

*Manager's Advisory Committee Meeting  
May 31, 2016*

**SUMMARY**

**Rates-MAC Present**

- Tom Boyko - East River Electric
- Dave Eide - Codington-Clark Electric
- Curt Dieren - L&O
- Ross Loomans - Lyon REC
- Tom Meland - Central Power
- Wayne Martian - North Central Electric Coop
- Matthew Washburn - NIPCO
- Joe Farley - Harrison County REC
- Brad Nebergall - Tri-State (*Via phone*)
- Doug Hardy - Central Montana
- Tim Stephens - Park Electric
- Vic Simmons - Rushmore
- John Lee - Butte Electric
- Claire Vigesaa - Upper Missouri
- Jerry King - Burke-Divide Electric
- Chris Baumgartner - KEM
- Bruce Kraemer - Crow Wing
- Mike Easley - PRECorp
- Ken Kuyper - Corn Belt
- Rick Olesen - Iowa Lakes Electric Cooperative

**Others Present**

- Michael Hoy - McCone Electric Coop
- Randy Hauck - Verendrye Electric
- Ted Smith - Sioux Valley Energy
- Mick Kossan - Central Power
- Greg Hollister - East River
- Jeff Bean - Western Iowa Power Coop
- Lyle Korver - North West REC
- Ryan Hentges - MVEC
- Colle Nash - Grand Electric Coop
- Carmen Hosack - NVREC
- Craig Codner - Butler Co REC
- Jim Bagley - Raccoon Valley
- Bill McKim - Midland Power
- Pat Carruth - MVCLP Assn
- Steve VerMulm - NIPCO
- Don Franklund - IEA
- Kevin Mikkelsen - Rosebud Electric Coop
- Martin Dahl - McLean Electric Coop
- Scott Reimer - Federated REA
- Paul Fitterer - Capital Electric Coop
- Bruce Garber - Dakota Valley

**Basin Electric**

- |                   |                |
|-------------------|----------------|
| Paul Sukut        | Steve Johnson  |
| Mike Risan        | Dave Raatz     |
| Mike Eggl         | Ken Rutter     |
| Becky Kern        | Lisa Carney    |
| Elizabeth Erhardt | Valerie Weigel |
| Amber Joyce       | Susan Sorensen |
| Diane Paul        | Dave Sauer     |
| John Jacobs       | Dale Niezwaag  |
| Chad Reisenauer   | Terri Schuette |
| Sharon Lipetzky   | Curt Pearson   |
| Mary Miller       | Jen Feigitsch  |
| Jeremy Woeste     | Jean Schafer   |
| Missy Schell      | Steve Tomac    |

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

### **General Manager's Report**

Paul Sukut, General Manager and CEO, welcomed all parties and reported on current status on DGC and loss of the ammonia plant as well as over-all losses this spring season. Paul touched on highlights from Minnkota discussions; the cost of load management; main concern is rates right now rather than the addition of another membership. At the end of the day, the goal is to protect our own membership. Open discussion was held addressing Member questions.

### **Member Manager Reports**

KEM Electric - Chris Baumgartner reported not as many new services but steady. Rains are good.

Crow Wing Power - Bruce Kraemer had nothing new.

Burke-Divide Electric - Jerry King reported things have slowed down but still steady.

Upper Missouri - Claire Vigesaa reported growth is in gas compression; still over 10 percent compared to last year.

East River Electric - Tom Boyko - Ethanol plants - members

Rushmore Electric - Vic Simmons reported loads are down

Park Electric Coop - Tim Stephens reported on Wind farms.

Central Mountain Electric - Doug Hardy reported the rain is great - loads are poor.

Iowa Lakes Electric - Rick Olesen - Recovery-ethanol plants have added addtl processes

L&O Power Coop - Curt Dieren reported loads are down and has had solar inquiries.

Lyon REC - Ross Loomans - thanked everyone for the support and information that was beneficial for his area qualifying for funding.

Corn Belt Power - Ken Kuyper reported on FERC struggles continuing.

PRECorp - Mike Easley - reported loads are down about 17% - hopefully we have reached the bottom.

North Central Electric - Wayne Martian - Requesting financials on private companies. A lot of financial challenges.

Central Power Electric - Tom Meland - SPP filing is behind us. Annual update in July.

NIPCO - Matt Washburn - Extremely wet, altering planting season. Loads over 5% b/c of the weather. ATR Approval process.

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Tri-State G&T - Brad Nebergall (*via phone*) had nothing to add.

### DGC consultant review

Dave Sauer, Senior Vice President and COO of Dakota Gasification Company, reviewed results of management consultants findings from the past ten years, showing a total of \$15 million spent and each area has different skill sets. The results received from:

Ritchie & Associates group (2006) - focused on maintenance and repair techniques; mainly work and no lag time.

Renoir - 1 (2008-2011) - focused on energy efficiency and increasing plant availability; making sure everyone looked at what was important across the whole plant; importance to reduce budget with a high overhead; and need to diversify.

Renoir -2 (2011-2016) - reviewed different tasks internal labor versus contract services keeping in mind our labor contracts; transparency between departments; start a financial plan- starting at zero-based budget; take advantage of the wealth of knowledge.

Renoir -3 reflected the use of minimum staffing and job consolidation (went from six to four plant operating units and reduced one department manager from five to four departments).

Life Cycle Engineering - focused on reliable versus availability. Currently we are working with this group because we found them to have the best practices with looking at employees to empower themselves by problem solving; looks at internally within the organization to move forward to improve; warehousing execution of job assignments; and operated within the limits of the unit.

Some of the outcomes noticed are:

- A) Daily Profit/Loss Statement issued internally to all employees. This will help each group contribute to the plant.
- B) Balanced Score Cards help strategically to show where we are headed today with the operation of the plant.
- C) New management processes are creating the teams to be a lot smoother and working together.
- D) Change management/continuous improvement. Here we work with employees to build a commitment from the ground up - helps keep it a lot more sustainable.
- E) Reduced expenses.
- F) Opportunity for Revenue Enhancements (Diverse group - reached out to energy resource center to take a look at the products we do have and see if there are other areas and markets we can break into.) Our products are not the same because we are coal and not oil deprived.
- G) Added four staff members to Marketing group.

He said we are trying to get better at what we do - it takes a lot of staff time. A lot of things they brought were already on the books.

Basin Electric staff and Members engaged in discussions.

**Action Item:** - Strategic plan Syn Gas as to sales? What a shut-down case looks like. Perhaps consolidating them into one in the future. Opportunities in the future.

### **Workforce Development Update**

Diane Paul, Senior Vice President of Human Resources, presented to the committee on the average number of retirements since the copious amounts in 2013. The numbers Diane shared on Basin Electric's current employee demographics reflected an average age of 43 and tenure of 12 years. During the large number of retirements and turnover, Basin Electric had lost history and an understanding of the cooperative culture in its workforce.

She stated some of the strategies being used at Basin Electric to integrate newer employees into the cooperative workforce are to ensure a greater effort on the recruitment front (vie for the best in the workforce and then retain those employees); revisit the new employee orientation processes; and maintain a constant communication with employees. Looking into the future and the potential retiree numbers, Basin Electric will continue to prepare for these transitions by developing staffing plans and in-house educational opportunities focused on the cooperative business model; implementing a monthly live stream educational series; and instituting a job shadowing between departments within Basin Electric and with the membership.

Through all these initiatives, Basin Electric is confident succession planning and learning and development efforts will ensure employees are prepared for the future, with an optimism about our ability to address foreseeable challenges.

### **SPP Short-term benefit/Load Management**

Ken Rutter, Senior Vice President of Marketing and Asset Management engaged discussions with the MAC committee as to SPP Market Performance Update. Some of the ways Basin Electric financially benefits in the market is A). Purchase from the market more effectively than Basin Electric can self-generate, thereby lowering costs and avoiding fuel expense. This is a Buyer Benefit; or B). Basin Electric sell excess energy to the market as a result of having more economic generation that we have load. Thereby capturing margins on generators to help offset fixed costs already incurred. This is a Seller Benefit.

Ken commented as to seeing fourteen year lows in natural gas, as of recent, it is even low for the last six years. Because of this nearly 50% of load in the market was served by wind assets.

The current market prices in SPP and MISO have their own distinct asset entered into the market. Once getting past the Wind you will find some cheap coal assets,

The question we need to ask ourselves is whether we have surplus to sell or are we a buyer. Being in the market whether we are shut down or not shows us chipping away at our fixed assets. What does additional wind do to the overall market place? In December Basin Electric was benefiting in SPP compared to April. Ken then went on to visit about Hedging impacts and how ineffective they have been. He reviewed a month as to where we the benefits in SPP are allocated. It was demonstrated times there was a higher level of expense, the combination of these resulted in a \$4.6 million favorable variance in SPP. If we were not in SPP, we would have had \$2.36 million on the marketing side. For the first seven months we show a \$12 million benefit to date.

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### Transmission Benefits Update

Mike Risan, Sr. Vice President of Transmission presented history on the primary benefits to joining MISO from the marketing side. One of the biggest opportunity Basin Electric had was the load growth in the Bakken and Three Forks. Initially, some of the things done were the addition of kV lines, additional generation in 2010 to Culbertson, additional delivery points in Blaisdell. Mike continued with discussing the negotiations with SPP, and the concept to accommodate NERC before joining was Basin Electric would be responsible for the costs. If after joining the SPP, they would cover costs. We were concerned if the new line was a bit too aggressive. We have not heard much feedback on that. The last segment is scheduled to go into service in 2017. Now that we are in SPP we have transitioned into Notice to Construct. An issue identified is north of Lake Sakakawea, south of the \_\_\_\_\_ a 115kV line is needed. Needs were identified but we don't believe they came up with the right solution. We asked SPP to re-evaluate the situation; one being the right-of-way. We are looking at \$27 million in benefits to Basin Electric.

Basin Electric staff and Members engaged in discussion.

### Load Management

Valerie Weigel, Manager of Marketing Finance Analytic and Amber Joyce, Senior Energy Marketing Analyst, reported to the Members on Load Management. Valerie and Amber explained to the Member's the main objective is finding a program that doesn't create any type of a shift. There are three key benefits to this program (Energy, Transmission, and Capacity). During their discussion with the Members, they focused mainly on Energy benefits. What Basin Electric wants to do is capture revenue opportunities during high market conditions; shift energy costs by the LMP hours; and capture costs spread between DA and RT markets, this would prove more cost sharing to the membership.

Valerie and Amber went on to discuss with the Members benefits of Energy Under Day Ahead price spreads. Under Day Ahead there are two peaks hours; one in the morning and one in evening, where a capture spread is determined. They commented at this time, Basin Electric is in a Market trial test with several Members, and continues to reach out to all Members interested in participating in Load Management. Valerie and Amber reviewed testing results and potential benefits that Basin Electric didn't realize before.

They reviewed testing for East River NIPCO, which was found to be very successful; Central Power; Rushmore; Corn Belt; and Upper Missouri, who currently does not have a load management in place. Open discussion facilitated with the Members showed to reflect how it would benefit all of our memberships. At this time, Basin Electric needs to see if we can get enough megawatts on board to see if this would be worth our while.

Valerie Weigel continued discussions on the Processes and what conclusions at the completion of the trial. They emphasized the program is completely voluntarily. It was mentioned to keep in mind when selecting which trial, The Day Ahead trial is financially binding. Basin Electric is looking at load we can control and restore, so we are not looking at losing any load. The prices show a dollar difference where we had times shifted. Load controlled reflected three dollar spread, the early morning hours showed a five dollar spread. This is an example how to use load management to benefit the member and Basin Electric. If we controlled two times a day

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we should shift High LMP's to Low LMP's we could save a monthly benefit of \$11,000. This is the type of benefit we are looking at. Basin Electric is only looking for voluntary participation from Class A members.

The two processes were explained to the committee.

High Level Day Ahead Process reviews forecasted LMP's for the next day and then Basin Electric works with member to determine load management, update demand bids, and finally review DA cleared prices.

High Level Real Time process explained working with the Member throughout the day to determine control and restoration, member provides validation of control, end of month determine if member controlled during time of peak, and finally share in revenue based on sharing mechanism.

They continued with discussing Sharing Mechanism and Load Management Revenue Sharing. They mentioned several highlights under this process that occur during the month.

- a. Objective is to pass through the energy benefit to the member less Basin Electric's costs.
- b. No impact to Basin Electric's member rates.
- c. No impacts to special rates
- d. A distinct letter agreement with the member will outline the rules of the program and the revenue sharing mechanism.

Next touched on was "Daily Data Capture", in this process of all controlled volumes will be captured in distinct books in Allegro. Following that discussion, information on "What is Shared" and "What are Costs?"

Basin Electric staff and Members engaged in discussions specific to Day Ahead trials.

### **Long Term Resource Optimization**

Valerie Weigel, Manager of Marketing Financial Analytics outlined many of the issues on Basin Electric's Long Term Resource Optimization, she advised the members there are no answers available at this time but we will try to answer as many as questions as possible. Valerie touched on how we got to this point. This included a short explanation on capacity factors operation of our coal units; short term economic shutdowns on units; and long term resource competitiveness. Valerie continued her discussion with the question, "how do our units compare and compete in the market?" What we know is that we can't withstand LOS shutdown in 2018 as this would make us short capacity and not enough time to replace it. Brief discussion on the different topics that have been discussed in the Optimization discussions.

John Jacobs, Senior Vice President of Operations discussed Expense Reduction Efforts with the Members. Starting with looking at different plants and their issues. For the CCR rule we will need to add additional capital toward these. If the update is not completed by 2018 the entire fleet will need to shut down. We are looking at our older units and asking ourselves as to what we can do. Is there a timeframe that we can do repair projects versus a replacement? Do we risk losing the reward benefits, are there costs we can defer and what can we do moving forward? With DCC under operations, what can we do make the units more efficient. Things we haven't talked about is that we have a lot of distributed generation. There will be costs as

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they age, we are looking at \$10 million on each. We are looking at doing what is appropriate for our members.

Susan Sorensen, Vice President and Treasurer covered the latest coal impacts with the Members. She then discussed how the process of Investment Decisions (long term) versus Operating Decisions (short, mid & long term) is handled. The process is started by going through an analysis to be sure the right decision is being made. What they are looking at are the costs (fixed and variable), depreciation, revenue or cost savings. Breaking down Fixed vs. Variable costs we will see Fixed is associated with an asset and Variable associated with production (when you produce). To improve the bottom line we are wanting to recover variable costs, chip away at our fixed costs, and in the end make a profit.

Ms. Sorensen went on to review costs incurred within the plants (LOS, DCC, DGC, AVS) keeping in mind once a variable always a variable, once a fixed costs always a fixed costs. Things we know so far, many of our fixed costs would remain, overheads at HDQ's would not substantially decrease, and regulatory asset would be established (Basin Electric only).

Basin Electric staff and Members engaged in discussions.

Valerie Weigel, Manager of Marketing Financial Analytics covered Short Term Marketing Impacts with the Members. She started with discussing Basin Electric's current portfolio versus market pricing.

Ms. Weigel ran through LOS Variable Cost Curves (New and Old) and Updated LOS - AVS Offer Curves with the Members.

Another topic touched on by Ms. Weigel was Market Impacts of Future Basin Energy Portfolio. Here the question is where does the resource value come from in the market? She gave four examples to this question.

*Capacity* - Steel on the ground or purchasing someone else's rights to steel on the ground.

*Energy* - The MWhs of electricity that actually flow and serve the load

*Ancillary Services* - Spinning Reserves; Operating Reserves; Regulation Up; Regulation Down

*Future Products* - Ramp (Compliment all the wind that is coming off and on all the time)

After discussing near term market prices compared to the cost of Leland Olds unit 1, Valerie visited on SPP Market and Wind Penetration. Wind has an impact on the LMP's on the market as well as gas prices. SPP adding 5 MW to the market will drive the wind penetration up. Reflects how wind affects the MW's in the market.

Questions from the Members are addressed by Basin staff.

Becky Kern, Director of Utility Planning follows discussions on Long Term Resource Planning. Ms. Kern addressed the time line presented back in January indicating dates for each landmark, we continue to use this time line to meet our power supply obligations. As we look at our resources we need a time line to be up front on what is needed to help make the right decision

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and when do we need to make these decisions. She then discussed Wind proposals with the Members. Nine proposals were shortlisted, six in ND and three in WY. Several started below \$20/MWh and were short-listed right away; there are several different analysis are taking place right now.

West Side RTO (Brattle Group - working on the concept of a joint tariff). Use the framework to help us in looking at wind in WY. Sometime this fall or early winter we can look at the participants and what they are doing.

Becky continued with a discussion on additional EVA analysis. Right now the model we are using forecasts 2017-2040 showing all markets, transmission flows, and different scenarios. Two Mass Cases and Rate Cases were reviewed, summaries were provided by states and what the case would be. The first series was finished up in February/March, EVA was asked for additional analysis.

Ms. Kern commented to the Members on the Leidos Engineering study taking place, and that they were hired initially to help with Wind generation. One of the issues they are addressing are, where is the best place to put wind generation? Looking at the different wind options, 2023 PROMOD case. Ultimately, we are identifying what the whole picture impact would be. Looking at the group to do additional work, looking at different scenarios. How does the whole economic picture look? In one study there is limited congestion, which is seen more in the south. Lots of wind requests have been submitted to SPP, which requires a fairly sizeable security deposit (\$1,000/MW). Wind projects in SPP must be built in order to get their security deposit back.

*Freedom Mine Analysis* - Becky mentioned Coteau Mine has been asked to run several different analysis.

*Long Term Need* - Becky commented on the current load forecast and the resulting SPP Surplus/deficit, we try to have atleast 100 MW's of surplus to help meet unanticipated load growth. Basin Electric needs to make a decision on how to meet the forecasted shortfall. Reviewing several factors that impact long term resource optimization from future Gas Price, Wind Build outs and Purchases, Clean Power Plan, Competitors Coal Units, Basin Family Pricing (fixed and variable), and Future Basin Electric Resource Needs, all this needs to be factored into our Long Term analysis. Becky summarized her presentation with several points for the Members. We cannot shut down the LOS plant today; our energy, capacity, ancillary services portfolio must be developed considering multiple constraints; we must have informed views on commodity prices, regulations, technology to ensure we make the best decisions; we must consider the accounting implications of changing our existing fixed price and variable price structures; and we will continue to analyze the alternatives and bring forward recommendations that the team believes reflect the consensus view of Senior Management is the best value for Basin Electric's members.

### **Financial Discussion**

Steve Johnson, Senior Vice President and Chief Financial Officer discussed the current status on Economic Development Loans. Steve mentioned they are ready to mature at the end of 2017, he proposes to push them out to 2025. Steve then moved into the 2016 Austerity Program updates. He addressed the original version versus the revised budget indicating a significant difference. Some of this is because of a workforce freeze.



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Basin Electric staff and Members engaged in discussion on the G&T Cooperative Ratings, upcoming expected action taken by Moody's on Basin Electric's credit rating and what effects this would have on Basin Electric. Steve continued on with Fitch's review and that they have affirmed Basin Electric's short-term rating, which is done on an annual basis. He mentioned Basin Electric has not heard much from S&P, the analyst from S&P did have some questions; information has been forwarded to them but no response at this time.

Steve reviewed Basin Electric's YTD Financial results, bottom line the loss will be greater than what was budgeted. He mentioned something Basin Electric is looking at is an Intra-Year Rate Increase.

Mr. Johnson presented the timeline for the 2017-2026 Financial Forecast. Steve mentioned we should have draft numbers for the July Board and MAC meetings. If any changes need to be made or if changes are requested, they will be incorporated and brought back to the board in August for final approval. Potentially looking at implementing a rate increase in September/October. There was then discussion held amongst the committee members as to the rate increase and when it could be implemented. The general consensus was an earlier implementation would be better.

Mr. Johnson briefed the Members on DGC Equity Infusion. At this juncture, it being deemed Series A Preferred Stock. Any and all dividends would be guaranteed by Basin Electric. These would be non-voting shares that that would not be transferable to an entity outside the Cooperative family. Steve then went on to discuss potential restrictions. Those being Limitations on Loans, Investments and Other Obligations of RUS Loan Contraction. Steve continued discussions with Members on Section 1717.654 of the RUS Regulations referencing investments up to 15% of Total Utility Plant. Bottom line, if a member without an Indenture does not meet the 15% limit, it will need to be examined on an individual basis to determine if the cooperative can meet the requirements for the exceptions in the Regulations.

### **Basin Electric position**

Mike Eggl, Senior Vice President of Communications touched on Basin Electric's membership benefits and changes taking place with *Touchstone Energy*. He explains the history of Basin Electric assisted with launching the brand, and we are paying half of the advertisement; based on the fee structure, Basin Electric has paid a total of \$30 million for annual dues to promote TSE since its inception. At this time we are looking for clarification on the value of the Touchstone Energy brand. We are not seeing a strong understanding among general public of who we are.

**Question:** What is out there to deliver on our side? With numerous logos out there do we switch over or continue on with Touchstone. What exactly do we receive from Touchstone?

**Answer:** The whole key to this is unified messaging.

Mary Miller, Director of Communication & Creative Services continued discussions on *Grassroots*. She informed Members as to the crucial time Basin Electric is faced with right now. A large turnover in the workforce, some of that is because baby boomer employees are leaving and the new workforce hired is unfamiliar with the cooperative business model. This is coming

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at a time where pressure is mounting and this is where membership is needed to carry out our message.

Curt Pearson, Manager of Media/Communication Relations and Dale Niezwaag, Senior Legislative Representative reported on what programs there are that will help with getting the younger generation excited and enthused on cooperatives. Dale visited on how we develop a better grassroots advocate to strengthen our employee base and harnessing grassroots advocacy across memberships. Some examples given were develop co-ops employees, directors and members to build relationships with elected and appointed officials by training on State and Federal Government procedures. Another is to develop today's youth into future leaders and promote interaction. Dale commented at this time Basin Electric is looking for cooperatives interested in piloting an Empower Youth program.

### **Solar White Paper discussion**

David Raatz, Vice President of Cooperative Planning discussed Solar and the White Paper previously sent to the Membership. Dave reviewed projects less than 50KW and what amount is found to be above 50KW solar. Basin Electric currently has a 10 MW cap under the Renewable Energy Purchase Rate. Some of the key criteria were addressed and mentioned that Basin Electric would purchase 80 dollars per MW rate. Dave then address Solar Pass-through rates. Looking into the future there is an 8-10 reduction in value.

*Committee members voiced their support to raise the cap to extend the 10Kw cap if is starting to exceed it.*

*Action Item: Look back at what amount is going back to the members.*

### **Next Meeting**

- July 19-21, Deadwood, SD