DFS filed for Chapter 7 bankruptcy.

Director Thiessen expressed his appreciation to Basin Electric staff that helped with Upper Missouri's tour of LCS. The Upper Missouri board also toured McKenzie Electric Cooperative's new office complex during its meeting. He noted that the District 8 caucus had nominated him to Basin Electric's board of directors.

Director Gilbert thanked Messrs. Peltier and Sukut for attending Corn Belt's annual meeting. He noted that the managers were not happy with the BNSF Railway Co. settlement distribution and that it was good that Mr. Sukut was there to answer questions.

Director Brekel reported that the Office of Surface Mining signed off on Tri-State's Colo-Wyo mines.

Director Applegate reported that Kent Pauling will retire as manager of NIPCO at the end of the year. NIPCO's current Chief Financial Officer will be the new manager. Brian Kaeding of the Iowa Statewide, is retiring; NIPCO employee Chuck Soderberg will be the new Iowa

Statewide manager. He also reported that the Tyson packing plant in NIPCO's area has closed. This was a 20 MW load representing 22% of NIPCO's total load.

Director Peltier reported that he and Mr. Sukut met with a couple of GRE-Fixing members during the month. The meetings went well and there is a chance that one may come to Basin Electric on an all-future-requirements basis. Director Peltier expressed his gratitude to Corn Belt for their hospitality during its annual meeting.

28. Date and Place of Next Board Meeting

The next regularly scheduled meeting of the Board of Directors will take place October 13-15, 2015, at Basin Electric's headquarters building in Bismarck, North Dakota.

29. Executive Session

At 12:20 p.m., it was moved by Director Gilbert, seconded by Director Drost and carried that the Board retire into executive session for a report on the Cooperative's deferred compensation plan.

At 12:40 p.m., it was moved by Director Drost, seconded by Director Gilbert and carried that the directors arise from executive session.

30. Adjournment

President Peltier adjourned the meeting at 12:40 p.m.

Gary C. Drost
Secretary-Treasurer