From: stephp@precorp.coop
To: wpsc_docket_filing@wyo.gov
Cc: Steph Pribilske
Subject: New Filing Submitted
Date: Monday, March 5, 2018 5:50:55 PM

FILING NO: 6320
DATE SUBMITTED: 3/5/2018 5:50:23 PM

FILING DESC: 10014-189-CT-18 Meter Testing and Verification-Ame

COMMENTS: Please see attached amended Application, Exhibit 1 and Tariff sheets; and, the addition of Exhibit 2.

User: Stephanie Pribilske

Business Name: Powder River Energy Corporation

BEFORE THE WYOMING PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION OF POWDER RIVER ENERGY CORPORATION SUNDANCE, WYOMING, TO REVISE ITS RULES AND REGULATIONS PERTAINING TO METER TESTING AND VERIFICATION	)))))	DOCKET NO. 10014-189-CT-18 RECORD NO. 14930

AMENDED APPLICATION

Powder River Energy Corporation, "the Applicant" named herein and sometimes herein called "the Cooperative", hereby respectfully requests an order from the Wyoming Public Service Commission, sometimes herein called "the Commission", approving the proposed Rules and Regulations incorporated herein as Wyoming PSC Tariff No. 9, Section X, First Revision of Sheets 52R through 57R to be effective May 7~~arch 16~~, 2018.

In support of its application, the Applicant sets forth the following:

1. The Applicant is a non-profit Cooperative electric utility organized and existing under, and by virtue of, the laws of the State of Wyoming. The Cooperative, pursuant to the laws of the State of Wyoming, is qualified to do business as a corporation within the State of Wyoming.

2. The Applicant has existing Rules and Regulations in effect and on file with the Commission. The proposed changes to these Rules and Regulations, specifically Section X – Meter Testing and Verification Program, are provided herein in both legislative and proposed formats. A detailed catalog of each proposed change, and explanation for the change, has been developed and is provided as Exhibit 1 -

Catalog of Changes to Meter Testing and Verification Program.

3. These changes, when approved, will replace Section X – Meter Testing and Verification Program, Original Sheets 53R through 57R of Wyoming PSC Tariff No. 9, of the Applicant's existing Rules and Regulations on file at the Wyoming Public Service Commission.

4. The Applicant originally filed its Meter Testing and Verification Program on October 10, 2014, in Docket No. 10014-155-CT-17 (Record No. 13997) and the Commission approved the program effective March 31, 2015.

4.5. The Applicant's last approved changes to its Meter Testing and Verification Program was done as part of the broader update to its Rules and Regulations ~~was~~ in 2017 in Docket No. 10014-176-CT-16 (Record No. 14562). The~~ese~~ changes approved at that time were to align and to comply with recently amended Commission Rules and Regulations made in Docket No. 90000-125-XO-15 (Record No. 14272). Additional changes at that time ~~The changes to the Applicant's Rules and Regulations~~ were mostly administrative in nature with no meaningful procedural changes suggested~~made at that time~~.

6. The Applicant proposes to remove from its existing Meter Testing and Verification Program~~plan~~ the ~~practice/~~requirement that each residential meter be field audited at least once every twelve (12) months for the purpose of visually inspecting the meter location and to validate the meter faceplate reading with that of its endpoint register. ~~of manually reading each residential meter at least once in every twelve (12) months~~

~~and visually inspecting/auditing the meter and meter location.~~

7. Since the inception of the annual residential field audits in 2014, PRECorp has tracked the findings of the audits to determine their effectiveness. The findings of the audits are provided in summary form as Exhibit 2 – Residential Meter Field Audit Results (2014-2017). Since 2014, the percentage of total meter register problems found have declined each year from 2.11 percent in 2014 to .51 percent in 2017. Furthermore, if we consider only the register problems found that would not have been identified absent the field audits (after deducting for the register problems found at billing e.g. endpoint register readings of zero) the percentage of problems identified specifically by the field audits drops 1.05 percent in 2014 to .35 percent in 2017, respectively.

8. The Applicant currently spends over $300,000 a year conducting the residential field audits (labor and transportation). For the few number of problems identified, particularly over the last three years, the cost of conducting the annual field audits has become cost-prohibitive. It would be in the best interest of the Cooperative and its membership if residential meter verification and testing were handled going forward through the random sampling procedure as prescribed In Section X - Meter Testing and Verification Program, Article V – Meter Testing and Verification Schedule, Subsection AQ.3., of the current program.

9. The Applicant acknowledges that if it discontinues its practice of annual residential meter field audits the frequency of register issues would increase again over time.

However, PRECorp is in the process of evaluating Automated Meter Infrastructure (AMI) system proposals to replace its current Automated Meter Reading (AMR) system. The AMR system will lose vendor support after 2020; the loss of vendor support, coupled with the age of the current AMR system and efficiency gains afforded by an AMI system are the underlying reasons PRECorp has decided to move forward with replacing its metering system at this time. Vendor selection and contract negotiations is expected to be complete by mid-year and project implementation will begin immediately thereafter. The implementation of the new AMI meter system will result in the replacement of one-hundred (100) percent existing residential AMR meters over a twenty-four (24) to thirty (30) month period. Continuing to field audit meters that are scheduled to be replaced with new AMI meters inside the next three years is further justification to support discontinuing the annual field audits at this time.

10. Currently, seventy-two (72) percent of the Cooperative's residential meters are electromechanical one-way AMR enabled meters with two registers, a meter register and endpoint or AMR register; replacing these meters with integrated solid-state AMI meter technology with two-way communications will all but eliminate the need for frequent manual inspection.

11. Removing the annual field audits from the Meter Testing and Verification Program at this time will allow the meter technicians currently assigned to this work to be re-assigned to assist the Cooperative with its installation of the new AMI system, saving

the Cooperative and its members on implementation costs of the new system.

~~5. The Applicant voluntarily proposed this practice in its filing in 2001 in Docket No. 10014-CC-00-50 (Record No. 6136) to address concerns with the accuracy of customer-reported meter readings for billing purposes.~~

~~6. As the annual reading and field audit of all residential meters predates the implementation of the Applicant's automated meter reading (AMR) system in the early to mid-2000s, it is no longer a necessary practice for the purpose of ensuring frequent meter readings and meter accuracy. Since the implementation of the Applicant's AMR system residential meters are now read daily. Moving forward, the Cooperative proposes to rely on the random sampling of meters, as outlined in the Applicant's Rules and Regulations on Meter Testing and Verification, Wyoming PSC Tariff No. 9, Section X, V.A.3 (Sheet 55R), as the preferred method for the selection and testing of meters for accuracy.~~

~~7.~~12. The Applicant also proposes to remove all references to equipment/tools listed in its Rules and Regulations pertaining to its Meter Testing and Verification that is not used in the testing and verification of meter accuracy and any data listed in the Tariff/program that is not gathered or verified at the time of a meter test.

~~8.~~13. Finally, the Applicant is making further general formatting corrections to Section X – Meter Testing and Verification Program that were not made with the changes made to its~~the~~ Rules and Regulations in 2017 in Docket No. 10014-176-CT-16 (Record No. 14562).

~~9.~~14. The Applicant has posted on its website, www.precorp.coop, the changes being proposed to its Rules and Regulations within this Application in a form that highlights each change. In addition, the Applicant will notify its members by referring them to its website by notice in the Cooperative's February 2018, member newsletter.

~~10.~~15. Communications in regard to this Application are to be addressed to Mr. Michael E. Easley, Chief Executive Officer for the Applicant, Post Office Box 930, Sundance, Wyoming 82729 and Mr. Mark L. Hughes, Attorney for the Applicant, Post Office Box 456, Sundance, Wyoming 82729.

~~11.~~16. The Cooperative is respectfully requesting these changes to its Rules and Regulations to be effective May~~arch~~ 7~~16~~, 2018, pursuant to the attached revised version of the Tariff and exhibit, and that such changes are contained in this filing and by reference are hereby made a part of this Application.

Dated at Sundance, Wyoming, the 5~~26~~th day of March~~January~~, 2018.

POWDER RIVER ENERGY CORPORATION

Michael E. Easley
Chief Executive Officer

BEFORE THE WYOMING PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION OF POWDER RIVER ENERGY CORPORATION SUNDANCE, WYOMING, TO REVISE ITS RULES AND REGULATIONS PERTAINING TO METER TESTING AND VERIFICATION	)))))	DOCKET NO. 10014-189-CT-18 RECORD NO. 14930

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In support of its application, the Applicant sets forth the following:

1. The Applicant is a non-profit Cooperative electric utility organized and existing under, and by virtue of, the laws of the State of Wyoming. The Cooperative, pursuant to the laws of the State of Wyoming, is qualified to do business as a corporation within the State of Wyoming.
2. The Applicant has existing Rules and Regulations in effect and on file with the Commission. The proposed changes to these Rules and Regulations, specifically Section X – Meter Testing and Verification Program, are provided herein in both legislative and proposed formats. A detailed catalog of each proposed change, and explanation for the change, has been developed and is provided as Exhibit 1 - Catalog of Changes to Meter Testing and Verification Program.
3. These changes, when approved, will replace Section X – Meter Testing and Verification Program, Original Sheets 53R through 57R of Wyoming PSC Tariff No. 9, of the Applicant's existing Rules and Regulations on file at the Wyoming Public

Service Commission.

4. The Applicant originally filed its Meter Testing and Verification Program on October 10, 2014, in Docket No. 10014-155-CT-17 (Record No. 13997) and the Commission approved the program effective March 31, 2015.

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6. The Applicant proposes to remove from its existing Meter Testing and Verification Program the requirement that each residential meter be field audited at least once every twelve (12) months for the purpose of visually inspecting the meter location and to validate the meter faceplate reading with that of its endpoint register.

7. Since the inception of the annual residential field audits in 2014, PRECorp has tracked the findings of the audits to determine their effectiveness. The findings of the audits are provided in summary form as Exhibit 2 – Residential Meter Field Audit Results (2014-2017). Since 2014, the percentage of total meter register problems found have declined each year from 2.11 percent in 2014 to .51 percent in 2017. Furthermore, if we consider only the register problems found that would not have been identified absent the field audits (after deducting for the register problems found at billing e.g. endpoint register readings of zero) the percentage of problems identified specifically by the field audits drops 1.05 percent in 2014 to .35 percent in 2017, respectively.

8. The Applicant currently spends over $300,000 a year conducting the residential field audits (labor and transportation). For the few number of problems identified, particularly over the last three years, the cost of conducting the annual field audits has become cost-prohibitive. It would be in the best interest of the Cooperative and its membership if residential meter verification and testing were handled going forward through the random sampling procedure as prescribed In Section X - Meter Testing and Verification Program, Article V – Meter Testing and Verification Schedule, Subsection AQ.3., of the current program.

9. The Applicant acknowledges that if it discontinues its practice of annual residential meter field audits the frequency of register issues would increase again over time. However, PRECorp is in the process of evaluating Automated Meter Infrastructure (AMI) system proposals to replace its current Automated Meter Reading (AMR) system. The AMR system will lose vendor support after 2020; the loss of vendor support, coupled with the age of the current AMR system and efficiency gains afforded by an AMI system are the underlying reasons PRECorp has decided to move forward with replacing its metering system at this time. Vendor selection and contract negotiations is expected to be complete by mid-year and project implementation will begin immediately thereafter. The implementation of the new AMI meter system will result in the replacement of one-hundred (100) percent existing residential AMR meters over a twenty-four (24) to thirty (30) month period. Continuing to field audit meters that are scheduled to be replaced with new AMI meters inside the next three years is further justification to support discontinuing the annual field audits at this time.

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12. The Applicant also proposes to remove all references to equipment/tools listed in its Rules and Regulations pertaining to its Meter Testing and Verification that is not used in the testing and verification of meter accuracy and any data listed in the Tariff/program that is not gathered or verified at the time of a meter test.

13. Finally, the Applicant is making further general formatting corrections to Section X – Meter Testing and Verification Program that were not made with the changes made to its Rules and Regulations in 2017 in Docket No. 10014-176-CT-16 (Record No. 14562).

14. The Applicant has posted on its website, www.precorp.coop, the changes being proposed to its Rules and Regulations within this Application in a form that highlights each change. In addition, the Applicant will notify its members by referring them to its website by notice in the Cooperative's February 2018, member newsletter.

15. Communications in regard to this Application are to be addressed to Mr. Michael E. Easley, Chief Executive Officer for the Applicant, Post Office Box 930, Sundance, Wyoming 82729 and Mr. Mark L. Hughes, Attorney for the Applicant, Post Office Box 456, Sundance, Wyoming 82729.

16. The Cooperative is respectfully requesting these changes to its Rules and Regulations to be effective May 7, 2018, pursuant to the attached revised version of the Tariff and exhibit, and that such changes are contained in this filing and by reference are hereby made a part of this Application.

Dated at Sundance, Wyoming, the 5th day of March, 2018.

POWDER RIVER ENERGY CORPORATION

Michael E. Easley
Chief Executive Officer

POWDER RIVER ENERGY CORPORATION

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1-800-442-3630

March 5, 2018

Mr. Chris Petrie
Chief Counsel
Wyoming Public Service Commission
Hansen Building, Suite 300
2515 Warren Avenue
Cheyenne, WY 82002

Re: Docket No. 10014-189-CT-18 Amended Filing

Dear Mr. Petrie:

Please find enclosed one (1) original and four (4) copies of Powder River Energy Corporation's amended Application and supporting documentation requesting to revise its Rules and Regulations pertaining to Meter Testing and Verification.

Powder River Energy Corporation respectfully requests approval of this Application from the Commission.

Sincerely,

Michael E. Easley
Chief Executive Officer

MEE/sjp

Enclosures

Exhibit 1 - Catalog of Changes to "Meter Testing and Verification Program" Section X

Tariff Sheet #	Proposed change	Reason for change
52R-57R	Footer Changes: Issued Date changed to March 5, 2018; Effective Date changed go May 7, 2018	Amended Application extending effective date to May 7, 2018.
52R-57R	Header Changes: 1st Revised Sheet/Cancels Original Sheet	Generational changes for new filing.
52R-57R	Footer Changes: Issued Date changed to January 26, 2018; Effective Date changed to March 16, 2018 Docket No. updated to 10014-189-CT-18	Revision updates for new filing.
52R-57R	Outline formatting and alignment corrections – indentations, underlining	Ensure formatting consistency throughout the document.
53R	Removal of "Field audit" reference and related language in IV.A.7	Removing all references in Tariff relevant to the annual residential field audit requirement and process.
54R	Removal of referenced tool in IV.B.2.b	Symbol Technologies Inc. Model MC 9090 is not meter test equipment but rather for Turtle endpoint communications. As such, it is not necessary to list the tool in the meter test plan.
54R & 55R	Removal of referenced tools in IV.B.4.a-e	The tools listed under Section IV.B.4.a-e are not meter test equipment and therefore do not need to be listed in the meter test plan.
55R	Removal of referenced tools in IV.B.5.a-c	The tools listed under Section IV.B.5.a-c are not meter test equipment and therefore do not need to be listed in the meter test plan.
55R	Removal of the reference to "YEARLY" in V. heading.	Removing all references in Tariff relevant to the annual residential field audit requirement and process.
55R	Removal of the reference to "annual" in V.A. first sentence.	Removing all references in Tariff relevant to the annual residential field audit requirement and process.

Tariff Sheet #	Proposed change	Reason for change
55R	Removal of "QUALIFICATIONS (cont'd)"	With edits, Section IV concluded on 54R.
56R	Removal of the reference to "YEARLY" in the title "METER TESTING AND VERIFICATION SCHEDULE (cont'd)" header.	Removing all references in Tariff relevant to the annual residential field audit requirement and process.
56R	Removal of the reference "Field" in V.B. as well as second reference "field" in first sentence.	Removing all references in Tariff relevant to the annual residential field audit requirement and process.
56R	Removal of "KVAR present reading" in V.B., the tenth bullet item down in the right column.	The KVAR present reading is an instantaneous reading for reactive energy and is not used for billing purposes. While KVAR present readings can be used to calculate power factor and poor power factor may be used to assess power factor penalties at billing, PRECorp instead uses a more accurate method to calculate power factor. We use KVAR hours which are calculated within the meter/meter program we have selected, making retaining the KVAR preset reading/recordings unnecessary.
56R	Removal of "PT number" and "Brand" in V.C., the first bullet item in the left column and the fourth bullet item in the right column.	The serial number and brand of PT is not information that is gathered and verified when testing and verifying PTs. We know what brand PT we use and PTs are not location specific being pre-capitalized at purchase.
56R	Removal of "CT number" and "Brand" in V.D., the first and fifth bullet items in the left column.	The serial number and brand of CT is not information that is gathered and verified when testing and verifying CTs. We know what brand CT we use and CTs are not location specific being pre-capitalized at purchase.
57R	Removal of the reference to "YEARLY" in the title "METER TESTING AND VERIFICATION SCHEDULE (cont'd)" header.	Removing all references in Tariff relevant to the annual residential field audit requirement and process.
57R	Change heading title of V.F. from "Annual Residential Meter Audit" to "Self-Contained Services"	Removing all references in Tariff relevant to the annual residential field audit requirement and process.

Tariff Sheet #	Proposed change	Reason for change
57R	Removal in V.F. of items 1-3.	Removing all references in Tariff relevant to the annual residential field audit requirement and process.
57R	Remove reference to “4.” in V.F. and under the heading of “Self-Contained Services” edit text to read “The Corporation will conduct the following inspection and testing at each self-contained service within the randomly sampled NEMA form type groups:”	Removing all references in Tariff relevant to the annual residential field audit requirement and process and editing text for clarify.
57R	In V.F.e. change text from “the audit” to “testing”.	Removing all references in Tariff relevant to the annual residential field audit requirement and process and editing text for clarify.
57R	F. Self-Contained Services – change listing identifiers – alpha to numeric and roman numerals to alpha.	Formatting consistency.

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57R	F. Self-Contained Services – change listing identifiers – alpha to numeric and roman numerals to alpha.	Formatting consistency.

Exhibit 2 - Residential Meter Field Audit Results (2014-2017)

				Register reading higher than endpoint reading					Register reading lower than endpoint reading				
	Meter Audits	Total Problems Found	Problems Requiring Action	Under Reported kWhs	Fixed at Billing*	Fixed at Audit	Unbilled kWhs	Lost Revenue	Over Reported kWhs	Fixed at Billing*	Fixed at Audit	Over Billed kWhs	Over Bill Adjustment
2014	17,564	370	185	257	116	141	181,063	$12,855	113	69	44	179,276	$12,728
		2.11%	1.05%	1.46%	0.66%	0.80%			0.64%	0.39%	0.25%		
2015	17,575	127	94	86	25	61	231,132	$16,181	41	8	33	319,718	$22,383
		0.72%	0.53%	0.49%	0.14%	0.35%			0.23%	0.05%	0.19%		
2016	17,660	95	71	53	10	43	122,078	$9,085	42	14	28	252,774	$18,811
		0.54%	0.40%	0.30%	0.06%	0.24%			0.24%	0.08%	0.16%		
2017	17,607	90	62	51	15	36	55,795	$4,512	39	13	26	208,849	$16,891
		0.51%	0.35%	0.29%	0.00%	0.20%			0.22%	0.07%	0.15%		

* Fixed at billing means when field audited the endpoint was reading zero and for these accounts manual reads were secured for billing purposes until the meter or endpoint was corrected during the audit. No unbilled or overbilled kWhs were realized.

RULES AND REGULATIONS OF SERVICE
Section X
METER TESTING AND VERIFICATION PROGRAM

I. GENERAL STATEMENT

In compliance with the Wyoming Public Service Commission's (Commission's) adopted Rule in Chapter 3, Section 18 (Meter Testing Program), the Corporation has developed and submitted the following Meter Testing and Verification Program. The intent of this Meter Testing and Verification Program is to develop a program for the calibration, recertification, care and maintenance of meters, recording devices, field testing equipment, and meter calibration equipment in order to keep the equipment in proper working condition. The Corporation, or its certified contractors, has all necessary meters, instruments, meter calibration equipment, and facilities necessary to carry out its meter-testing program. The facilities and equipment are available for inspection by any authorized representative of the Commission. Finally, meter verifications, test results, and audit data as well as equipment calibration records are kept electronically and available upon Commission request or as otherwise required by the Commission's and Corporations Rules and Regulations with regard to member requests.

II. RULES AND GUIDELINES

A. The Corporation's Meter Testing and Verification program shall conform as applicable to the following guidelines and rules:
   1. RUS Bulletin 1730-1;
   2. RUS Form 300;
   3. Wyoming Public Service Commission, Chapter 3, Section 18.

III. METER ACCURACY

A. The Corporation's Meter Testing and Verification program will statistically verify meter accuracy according to:
   1. ANSI for Electric Meters Code for Electric Metering (ANSI C12.1)
   2. American National Standard Sampling Procedures and Tables for Inspection by Variables for Percent Non-Conforming (ANSI/ASQ Z1.9-2008) for sampling.

B. The Corporation will verbally advise members about the contents of the ANSI Standards in person or by phone. If the member desires to personally review the ANSI Standards, they may

METER ACCURACY (cont'd)

do so in one of the Corporation's main offices in Sundance, Gillette, or Sheridan. Prior to such review, they must read and acknowledge the ANSI Standards licensing requirements and affirm that they will not copy or reproduce them in any manner.

All in-service billing/revenue meters in the Corporation's service territory will be divided into homogeneous test groups based on form factor. A random sample from each homogeneous lot will be selected, tested, and statistically analyzed. The random test sample program as described below will be conducted annually thereafter. Meters will be considered accurate for billing purposes if they register within +/- 2% under test conditions.

IV. QUALIFICATIONS

A. The Corporation will meet the following qualifications:
   1. 100% testing of all meters by the manufacturer prior to shipment to the Corporation;
   2. Quality assurance testing of all meters by Corporation personnel before initial installation (testing information will be loaded into the Corporation's billing system for historical reference);
   3. Ability to monitor all in-service meters for performance through daily reads;
   4. Ability to monitor member usage abnormalities on a daily basis;
   5. Random sample testing and field verification of meters after ten (10) years in service (explained in detail below);
   6. Field test and verify all instrument rated meters and associated instrumentation transformers once every three (3) years; and

Table 1. Meter Forms and Associated Information

Meter Number Starting Letter	NEMA Form		Phase	Class (Amps)	Voltage	Application	Number of Wires
TZ	1S		1Φ	100 or 200	120	Self-contained	2
T	2S		1Φ	200	240	Self-contained	3
U	2S		1Φ	200	240	Self-contained	3

QUALIFICATIONS (cont'd)

H	2S	1Φ	200	240	Self-contained	3
A	2S	1Φ	200	240	Self-contained	3
N	12S	1Φ & 3Φ	200	120-480	Self-contained	3
V	3S	1Φ	10 or 20	120, 240, 480	Instrument-rated	2
Y	4S	3Φ	10 or 20	240	Instrument-rated	3
W	16S	3Φ	200	120-480	Self-contained	4
E	16S	3Φ	20	120-480	Self-contained	4 -Reactive
M	5S	3Φ	20	120-480	Instrument-rated	4
P	6S	3Φ	20	120-480	Instrument-rated	4
X	9S	3Φ	20	120-480	Instrument-rated	4
R	5S, 6S, 9S	3Φ	20	120-480	Instrument-rated	3 or 4 - Reactive

B. Test Equipment

The Corporation uses a variety of equipment to test meters and associated instrumentation. This equipment includes the following list along with the calibration schedule. All calibrations on test equipment conform to ANSI standards and manufacturer recommendations. All calibration is done by a third-party, certified contractor, or by the manufacturer of the equipment. These calibration records are available for inspection upon request or as required by the Commission. All equipment has protective cases which are used for transport between job locations to ensure there is no damage or issues that may affect testing results. These cases are stored in temperature controlled environments when not in use and are only taken out during actual testing procedures. In cases where results may not seem correct to the technician, there are several devices for each model type so results can be cross checked between two devices, as appropriate, to provide correct validation.

1. Laboratory Meter Test Boards (calibrated annually)
   a. Radian Research – Models RFL 5800, WECO 2350
2. Portable Test Sets (calibrated annually)
   a. Probewell – Models MT-1, MT-1/NT9, MT-1NT
3. Instrumentation Test Equipment (calibrated bi-annually)
   a. SpinLab Bird Dog – Models 5000, 6000

V. METER TESTING AND VERIFICATION SCHEDULE

A. The schedule for meter testing and verification will consist of the following:

1. All 1Ø and 3Ø demand billed accounts, including 3Ø instrument rated metered accounts and substation meters, will be tested and verified at least once every three (3) years. The Current Transformers (CTs) and Potential Transformers (PTs) for these metering points will also be tested with test results stored in the Corporation's records.
2. All 69 kV primary delivery metered accounts will be tested and verified once every six (6) months. The Current Transformers (CTs) and Potential Transformers (PTs) for these metering points will also be tested with test results stored in the Corporation's records.
3. A random sample, from each of the remaining meter form types (specifically 2S, 12S, and 16S) will be selected to be tested/verified annually according to the ANSI guidelines listed above. If more than four (4) percent of the meters within each meter form type listed above are not within a +/- 2% compliance, another random sampling of meters from that form type will be chosen to be tested/verified. Additionally, if a Corporation meter, when tested, in any form group varies more than +/- 2%, the Corporation will replace that meter at the time of test/verification. Once a meter has been randomly selected for testing, it will be taken out of the list of potential meters for random selection for the next five (5) years.

Please refer to Table 1 above for a complete list and description of each NEMA meter type currently used in active meters on the Corporation's system. Additionally, forms for verifying field information are taken directly from the Service Orders for each test/verification. Service Orders are generated out of information currently residing in the Corporation's billing system (CIS). After field information is gathered/verified, the Corporation's billing system is matched/updated with all appropriate information.

METER TESTING AND VERIFICATION SCHEDULE (cont'd)

B. Meter Testing and Verifications

For meter tests and verifications, the following information is gathered or verified:

- Meter number
- Secondary meter number
- Meter type
- Register type
- Usage dials
- Meter phase
- Number of wires
- Manufacturer
- Meter type description
- NEMA form
- Class
- Amps
- Volts
- Base KH
- Register ratio
- Technician name
- Actual number of dials
- Rate
- Revenue Class
- Seal
- Billing multiplier
- Present reading
- Previous reading
- Demand reading
- Power factor
- Township, Range, Section
- Latitude/Longitude
- Transformer capacity
- Date of test/verification

C. Potential Transformer (PT) Tests and Verifications

For field meter tests and verifications, the following information is gathered or verified:

- System voltage
- Ratio
- Accuracy
- Fused (yes/no)
- Latitude/Longitude
- Date of test
- Technician name

D. Current Transformer (CT) Tests and Verifications

For field meter tests and verifications, the following information is gathered or verified:

- System voltage
- Ratio
- Accuracy
- Short time rating
- Latitude/Longitude
- Date of test
- Technician name

Meter Testing and Verification Program **Section X**

METER TESTING AND VERIFICATION SCHEDULE (cont'd)

E. Instrument Rated Services
The Corporation is required to test instrument rated services once every three (3) years.

F. Self-Contained Services
The Corporation will conduct the following inspection and testing at each self-contained service within the randomly sampled NEMA form type groups:
1. Conduct a visual inspection of the service noting or completing anything that needs to be fixed:
   a. Meter;
   b. Seal;
   c. Meter base;
   d. Display;
   e. General appearance of service (e.g., excellent, good, fair, poor, needs attention);
2. Take a picture of the service;
3. Record meter reading from dials or electronic display;
4. Record endpoint reading;
5. If there is a 100 kWh or more discrepancy between the endpoint and the meter, the meter will be replaced at the time of testing.

RULES AND REGULATIONS OF SERVICE
Section X
METER TESTING AND VERIFICATION PROGRAM

I. GENERAL STATEMENT

In compliance with the Wyoming Public Service Commission's (Commission's) adopted Rule in Chapter 3, Section 18 (Meter Testing Program), the Corporation has developed and submitted the following Meter Testing and Verification Program. The intent of this Meter Testing and Verification Program is to develop a program for the calibration, recertification, care and maintenance of meters, recording devices, field testing equipment, and meter calibration equipment in order to keep the equipment in proper working condition. The Corporation, or its certified contractors, has all necessary meters, instruments, meter calibration equipment, and facilities necessary to carry out its meter-testing program. The facilities and equipment are available for inspection by any authorized representative of the Commission. Finally, meter verifications, test results, and audit data as well as equipment calibration records are kept electronically and available upon Commission request or as otherwise required by the Commission's and Corporations Rules and Regulations with regard to member requests.

II. RULES AND GUIDELINES

A. The Corporation's Meter Testing and Verification program shall conform as applicable to the following guidelines and rules:
   1. RUS Bulletin 1730-1;
   2. RUS Form 300;
   3. Wyoming Public Service Commission, Chapter 3, Section 18.

III. METER ACCURACY

A. The Corporation's Meter Testing and Verification program will statistically verify meter accuracy according to:
   1. ANSI for Electric Meters Code for Electric Metering (ANSI C12.1)
   2. American National Standard Sampling Procedures and Tables for Inspection by Variables for Percent Non-Conforming (ANSI/ASQ Z1.9-2008) for sampling.

B. The Corporation will verbally advise members about the contents of the ANSI Standards in person or by phone. If the member desires to personally review the ANSI Standards, they may

METER ACCURACY (cont'd)

do so in one of the Corporation's main offices in Sundance, Gillette, or Sheridan. Prior to such review, they must read and acknowledge the ANSI Standards licensing requirements and affirm that they will not copy or reproduce them in any manner.

All in-service billing/revenue meters in the Corporation's service territory will be divided into homogeneous test groups based on form factor. A random sample from each homogeneous lot will be selected, tested, and statistically analyzed. The random test sample program as described below will be conducted annually thereafter. Meters will be considered accurate for billing purposes if they register within +/- 2% under test conditions.

IV. QUALIFICATIONS

A. The Corporation will meet the following qualifications:
   1. 100% testing of all meters by the manufacturer prior to shipment to the Corporation;
   2. Quality assurance testing of all meters by Corporation personnel before initial installation (testing information will be loaded into the Corporation's billing system for historical reference);
   3. Ability to monitor all in-service meters for performance through daily reads;
   4. Ability to monitor member usage abnormalities on a daily basis;
   5. Random sample testing and field verification of meters after ten (10) years in service (explained in detail below);
   6. Field test and verify all instrument rated meters and associated instrumentation transformers once every three (3) years; and

Table 1. Meter Forms and Associated Information

Meter Number Starting Letter	NEMA Form		Phase	Class (Amps)	Voltage	Application	Number of Wires
TZ	1S		1Φ	100 or 200	120	Self-contained	2
T	2S		1Φ	200	240	Self-contained	3
U	2S		1Φ	200	240	Self-contained	3

QUALIFICATIONS (cont'd)

H	2S	1Φ	200	240	Self-contained	3
A	2S	1Φ	200	240	Self-contained	3
N	12S	1Φ & 3Φ	200	120-480	Self-contained	3
V	3S	1Φ	10 or 20	120, 240, 480	Instrument-rated	2
Y	4S	3Φ	10 or 20	240	Instrument-rated	3
W	16S	3Φ	200	120-480	Self-contained	4
E	16S	3Φ	20	120-480	Self-contained	4 -Reactive
M	5S	3Φ	20	120-480	Instrument-rated	4
P	6S	3Φ	20	120-480	Instrument-rated	4
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METER TESTING AND VERIFICATION SCHEDULE (cont'd)

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For meter tests and verifications, the following information is gathered or verified:

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- Register type
- Usage dials
- Meter phase
- Number of wires
- Manufacturer
- Meter type description
- NEMA form
- Class
- Amps
- Volts
- Base KH
- Register ratio
- Technician name
- Actual number of dials
- Rate
- Revenue Class
- Seal
- Billing multiplier
- Present reading
- Previous reading
- Demand reading
- Power factor
- Township, Range, Section
- Latitude/Longitude
- Transformer capacity
- Date of test/verification

C. Potential Transformer (PT) Tests and Verifications

For field meter tests and verifications, the following information is gathered or verified:

- System voltage
- Ratio
- Accuracy
- Fused (yes/no)
- Latitude/Longitude
- Date of test
- Technician name

D. Current Transformer (CT) Tests and Verifications

For field meter tests and verifications, the following information is gathered or verified:

- System voltage
- Ratio
- Accuracy
- Short time rating
- Latitude/Longitude
- Date of test
- Technician name

METER TESTING AND VERIFICATION SCHEDULE (cont'd)

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2. Take a picture of the service;
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5. If there is a 100 kWh or more discrepancy between the endpoint and the meter, the meter will be replaced at the time of testing.