
2018 Budget Narrative

Introduction:

2018 is the first year of a multi-year Work Plan. Financial thresholds have been established by the Board to maintain \$500,000 in cash reserves and maintain a Debt Service Coverage Ratio (DSCR) of 1.25 throughout the period of the Work Plan 2018-2022. The Cooperative maintains a \$2 million line of credit for extreme unforeseen emergencies with both CFC and CoBank.

There are several areas of primary focus that are driving the 2018 Budget Submittal Process. These include:

- Deployment of TWACS digital meter replacement. Based upon long delivery schedules for digital meters, 50% of the meters will be delivered in August 2018, with the balance in March 2019. The first digital meter is scheduled to be installed in Belfry, September 2018. TWACS related work on 5 substations will be completed during the Spring and Summer of 2018. The remaining 5 substations will be completed in 2019. BEC will pursue a 15 year loan (approximately \$1.5 million) to finance the installation of the TWACS project. To stay in compliance with BEC Bylaws, the Cooperative must allow a 60 day comment period prior to acquiring any long term debt. The Board will be presented with a final bid to approve at their January 30, 2018 Board Meeting. Consequently, the 60 day notification period will begin in February. During the 60 Day notification period, discussion will take place regarding loan options, timelines and details. The first payment to the vendor will take place upon delivery of the TWACS substation transformers in April; approximately \$250,000.
- Initiate a Vegetation Management Program that provides a 5 year rotation throughout BEC's service territory. The initial two years are funded at \$220K with year 3 and beyond funded at \$150K. Current tree trimming practices target areas of greatest need and customer outages from year to year. The proposed Vegetation Management Plan will divide the service territory into 5 geographic areas and trim trees within the rights of way of one geographic area per year. After the 5th year, natural tree growth in the first area will require trimming again and the cycle repeats. Members can expect fewer outages and reduced operating costs from less overtime callouts from tree related outages. Budget \$220,000.
- The driving force behind the need for replacing our existing staking/mapping software is the age of the staking program, lack of support and vulnerability to loss of 17 years of data. The utility industry has made significant progress in this area over the years to fully integrate Mapping, Staking and GIS systems. BEC's existing staking and mapping software is 17 years old and no longer supported and contains none of the integration requirements of GIS, Mapping and Staking functions. Seventeen years of engineering records from the staking program reside on one tower computer with no backup. 17 years of staking sheets will be migrated over to a new cloud-based Mapping, Staking and GIS system. Budget \$56,824.
- 100 poles will be changed out in 2018 due to age and condition. Reduced availability of man-hours because of the TWACS deployment in 2018 & 2019 necessitates the reduction in pole replacements in those years, \$115,000.
- Pole testing and inspection will include 4 summer interns to expedite this process. Testing and inspection prior to 2018 was performed by line personnel with the goal of completing one substation per year. Consequently, only two of 10 substations have been completed.

This work needs to be completed in 4-5 years to fully support a 2020 Pole Replacement Program, accurate property records and deployment of the GIS system.

- The 2018-2019 Construction Work Plan is being completed by HDR in 2017. This is a plan required by RUS to make sure our system is reliable. \$65,000 in the 2018 budget is designated for completion of the Pine Crest Subdivision primary line extension. HDR is also in the process of updating our system model in 2017 that hasn't been done since 2005. In 2019, HDR will prepare the two year work plan for 2020 and 2021. This will also include the environmental report required by RUS.
- 2018 will be year one of a 5 year replacement of substation oil circuit breakers. New electronic circuit breakers are fully compatible with the new TWACS system and allow more individual circuit information that is not available with the existing oil circuit breakers. Removing the oil circuit breakers will reduce line crew maintenance and negate liability and cleanup costs associated with oil-filled equipment, \$58,500.
- Increased communication to maintain a high degree of transparency to members and fully support the deployments of the TWACS system, community solar initiative and exploration of interest in Community Solar among members. Budget \$133,135.
- Initiate market research and member interest in a Community Solar Project with possible construction in 2019 based upon member financial commitment.
- Continue work on possible alternative rate designs that offer fair and equitable cost recovery among members within and across all rate classes. The electric industry is being driven by new technology, distributed generation and customer choice. The BEC Board has chosen to deploy new meter reading technology and support customer choice without jeopardizing the Cooperative's financial stability, system safety and reliability. Rate designs that support customer choice and meet the Cooperative's objectives will be explored with member input in 2018 and 2019. Implementation targeted for late 2019 following a full scale Cost of Service Study.
- Increased training for employees to improve skills and certifications where necessary.
- Increased investment in facilities. These include:
 - ✓ The HVAC system in the main office is original equipment from the late 1970's. The original design incorporates baseboard heat and a 5 ton air conditioner. The current design provides absolutely no fresh air ventilation when the air conditioning system is turned off for the summer, approximately 9 months. This provides an unsatisfactory and unhealthy work environment for employees. The 2018 budget includes a 5-ton high efficiency 2 stage heat-pump with an economizer to provide free outside air cooling below 55 degrees and fresh air throughout the year. Budget \$15,000.
 - ✓ The existing computer hardware and network will be replaced and upgraded in 2018. The current system utilizes tower computers or laptops with docking stations at each workstation. Upgrading all existing hardware and software over 5 years old would require in excess of \$12,500. Systems Technology Consultants (STC) in Billings is BEC's network administrator and charges approximately \$1,200 per month to support all hardware, software and the network. The hardware, software and network will be upgraded in 2018 to a "thin client" network architecture that utilizes a single backroom server with adequate storage and processing capability to support all BEC workstations. This new architecture will forego the perpetual replacement of individual workstation tower computers and software. Next year all hardware, software and security measures will be installed, maintained and upgraded on a single back-office server. The only piece of hardware at each workstation will be a "thin client" box the size of a typical paperback. This serves as the portal for monitors,

keyboards and mice at each workstation. Consequently, savings should also be realized from STC with only providing network, hardware and software support to only one server. Budget \$28,000.

- ✓ Four employee workstations will be upgraded with modular furniture. An additional closed office will be constructed for the Member Services/ Communication employee displaced by the addition of a part-time work-order employee. Budget \$5,500.
- Continued use of outside consultants and technical expertise for:
 - ✓ System Engineering
 - ✓ Financial Projections and Modeling
 - ✓ Rate Design
 - ✓ Communications
 - ✓ Board/ Risk Management Research & Analysis

2018 Controllable Expenditures

Capital Budget

Total: \$1,298,589

- A. Electric Distribution Extensions- \$2,265**
Electric meters- Meters will need to be purchased for new construction in the state of Wyoming. Montana meters are paid by the member as a contribution in aid of construction. 8 new service meters x \$105= \$840 plus 3 irrigation/poly-phase x \$475= \$1,425
- B. Electric Conversions and Line Upgrades- \$65,000**
Pine Crest Subdivision Loop
- C. Miscellaneous Electric Distribution- \$248,500**
- **Replacement Transformers-** To be used for replacement of faulty or damaged transformers. Any given variety, \$20,000
 - **Sectionalizing Equipment-** Equipment to replace outdated line oil circuit breakers. The new breakers will be “one shot” capable, whereas the old ones are not. This is a safety measure for working on the power lines and during dry conditions to prevent range fires. \$15,000
 - **Electronic OCR’s-** This is the first year of a multi-year replacement program. Oil- filled substation circuit breakers will be replaced with new electronic circuit breakers that will be compatible with the TWACS system and provide individual circuit information. The new electronic breakers require minimal maintenance and negate the exposure of an oil spill. \$58,500
 - **Pole Replacements –** 100 poles will be changed out due to age and condition. Reduced availability of man-hours because of the TWACS deployment necessitates the reduction in pole replacements in 2018 and 2019. 100 poles x \$1,500= \$115,000
 - **Ordinary Replacements –** Replace underground cable or overhead conductor as needed. Underground cable is replaced after three faults. \$40,000
- D. Construction Work Plan- \$1,000**
The 2018-2019 Work Plan is being completed by HDR in 2017. The \$1,000 is a placeholder in the event that the Plan is not completed in 2017. This is a plan required by RUS to make sure our system is reliable. HDR is also in the process of updating our system model in 2017 that hasn’t been done since 2005. In 2019, HDR will prepare the

two year work plan for 2020 and 2021. This will also include the environmental report required by RUS.

E. General Plant **Total: \$926,824**

Facility Upgrades	\$58,500
HVAC Upgrade	\$15,000
Office Furniture	\$5,500
General Facilities Improvements	\$10,000
Computer Network, Hardware, Software Upgrade	\$28,000

TWACS **Total: \$751,000**

The TWACS system will replace our existing outdated AMR system. The new TWACS technology offers significant operating efficiencies, system information and improved customer service to members. Replacement meters are no longer available and need to be acquired from other utilities going through a similar upgrade to digital meters. Our existing Turtle TS1 system will no longer be supported by the manufacturer at the conclusion of 2018.

NISC Upgrades- **Total: \$117,324**

Staking/Mapping Software- The driving force behind the need for the staking/mapping program is the age of the staking program, lack of support and vulnerability to loss of 17 years of data. The utility industry has made significant progress in this area over the years to fully integrate Mapping, Staking and GIS systems. BEC's staking and mapping software is 17 years old and no longer supported and contains none of the integration requirements of GIS, Mapping and Staking functions. Seventeen years of engineering records from the staking program reside on one tower computer with no backup. 17 years of staking sheets will be migrated over to a new cloud-based Mapping, Staking and GIS system. \$56,824

NISC Modules- These modules are necessary for the new metering system to communicate with billing software. \$50,000

TWACS Upgrade- NISC costs associated with migrating our old billing system to the new TWACS billing software. \$8,000

Document Vault- NISC software to allow a shift from paper to all electronic files and documents. \$2,500

F. Transportation General Plant- **Total: \$55,000**

Mini Trackhoe- Replace the 1998 small backhoe on the skid steer in Columbus with a mini-trackhoe. The mini-trackhoe in Red Lodge has proven to be a vital piece of equipment for BEC. The tracked mini was the only equipment that could operate in the snow and mud last May.

Professional Services**Total: \$99,000**

Rate Design Consultant-	\$15,000
Communications Consultant-	\$15,000
System Engineering	\$7,500
Financial Consultant-	\$15,000
Legal-	\$40,000
Audit/Tax Preparation-	\$6,500

Vegetation Management**\$220,000**

2018 will mark a significant change in the how the Cooperative trims trees throughout its service territory. Approximately \$100,000 has been budgeted annually to trim trees. The annual focus for trimming has been those areas that have experienced the greatest number of outages the previous winter and past year. Unfortunately, this approach never allows the Co-op to get ahead of the curve in managing tree growth. In many respects, it's the "tail wagging the dog" from year to year.

2018 will mark the first year of a 5-year Vegetation Management Plan. The service territory will be divided into 5 geographic areas on a 5-year rotation. 2018 and 2019 will need to be funded at \$220,000 to get ahead of the curve on needed areas of trimming. Going forward tree trimming will need to be funded at \$150,000 per year to maintain a 5-year growth cycle.

This Plan will reduce customer outages from trees throughout the year and even more so during periods of heavy wet snow. Savings will be achieved through reduced overtime.

2018 Communication & Member Services**Total: \$133,135**

2018 will be a most exciting year for member communication and member services. This is a budget increase from previous years to maintain the level of transparency to members and fully support the deployment of the TWACS system and digital meters followed by Rate Design and Community Solar. New and different communication channels will be tested. More detailed communication plans will be completed in the Spring of 2018.

The communication strategy is to lead monthly with the Rural Montana newsletter content, tie storylines and new content across all media including billing statement notice, billing statement insert, website, Facebook, articles and press releases.

2018 New Initiatives

1. Monthly theme across all media.
2. Direct mail– Quarterly (a top contender in the member annual meeting survey results).
3. Town Hall meetings scheduled across the service area for both Digital Meter and Irrigator presentations. Town Hall meeting for Community Solar.
4. New member package (welcome letter, BEC bylaws).
5. Member Follow-up survey to insure we are meeting expectations
6. Internal communications (our top ambassadors (employees) will always receive a pre-release of all communication).
7. Local tie-ins with coupons, special offers, find an icon to win, etc.

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8. Adherence to the 7 C's of communication (clear, concise, concrete, correct, coherent, complete and courteous).

Defined Communication Channels

Rural Montana Magazine	12 issues	\$23,910
Billing statement notice	12 statements	\$0
Billing statement inserts	12 statements	\$12,000
Website (Go Daddy)	Annual Hosting	\$15
Website Template (Touchstone)	Annual Hosting	\$0
Facebook	Annual Hosting	\$0
Articles/Press releases	as necessary	\$0
Direct mail	Quarterly report, Town Halls and Irrigators, new initiatives	\$40,000
Town Hall meetings	Fourteen Total	\$12,000
Annual Member Meeting	September 29-Anipro Event Center (includes labor)	\$27,410
New Member Welcome Package	All new members	\$1,000
Adobe systems and graphic images	Monthly subscriptions	\$1,800
Banik Communications	Communication support	\$15,000