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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

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In the Matter of the Application	)	<u>Docket No.</u>
of Mt. Wheeler Power, Inc. for	)	
Authority to Issue Securities	)	APPLICATION FOR AUTHORITY
	)	TO ISSUE SECURITIES

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Applicant Mt. Wheeler Power, Inc., hereinafter referred to as Mt. Wheeler, hereby applies for authority pursuant to Utah Code Ann. ' 54-4-31 to issue securities in the form of an extension of the period during which draws can be made as set forth below and in the attached letter, Exhibit B hereto, from the National Rural Utilities Cooperative Finance Cooperation.

Mt. Wheeler submits that the requested extension of the loan draw period for a term of 5 additional years through May 12, 2019 is consistent with the public interest, for a lawful and proper purpose and within Mt. Wheeler's corporate power, is consistent with sound financial practices, is consistent with the proper performance of Mt. Wheeler's public service, and will enhance and not impair Mt. Wheeler's ability to perform its public utility services.

Attached hereto, as Exhibit A, is a copy of the Report and Order in Docket No. 09-031-01 issued on April 23, 2009 by the Public Service Commission of Utah approving Mt. Wheeler's original application to enter into the Loan Agreement with the National Rural Utilities Cooperative Finance Corporation (CFC) and to sign the secured promissory note and Restated Mortgage and Security Agreement, which documents are on file as Exhibits in Docket No. 09-031-01.

As set forth in the attached letter from CFC, Exhibit B, dated February 12, 2014, CFC has consented to an extension of the loan "Draw Period" from May 12, 2014 to and including May 12, 2019. The extension would not affect any other terms or conditions of the original loan documents. The original loan maturity date of May 12, 2049 would remain the same.

A copy of the 2013 audited financial statement for Mt. Wheeler will be available in early April, 2014 and will be submitted at that time, as a supplement to this Application.

Exhibit C attached hereto is the same exhibit as Exhibit D that was filed with the original Application to issue securities in Docket No. 09-031-01. This Exhibit C is still relevant as it sets forth the information regarding the use of the funds from this line of credit in connection with Mt. Wheeler's work plans.

Mt. Wheeler represents that this application is

anticipated to be unopposed and uncontested. Pursuant to R746-110 of the Public Service Commission Rules, Mt. Wheeler would respectfully request Informal Adjudication of this Application.

Pursuant to R746-110-2 of the Public Service Commission Rules, Mt. Wheeler requests that the Commission determine the nature of the notice of this informal proceeding that may be appropriate. Pursuant to R746-110-2, Mt. Wheeler would request the Commission waive the 20-day period for its Report and Order and issue a Final Order thereon.

I declare that I have read the foregoing Application and that the Application is true of my own knowledge and to any matters based upon information and belief I believe them to be true.

Dated this 25<sup>th</sup> day of March, 2014.

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By: \_\_\_\_\_/s/\_\_\_\_\_  
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# **EXHIBIT A**

This Exhibit A is a copy of the Report and Order Issued April 23, 2009 by the Public Service Commission of Utah in Docket No. 09-031-01.

-BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH –

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In the Matter of the Application of Mt.	)	
Wheeler Power, Inc., for Authority to Issue	)	<u>DOCKET NO. 09-031-01</u>
Securities	)	<u>REPORT AND ORDER</u>

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ISSUED: April 23, 2009

By The Commission:

This matter is before the Commission on the Application of Mt. Wheeler Power, Inc. (Company) for approval to allow it to extend and increase the financing commitment with the National Rural Utilities Cooperative Finance Corporation (CFC) to a total commitment of \$25 million.

Currently, the Company has an outstanding financing commitment with CFC which was issued in 1998 for \$11.0 million, of which \$7.5 million has been used. The new commitment will be in place for 5 years and will be used to finance projects as necessary. When specific projects are identified, the Company makes a formal request for CFC to issue individual notes under this commitment. Each note is structured with repayment terms appropriate to the project and may have a maturity date and amortization of up to 40 years. Each new advance will reduce the amount available under this commitment but it is not anticipated that the Company will use the total commitment amount.

The Division of Public Utilities (Division) performed an analysis of the Company's Application. To complete its analysis, the Division relied on the following: 1) audited financial statements for the Company for years ending December 31, 2004 through December 31, 2007; 2) internal financial statements of the Company for December 31, 2008; 3)

DOCKET NO. 09-031-01

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CFC proposed Loan Agreement, Secured Promissory Note and Restated Mortgage and Security Agreement; 4) attachments filed by the Company with the Application; 5) correspondence with Kevin Robison of the Company. Based on its analysis, the Division recommended approval of the Company's Application.

The Division provided the following background for the Application:

The Company's revenues increased by 17.06% from 2004 to 2008, from \$16.147 to \$30.887 million. This revenue was primarily due to a large influx of commercial customers in 2005. Since 2005, the increase has constant at about 6A%. Not only have the commercial customers increased revenues, but operating expenses as well. The Company's balance sheet, however, shows a significant increase in Cash and Equivalents for 2007 and 2008 with a current balance of \$2.037 million. The Company's regulatory Capital Structure shows Long-Term Debt at 38.01% with Common Equity at 61.99% for 2008. The Division performed a ratio and quick-ratio analysis for the Company. The ratio analysis for the year-end 2008 shows a current ratio of 1.22 and a quick ratio of .71. Return on Total Capital for 2008 is calculated at 10.85% compared to the historical average of 8.83%.

Loan covenants in the new agreement have not changed and require a minimmm Debt Coverage Ratio of 1.35. Currently the Company's Debt Coverage Ratio is 2.79, with the average of all years at 2.30. Additional covenants specify that any additional loans from entities other than CFC must be less than 15% of Total Plant or 50% of Equity whichever is greater.

The Division also prepared forecasts for the Company based on the historical data from 2004 to 2008. Based on its forecast, the Division stated that the Company will be able to

meet its financial obligations and will remain in compliance with the covenants established in the CFC loan agreement. Based on its Analysis, the Division recommended that the Commission approve the Company's Application to extend the current agreement with CFC and increase the total commitment to \$25 million.

ORDER

Therefore based on the Application submitted by the Company, together with supporting documents, and based on the recommendation of the Division

1. the Commission hereby approves the Company's Application, and allows it to extend and increase the financing commitment with CFC to a total commitment of \$25 million;
2. Pursuant to Sections 63G-4-301 and 54-7-15 of the Utah Code, an aggrieved party may request agency review or rehearing of this Order by filing a written request with the Commission within 30 days after the issuance of this Order. Responses to a request for agency review or rehearing must be filed within 15 days of the filing of the request for review or rehearing. If the Commission does not grant a request for review or rehearing within 20 days after the filing of the request, it is deemed denied. Judicial review of the Commission's final agency action may be obtained by filing a petition for review with the Utah Supreme Court within 30 days after final agency action. Any petition for review must comply with the requirements of Sections 63G-4-401 and 63G-4-403 of the Utah Code and the Utah Rules of Appellate Procedure.

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DATED at Salt Lake City, Utah, this 23' day of April, 2009.

/s/ Ted Boyer, Chairman

/s/ Ric Campbell, Commissioner

/s/ Ron Allen, Commissioner

Attest:

\_\_\_\_\_

/s/ Julie Orchard  
Commission Secretary  
0/51577



# **EXHIBIT B**

This Exhibit B is a letter agreement dated February 12, 2014 between the National Rural Utilities Cooperative Finance Corporation and Mt. Wheeler Power, Inc. for the five year extension of the loan Draw Period.



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**National Rural Utilities  
Cooperative Finance Corporation**

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SERVICE | INTEGRITY | EXCELLENCE

20701 Cooperative  
Way Dulles, Virginia  
20166  
703-467-1800 www.nruck.coop

February 12, 2014

Mr. Randy Ewell  
General Manager  
Mt. Wheeler Power, Inc.  
1600 Great Basin Blvd.  
Ely, NV 89301

Re: Request for Extension by Mt. Wheeler Power, Inc. (the  
"Borrower")

Dear Mr. Ewell:

National Rural Utilities Cooperative Finance Corporation ("CFC") has received from the Borrower a request to extend period during which the Borrower may obtain funds pursuant to that certain Loan Agreement between CFC and the Borrower dated as of May 12, 2009 with respect to Loan No.NV019-V-9020 (the "Loan Agreement"). This period of time is defined in the Loan Agreement as the "Draw Period". Under the Loan Agreement, as of May 12, 2014, CFC may stop advancing funds and limit the CFC Commitment (as defined in the Loan Agreement) to the amount advanced prior to such date.

CFC hereby consents to extend the Draw Period to and including May 12, 2019, subject to the following conditions:

- (a) This is a one-time extension. This extension will not affect the amortization or extend final maturity date of any Advance under the Loan Agreement. All Advances must be repaid by the facility maturity date of May 12, 2049.
- (b) This extension shall not be construed as an extension or waiver of any other term, condition or provision of the Loan Agreement or any other credit agreement with CFC.
- (c) This extension shall not be construed as a waiver of any term, condition or provision of the Loan Agreement with respect to the conditions that must be met in order to continue receiving Advances under the terms of the Loan Agreement or any other credit agreement with CFC.

(d) Except as specifically waived by CFC herein, each and every term, condition and provision contained in the Loan Agreement or any other credit agreement with CFC shall remain unchanged and in full force and effect.

If the foregoing accurately describes our mutual understanding of the effect of this consent and the conditions under which it is granted, please so indicate by signing this correspondence where indicated and returning the original to CFC.

Very truly yours,  
National Rural Utilities Cooperative Finance Corporation,

By: \_\_\_\_\_ *Iciek* \_\_\_\_\_

Eileen Iciek  
Assistant Secretary-Treasurer

Acknowledged and Agreed: Mt.  
Wheeler Power, Inc.

By:

Name: Title: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# **EXHIBIT C**

This Exhibit C is the same as Exhibit D to the original application to issue securities filed by Mt. Wheeler Power, Inc. in Docket No. 09-031-01.

## I. INTRODUCTION

### A. Purpose

The purpose of this report is to examine the existing electrical distribution system of Mt. Wheeler Power, Incorporated and to plan for its orderly expansion. All improvements made since the last study have been incorporated into the overall design of the system. The existing system facilities are utilized whenever possible. When calculated data indicated the need for improvements, corrective measures were recommended.

All improvements recommended in Load Block "A" should be incorporated into a Four-Year Work Plan. Hereafter, Load Block "A" should be considered as a Four-Year Work Plan.

This plan provides management with an outline for the system growth expressed in terms of the investments associated with major facilities and corresponding load levels. The load levels at which the investment requirements are specified in this study can be used to relate expenditures to a time scale for financial forecasting. Reference to this study and to future revisions as system additions are planned, will accomplish the following objectives:

1. An orderly development of the system in order to minimize waste resulting from facilities becoming inadequate early in their service lives.
2. System expansion in a manner that investment in new facilities is compatible with load growth and revenue.
3. Maximum use of opportunities to improve quality of service.
4. Maximum use of anticipated developments in equipment design and application.
5. Coordination of the various components of the power supply and distribution system so as to maintain a reasonable economic balance between them.

## II. GENERAL DESCRIPTION OF THE REPORT

### A. Summary

Load Block "A" (Four-Year Work Plan) presents a detailed study of improvements needed to expand the capacity of this system. The projected coincidental peak demand anticipated during the next four years is 52 MW, excluding all special mining loads. The Work Plan is designed to be a guide to system expansion and to assist the system operation by serving as a ready reference of system configuration and capacity.

Load Block "A" (Four-Year Work Plan) was divided into four, one-year sections. The recommended improvements have been designed for each of the four years of the Work Plan. Likewise, cost estimates have been summarized separately for the four years.

The plan proposed within this report should be considered as a general guideline for system improvements. Since actual future load growth and other factors affecting system development may vary, it is the recommendation of the Engineering Department that the Cooperative review this plan

periodically to see if modifications of the plan are required. Actual line construction should, therefore, be based on recommendations resulting from current and future construction work plans. Used in this fashion, the proposed long range plan and transition plans should permit maximum utilization of existing facilities while avoiding the installation of new facilities not used in long term.

The following report was referred to in the preparation of this study:

1. 1991-1992 Two-Year Work Plan prepared by Mt. Wheeler Power, Incorporated.
2. 1997-2000 Four-Year Work Plan and Long Range Plan prepared by Southern Engineering.
3. 2004-2007 Four-Year Work Plan prepared by Mt. Wheeler Power, Inc.
4. Current consultations with Power Engineers of Hailey, Idaho.

#### B. Conclusions

The Cooperative is providing adequate, dependable service to its consumer-members at the present time. During the next four years, voltage regulation problems will occur at some points in the system. To correct these problems, it is recommended that the cooperative construct new lines plus purchase and install voltage regulators so that voltage levels may be maintained. In addition, it is recommended that the Cooperative re-insulate and convert existing city and town 2,400 V Delta systems to 14.4/24.9 kV so that voltage levels may be maintained.

#### C. Recommendations

It is recommended that the Cooperative adopt this report as its distribution system planning guide. All future additions to the system should be in accordance with this report or subsequent revisions thereof.

Due to high fixed costs associated with plan investments, it is recommended that the Cooperative make a careful study of each improvement before it is installed.

### III. EXISTING SYSTEM ANALYSIS

#### A. Criteria

The historical substation peak kW demand and individual consumer's installed transformer kVA were used as the basis for the development of the system model.

This Work Plan was based on the following criteria:

Coincidental kW Demand	52 MW
Voltage Drop Limitation (120 Volt base 5%)	6 Volts
With Regulators	12 Volts

In designing Mt. Wheeler Power's Four-Year Construction Work Plan, system voltages throughout the system were taken into consideration. The maximum voltage drop on primary

distribution lines was based upon a 120 volt base (5% bandwidth) and not exceeding 6 volts drop after line regulation. This maximum allowable voltage drop is in accordance with RUS Bulletin 169-4. Other criteria used in developing Mt. Wheeler Power's Four-Year Work Plan were the thermal loading of conductors. Conductors used for primary line shall not be loaded more than 70% of their thermal rating. By the limitation of the primary lines, we are able to reduce losses while also producing substantial tie-lines between substations so that load may be shifted during emergency situations. Conversions to multi-phase lines to correct voltage drops and to improve phase balance will be made on single-phase and two-phase lines operating at 14.4/24.9 kV. Operating and engineering practices used to develop the loading criteria area were based on a single-phase line interruption which may cause operation of a ground trip device of a three-phase recloser or breaker. Also, the conversion of single-phase lines to multi-phase lines was indicated within this work plan to correct both voltage drop problems and sectionalizing problems or a combination of both. Multi-phasing of distribution lines was recommended in the following situations:

1. When the calculated voltage drops indicated voltage drop problems, multi-phasing was recommended to solve these problems while also being able to solve imbalance which may exist on long feeder lines.
2. Multi-phasing was also considered on single-phase lines which exceeded 45 amps and the available fault current limits recloser size of 50-amp continuous rating.
3. In order to improve voltage drop problems, reduce line losses, and replace facilities, some of which have been in service since the 1920 and 1930s, conversion from 2400 V Delta and 2.4/4.16 kV-Y to 14.4/24.9 kV was recommended.

#### B. Service Area

The Cooperative serves an extensive area in eastern Nevada and western Utah. The Cooperative has services within the following counties:

1. Nevada (White Pine, Eureka, Elko and Nye).
2. Utah (Juab, Millard and Tooele).

#### C. Load Characteristics

Overall, the type of load growth Mt. Wheeler Power, Inc. is currently experiencing reflects the trend in the sparsely populated areas. That is to say, a moderate load growth for the most part in the rural areas, but having a higher load growth in areas that are urban or border urban areas or along state highways.

Over the time period covered by this study, it is reasonable to assume that the current load growth in the rural areas will be modest and that most of the abrupt rise in load growth for this Cooperative will be seen in areas that border larger towns, cities, etc.

## D. System Capacity

A review of the system load and voltage calculations for the existing system with kW demand and individual consumers installed transformer loading indicates that the system line capacity is adequate to handle present load levels. However, it is evident that additional substation and line improvements should be added during the Four-Year Work Plan to continue to provide adequate service.

### 1. GONDER SUBSTATION #1

Transmission Step-Down Transformer (230-69 kV). Present capacity is 32 MVA and ultimate capacity is 40 MVA (FOA) for each transformer. Latest peaks have been approximately 23.1 MVA for summers and 26.3 MVA for winters.

Distribution Substation Transformer (69-24.9Y/14.4 kV). Capacity of this 7,500 kVA transformer is adequate with the addition of cooling fans increasing its rating to 10,500 kVA (FA). Non-coincidental peaks from recloser readings at ~ 20% diversity are summer 5.5 MVA and winter 8.2 MVA.

### 2. MACHACEK SUBSTATION #2

Transmission Step-Down Transformer (230-69 kV). Capacity of the two 24 MVA transmission transformers is adequate we just have to correct a voltage fluctuation situation. Latest peaks have been approximately 16.5 MVA for summers and 8.7 MVA for winters.

Distribution Substation Transformers (69-24.9/14.4 kV). Capacity of the initial transformer was increased to 22,400 kVA (FA) by the addition of additional fans. In 1998, a second transformer was added to support this unit. Parallel operation of the two transformers, if required, could be accomplished with additional equipment and engineering. Non-coincidental peaks from recloser readings at ~ 20% diversity are summer 13.6 MVA and winter 4.4 MVA.

### 3. MURRY SUBSTATION #3

Distribution Substation Transformer (69-24.9/14.4 kV). Capacity of this 7,500 kVA transformer is adequate. Cooling fans increase the capacity to 8,400 kVA (FA). Non-coincidental peaks from recloser readings at ~ 20% diversity are summer 3.0 MVA and winter 5.0 MVA.

### 4. GIANOLI SUBSTATION #4

Distribution Substation Transformer (69-4.16Y/2.4 x 12.5Y/7.2 kV) operating at 4.16/2.4 kV. Capacity of this 7,500 kVA transformer is adequate for the work plan period. Some additional load in East Ely has been transferred from this transformer to the



24.9Y/14.4 kV Gonder/Murry lines. Cooling fans increase the capacity to 8,400 kVA (FA). Without accurate reads the load is estimated to be ~7 MVA winter and less in summer.

5. GRIGGS SUBSTATION #6

Distribution Substation Transformer (69-24.9Y/14.4 kV). Capacity of this 5,000 kVA transformer is adequate. Non-coincidental peaks from recloser readings at ~ 20% diversity are summer 950 KVA and winter 520 KVA.

6. BAKER SUBSTATION #7

Distribution Substation Transformer (69-24.9Y/14.4 kV). Capacity of this 3,750 kVA transformer is currently being approached. The addition of cooling fans increase this transformer's capacity to 5,400 kVA (FA). Non-coincidental peaks from recloser readings at ~ 20% diversity are summer 4.2 MVA and winter 2.8 MVA.

7. WILLIAMS SUBSTATION #8

Distribution Substation Transformer (69-24.9/14/4 kV). Capacity of this 5,000 kVA transformer is adequate. The addition of cooling fans could possibly increase this transformer's capacity to 8,400 kVA (FA). Non-coincidental peaks from recloser readings at ~ 20% diversity are summer 4.3 MVA and winter 3.1 MVA.

8. TAYLOR SUBSTATION #13

Taylor (Mine) Substation Transformer (69-4.16Y/2.4 kV). This 5,000 kVA transformer is adequate for presently planned loads and the fan cooled rating is adequate for the future loads as planned by an interested mining company.

E. Substations

Mt. Wheeler Power, Incorporated provides service to its consumers from eight distribution substations which are owned by Mt. Wheeler Power, Inc. Mt Wheeler Power assumes responsibility for all maintenance and capacity increases on existing substations and installation of new substations when required.

F. Maintenance

Other Maintenance programs include annual infrared testing, periodic checks and servicing of switches, OCBs, OCRs, right-of-way clearing, etc.

G. Energy Losses

System energy losses have been calculated for the five-year period ending December 2005. The tabulations indicate that losses have varied from 8.04% to 3.22%.

#### H. Design Data

For the purpose of this analysis, each substation area represents a usage area. Using this data, along with projections of measured peak kW demand for each source, a projected load was determined for each substation or metering point area.

#### I. Load Balance

In making the load balance, it was assumed that all consumers in a usage area would place the same demand on the system. Necessary tap changes will be made to obtain an adequate load balance.

#### J. Physical Condition

The physical condition of the system, determined by routine inspections, is considered to be satisfactory. Mt. Wheeler Power, Inc. has had the distribution pole system periodically inspected and is currently investigating the opportunity to have the transmission poles inspected.

### IV. FOUR-YEAR WORK PLAN CONSTRUCTION PROGRAM

#### A. Discussion of System Improvements

The system improvements that will be required during the next four years to expand the capacity of the system to meet new consumer demands and accommodate usage increases by existing consumers will be discussed as they appear on the 2007-2010 Work Plan Substation Schedule. The improvement numbers are based on RUS classifications in order to identify the type improvement as follows:

Code 200:	New Line Construction
Code 300:	Line Conversions
Code 400:	New Substation
Code 500:	Substation Changes /Improvements
Code 600:	Sectionalizing/Regulation
Code 1100:	Transmission Line Air-Break Switches

#### GONDER SUBSTATION #1

The Gonder Substation is located in the central portion of the Cooperative's service area. The projected peak demand for this 230/69 KV substation during the time period covered by this work plan is 46 MW. The highest peak lately has been ~ 26 MW and Sierra Resources is currently requesting a 69/25 KV substation at Duck Creek for 20 MW for 2008. This may take a new 69KV SF6 breaker, a new 69/25 KV substation transformer near the Duck Creek turnoff w/an OLTC,

circuit switcher, regulators, 69 KV overhead transmission line, etc. All is not known yet as we have just started meeting with SPPCO this last month concerning this load requirement. LS Power may open negotiations again and require load which we do not know as of yet. The 2303 Breaker needs to be replaced due to difficulty in finding replacement parts, its age and possibility of failure in the 230 KV bus.

The 69/25 KV substation is nearing its peak and with the additional growth foreseen by the construction of the Sierra Resources Power Plant we are looking at ~2.5 MVA for water well loads and ~5 MVA for 1,500 units or more man camp facilities. This would require another 69/25 KV substation transformer with a circuit switcher, etc. at Gonder with a capability to handle future growth of ~17 MVA. We would also have to build more distribution lines to feed this new load. With this we could possibly split the load at times but still have one 69/25 KV transformer to handle load out of Gonder.

Overall, the Gonder Substation is in good condition for an aging substation. It is, however, recommended that the 69KV OCB's be inspected for possible replacement, over a period of time, in the Long Range Plan due to the age and deterioration of the original units.

In the Gonder Substation service area, the conversion of 4.6 miles of 2.4/4.16 kV distribution line will need to take place. These conversions consist of the reinsulation and conversion of 2.4/4.16 kV lines within the town of McGill. These improvements need to take place in order to improve system reliability, voltage levels, reduce line losses and replace existing facilities.

## MACHACEK SUBSTATION #2

The Machacek Substation is located in the northwestern portion of the Cooperative's service area. The projected peak demand for this 230/69 KV substation during the time period covered by this work plan is 20.7 MW. Bald Mtn Mine is looking at increasing their load by ~1 MW and maybe more. Power Engineers and Mt. Wheeler Power have been calculating the capacity of the 69 KV line feeding the site. We have not heard anything definite as of late. Mt. Hope is investigating the possibility of their mining operation, 39 MW, which would be fed from the 345 KV line of SPPCO or the 230 KV line out of Machacek Substation.

The 69/25 KV distribution peak load would be ~ 18 MW. The well field for Mt. Hope would be fed from the 69/25 KV DVW line for ~2 MW. Another mine has been investigating the possibility of tying into the 69 KV line in Newark Valley to feed a 750 KW load near Mt. Hamilton. Homestake Mining may bring on an unknown additional 25 KV load also.

Overall, this substation is in good condition; however, the concentric neutral on the underground cable serving all irrigation loads is in need of replacement due to aging and deterioration of the original cable. It is, therefore, recommended that the Cooperative continue with their underground cable replacement program to better serve its irrigation load.

The Cooperative has continued with their program whereby a number of single-phase hydraulic reclosers are replaced each year with new electronic reclosers.

## MURRY SUBSTATION #3

The Murry Substation is located in the central portion of the Cooperative's service area, near the town of Ely, Nevada. The projected peak demand for this substation during the time period covered by this work plan is 6 MW. There is a number of residential subdivisions coming in but we have not seen any commercial load requests.

To insure that system reliability is maintained throughout the town of Ely, as well as maintaining voltage levels, reducing line losses and replacing aged outside plant, some of which dates back to the 1920-30's, it is recommended that the cooperative re-insulate and convert that portion of the Murry Canyon currently operating at 2.4/4.16 kV to 14.4/24.9 kV.

To assist in maintaining the Railroad Valley/Nyala circuit, in the case of an emergency condition in Williams Substation we will perform maintenance on the existing "retired 34.5 kV line" near the Lone Tree Substation to the Blackjack/Lund turnoff. Once this is in operating condition we will be able to tie that circuit to the Murry Substation which has plenty of capacity to handle the additional load.

#### GIANOLI SUBSTATION #4

The Gianoli Substation is located in the central portion of the Cooperative's service area. This substation serves the main part of the town of Ely, Nevada. The projected peak demand for this substation during the time period covered by this work plan is 6 MW.

To insure that system reliability is maintained throughout the extremities of this substation's service area, as well as maintaining voltage levels, reducing line losses and replacing existing facilities, some of which date back to the 1920-30's, several improvements are being recommended for the time period covered by this Work Plan.

The greatest improvement being recommended is the relocation/replacement of the entire substation to a location on Campton Street east of the original site. This will allow ease of access, alleviate safety violations, allow maintenance with minimal outage times and give accessibility to construct a sub with newer recording reclosers to allow better control and supervision of the Gianoli circuits. This would also entail five new feeders be built to feed the existing loads.

The 2400/4160 Volt circuits may be best left on the system with regular maintenance.

#### GRIGGS SUBSTATION #6

The Griggs Substation is located in the northern portion of the Cooperative's service area. The projected peak demand for this substation during the time period covered by this work plan is 1.2 MW.

Overall, the Griggs Substation is in fairly good condition. It is, however, recommended that the substation reclosers and respective control panels be replaced due to the age and unavailability of parts to perform maintenance on these units.

#### BAKER SUBSTATION #7

The Baker Substation is located in the eastern portion of the Cooperative's service area. The projected peak demand for this substation during the time period covered by this work plan is 5.5 MW

To insure that system reliability is maintained throughout the substation area (south), as well as maintaining adequate voltage levels, reducing line losses and replacing outside plant, some of which dates back to the 1920-30's, it is recommended that the Cooperative re-insulate and convert the town of Garrison from 2.4/4.16 kV to 14.4/24.9 kV.

The Cooperative has continued with their program whereby a number of single-phase hydraulic reclosers are replaced each year with new electronic reclosers.

#### WILLIAMS SUBSTATION #8

The Williams Substation is located in the southwestern portion of the Cooperative's service area. The projected peak demand for this substation during the time period covered by this work plan is 6.5 MW.

Overall, the Williams Substation is in fair condition. This substation would best be served with a spare 7.5 MVA substation transformer with circuit switcher in order to best serve our consumers.

#### TAYLOR SUBSTATION #13

The Taylor Williams Substation is located in the southwestern portion of the Cooperative's service area. The only load on that substation is a manufactured home and a couple of security lights. A 100 hp water test well is to be energized the fall of 2006 for possible future mining usage.

The Taylor Substation is in fairly good condition.