Questions on these minutes should be referred to your G&T.

Manager's Advisory Committee Meeting
May 3, 2018

SUMMARY

Rates-MAC Present

Tom Boyko – East River Electric
Paul Erickson - Sangre de Cristo Electric
Curt Dieren – L&O
Matt Washburn - NIPCO
Tom Meland – Central Power
Joe Farley - Harrison County Rural Electric
Walker Witt - Black Hills Electric
Brad Nebergall – Tri-State
Vic Simmons - Rushmore Electric
Jack Hamblin - Southeast Electric
Doug Hardy – Central Montana
Tim Stephens - Park Electric
Claire Vigesaa - Upper Missouri
Mike Easley - Members 1st
Scott Sweeney- Fergus Electric
Kevin Mikkelsen - Rosebud Electric
Colle Nash - Grand Electric
Ken Kuyper - Corn Belt
Tim McCarthy- Sioux Valley Energy
Martin Dahl - McLean Electric
Jim Gossett - Raccoon Valley Electric

Others Present

Bill McKim - Midland Power
Jerry King - Burke-Divide Electric
Jason Brothen - Mid-Yellowstone Electric
Tim Sullivan - Wright-Hennepin
Brad Schardin - Southeastern Electric
John Lee - Butte Electric
Darick Eisenbraun - Butte Electric
Matt Hotzler - H-D Electric
Dave Page - Whetstone Valley
Craig Codner - Butler Co REC
Russell Gall - Charles Mix Electric
Ken Schlimgen - Central Electric
Lyle Karver - North West REC
Tim Mergen - Meeker Co-op
Bob Sandberg - Wright-Hennepin
DeeAnne Newville - Renville-Sibley
Gary Highley - McKenzie Electric
John Skurupey - McKenzie Electric
Dale Haugen - Mountrail Williams Electric
Jeremy Mahowald - Upper Missouri
Dick Johnson - West River Electri
Rick Knick - Sheridan Electric
Riley Tommerup - Sheridan Electric
Scott Moore - FEM Electric
Ted Smith - Sioux Valley Energy
Kory Johnson - Agralite Electric
Carmen Hosack - Nishnabotna Valley REC
Jeff Bean - WIPCO
Adam Granger - PRECorp
Quentin Rogers - PRECorp
Kara Brooks - PRECorp
Tim O'Leara - Lyon-Lincoln Electric
Pat Carruth - MVCLPA
Bruce Kraemer - Crow Wing Power
Don Franklund - IEA
Randy Hauck - Verendrye
Wayne Martian - North Central Electric
Timothy McIntyre - Lake Region Electric
Chris Larson - Clay-Union

Char Hager - Northern Electric
Travis Kupper - IEA
Paul Fitterer - Capital Electric
Bruce Garber - Dakota Valley & Northern Plains
Greg Hollister - East River

Basin Electric

Dale Niezwaag
Val Weigel
Steve Johnson
Ken Rutter
Matt Greek
John Jacobs
Jason Doerr
Elizabeth Erhardt
Chad Reisenauer
Becky Kern
Shawn Deisz
Kelly Cozby
Traci Bettenhausen
Tammy Langerud
Jean Schafer
Andrew Buntrock
Chris Baumgartner
Paul Sukut
Dave Raatz
Lisa Carney
Andy Buntrock
Tyler Hamman
Gavin McCollam
Myron Steckler
Mike Risan
Tom Christensen
Dave Sauer

General Manager's Report

CEO & General Manager, Paul Sukut, highlighted on where staff is at this time. Mountain West discussions continue; communication was sent removing ourselves from the AVS lease allowing us 340 MW of additional exposure to the market. When it comes to LOS, staff will present to the Board of Directors as to what will happen there. The late spring did not help with DGC and moving product so right now we are below budget on our production even though it is running very well. We will continue to move as much product possible.

Member Manager's Report

Tom Meland, Central Power Electric - Pass
Tom Boyko, East River Electric Power - Seeing first Ethanol plant going Self- Generation 4.5 MW of 11MW to be doubled later. The 23MW Sugar Beet plant has about 15MW going to self-generation.
Kevin Mikkelsen, Rosebud Electric - Pass
Mike Easley, Members 1st Power Cooperative - PreCorp is hoping Carbon Creek assets access that are up for sale will continue serving 45 MW load, though economics are a driver in this.
Phil Lands - Corn Belt Power Cooperative- an ethanol plant, will have a combined heat and power facility of about 3 MW up and running the first quarter of 2019. Iowa just passed an energy bill reducing regulations, giving us more flexibility.
Claire Vigesaa, Upper Missouri Power Cooperative- Did not get about 75-100MW of gas processing load due to pricing.
Vic Simmons, Rushmore Electric Power Cooperative - Pass

Doug Hardy, Central Montana Electric Power Cooperative - Pass
Paul Erickson, Sangre de Cristo Electric Assn - Held a recent strategy meeting preparing for what they are seeing, an increase in the renewable portfolio.
Brad Nebergall, Tri-State - lost an existing plant, but the load growth through the first three months have increased by 3 ½ percent.

Rate Discussion

Rate Subcommittee Update *(Action Item).*
Dave Raatz, Senior VP of Asset Management, Resource Planning & Rates, gave a quick update to the committee on TransCanada status before starting his rate subcommittee update presentation.

Breaking the presentation into two parts, Dave began (Rate Schedule Components) with rate subcommittee updates sharing a chart reflecting our current estimate of the market (Transmission, Energy from the RTO, and Capacity) compared to Basin Electric's Wholesale rate to the Membership. Focusing on what our Demand Charge is today initiated several discussion whether Basin Electric should establish a fixed charge or come up with an incentive rate. Staff agreed establishing a fixed charge would only see movement of dollars from one member to another. Instead, staff came back with an incentive rate concept and the Rate Subcommittee members recommended to move forward to seek Manager Advisory Committee approval.

Continuing discussions, Dave discussed the Incentive Rate Concept. The incentive rate would apply to four years, 2019, 2020, 2021, and 2022, so if an application was submitted during these years an $11 demand rate would be guaranteed during this four year window. After that, the full base demand rate would be in effect.

Dave then outlined Key Points of Incentive Rate. By giving the discounted rate, there will be no negative impact on Basin Electric's bottom line. It was the Rate Subcommittee's recommendation as an action for the Board. Basin Electric staff is trying to get loads that we otherwise would not get.

> **Questions from committee members answers by Basin Electric staff.**
>
> ***Mike Easley moved to accept Rate Subcommittee recommendations; seconded by Tom Boyko. Discussion held between committee members to raise the allowed member markup from two dollars to three dollars. Upper Missouri noted this is just a band aid for the next four years, this should help stabilize Basin Electric, grow margins so we can look at rate reductions. Discussion between members continues. Char Hagar from Northern Electric commented of losing a load due to a bidding ward (6 to 8.5 MW). A call for vote was taken, Motion carried. (10-1)***

2019 Schedule A Components - Elizabeth Erhardt, Rate & Load Analyst, covered four topics summarizing the rate schedule; General Rate Structure, Special Purpose Rates, Purchase Rates, and Other Rates. Concerning Basin Electric Base and Fixed CROD, there are no actual rate components determined at this time but desires to hold the rates constant into 2019. Under the Demand Period Waiver, the 2018 hours would be carried into 2019; there would also be a one year extension of the intent to maintain language. Moving onto Special Purpose Rates, the hope is to maintain the 34 mills rate into 2019 on Electric Heat; no change for the Interruptible Rate, the Renewable Delivery Rate will consider a decrease to the mill adder from six mills to one mills. MISO Wind Resource Rate will not change; the Standby Rate shows change in 2019 based on base rate levels and estimated transmission cost. The Purchase Rates for load management will have no change and staff will keep the $18/kW season payment for now, and for the Generation Purchase Rate, we are expecting to see these rates decreasing in 2019. Elizabeth then moved onto Other Rates. For PURPA, again a decrease in rates should be seen in 2019 due to lower market prices; no change for the Load Data Incentive Rate; Environmental Attributes there is no change.

Questions from committee member answered by Basin Electric staff.

Dave Raatz continued discussions on three potential changes on rates. The first one was on PURPA Rate where it talked about an increased member owned generation option from 150kW up to one MW. Under today's rate, there is a provision if a member owns generation, they can own generation up to 150kW and Basin Electric will compensate our PURPA Rate. We're seeing from a staff perspective a desire from member's to build larger solar projects.

The second topic on New Consumer and Member Owned Battery Rate. Today the costs of batteries are close to 12-14kW a month. We have some members who would like to place batteries on the system to reduce demand purchases from Basin Electric but this is a violation of the all requirements contract. Basin Electric would like to offer this for Members to put out on their systems. Additional discussion on this topic is planned with the Rate Subcommittee.

Questions from committee members answered by Basin Electric staff.

Dave concluded his discussions by informing the committee that some distribution members are struggling on how to implement the Standby Rate for solar projects. The concept staff would like to visit with the Rate Subcommittee about is creating a new category for solar projects under a MW.

Strategic Planning Update

Chris Baumgartner, Senior VP of Member Services & Administration, shared Basin Electric cooperative activities and staff's reliability to our members along with other operating efficiencies used by staff today.

UREA Update/Fertilizer Joint Venture

Dave Sauer, Senior Vice President & Chief Operating Officer of DGC - Highlighted committee members on the recent status of the UREA manufacturing and some of the issues they are encountering currently.

Questions from committee members answered by Basin Electric staff.

Director of DGC/BEPC Portfolio Management, Ken Rutter, continued discussions highlighting the first six months of the year based inventory production and the sales side of fertilizer focusing more on UREA than ammonia. During the months of November and December timeframe, staff's emphasis is put on selling forward to spring and cash sales on that day's market. With the start of the UREA plant, we had a limitation of 70,000 tons of what staff could sell. In March, the plant is producing and we were still selling beyond available product, which is where we wanted to be.

With the winter dragging into early spring, staff encountered below normal temperatures which created an issue in shifting of the spring season. During this time, staff was able to make some critical ammonia sales. With the plant just coming online, the products were set up for the spring season with the UREA sales being above and beyond this. At the end of the season, both ammonia and UREA showed enough inventory was built up, and keeping the plant running through the spring season, staff will need to manage the ammonia position. When looking at the financial performance for DGC, staff is looking at lower margin sales from the product because of a shift in the spring season and tightness.

Concluding his presentation, Ken summarized with DGC Joint Marketing discussions recently held, the financial benefits, and that staff is currently at a point where they are ready to seek approval from the Basin Electric Board.

Questions from committee members answered by Basin Electric staff.

DGC Impairment/Deferred Revenue

Vice President & Controller Shawn Deisz began with the Recognition and Measurement of Impairment. She noted the process is very structured and staff works closely with the external auditors when doing the analysis. Shawn then outlined three steps involved in reviewing for an impairment. First there must be indicators that an impairment actually exists; second, if indicators are present, staff would test for recoverability; third, staff must determine the measurement of the actual impairment amount. Shawn broke down each step along with the general approach staff takes when looking at the asset group being reviewed for impairment.

Questions from committee members answered by Basin Electric staff.

Steve Johnson, Senior Vice President & CFO, talked about Deferred Revenue and how the rating agencies view when conducting a ratings review. Addressing the second question, with regard to future forecast prices and what bearing that may or may not have on a potential DGC impairment, Steve shared a graph with last year's forecast along with prices staff will be using in this year's forecast.

The discussion then moved to DGC's Debt Portfolio. Steve noted that even if a write down of the assets takes place, the debt does not go away. There is no correlation between an impairment and a reduction of debt. It's an obligation that DGC/Basin Electric will have to deal with until the debt is paid off.

Questions from committee members answered by Basin Electric staff.

Mountain West Update

Senior Vice President of Transmission, Engineering & Construction, Tom Christensen touched on Mountain West Transmission and the evolution of the whole process and current developments. Tom informed committee members of the SPP Board of Directors endorsing a

Policy Statement in March of 2018 and PSCO withdrawing from the market in April of this year. Tom then outlined the SPP geography map and its current footprint and those members that are currently within Mountain West Transmission Group. With strong support from the SPP Board for this initiative, members will need to look at the need to fix the cost shift issue, address DC Tie Cost Sharing, and if these two issues are fixed, then the group will need to address Market Benefits. If these three are resolved then the group would be able to proceed with the steps needed to accomplish us joining in the group.

Questions from committee members answered by Basin Electric staff.

BEPC Resource Planning

Starting with his presentation, Dave Raatz started with the RFP Analysis and the strategy staff previously took was to create a cliff event and purchasing power in the market for some time. With the load growth we're seeing, staff is pursuing low cost market capacity purchases in order to push out the need for additional capacity/new build from the 2023-2025 time period to 2028. As a result of the recent RFP, the goal is to secure capacity out until 2028 as this tends to be about where the breakeven point is for needing new builds in SPP, and thus significantly increase our open energy position and rely more of the energy market.

Dave outlined the concept of a decision timeline for Basin Electric staff and that in April staff was authorized by the Board of Directors to purchase 150 MW capacity in Montana. In May we will look at a possible purchase in MISO, and will look for SPP Resource authorization in May or June.

Talking about the amount of surplus/(Deficits) in MISO Zone 1, Dave shared slides reflecting a shortage of 300 MW capacity in 2025-2026. At this time, staff is looking to purchase accreditation without energy in MISO, the strategy will allow Basin Electric to purchase energy in the market and should provide economic value for Basin Electric. He then dove into the SPP region and talked about a couple of difference considerations related to resource decisions and challenging economics. Steve Johnson joined in and talked about more details related to the AVS unit 2 leveraged lease and why Basin Electric got into the leverage lease back in the 1980's. Sharing with the committee members, Dave advised how staff has several options to support our obligations. He then identified the SPP capacity surplus/deficits, and discussed the ongoing analysis Basin Electric staff is working on to reliably serve member load.

Manager's Advisory Committee Meeting
May 4, 2018

SUMMARY

Rates-MAC Present	Others Present
Tom Boyko – East River Electric	Bill McKim - Midland Power
Paul Erickson - Sangre de Cristo Electric	Jerry King - Burke-Divide Electric
Curt Dieren – L&O	Jason Brothen - Mid-Yellowstone Electric
Matt Washburn - NIPCO	Tim Sullivan - Wright-Hennepin
Tom Meland – Central Power	Brad Schardin - Southeastern Electric
Joe Farley - Harrison County Rural Electric	John Lee - Butte Electric
Walker Witt - Black Hills Electric	Darick Eisenbraun - Butte Electric
Brad Nebergall – Tri-State	Matt Hotzler - H-D Electric
Vic Simmons - Rushmore Electric	Dave Page - Whetstone Valley
Jack Hamblin - Southeast Electric	Craig Codner - Butler Co REC
Doug Hardy – Central Montana	Russell Gall - Charles Mix Electric
Tim Stephens - Park Electric	Ken Schlimgen - Central Electric
Claire Vigesaa - Upper Missouri	Lyle Karver - North West REC
Mike Easley - Members 1st	Tim Mergen - Meeker Co-op
Scott Sweeney - Fergus Electric	Bob Sandberg - Wright-Hennepin
Kevin Mikkelsen - Rosebud Electric	DeeAnne Newville - Renville-Sibley
Colle Nash - Grand Electric	Gary Highley - McKenzie Electric
Ken Kuyper - Corn Belt	John Skurupey - McKenzie Electric
Tim McCarthy - Sioux Valley Energy	Dale Haugen - Mountrail Williams Electric
Martin Dahl - McLean Electric	Jeremy Mahowald - Upper Missouri
Jim Gossett - Raccoon Valley Electric	Paul Fitterer - Capital Electric
	Chris Studer - East River
	Riley Tommerup - Sheridan Electric
	Dustin Zubke - East River
	Ted Smith - Sioux Valley Energy
	Kory Johnson - Agralite Electric
	Carmen Hosack - Nishnabotna Valley REC
	Jeff Bean - WIPCO
	Tim O'Leara - Lyon-Lincoln Electric
	Pat Carruth - MVCLPA
	Bruce Kraemer - Crow Wing Power
	Don Franklund - IEA
	Randy Hauck - Verendrye
	Wayne Martian - North Central Electric
	Timothy McIntyre - Lake Region Electric
	Travis Kupper - IEA
	Kory Johnson - Agralite
	Bruce Garber - Dakota Valley & Northern Plains
	Greg Hollister - East River
	John Sokoloski - Goldenwest Electric

Matt Klein - Union County Electric
Chance Briscoe - Northwest Rural PPD
Ross Loomans - Lyon REC
Scott Reimer - Federated REA
Mick Kossan - CPEC

Basin Electric

Dale Niezwaag
Steve Johnson
Matt Greek
John Jacobs
Jason Doerr
Elizabeth Erhardt
Chad Reisenauer
Becky Kern
Shawn Deisz
Kelly Cozby
Chris Baumgartner
Paul Sukut
Dave Raatz
Lisa Carney
Andy Buntrock
Tyler Hamman
Mike Risan
Tom Christensen
Dave Sauer
Sue Sorenson
Darla Miller

Wholesale Power Contract Exceptions

Billing Rate Differences - Beck Kern, Director of Long-Term Utility Planning, displayed and explained a slide identifying the various exceptions and differences under the Wholesale Power Contract of our members as of Jan 1, 2018. This material was pulled together at the request of the Rate Subcommittee.

Financial Forecast

Wind and Markets - Ken Rutter touched on some of the drivers in the market place and what are influencing the prices and substantially increasing the negative effects on pricing.

Sharing several graphs, Ken outlined the correlations of prices in the markets and wind generation levels, which essentially indicates a 50% correlation. Taking a case scenario with wind penetration level, an average across all hours was 23% wind to load penetration in 2017. This year is showing something closer to the 18% level which correspondence with the higher generation that is seen in the market place.

Questions from committee members answered by Basin Electric staff.

Discussions continue between committee members and Basin Electric staff. Looking at an analysis from SPP, Ken discussed if there was an interest to build a new asset in the market place, the market would not be able to cover the fixed costs of the asset. The market is trying to serve the energy at the lowest possible cost, it is up to the utilities to determine if they need capacity resources to meet their load obligations and if so to cover the fixed costs of the asset.

Questions from committee members answered by Basin Electric staff.

Continuing, Ken continues with load zone pricing and rough incremental costs showing how staff is still capturing margin over and above the energy costs of the units.

Question from committee member answered by Basin Electric staff.

World We Operate In - Becky Kern presented information as how staff makes assumptions when it comes to the financial forecasting process. Staff focuses in the areas our members and resources are located in which includes SPP, MISO, WECC-RMRG, and WECC-NWPP when it comes to assumptions that go into the power supply models. Looking at various sources, such as load growth, retirements, the current generator interconnections queue's in the areas related to wind and solar, and the forecasted planning reserve margin in the various power supply regions.

The SPP area demand and energy forecasts contained in the power supply model were validated against various other sources to evaluate for reasonability. A look at new resource capabilities additions, using three different sources; IHS, Annual Energy Outlook, and S & P. Most of the forecasts show significant wind and solar development. Modifications were made to the power supply model to incorporate some of this anticipated development as this will have a significant effect on market prices as we go forward. Continuing discussions, Becky addressed future Resource Retirements. These can be challenging because you are trying to predict when units may retire and the entity that owns and operates the unit hasn't made the decision yet. We have mainly focused on making sure all the known announcements have been incorporated into the power supply model. We also reviewed how many coal plants are expected to be 60 years old in the next 10 years to see how much variance there could be to the assumptions in the power supply model. Currently, excluding Basin Electric's LOS units, there are around 200 MW of coal generation in SPP that will be 60 years old or more in the next 10 years.

In MISO, Basin Electric is about 0.2% of the entire MISO footprint. The demand and energy forecasts included in the power supply model seemed reasonable as compared to various other sources of information. MISO is expecting to see significant expansion in the Wind and Solar fleet, as well as some natural gas expansions. It is expected that almost 9,500 MW of coal generation will become 60 years old in the next 10 years and has not announced a retirement date. Nearly 5,000 MW of gas units will be 60 years old in the next 10 years and has not announced a retirement date. Thus, meaning you could see quite a bit of resource retirements going on in the MISO system.

Committee questions answered by Basin Electric staff.

When looking at the MISO forecasted planning reserve market, they have approximately 17-18% for planning reserves. Based on what is on our model, we are looking at the 2024 time period when MISO would start falling short of capacity and new resources would need to be built.

In the WECC-RMRG area, demand and energy forecasts in the model seem comparable to other sources. Again, Wind and Solar is anticipated to be the largest source of capability additions in this region as like in the other regions. When looking at our resource retirements, it is pretty much all coal.

Additional comments from Dave Raatz regarding the market and what drives the economics for Basin Electric staff when looking at capacity.

Member Load Levels - The 2018 Load Forecast was approved earlier this year by the Board of Directors and it was a bandwidth forecast due to uncertainties in oil related load growth and the TransCanada Keystone XL Pipeline. The whole bandwidth forecast developed, is higher than last year's forecast. Staff discussed the version of the forecast to use in the financial forecast with the Rate Subcommittee on April 6th at which member's felt this was the right forecast concept to use in our planning scenarios. Taking a specific look at the energy sales and demand sales compared to last year's forecast reflect an increase in energy sales and a minimal decrease in demand sales for the 1st three years and then demand growth is higher.

Resource Operations - Becky Kern presented the natural gas pricing assumptions that are being utilized in the upcoming financial forecast. The new forecasts show lower natural gas prices in the early years and coming closer to last year's forecast towards the back end. Next up was a general discussion on the various power supply related assumptions that are going into the financial forecast. Staff has not assumed the West RTO (Mountain West) formation goes forward in the financial forecast, at this time, due to the recent exit of PSCo, a scenario could be added later once more information is known related to the west side RTO market. The AVS 2 lease is terminated as of 12/31/2020, the rest of Basin Electric coal fleet continues to operate, and then there are a couple units that will be in MISO market for a couple years after that they will be brought into SPP. With Duane Arnold in MISO through May of 2021 and then back to SPP, they may be shutting down in 2025 and staff has considered that.

With the assumptions, Becky showed preliminary results related to electricity market prices in SPP, MISO, RMRG, and NWPP, coal generation and gas generation dispatch. The market prices from the simulations compared to the forward market prices are trending rather close.

Becky then walked through each of the Basin Electric coal generation stations and showed two years of history, last year's financial forecast results compared to the preliminary generation dispatch in this year's forecast.

Concluding her discussion, Becky showed natural gas generation. Overall the new natural gas generation forecast is lower than last years, primarily due to lower market prices.

Financial Forecast Process - Darla Miller, Manager of Finance Planning/Forecast gave the committee a sense on the major deliverables. The one that will get the most attention is our long-range financial forecast, others are annual budgets; each month staff will look at variance analysis to ask what staff see's versus what was budgeted. This feeds into the end of year estimates, this helps staff plan for the rest of the year. Concluding with sensitivity analysis and modeling, Darla informed the group that this is a task staff tackles daily.
Focusing on a 10 year forecast projection, staff looks at operations, revenue expenses and cash flows as well as increased look into the balance sheet. All these steps aid in making management decisions. The type of software Bain Electric staff uses benefits the members on how financial reporting has been enhanced and improved throughout each departments data integrated into the program making the process more flexible. She continues with a timeline that outlines the process of why a financial forecast seems to take so long. Starting with what

could be the most critical piece, commodity pricing, Darla breaking the items down and how each group is impacted.

Financial Forecast Assumptions - With some of the key assumptions already laid out, Darla mentioned how the forecast aids in setting the member rate, monitor what is anticipated for key ratios, and used as a tool for strategic planning.

Starting with commodity prices, staff used market prices for 2019 and 2020-2028 blended third party outlooks are used, Platts & IHS. Revisiting the topic when it comes to the difference between marketing prices and outlook pricing would be what you can secure today, and outlook pricing is reflected as future periods.

Question from committee member answered by Basin Electric staff.

Continuing with discussions, Darla reviewed a current slide on commodity prices projected for 2019-2028 compared from a year ago. She then visited on nominal pricing and how real dollars are saying what this really looks like by taking away the inflation factor. Darla walked through Natural Gas, NH3 - FOB, HSFO, and Brent displaying slide indicating the same trend throughout with highs in 2014, a dip in 2016, and then coming back up with recovery in the latter years. A quick review on Diesel does not indicate much movement, but there is significant volumes of diesel in market position, currently.

Concluding, Darla discussed Interest Rates. She stated that the one month LIBOR is the driver for all the additional interest rates. When comparing the current forecast to the last forecast, we are up 100 points that will feed into the other indexes.

Question from committee member answered by Basin Electric staff.

Other topics of discussion

Discussion on format for July’s MAC meeting discussed between members.

Next Meeting

- July 17-19 Deadwood, SD