POWER SUPPLY PROJECT COMMITTEE GREAT LAKES UTILITIES MINUTES



July 24, 2019 Teleconference

COMMITTEE MEMBERS:

Clintonville

Absent

Kiel

Kris August

Manitowoc

Nilaksh Kothari

Shawano

Absent

Wisconsin Rapids

Jem Brown

Legal Counsel:

Richard Heinemann, Boardman & Clark

Absent:

Brian Knapp; Brian Ellickson

Additional Attendees:

Ryan Pelowski; John Fales; Mike Furmanski; Dave DeJongh;

Nicolas Kumm; Kurt Wood; Scott Dennee; Andy Onesti

Chair Jem Brown called the meeting to order at 10:04 a.m. Those present are indicated above.

APPROVAL OF MINUTES: The Regular Session Minutes from the April 23, 2019 meeting were presented for approval.

MOTION: Motion was made by Nilaksh Kothari and seconded by Kris August to approve the Regular Session Minutes from April 23, 2019. Motion carried unanimously.

ENERGY AND CAPACITY PROPOSALS: A RFP for energy purchases for 2023 through 2035, capacity purchases from PY23/24 through PY 29/30, and renewable energy projects, with or without associated storage capabilities was released on May 15 with a due date of June 6, 2019. GLU received 9 responses for the energy purchases, 1 response for the capacity purchases, and 4 responses for renewable energy. The lowest offered indicative prices for energy products for delivery at the WPS.MPU node and at the WPS.GLU node were discussed. The pricing for the energy products were slightly higher than the current contracts. The capacity purchase was for only Zone 1 was significantly higher than the current contracts. Multiple proposals were reviewed for the renewable energy with different options. Discussion ensued. The consensus was to not pursue any of the offers at this time.

BEHIND THE METER MEMBER SOLAR PROJECT: In the recently completed long-term power supply analysis conducted by Leidos, renewable energy, and in particular solar energy, was identified as a key candidate for future consideration. Two options of a possible solar project, namely a wholesale utility-scale PPA, and a smaller distributed solar facility located "behind the meter" were presented. For a utility-scale PV PPA the proposed off-take sizes are for 50 MW (109,700 MWh annual production) or 100 MW (219,400 MWh annual production). The "behind the meter" project proposal is for a single project of 2 MWs (4,038 MWh annual production) which assumed the utility will be responsible for the cost of land and interconnection. The wholesale solar project has a projected breakeven point in the first year but requires a commitment to a 50 MW size project which is a significant portion of the GLU energy requirements. A distribution connected project would reduce risks by being close to the load which would reduce congestion risks and the smaller size project would reduce the financial risks. The payback varies for six to

ten years. Discussion ensued to confirm that this project will be a GLU project and will be incorporated into the wholesale power supply costs rather than offsetting member purchase. The consensus was to continue with smaller distributed solar generation at member sites and have a developer make a presentation at the next GLU meeting to consider alternatives including retaining a potential solar consulting expert.

ADJOURN: Motion to adjourn by Kris August and seconded by Nilaksh Kothari. Motion carried unanimously. Meating alljourned at 10:27 a.m.

Jem Brown, Chair



GLU WEST POWER SUPPLY PROJECT COMMITTEE GREAT LAKES UTILITIES MINUTES

July 24, 2019 Teleconference

COMMITTEE MEMBERS:

Bangor Ryan Pelowski
Cornell Dave DeJongh
Medford John Fales
Trempealeau Kurt Wood

Legal Counsel:

Richard Heinemann, Boardman & Clark Law Firm

Managing Director:

Nilaksh Kothari

Additional Attendees:

Jem Brown; Nicolas Kumm; Mike Furmanski; Kris August; Scott

Dennee

Absent:

Chair Dave DeJongh called the meeting to order at 10:28 a.m. Those present are indicated above.

MINUTES: The Regular Session Minutes from the April 23, 2019 meeting was presented for approval.

MOTION: Motion was made by John Fales and seconded by Kurt Wood to approve the Regular Session Minutes from April 23, 2019. Motion carried unanimously.

CASH RESERVE POLICY: The final cash reserve policy and methodology for GLU-West members was presented for approval. The policy was updated to incorporate the comments from members and attorney at the April 23, 2019 meeting. A brief discussion ensued.

MOTION: Motion was made by John Fales and seconded by Ryan Pelowski to approve the Cash Reserve Policy. Motion carried unanimously.

ENERGY AND CAPACITY PROPOSALS: A RFP for energy purchases for 2023 through 2035, capacity purchases from PY23/24 through PY 29/30, and renewable energy projects, with or without associated storage capabilities was released on May 15 with a due date of June 6, 2019. GLU received 9 responses for the energy purchases, 1 response for the capacity purchases, and 4 responses for renewable energy. The lowest offered indicative prices for energy products for delivery at the WPS.MPU node and at the WPS.GLU node were discussed. The pricing for the energy products were slightly higher than the current contracts. The capacity purchase was for only Zone 1 and was significantly higher than the current contracts. Multiple proposals were reviewed for the renewable energy with different options. Discussion ensued. The consensus was to not pursue any of the offers at this time and believed that this kind of information helps plan for the future.

BEHIND THE METER MEMBER SOLAR PROJECT: In the recently completed long-term power supply analysis conducted by Leidos, renewable energy, and in particular solar energy, was

identified as a key candidate for future consideration. Two options of a possible solar project, namely a wholesale utility-scale PPA, and a smaller distributed solar facility located "behind the meter" were presented. For a utility-scale PV PPA the proposed off-take sizes are for 50 MW (109,700 MWh annual production) or 100 MW (219,400 MWh annual production). The "behind the meter" project proposal is for a single project of 2 MWs (4,038 MWh annual production) which assumed the utility will be responsible for the cost of land and interconnection. The wholesale solar project has a projected breakeven point in the first year, but requires a commitment to a 50 MW size project which is a significant portion of the GLU energy requirements. A distribution connected project would reduce risks by being close to the load which would reduce congestion risks and the smaller size project would reduce the financial risks. The payback varies for six to ten years. Discussion ensued to confirm that this project will be a GLU project and will be incorporated into the wholesale power supply costs rather than offsetting member purchase. The consensus was to continue with smaller distributed solar generation at member sites and have a developer make a presentation at the next GLU meeting to consider alternatives including retaining a potential solar consulting expert.

ADJOURN: Motion to adjourn by Kurt Wood and seconded by Ryan Pelowski. Motion carried. Meeting adjourned at 10:46 a.m.

Dave DeJongh, Char



LAKESWIND PROJECT COMMITTEE GREAT LAKES UTILITIES MINUTES

July 24, 2019 Teleconference

COMMITTEE MEMBERS:

Bangor

Ryan Pelowski

Cornell

Dave DeJongh

Medford

John Fales

Power Supply Committee Representative

Absent

Trempealeau

Kurt Wood

Legal Counsel:

Richard Heinemann, Boardman & Clark Law Firm

Managing Director:

Nilaksh Kothari

Absent:

Brian Knapp

Additional Attendees:

Jem Brown; Nicolas Kumm; Kris August; Mike

Furmanski; Scott Dennee

Committee Chair John Fales called the meeting to order at 10:47 a.m. Those present are indicated above.

MINUTES: The Regular Session Minutes from the April 23, 2019 meeting were presented for approval.

MOTION: Motion was made by Dave DeJongh and seconded by Ryan Pelowski to approve the Regular Session Minutes from April 23, 2019. Motion carried unanimously.

WIND PROJECT PERFORMANCE REPORT THROUGH JUNE 2019: The overall performance of the project through June 2019 was reviewed. The operation of the wind farm in the market continues to be stable. There have been no curtailments for either reliability or economic dispatch to date in 2019. The energy production from the wind farm in 2019 YTD continues to fall short of projections. The reduced energy production along with improved MISO energy pricing has resulted in the financial performance of the project to be ahead of budget. This has resulted in positive cash flows for the wind project through May of 2019 of approximately \$75,000. The cost of the wind energy for 2019 YTD, purchased price minus revenues received from sale to MISO market, is averaging \$14.73/MWh. The costs ranged from a high of \$20.16/MWh in May to a low of \$9.42/MWh in February. The projected cost being used for billing in 2019 is \$14.00/MWh. The total output of the wind farm in 2019 YTD is 76,744 MWhs which extrapolates to an annual total of ~153,000 MWHs versus an estimated annual output of 172,000 MWhs. Discussion ensued on the significant loss event on July 9, 2019.

ADJOURN: Motion to adjourn by Dave DeJongh and seconded by Kurt Wood. Motion carried. Meeting adjourned at 10:55 a.m.

John Fales, Chair



GREAT LAKES UTILITIES BOARD OF DIRECTORS MEETING MINUTES

August 7-8, 2019 Madison, WI

CITIES REPRESENTED:

Bangor Ryan Pelowski Clintonville Brian Ellickson Cornell absent

Escanaba, MI Mike Furmanski Kiel Kris August Manitowoc Nilaksh Kothari

Manitowoc Nilaksh Kotha Marshfield Nick Kumm Medford John Fales Shawano Brian Knapp Stratford Scott Dennee Trempealeau Kurt Wood Wisconsin Rapids Jem Brown

Legal Counsel: Attorney Richard Heinemann, Boardman & Clark

Additional Attendees: Kent Myers Absent: Dave DeJongh

Jem Brown, Chair of the Board, called the meeting to order at 1:05 p.m. and called the roll. A quorum was present with eleven communities represented. Those present are indicated.

STRATEGIC PLANNING SESSION: Kent Myers of Vision Companies facilitated the Strategic Planning Session which included defining a clear vision of GLU; succession planning and retaining key personnel with the upcoming retirement of N. Kothari; and discussion of the anticipated future state of GLU.

The Board recessed at 4:55 p.m.

The Board reconvened at 8:30 a.m. on August 8.

NEXT MEETING: August 13, 2019 at 9:30 a.m. - Medford, WI

ADJOURNMENT: Motion by Nick Kumm and seconded by Kurt Wood to adjourn. Motion carried unanimously. Meeting adjourned at 12:05 p.m.

John Fales, Secretary



GREAT LAKES UTILITIES BOARD OF DIRECTORS MEETING MINUTES

AUGUST 13, 2019 MEDFORD, WI

CITIES REPRESENTED:

Bangor Ryan Pelowski
Clintonville Brian Ellickson
Cornell Dave DeJongh

Escanaba, MI Absent Kiel Absent

Manitowoc Nilaksh Kothari
Marshfield Nicolas Kumm
Medford John Fales
Shawano Brian Knapp
Stratford Scott Dennee
Trempealeau Kurt Wood
Wisconsin Rapids Jem Brown

Legal Counsel: Attorney Richard Heinemann, Boardman & Clark Law Firm (via

telephone)

Absent: Mike Furmanski; Kris August

Additional Attendees: Spencer Titera - Medford; Andy Onesti - MPU; Kevin Favero -

Leidos; Marc Miller - Soltage, LLC; Rao Konidena - Rakon

Energy, LLC

Jem Brown, Chair of the Board, called the meeting to order at 9:30 a.m. and called the roll. A quorum was present with ten communities represented. Those present are indicated.

MINUTES: The Regular Session Minutes from the July 24, 2019 meeting were presented for approval.

MOTION: Motion was made by Nilaksh Kothari and seconded by Scott Dennee to approve the Regular Session Minutes from July 24, 2019. Motion carried unanimously.

UPDATED RESULTS OF LONG RANGE PLANNING STUDY – PHASE 2 - PRESENTATION: Since the last presentation of the results in April 2019, heavily discounted Wartsila reciprocating engine generator sets have become available for purchase by GLU. Kevin Favero provided the highlights of the study to include an additional option of the three 11.8 MW reciprocating engines and behind the meter solar generation in member communities. The updated analysis when compared to the April 2019 study concluded that 35 MW reciprocating (RICE) with distributed solar is the most cost effective long term option for the GLU east power supply portfolio. A lengthy discussion ensued on solar, capacity requirements of GLU starting year four, and rate of return.

MOTION: Motion was made by Brian Knapp and seconded by Dave DeJongh to authorize N. Kothari to negotiate a non-binding agreement to purchase the three 11.8 MW dual-fuel reciprocating engines and submit for Board approval and begin discussions with MPU on a joint

agreement. Motion carried unanimously.

Marc Miller - Soltage and Rao Konidena - Rakon Energy arrived at the meeting at 11:00 a.m.

SOLAR PROJECT VENDOR PRESENTATION: Mr. Marc Miller of Soltage, LLC presented to the Board regarding the various commercial options for developing solar projects. The commercial options include purchase power agreements (PPA), purchase power agreement with a buy-out option, build-transfer, and distribution tied resources. The pros and cons of each of the options were discussed along with the current schedule of the investment tax credit phase-out process.

SOLAR PROJECT CONSULTANT PROPOSAL PRESENTATION: Mr. Rao Konidena of Rakon Energy, LLC presented to the Board on the engineering services proposal for managing the process for completing a solar installation. The proposed services include gathering the background information on available sites, development of a request for proposal (RFP) document, and evaluation of the RFP responses. The proposal was distributed for review.

Andy Onesti, Marc Miller, and Rao Konidena left the meeting at 12:20 p.m.

DRAFT CREDIT POLICY: This item was tabled until the next meeting.

STRATEGIC PLAN UPDATE/FOLLOW-UP: This item was tabled until the next meeting.

MANAGING DIRECTOR REPORT: N. Kothari updated on the following: Hometown Connections continues to reach out to inquire if any questions or additional information is needed for GLU to become a member-owner; the September meeting of GLU Board should be considered in Escanaba, MI to tour the reciprocating engines in Upper Michigan; and MPU Commission President request to Chair, Jem Brown, to appoint a GLU representative on the MPU search committee for the successor of the General Manager. Discussion ensued on details of N. Kothari employment agreement during transition. GLU Board appointed John Fales and Brian Knapp.

MOTION: Motion was made by B. Knapp and seconded by John Fales to request MPU Commission to ensure availability of N. Kothari to continue providing GLU services during the transition between six to twelve months after his successor is appointed. Motion carried with N. Kothari abstaining.

INVESTMENT PORTFOLIO REPORT: The Investment Portfolio Report from Baird for the period ending June 30, 2019 was reviewed and accepted. A brief discussion ensued.

ANNUAL MEETING: The 19th annual meeting of Great Lakes Utilities will be on Wednesday, October 30 in Marshfield. An election will need to be held for Chair at the meeting. A brief discussion ensued on topics and recognitions.

TAPS 2019 FALL CONFERENCE: The TAPS 2019 Fall Conference will be held at Hilton Madison Monona Terrace in Madison, WI from October 28-30, 2019. This is a good opportunity to learn transmission issues at national and regional levels. Marshfield (MU) and Manitowoc (MPU) are the only two members paying TAPS annual membership of approximately \$25,000. Input was requested on whether GLU should participate as a body and/or recommend whether MU

and MPU drop their membership. The recommendation was to cover the cost of GLU members' registration and hotel expenses of approximately \$400.00 per member.

NEXT MEETING: September 17, 2019 - Location TBD.

ADJOURNMENT: Motion by Nilaksh Kothari and seconded by Brian Knapp to adjourn. Motion carried unanimously. Meeting adjourned at 12:45 pm.

John Fales, Secretary