MINUTES OF REGULAR BOARD MEETING
OF
HOLY CROSS ENERGY

NOVEMBER 14, 2018

A regular meeting of the Board of Directors of Holy Cross Electric Association, Inc., a/k/a Holy Cross Energy (hereinafter called “Holy Cross”), a Colorado cooperative association, was held at the main office at 3799 Highway 82 in Garfield County, Glenwood Springs, CO at 9:05 a.m. on November 14, 2018.

Agenda Item 1: Roll Call. Chair Megan M. Gilman reported that five of the seven Directors were present being Megan M. Gilman, Kristen N. Bertuglia, Robert H. Gardner, Adam L. Palmer, and David C. Munk (by telephone); and Michael A. Glass will be late in arriving; and Clemons M. Kopf was absent. Staff attending included Bryan J. Hannegan, President and Chief Executive Officer; David Bleakley, Vice President – Engineering; Michael Whiddon, Accounting Supervisor; Bob Farmer, Vice President - Information Technology; John Rowley, Vice President - Human Resources; Cody O’Neil, Vice President - Glenwood District Operations; Steve Beuning, Vice President – Power Supply and Programs; and General Legal Counsel Randolph W. Starr. Jim Sack, Wholesale Account Manager for Xcel Energy and Amanda Anne Mire were also in attendance.

Agenda Item 2: Adjourn Previous Board Meeting. Chair Gilman adjourned the meeting of the Board of Directors originally convened on October 24, 2018, and then continued to today’s meeting.

Agenda Item 3: Public Comment. Chair Gilman asked for comments of members of the public present. Director Glass arrived prior to the public comment period. Comments were made by Amanda Mire about the Gilman transmission line in Minturn. Discussion ensued about the project. At the conclusion of the comments Ms. Mire left the Board room. [09:50] Mr. Sack left the Board room. [09:58]

Agenda Item 4: Employee Recognition. None.

Agenda Item 5: Consent Calendar. The following informational items were presented to the Board in the form of written reports and memoranda:

a. Minutes of October 24, 2018 Regular Meeting
b. Treasurer’s Report
c. Safety Committee Minutes
d. Attorney’s Report
e. Staff Reports
f. Board Committee Reports
   i. Communications
   ii. Finance
   iii. Governance
   iv. Strategic Issues
g. Directors’ Reports
   i. Western United Electric Supply Corporation
   ii. Colorado Rural Electric Association

Questions posed by Board members were answered by staff members. During the discussion Craig Tate and Kristina Johnson entered the Board room. Discussion ensued about changing the date and location of the December Board meeting to December 20 and the
meeting to be held at the Cooley Mesa office. It was the consensus of the Board to make the change in date and location of the December Board meeting as proposed. Upon motion duly made, seconded, put to a vote and unanimously carried, it was

**RESOLVED** that the items on the Consent Calendar be approved as presented.
A short break was taken.

Agenda Item 6: Old Business.

a. Uncollected Debt Report. Mr. Hannegan, in lieu of Mr. Alderson, presented the list of accounts that are uncollected and that should be declared as uncollectable, totaling $35,590.72 (January 1 through June 30, 2018). The list had been presented to the Board prior to the meeting. Upon motion duly made, seconded, put to a vote and unanimously carried, the following resolution was adopted:

**RESOLVED** that the attached list of accounts receivable prepared by Mr. Alderson, totaling $35,590.72, was declared uncollectable and the accounts should be written off of the financial records of Holy Cross.

b. Date and Location of Annual Member Meeting. Mr. Tate made a presentation about the date of and location of the 2019 Annual Meeting of Members of Holy Cross. Action was deferred due to a conflict with the CREA Board meeting. Action later in the meeting will occur. Mr. Tate and Ms. Johnson left the Board room.

Upon motion duly made, seconded and unanimously carried, the following resolution was adopted:

**RESOLVED** that the 2019 Annual Meeting of Members of Holy Cross be set for May 30, 2019, with the location to be at the Brush Creek Park and Pavilion, 909 Capitol Street, Eagle, CO 81631.

Agenda Item 7: New Business. None.

Agenda Item 8: Executive Session. Upon motion duly made, seconded, put to a vote and unanimously carried, the following resolution was adopted:

**RESOLVED** that the Board enter executive session to consider documents or testimony given in confidence generally relating to Gilman Transmission Line and implementation of the Seventy70Thirty Plan matters. All staff members remained in the Board room.

No action was taken by the Board to make final policy decisions or adopt or approve any resolution, rule, regulation, or formal action, any contract, or any action calling for the payment of money. During the discussion Mr. Tate entered the Board room.

Upon motion duly made, seconded, put to a vote and unanimously carried, the following resolution was adopted:

**RESOLVED** that the Board exit executive session.

Agenda Item 6: Old Business. [continued]

b. Date and Location of Annual Member Meeting. [continued] Mr. Tate reported on the availability of the Brush Creek Park on alternative dates, and the proposed dates are available. Upon motion duly made, seconded and unanimously carried, the following resolution was adopted:

**RESOLVED** that the 2019 Annual Meeting of Members of Holy Cross be set for **June 6, 2019**, with the location to be at the Brush Creek Park and Pavilion, 909 Capitol Street, Eagle, CO 81631.

Agenda Item 9: Lunch with Finance Department. A break for lunch was taken.

Agenda Item 6: Old Business. [continued]
c. Cost of Service Study and Rate Design. Ahmad Faruqui, Ph.D., Léa Grausz, M.S., Lucas Bressan, M.S., Cecile Bourbonnais, and Noosha Razavian of the Brattle Group joined the meeting by teleconference at 1:00 pm to participate in the discussion by the Board about the study and rate design issues. An extensive written presentation was given to the Board prior to the meeting.

Brattle identified a few innovative rate designs through a rate design scorecard exercise that was carried out with HCE Board members and senior management. Brattle also conducted a cost of service study for HCE and summarized the key findings. Brattle analyzed the impact of TOU Rates and Three-Part Rates (with and without seasonality) and on customer load using Brattle's PRISM software. The presentation described the process through which the innovative rate designs were selected and the results of the PRISM simulation.

Q1. Which rates should be tested? A wide range of rate design choices is available: Flat Rates, Inclining Block Rates (IBR), Declining Block Rates (DBR), Seasonal Rates, Time-of-Use (TOU), Demand Charges, Critical Peak Pricing (CPP), Variable Peak Pricing (VPP), Peak Time Rebates (PTR), Real-Time Pricing (RTP), Electric Vehicle Rates, Prepaid Rates, Flat Bill (akin to Netflix® pricing).

Q2. Should there be a seasonal differentiation? Brattle recommendation: Brattle has identified a 3-month Peak Season spanning from December to February. All other months of the year would be part of the Off-Peak Season. HCE load data suggest that these three months shape the residential peak demand. Furthermore, a shorter peak season tends to be more effective in signaling to customers to change their consumption patterns.

Q3. What is an adequate peak period of the day for time of use? Brattle recommendation: Based on 2017 load shapes, we recommend defining a dual peak period (i.e., morning and evening peak periods) to capture highest coincident peak hours of the day: Morning peak period: 7-10 AM, Evening peak period: 4-9 PM, These peak periods are purposely kept relatively short because shorter periods are known to have better customer responsiveness. The peak periods selected also include PSCo’s coincident peak time of day (4-8 PM). Lastly, Brattle recommended implementing TOU energy charges year-round for 7 days/week, without excluding holidays and weekends.

Q4. Should the fixed charge be increased? HCE’s fixed charge is relatively low in comparison to other utilities and does not reflect HCE’s fixed costs. We therefore model two scenarios: 1. Keeping the fixed charge constant to the current rate of $9 per month, 2. Increasing the fixed charge to $18 per month. Customer-related costs vary with the number of customers served, and do not typically depend on the amount of electricity consumed. A fixed charge therefore reflects the invariance of these customer costs with respect to consumption. By enhancing HCE’s ability to recover these costs in the face of changes in consumption, a fixed charge reduces coverage risk for fixed costs. The higher fixed charge is justified on a cost causation basis and would better reflect the fixed nature of the costs related to serving individual customers.

Q5. What demand charge should be introduced? A demand charge helps recover system capacity costs, which vary with maximum demand. Currently, demand-related costs make up roughly 50% of HCE’s total costs for both Residential and GS customers, yet HCE only offers a demand charge to large customers. Implementing a demand charge for the entire Residential class would create a more cost-reflective rate and send customers price signals to reduce peak usage and smooth out their load profiles. Brattle recommendation: We recommend introducing a $10/kW demand charge for the standard Three-Part Rate and $10/kW Peak Season & $5/kW Off-Peak Season demand charges for the Three-Part Rate with seasonality.

Q6. Will the new rate replace the default rate or be deployed on an opt-in basis? Opt-out rate offerings produce enrollment levels that are between 3x and 5x higher than opt-in rate offerings. Opt-in enrollment among eligible customers is likely to increase if offered with enabling technology. Brattle has assumed that HCE’s rate offering is not accompanied with such technologies. For all rate offerings considered, Brattle has modeled both opt-in and opt-out scenarios, using 20% and 74% adoption rates respectively, reduced by 25% to account for the high proportion of residential visitors in HCE’s service area. The opt-out
scenario additionally models a 50% customer response. Brattle notes that such changes in participation are assumed to happen over a 5-year timeframe once the new rates are offered.

As described at the Board’s October meeting, the timetable for the rest of the rate design process is as follows:
- November – receive final briefing from Brattle on their rate design analysis
- December – peer review by independent organizations (RMI, RAP, CFC)
- January 2019 – Board of Directors identifies proposed rate change(s)
- February/March – community workshops and outreach to members
- April – Board of Directors finalizes proposed rate change(s)
- May – 30-day period for notice of rate change(s)
- June 2019 – rate change(s) take effect

Today’s presentation and discussion by Brattle provided guidance to HCE staff as it crafts a proposed set of rate and tariff changes for the Board’s consideration in January.

A break was taken. After the break the board and staff engaged in further discussion.

Agenda Item 10: Continuation of Board Meeting. Chair Gilman recessed the meeting at 4:12 p.m. until the regular Board Meeting on December 20, 2018. The next meeting will be held at Holy Cross’s office at Cooley Mesa at 0132 Buckhorn Valley Blvd, Gypsum, CO 81637 in Eagle County at 9:00 a.m.

Secretary – Robert H. Gardner

APPROVED:

Chair – Megan M. Gilman

NOTE: The 2018 regular Board Meeting dates are scheduled for:
- December 20, 2018. [Note change in date]

NOTE: The 2019 regular Board Meeting dates are tentatively scheduled for:
- January 16, 2019;
- February 20, 2019;
- March 13, 2019 [note change from regular schedule due to school spring break];
- April 17, 2019;
- May 15, 2019; [Annual Member Meeting is June 6, 2019]
- June 19, 2019;
- July 17, 2019;
- August 21, 2019;
- September 18, 2019;
- October 16, 2019;
- November 20, 2019; and
- December 18, 2019.

Upcoming Meetings of Associated Organizations:
Mid-West Electric Consumers Association Annual Meeting on December 10-13 in Denver, CO.