



# County of Los Alamos

1000 Central Avenue  
Los Alamos, NM 87544

## Agenda - Final Board of Public Utilities

*Robert Gibson, Chair; Eric Stromberg, Vice-chair; Matt Heavner; Charles Nakhleh, and, Steve Tobin, Members;  
Philo Shelton, Ex Officio Member  
Anne Laurent, Ex Officio Member  
Theresa Cull, Council Liaison*

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Wednesday, April 17, 2024

5:30 PM

Municipal Bldg., Council Chambers

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**Public Participation: In person or <https://us06web.zoom.us/j/88515885437>**

Members of the public wishing to attend may participate and provide public comment via Zoom.

Webinar Link ~ <https://us06web.zoom.us/j/88515885437> Webinar ID ~ 885 1588 5437

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### **PUBLIC COMMENT:**

Oral comments are accepted during the two periods identified on the agenda and after initial board discussion on a business item, prior to accepting a main motion on an item. Public comments are limited to four minutes per person. For those participating over Zoom, please use the raise hand function. If you are participating by phone enter \*9 to raise your hand.

Please submit written comments to the board at [bpu@lacnm.us](mailto:bpu@lacnm.us).

### **1. CALL TO ORDER**

### **2. PUBLIC COMMENT**

*This section of the agenda is reserved for comments from the public on Consent Agenda items or items that are not otherwise included in this agenda.*

**3. APPROVAL OF AGENDA**

**4. BOARD BUSINESS**

**4.A. Chair's Report**

**4.B. Board Member's Reports**

**4.C. Utilities Manager's Report**

**4.D. County Manager's Report**

**4.E. Council Liaison's Report**

**4.F. Environmental Sustainability Board Liaison's Report**

**4.G. General Board Business**

*None.*

**4.H. Board Expenses**

*None.*

**5. PUBLIC HEARING(S)**

- 5.A. [OR1015-24a](#) Approval of Incorporated County of Los Alamos Ordinance No. 732; An Ordinance Authorizing the Execution and Delivery of a Loan Agreement ("Loan Agreement") By and Between the Incorporated County of Los Alamos, New Mexico (the "Governmental Unit") and the New Mexico Finance Authority, Evidencing a Special Limited Obligation of the Governmental Unit to Pay a Principal Amount of No More Than \$2,020,000, Together with Interest, Expenses, and Administrative Fees Thereon, for the Purpose of Financing the Costs of Construction of Electrical and Mechanical Upgrades, Specifically the Water Production Replacement of the Supervisory Controls and Data Acquisition System and Related Appurtenances of the Project; Providing for the Pledge and Payment of the Principal, Administrative Fees and Interest Due Under the Loan Agreement Solely From the Net Revenues of the Joint Utility System of the Governmental Unit; Setting an Interest Rate for the Loan; Approving the Form of and Other Details Concerning the Loan Agreement; Ratifying Actions Heretofore Taken; Repealing All Action Inconsistent with This Ordinance; and Authorizing the Taking of Other Actions in Connection with the Execution and Delivery of the Loan Agreement.

**Presenters:** James Alarid, Deputy Utilities Manager - Engineering

- 5.B. [OR1018-24a](#) Approval of Incorporated County of Los Alamos Ordinance No. 733 An Ordinance Authorizing the Incorporated County of Los Alamos (County) to Submit an Amendment No. 2, to the New Mexico Environment Department (NMED) Clean Water State Revolving Fund (CWSRF), for the Purpose of Increasing the Funding of Loan Number CWSRF 110 for the Bayo Lift Station Elimination Project.

**Presenters:** James Alarid, Deputy Utilities Manager - Engineering

## 6. **CONSENT AGENDA**

*The following items are presented for Board approval under a single motion unless any item is withdrawn by a member for further Board consideration in the "Business" section of the agenda.*

### **~ CONSENT MOTION ~**

*I move that the Board of Public Utilities approve the items on the Consent Agenda as presented and that the motions in the staff reports be included in the minutes for the record.*

**OR**

*I move that the Board of Public Utilities approve the items on the Consent Agenda as amended and that the motions contained in the staff reports, be included in the minutes for the record.*

- 6.A. [18076-24](#) Approval of Board of Public Utilities Meeting Minutes for March 6 and March 20, 2024

**Presenters:** Board of Public Utilities

7. **DEPARTMENT BUSINESS**

- 7.A. [18243-24](#) Integrated Resource Plan (IRP) Implementation Update

**Presenters:** Ben Olbrich, Deputy Utilities Manager - Power Supply

- 7.B. [18244-24](#) FY2024 Electric Reliability Plan Update

**Presenters:** Stephen Marez, Deputy Utilities Manager - Electric Distribution

- 7.C. [18607-24b](#) Approval of Budget Revision 2024-60 Uniper Settlement and Change to Debt Coverage Ratio

**Presenters:** Karen Kendall, Deputy Utilities Manager - Finance

- 7.D. [18304-24](#) Approval of Changes to the Department of Public Utilities Rules & Regulations - Fee Schedule

**Presenters:** James Alarid, Deputy Utilities Manager - Engineering

- 7.E. [18305-24b](#) Approval of Proposed Changes to the Department of Public Utilities Rules & Regulations, Rule E-5 Interconnection with Cogeneration and Small Power Producers

**Presenters:** Karen Kendall, Deputy Utilities Manager - Finance and Stephen Marez, Deputy Utilities Manager - Electric Distribution

8. **MONTHLY STATUS REPORTS**

- [18087-24](#) Status Reports for March 2024

**Presenters:** Philo Shelton, Utilities Manager

9. **UPCOMING AGENDA ITEMS**



[18065-24](#) Tickler File for the Next Three Months

**Presenters:** Philo Shelton, Utilities Manager

**10. PUBLIC COMMENT**

*This section of the agenda is reserved for comments from the public on any items.*

**11. ADJOURNMENT**

If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact Human Resources at 505-662-8040 as soon as possible.

Complete Board of Public Utilities agenda packets, past agendas, videos, legislation and minutes can be found online at <https://losalamos.legistar.com>. Learn more about the Board of Public Utilities at <https://ladpu.com/BPU>.



# County of Los Alamos

## Staff Report

April 17, 2024

Los Alamos, NM 87544  
www.losalamosnm.us

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**Agenda No.:** 5.A.

**Index (Council Goals):** Quality Excellence - Effective, Efficient, and Reliable Services; DPU FY2022 - 1.0 Provide Safe and Reliable Utility Services

**Presenters:** James Alarid, Deputy Utilities Manager - Engineering

**Legislative File:** OR1015-24a

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### Title

Approval of Incorporated County of Los Alamos Ordinance No. 732; An Ordinance Authorizing the Execution and Delivery of a Loan Agreement ("Loan Agreement") By and Between the Incorporated County of Los Alamos, New Mexico (the "Governmental Unit") and the New Mexico Finance Authority, Evidencing a Special Limited Obligation of the Governmental Unit to Pay a Principal Amount of No More Than \$2,020,000, Together with Interest, Expenses, and Administrative Fees Thereon, for the Purpose of Financing the Costs of Construction of Electrical and Mechanical Upgrades, Specifically the Water Production Replacement of the Supervisory Controls and Data Acquisition System and Related Appurtenances of the Project; Providing for the Pledge and Payment of the Principal, Administrative Fees and Interest Due Under the Loan Agreement Solely From the Net Revenues of the Joint Utility System of the Governmental Unit; Setting an Interest Rate for the Loan; Approving the Form of and Other Details Concerning the Loan Agreement; Ratifying Actions Heretofore Taken; Repealing All Action Inconsistent with This Ordinance; and Authorizing the Taking of Other Actions in Connection with the Execution and Delivery of the Loan Agreement.

### Recommended Action

**I move that the Board of Public Utilities approve Incorporated County of Los Alamos Ordinance No. 732; An Ordinance Authorizing the Execution and Delivery of a Loan Agreement ("Loan Agreement") By and Between the Incorporated County of Los Alamos, New Mexico (the "Governmental Unit") and the New Mexico Finance Authority, Evidencing a Special Limited Obligation of the Governmental Unit to Pay a Principal Amount of No More Than \$2,020,000, Together with Interest, Expenses, and Administrative Fees Thereon, for the Purpose of Financing the Costs of Construction of Electrical and Mechanical Upgrades, Specifically the Water Production Replacement of the Supervisory Controls and Data Acquisition System and Related Appurtenances of the Project; Providing for the Pledge and Payment of the Principal, Administrative Fees and Interest Due Under the Loan Agreement Solely From the Net Revenues of the Joint Utility System of the Governmental Unit; Setting an Interest Rate for the Loan; Approving the Form of and Other Details Concerning the Loan Agreement; Ratifying Actions Heretofore Taken; Repealing All Action Inconsistent with This Ordinance; and Authorizing the Taking of Other Actions in Connection with the Execution and Delivery of the Loan Agreement and forward to Council for Introduction and Adoption.**

### Utilities Manager Recommendation

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The Utilities Manager recommends that the BPU approve this ordinance and forward to Council for introduction and adoption.

**Body**

The DPU has secured multiple Drinking Water State Revolving Loans (DWSRL) in recent years to complete important upgrades to the water production system. The loans are offered with an interest rate of 0.01% for twenty-year terms. These loan funds will be used to replace the existing water production Supervisory Controls and Data Acquisition System (SCADA) system. The SCADA system allows the water operators to monitor and control 45 remote sites which consist of tanks, booster stations and wells. The existing SCADA system was placed into service in the early 1990's. The existing system is a proprietary system with many features that are no longer supported by the vendor.

The project will include replacement of the existing microwave communications system with fiber optic lines that will be attached to existing overhead electric lines. The radio terminal units at 45 facilities will be replaced with new open-architecture process logical controllers (PLCs) that Los Alamos County staff will have the ability to program, troubleshoot, upgrade and manage the new SCADA system. A new master station, located at Pajarito Cliffs water operations control room, will be installed on a new operating system. The loan is scheduled to close in early July and staff will immediately begin to procure equipment for self-performed work and issue a request for proposals for support services that will be needed to complete the project.

**Alternatives**

If the ordinance is not approved, the loan funding will be lost. Staff will continue to pursue the project in the next budget year due to the risk of failure of the existing system.

**Fiscal and Staff Impact/Planned Item**

The project is included in the fiscal year 2025 water production capital budget in the amount of \$2,020,000, paid for by a Drinking Water State Revolving Loan.

**Attachments**

- A - Ordinance 732
- B - DWSRL 6368 Loan Agreement
- C - Pledged Revenue Certificate
- D - General and No Litigation Certificate
- E - Delivery Certificate and Cross-Receipt

STATE OF NEW MEXICO )  
 ) ss.  
COUNTY OF LOS ALAMOS )

**INCORPORATED COUNTY OF LOS ALAMOS ORDINANCE NO. 732**

**AUTHORIZING THE EXECUTION AND DELIVERY OF A LOAN AGREEMENT ("LOAN AGREEMENT") BY AND BETWEEN THE INCORPORATED COUNTY OF LOS ALAMOS, NEW MEXICO (THE "GOVERNMENTAL UNIT") AND THE NEW MEXICO FINANCE AUTHORITY, EVIDENCING A SPECIAL LIMITED OBLIGATION OF THE GOVERNMENTAL UNIT TO PAY A PRINCIPAL AMOUNT OF NO MORE THAN \$2,020,000, TOGETHER WITH INTEREST, EXPENSES, AND ADMINISTRATIVE FEES THEREON, FOR THE PURPOSE OF FINANCING THE COSTS OF CONSTRUCTION OF ELECTRICAL AND MECHANICAL UPGRADES, SPECIFICALLY THE WATER PRODUCTION REPLACEMENT OF THE SUPERVISORY CONTROL AND DATA ACQUISITION ("SCADA") SYSTEM AND RELATED APPURTENANCES OF THE PROJECT; PROVIDING FOR THE PLEDGE AND PAYMENT OF THE PRINCIPAL, ADMINISTRATIVE FEES AND INTEREST DUE UNDER THE LOAN AGREEMENT SOLELY FROM THE NET REVENUES OF THE JOINT UTILITY SYSTEM OF THE GOVERNMENTAL UNIT; SETTING AN INTEREST RATE FOR THE LOAN; APPROVING THE FORM OF AND OTHER DETAILS CONCERNING THE LOAN AGREEMENT; RATIFYING ACTIONS HERETOFORE TAKEN; REPEALING ALL ACTION INCONSISTENT WITH THIS ORDINANCE; AND AUTHORIZING THE TAKING OF OTHER ACTIONS IN CONNECTION WITH THE EXECUTION AND DELIVERY OF THE LOAN AGREEMENT.**

Capitalized terms used in the following recitals have the same meaning as defined in Section 1 of this Ordinance, unless the context requires otherwise.

**WHEREAS**, the Governmental Unit is a legally and regularly created, established, organized and existing incorporated county under the general laws of the State; and

**WHEREAS**, the Governing Body has determined and hereby determines that the Project may be financed with amounts borrowed under the Loan Agreement and that it is in the best interest of the Governmental Unit and the public it serves that the Loan Agreement be executed and delivered and that the financing of the construction of the Project take place by executing and delivering the Loan Agreement; and

**WHEREAS**, the Governing Body has determined that it may lawfully pledge the Pledged Revenues for the payment of amounts due under the Loan Agreement; and

**WHEREAS**, other than as described on the Term Sheet, the Pledged Revenues have not heretofore been pledged to secure the payment of any obligation which is currently outstanding; and

**WHEREAS**, there have been presented to the Governing Body, and there presently are on file with the County Clerk, this Ordinance and the form of the Loan Agreement; and

**WHEREAS**, the Governing Body hereby determines that the Project to be financed by the Loan Agreement is to be used for governmental purposes of the Governmental Unit; and

**WHEREAS**, all required authorizations, consents and approvals in connection with (i) the use and pledge of the Pledged Revenues to the Finance Authority (or its assigns) for the payment of amounts due under the Loan Agreement, (ii) the use of the proceeds of the Loan Agreement

to finance the Project, and (iii) the authorization, execution and delivery of the Loan Agreement, which are required to have been obtained by the date of the Ordinance have been obtained or are reasonably expected to be obtained prior to the Closing Date.

**NOW, THEREFORE, BE IT ORDAINED BY THE GOVERNING BODY OF THE INCORPORATED COUNTY OF LOS ALAMOS, NEW MEXICO:**

**Section 1. Definitions.** Capitalized terms defined in this Section 1 shall, for all purposes, have the meaning herein specified, unless the context clearly requires otherwise (such meanings to be equally applicable to both the singular and the plural forms of the terms defined):

“Administrative Fee” or “Administrative Fee Component” means the 0.25% annual fee payable to the Finance Authority as 0.125% of the Loan Agreement Principal Amount then outstanding as a part of each Loan Agreement Payment for the costs of originating and servicing the Loan.

“Aggregate Disbursements” means, at any time after the Closing Date, the sum of all Disbursements.

“Aggregate Repayable Disbursements” means, at any time after the Closing Date, the Aggregate Disbursements.

“Approved Requisition” means a requisition in the form of Exhibit “C” to the Loan Agreement, together with supporting documentation submitted to and approved by the Finance Authority pursuant to Section 4.2 of the Loan Agreement.

“Authorized Officers” means the Chair, Vice-Chair, Utilities Manager, Deputy Utilities Manager – Finance and Administration, Deputy Utilities Manager – Engineering Division and the County Clerk of the Governmental Unit.

“Bonds” means drinking water state revolving loan fund revenue bonds, if any, issued hereafter by the Finance Authority and related to the Loan Agreement and the Loan Agreement Payments.

“Closing Date” means the date of execution, delivery and funding of the Loan Agreement authorized by this Ordinance.

“Debt Service Account” means the debt service account established in the name of the Governmental Unit and administered by the Finance Authority to pay the Loan Agreement Payments under the Loan Agreement as the same become due.

“Disbursement” means an amount caused to be paid by the Finance Authority for an Approved Requisition for costs of the Project, including the Expense Fund Component.

“DWSRLF Act” means the general laws of the State, particularly the Drinking Water State Revolving Loan Fund Act, NMSA 1978, §§ 6-21A-1 through 6-21A-9, as amended; NMSA 1978, §§ 4-62-1 through 4-62-10, as amended; and enactments of the Governing Body relating to the Loan Agreement, including this Ordinance.

“Drinking Water State Revolving Loan Fund” means the drinking water state revolving loan fund established by the DWSRLF Act.

“Environmental Protection Agency” means the Environmental Protection Agency of the United States.

“Expense Fund” means the expense fund hereby created to be held and administered by the Finance Authority to pay Expenses.

“Expense Fund Component” means an amount equal to one percent (1%) of each Disbursement for the Project, simultaneously withdrawn and deposited in the Expense Fund to pay Expenses.

“Expenses” means the Finance Authority’s costs of issuance of the Loan Agreement and the Bonds, if any, and periodic and regular fees and expenses incurred by the Finance Authority in administering the Loan Agreement, including legal fees.

“Final Loan Agreement Payment Schedule” means the schedule of Loan Agreement Payments due on the Loan Agreement following the Final Requisition, as determined on the basis of the Aggregate Repayable Disbursements.

“Final Requisition” means the final requisition of moneys to be submitted by the Governmental Unit, which shall be submitted by the Governmental Unit on or before the date provided for in Section 4.1(b) of the Loan Agreement.

“Finance Authority” means the New Mexico Finance Authority, created by the New Mexico Finance Authority Act, NMSA 1978, §§ 6-21-1 through 6-21-31, as amended.

“Fiscal Year” means the period commencing on July 1 of each calendar year and ending on the last day of June of the next succeeding calendar year, or any other twelve-month period which any appropriate authority may hereafter establish for the Governmental Unit as its fiscal year.

“Governing Body” means the duly organized County Council of the Governmental Unit and any successor governing body of the Governmental Unit.

“Governmental Unit” means the Incorporated County of Los Alamos, New Mexico.

“Gross Revenues” means all income and revenues directly or indirectly derived by the Governmental Unit from the operation and use of the System, or any part of the System, for any particular Fiscal Year period to which the term is applicable, and includes, without limitation, all revenues received by the Governmental Unit, or any municipal corporation or agency succeeding to the rights of the Governmental Unit, from the System and from the sale and use of electric, gas, water and sanitary sewer services or facilities, or any other service, commodity or facility or any combination thereof furnished by the System.

Gross Revenues do not include:

(a) Any money received as (i) grants or gifts from the United States of America, the State or other sources or (ii) the proceeds of any charge or tax intended as a replacement therefore or other capital contributions from any source which are restricted as to use;

(b) Gross receipts taxes, other taxes and/or fees collected by the Governmental Unit and remitted to other governmental agencies; and

(c) Condemnation proceeds or the proceeds of any insurance policy, except any insurance proceeds derived in respect of loss of use or business interruption.

"Herein," "hereby," "hereunder," "hereof," "hereinabove" and "hereafter" refer to this entire Ordinance and not solely to the particular section or paragraph of this Ordinance in which such word is used.

"Interest Component" means the portion of each Loan Agreement Payment paid as interest accruing on the Aggregate Repayable Disbursements then outstanding, calculated from the date of each Disbursement.

"Interest Rate" means the rate of interest on the Loan Agreement as shown on the Term Sheet.

"Loan" means the funds to be loaned to the Governmental Unit by the Finance Authority pursuant to the Loan Agreement, up to the Maximum Principal Amount.

"Loan Agreement" means the loan agreement and any amendments or supplements thereto, including the exhibits attached to the loan agreement.

"Loan Agreement Payment" means, collectively, the Principal Component, the Interest Component, Expenses, and the Administrative Fee Component to be paid by the Governmental Unit as payment on the Aggregate Repayable Disbursements under the Loan Agreement, as shown on Exhibit "B" thereto.

"Loan Agreement Principal Amount" means, as of any date of calculation, the Aggregate Repayable Disbursements (including the Expense Fund Component) then outstanding.

"Maximum Repayable Principal" means the maximum amount of Aggregate Repayable Disbursements repayable by the Governmental Unit pursuant to the Loan Agreement, and is equal to the Maximum Principal Amount. The Maximum Repayable Principal is \$2,020,000.

"Maximum Principal Amount" means \$2,020,000.

"Net Revenues" means the Gross Revenues of the System owned and operated by the Governmental Unit minus Operation and Maintenance Expenses of the System, indirect charges, amounts expended for capital replacements and repairs of the System, required set asides for debt and replacement requirements and any other payments from the gross revenues reasonably required for operation of the System.

"NMSA" means the New Mexico Statutes Annotated, 1978 Compilation, as amended and supplemented from time to time.

"Operation and Maintenance Expenses" means all reasonable and necessary current expenses of the System, for any particular Fiscal Year or period to which such term is applicable, paid or accrued, related to operating, maintaining and repairing the System, including, without limiting the generality of the foregoing:

(a) Legal and overhead expenses of the Governmental Unit directly related and reasonably allocable to the administration of the System;



(b) Insurance premiums for the System, including, without limitation, premiums for property insurance, public liability insurance and workmen's compensation insurance, whether or not self-funded;

(c) Premiums, expenses and other costs (other than required reimbursements of insurance proceeds and other amounts advanced to pay debt service requirements on System bonds) for credit facilities;

(d) Any expenses described in this definition other than expenses paid from the proceeds of System bonds;

(e) The costs of audits of the books and accounts of the System;

(f) Amounts required to be deposited in any rebate fund;

(g) Salaries, administrative expenses, labor costs, surety bonds and the cost of water, materials and supplies used for or in connection with the current operation of the System; and

(h) Any fees required to be paid under any operation, maintenance and/or management agreement with respect to the System.

Operation and Maintenance Expenses do not include any allowance for depreciation, payments in lieu of taxes, franchise fees payable or other transfers to the Governmental Unit's general fund, liabilities incurred by the Governmental Unit as a result of its negligence or other misconduct in the operation of the System, any charges for the accumulation of reserves for capital replacements or any Operation and Maintenance Expenses payable from moneys other than Gross Revenues.

"Ordinance" means this Ordinance No. 732 adopted by the Governing Body of the Governmental Unit on May 28, 2024, approving the Loan Agreement and pledging the Pledged Revenues to the payment of the Loan Agreement Payments as shown on the Term Sheet to the Loan Agreement, as supplemented from time to time in accordance with the provisions hereof.

"Parity Obligations" means any obligations of the Governmental Unit under the Loan Agreement and any other obligations now outstanding or hereafter issued or incurred, payable from or secured by a pledge of the Pledged Revenues and issued with a lien on the Pledged Revenues on a parity with the Loan Agreement, including any such obligations shown on the Term Sheet.

"Pledged Revenues" means the Net Revenues of the Governmental Unit pledged to payment of the Loan Agreement Payments pursuant to this Ordinance and described on the Term Sheet.

"Project" means the project described in the Term Sheet.

"Senior Obligations" means any bonds or other obligations of the Governmental Unit now outstanding or hereafter issued or incurred, payable from or secured by a pledge of the Pledged Revenues and issued with a lien on the Pledged Revenues superior to the lien created by the Loan Agreement, including any such obligations shown on the Term Sheet.

“State” means the State of New Mexico.

“Subordinated Obligations” means any bonds or other obligations of the Governmental Unit now outstanding or hereafter issued or incurred with a lien on the Pledged Revenues subordinate to the lien created by the Loan Agreement and subordinate to any other outstanding Parity Obligations having a lien on the Pledged Revenues, including any such obligations shown on the Term Sheet.

“System” means the joint utility system designated as the Governmental Unit’s electric, gas, water and wastewater utility system, and all improvements or additions thereto, including additions and improvements to be acquired or constructed with the proceeds of the Loan Agreement.

“Term Sheet” means Exhibit “A” to the Loan Agreement.

“Unrequisitioned Principal Amount” means the amount, if any, by which the Maximum Principal Amount exceeds the Aggregate Disbursements at the time the Governmental Unit submits the certificate of completion required pursuant to Section 6.3 of the Loan Agreement.

**Section 2. Ratification.** All action heretofore taken (not inconsistent with the provisions of this Ordinance) by the Governing Body and officers of the Governmental Unit directed toward the acquisition and completion of the Project, and the execution and delivery of the Loan Agreement shall be, and the same hereby is, ratified, approved and confirmed.

**Section 3. Authorization of the Project and the Loan Agreement.** The acquisition and completion of the Project and the method of financing the Project through execution and delivery of the Loan Agreement are hereby authorized and ordered. The Project is for the benefit and use of the Governmental Unit.

**Section 4. Findings.** The Governmental Unit hereby declares that it has considered all relevant information and data and hereby makes the following findings:

A. Moneys available and on hand for the Project from all sources other than the Loan Agreement are not sufficient to defray the cost of acquiring and constructing the Project.

B. The Pledged Revenues may lawfully be pledged to secure the payment of amounts due under the Loan Agreement.

C. It is economically feasible and prudent to defray, in whole or in part, the costs of the Project by the execution and delivery of the Loan Agreement.

D. The Project and the execution and delivery of the Loan Agreement in the Maximum Principal Amount pursuant to the DWSRLF Act to provide funds for the financing of the Project are necessary or advisable in the interest of the public health, safety, and welfare of the residents and the public served by the Governmental Unit.

E. The Governmental Unit will acquire and construct the Project, in whole or in part, with the net proceeds of the Loan.

F. Other than as described on the Term Sheet, the Governmental Unit does not have any outstanding obligations payable from Pledged Revenues which it has incurred or will incur prior to the initial execution and delivery of the Loan Agreement.

G. The net effective interest rate on the Maximum Principal Amount does not exceed the current market rate, which is the maximum rate permitted by federal law.

**Section 5. Loan Agreement - Authorization and Detail.**

A. Authorization. This Ordinance has been adopted by the affirmative vote of at least a two-thirds (2/3) majority of all of the members of the Governing Body. For the purpose of protecting the public health, conserving the property, and protecting the general welfare and prosperity of the public served by the Governmental Unit and acquiring and constructing the Project, it is hereby declared necessary that the Governmental Unit, pursuant to the DWSRLF Act, execute and deliver the Loan Agreement evidencing a special limited obligation of the Governmental Unit to pay a principal amount of \$2,020,000 and interest thereon, and the execution and delivery of the Loan Agreement is hereby authorized. The Governmental Unit shall use the proceeds of the Loan (i) to finance the acquisition and completion of the Project and (ii) to pay the Administrative Fee and Expenses of the Loan Agreement and the costs of issuance of the Bonds, if any. The Project will be owned by the Governmental Unit.

B. Detail. The Loan Agreement shall be in substantially the form of the Loan Agreement presented at the meeting of the Governing Body at which this Ordinance was adopted. The Loan shall be in an amount not to exceed the Maximum Principal Amount of \$2,020,000. The Loan Agreement Principal Amount shall be payable in installments of principal due on May 1 of the years designated in the Final Loan Agreement Payment Schedule and bear interest payable on May 1 and November 1 of each of the years designated in the Final Loan Agreement Payment Schedule, at the interest rate designated in the Loan Agreement, including Exhibit "A" thereto, which rate includes the Administrative Fee.

**Section 6. Approval of Loan Agreement.** The form of the Loan Agreement as presented at the meeting of the Governing Body at which this Ordinance was adopted is hereby approved. Authorized Officers are hereby individually authorized to execute, acknowledge and deliver the Loan Agreement with such changes, insertions and omissions as may be approved by such individual Authorized Officers, and the County Clerk is hereby authorized to affix the seal of the Governmental Unit on the Loan Agreement and attest the same. The execution of the Loan Agreement by an Authorized Officer shall be conclusive evidence of such approval.

**Section 7. Special Limited Obligation.** The Loan Agreement shall be secured by the pledge of the Pledged Revenues as set forth in the Loan Agreement and shall be payable solely from the Pledged Revenues. The Loan Agreement, together with interest thereon and other obligations of the Governmental Unit thereunder, shall be a special, limited obligation of the Governmental Unit, payable solely from the Pledged Revenues as provided in this Ordinance, and the Loan Agreement shall not constitute a general obligation of the Governmental Unit or the State, and the holders of the Loan Agreement may not look to any general or other fund of the Governmental Unit for payment of the obligations thereunder. Nothing contained in this Ordinance nor in the Loan Agreement, nor any other instruments, shall be construed as obligating the Governmental Unit (except with respect to the application of the Pledged Revenues) or as imposing a pecuniary liability or a charge upon the general credit of the Governmental Unit or against its taxing power, nor shall a breach of any agreement contained in this Ordinance, the Loan Agreement, or any other instrument impose any pecuniary liability upon the Governmental

Unit or any charge upon its general credit or against its taxing power. The Loan Agreement shall never constitute an indebtedness of the Governmental Unit within the meaning of any State constitutional provision or statutory limitation and shall never constitute or give rise to a pecuniary liability of the Governmental Unit or a charge against its general credit or taxing power. Nothing herein shall prevent the Governmental Unit from applying other funds of the Governmental Unit legally available therefor to payments required by the Loan Agreement, in its sole and absolute discretion.

**Section 8. Disposition of Proceeds; Completion of Acquisition and Completion of the Project.**

A. Debt Service Account; Disbursements. The Governmental Unit hereby consents to creation of the Debt Service Account to be held and maintained by the Finance Authority as provided in the Loan Agreement.

The proceeds derived from the execution and delivery of the Loan Agreement shall be disbursed promptly upon receipt of an Approved Requisition (as defined in the Loan Agreement).

Until the acquisition and completion of the Project or the date of the Final Requisition, the money disbursed pursuant to the Loan Agreement shall be used and paid out solely for the purpose of acquiring and constructing the Project in compliance with applicable law and the provisions of the Loan Agreement.

B. Prompt Completion of the Project. The Governmental Unit will complete the Project with all due diligence.

C. Certification of Completion of the Project. Upon the acquisition and completion of the Project, the Governmental Unit shall execute and send to the Finance Authority a certificate stating that the completion of and payment for the Project has been completed.

D. Finance Authority Not Responsible for Application of Loan Proceeds. The Finance Authority shall in no manner be responsible for the application or disposal by the Governmental Unit or by its officers of the funds derived from the Loan Agreement or of any other funds herein designated.

**Section 9. Deposit of Pledged Revenues; Distributions of the Pledged Revenues and Flow of Funds.**

A. Deposit of Pledged Revenues. Pledged Revenues shall be paid directly by the Governmental Unit to the Finance Authority in an amount sufficient to pay principal, interest, Administrative Fees, Expenses and other amounts due under the Loan Agreement, as provided in Section 5.2 of the Loan Agreement.

B. Termination on Deposits to Maturity. No payment shall be made into the Debt Service Account if the amount in the Debt Service Account totals a sum at least equal to the entire aggregate amount of Loan Agreement Payments to become due as to principal, interest on, Administrative Fees and any other amounts due under the Loan Agreement, in which case moneys in such account in an amount at least equal to such principal, interest and Administrative Fee requirements shall be used solely to pay such obligations as the same become due, and any moneys in excess thereof in such accounts shall be transferred to the Governmental Unit and used as provided in Section 9.C of this Ordinance.

C. **Use of Surplus Revenues.** After making all the payments required to be made by this Section and any payments required by outstanding Parity Obligations, any moneys remaining in the Debt Service Account shall be transferred to the Governmental Unit on a timely basis and applied to any other lawful purpose, including, but not limited to, the payment of any Parity Obligations or bonds or obligations subordinate and junior to the Loan Agreement, or purposes authorized by the Governmental Unit, the Constitution and laws of the State, as the Governmental Unit may from time to time determine.

**Section 10. Lien on Pledged Revenues.** Pursuant to the Loan Agreement, the Pledged Revenues are hereby authorized to be pledged, and are hereby pledged, and the Governmental Unit grants a lien on the Pledged Revenues and security interest therein, for the payment of the principal, interest, Administrative Fees, and any other amounts due under the Loan Agreement, subject to the uses thereof permitted by and the priorities set forth in this Ordinance. The Loan Agreement constitutes an irrevocable lien, but not necessarily an exclusive lien, on the Pledged Revenues as set forth herein and therein, and the Governmental Unit shall not create a lien on the Pledged Revenues superior to that of the Loan Agreement without the express prior written approval of the Finance Authority.

**Section 11. Authorized Officers.** Authorized Officers are hereby individually authorized and directed to execute and deliver any and all papers, instruments, opinions, affidavits and other documents and to do and cause to be done any and all acts and things necessary or proper for carrying out this Ordinance, the Loan Agreement and all other transactions contemplated hereby and thereby. Authorized Officers are hereby individually authorized to do all acts and things required of them by this Ordinance and the Loan Agreement for the full, punctual and complete performance of all the terms, covenants and agreements contained in this Ordinance and the Loan Agreement including, but not limited to, the execution and delivery of closing documents and reports in connection with the execution and delivery of the Loan Agreement, and the publication of the summary of this Ordinance set out in Section 17 of this Ordinance (with such changes, additions and deletions as may be necessary).

**Section 12. Amendment of Ordinance.** Prior to the Closing Date, the provisions of this Ordinance may be supplemented or amended by ordinance of the Governing Body with respect to any changes which are not inconsistent with the substantive provisions of this Ordinance. After the Closing Date, this Ordinance may be amended without receipt by the Governmental Unit of any additional consideration, but only with the prior written consent of the Finance Authority.

**Section 13. Ordinance Irrepealable.** After the Closing Date, this Ordinance shall be and remain irrepealable until all obligations due under the Loan Agreement shall be fully paid, canceled and discharged, as herein provided.

**Section 14. Severability Clause.** If any section, paragraph, clause or provision of this Ordinance shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this Ordinance.

**Section 15. Repealer Clause.** All bylaws, orders, resolutions and ordinances, or parts thereof, inconsistent herewith are hereby repealed to the extent only of such inconsistency. This repealer shall not be construed to revive any bylaw, order, resolution or ordinance, or part thereof, heretofore repealed.

**Section 16. Effective Date.** Upon due adoption of this Ordinance, it shall be recorded in the book of the Governmental Unit kept for that purpose, authenticated by the signatures of the Council Chair and County Clerk, and the title and general summary of the subject matter contained in this Ordinance (set out in Section 17 below) shall be published in a newspaper which is of general circulation in the Governmental Unit, and the Ordinance shall be in full force and effect thereafter, in accordance with law.

**Section 17. General Summary for Publication.** Pursuant to the general laws of the State, the title and a general summary of the subject matter contained in this Ordinance shall be published in substantially the following form:

*[Form of Summary of Ordinance for Publication.]*

Incorporated County of Los Alamos, New Mexico  
Notice of Adoption of Ordinance

Notice is hereby given of the title and of a general summary of the subject matter contained in Ordinance No. 732, duly adopted and approved by the Governing Body of the Incorporated County of Los Alamos, New Mexico (the Governmental Unit"), on May 28, 2024. Complete copies of the Ordinance are available for public inspection during normal and regular business hours in the office of the County Clerk, at 1000 Central Avenue, Suite 240, Los Alamos, New Mexico 87544.

The title of the Ordinance is:

INCORPORATED COUNTY OF LOS ALAMOS, NEW MEXICO  
ORDINANCE NO. 732

AUTHORIZING THE EXECUTION AND DELIVERY OF A LOAN AGREEMENT ("LOAN AGREEMENT") BY AND BETWEEN THE INCORPORATED COUNTY OF LOS ALAMOS, NEW MEXICO (THE "GOVERNMENTAL UNIT") AND THE NEW MEXICO FINANCE AUTHORITY, EVIDENCING A SPECIAL LIMITED OBLIGATION OF THE GOVERNMENTAL UNIT TO PAY A PRINCIPAL AMOUNT OF NO MORE THAN \$2,020,000, TOGETHER WITH INTEREST, EXPENSES, AND ADMINISTRATIVE FEES THEREON, FOR THE PURPOSE OF FINANCING THE COSTS OF CONSTRUCTION OF ELECTRICAL AND MECHANICAL UPGRADES, SPECIFICALLY THE WATER PRODUCTION REPLACEMENT OF THE SUPERVISORY CONTROL AND DATA ACQUISITION ("SCADA") SYSTEM AND RELATED APPURTENANCES OF THE PROJECT; PROVIDING FOR THE PLEDGE AND PAYMENT OF THE PRINCIPAL, ADMINISTRATIVE FEES AND INTEREST DUE UNDER THE LOAN AGREEMENT SOLELY FROM THE NET REVENUES OF THE JOINT UTILITY SYSTEM OF THE GOVERNMENTAL UNIT; SETTING AN INTEREST RATE FOR THE LOAN; APPROVING THE FORM OF AND OTHER DETAILS CONCERNING THE LOAN AGREEMENT; RATIFYING ACTIONS HERETOFORE TAKEN; REPEALING ALL ACTION INCONSISTENT WITH THIS ORDINANCE; AND AUTHORIZING THE TAKING OF OTHER ACTIONS IN CONNECTION WITH THE EXECUTION AND DELIVERY OF THE LOAN AGREEMENT.

The title sets forth a general summary of the subject matter contained in the Ordinance.

This notice constitutes compliance with NMSA 1978, § 6-14-6.

*[End of Form of Summary for Publication.]*

**Section 18. Execution of Agreements.** The Incorporated County of Los Alamos, New Mexico, through its Governing Body agrees to authorize and execute all such agreements with the New Mexico Finance Authority as are necessary to consummate the Loan contemplated herein and consistent with the terms and conditions of the Loan Agreement and this Ordinance.

**PASSED, APPROVED AND ADOPTED** this 28<sup>th</sup> day of May, 2024.

**COUNCIL OF THE INCORPORATED COUNTY  
OF LOS ALAMOS, NEW MEXICO**

By \_\_\_\_\_  
Denise Derkacs, Chair

[SEAL]

ATTEST:

By \_\_\_\_\_  
Naomi D. Maestas, County Clerk

*[Remainder of page intentionally left blank.]*

Governing Body Member \_\_\_\_\_ then moved adoption of the foregoing Ordinance duly seconded by Governing Body Member \_\_\_\_\_.

The motion to adopt said Ordinance, upon being put to a vote, was passed and adopted on the following recorded vote:

Those Voting Aye:

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Those Voting Nay:

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Those Absent:

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\_\_\_\_\_ (\_\_\_\_) members of the Governing Body having voted in favor of said motion, the Chair declared said motion carried and said Ordinance adopted, whereupon the Chair and the County Clerk signed the Ordinance upon the records of the minutes of the Governing Body.

After consideration of other matters not relating to the Ordinance, the meeting on motion duly made, seconded and carried, was adjourned.



COUNCIL OF THE INCORPORATED COUNTY  
OF LOS ALAMOS, NEW MEXICO

By \_\_\_\_\_  
Denise Derkacs, Chair

[SEAL]

ATTEST:

By \_\_\_\_\_  
Naomi D. Maestas, County Clerk

*[Remainder of page intentionally left blank.]*

STATE OF NEW MEXICO                               )  
  ) ss.  
COUNTY OF LOS ALAMOS                     )

I, Naomi D. Maestas, the duly appointed, qualified, and acting County Clerk of the Incorporated County of Los Alamos, New Mexico (the "Governmental Unit"), do hereby certify:

1. The foregoing pages are a true, perfect, and complete copy of the record of the proceedings of the County Council (the "Governing Body"), constituting the governing body of the Governmental Unit, had and taken at a duly called regular meeting held at 1000 Central Avenue, Los Alamos, New Mexico 87544, on May 28, 2024, at the hour of 6:00 p.m., insofar as the same relate to the adoption of Ordinance No. 732 and the execution and delivery of the proposed Loan Agreement, copies of which are set forth in the official records of the proceedings of the Governing Body kept in my office. None of the action taken has been rescinded, repealed, or modified.

2. Said proceedings were duly had and taken as therein shown, the meeting therein was duly held, and the persons therein named were present at said meeting, as therein shown.

3. Notice of the meeting was given in compliance with the permitted methods of giving notice of meetings of the Governing Body as required by the State Open Meetings Act, NMSA 1978, §§ 10-15-1 through 10-15-4, as amended, including, the Governing Body's Open Meetings Resolution No. 24-01 presently in effect.

IN WITNESS WHEREOF, I have hereunto set my hand this 12<sup>th</sup> day of July, 2024.

**COUNCIL OF THE INCORPORATED COUNTY  
OF LOS ALAMOS, NEW MEXICO**

[SEAL]

By Naomi D. Maestas, County Clerk

6951109

**EXHIBIT "A"**

AFFIDAVIT OF PUBLICATION OF NOTICE OF MEETING AND INTENT TO ADOPT  
ORDINANCE, NOTICE OF MEETING, MEETING AGENDA AND AFFIDAVIT OF  
PUBLICATION OF NOTICE OF ADOPTION OF ORDINANCE

FINAL-DRAFT

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**\$2,020,000 Maximum Principal Amount**

**Maximum Repayable Principal Amount \$2,020,000**

**DRINKING WATER STATE REVOLVING LOAN FUND  
LOAN AGREEMENT**

dated

**July 12, 2024**

by and between the

**NEW MEXICO FINANCE AUTHORITY**

and the

**INCORPORATED COUNTY OF LOS ALAMOS, NEW MEXICO**

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**DRINKING WATER STATE REVOLVING LOAN FUND  
LOAN AGREEMENT**

This LOAN AGREEMENT (the “Loan Agreement”), dated as of July 12, 2024, is entered into by and between the **NEW MEXICO FINANCE AUTHORITY** (the “Finance Authority”), and the **INCORPORATED COUNTY OF LOS ALAMOS, NEW MEXICO** (the “Governmental Unit”), an incorporated county duly organized and existing under the laws of the State of New Mexico (the “State”).

**W I T N E S S E T H:**

Capitalized terms used in the following recitals of this Loan Agreement and not defined in the first Paragraph above or in these recitals shall have the same meaning as defined in Article I of this Loan Agreement, unless the context requires otherwise.

WHEREAS, the Finance Authority is authorized, pursuant to the Drinking Water State Revolving Loan Fund Act, NMSA 1978, §§ 6-21A-1 through 6-21A-9, as amended (the “DWSRLF Act”) to implement a program to permit qualified local authorities, such as the Governmental Unit, to enter into agreements with the Finance Authority to provide financial assistance in the acquisition, design, construction, improvement, expansion, repair and rehabilitation of drinking water supply facilities as authorized by the Safe Drinking Water Act; and

WHEREAS, the Governing Body of the Governmental Unit has determined that it is in the best interests of the Governmental Unit and the public it serves that the Governmental Unit enter into this Loan Agreement with the Finance Authority and accept a loan from the Finance Authority to finance the costs of the Project, as more fully described on the Term Sheet attached hereto as Exhibit “A”; and

WHEREAS, the Project appears on the Drinking Water Fundable Priority List; and

WHEREAS, the Project has been planned and authorized in conformity with the Intended Use Plan; and

WHEREAS, the New Mexico Environment Department (the “Department”) shall have determined that the Governmental Unit’s Project plans and specifications comply with the provisions of 42 U.S.C. Section 300j-12 and the requirements of the laws and regulations of the State governing the construction and operation of drinking water systems prior to disbursement of any proceeds of the Loan for construction; and

WHEREAS, a portion of the funds made available under this Loan Agreement pursuant to the DWSRLF Act and the Safe Drinking Water Act are federal funds categorized as CFDA 66.468; and

WHEREAS, pursuant to information provided by the Governmental Unit and environmental review by applicable State and federal agencies, and in accordance with 40 C.F.R. Sections 6.204, 6.300(c)(1), and 6.301(f), and pursuant to the environmental review process of the State, the Finance Authority has determined that the Project meets the requirements for a

Categorical Exclusion as defined in the State Environmental Review Process (SERP) for the Drinking Water State Revolving Loan Fund; and

WHEREAS, the New Mexico Environment Department Drinking Water Bureau has determined that the Governmental Unit has sufficient technical, managerial and financial capability to operate the Project for its useful life and ensure compliance with the requirements of the Safe Drinking Water Act.

NOW, THEREFORE, for and in consideration of the premises and the mutual promises and covenants herein contained, the Finance Authority and the Governmental Unit agree:

## **ARTICLE I DEFINITIONS**

Capitalized terms defined in this Article I shall have the meaning specified in this Article I wherever used in this Loan Agreement, including the foregoing recitals, unless the context clearly requires otherwise. Capitalized terms defined in the foregoing recitals, if not defined in this Article I, shall have the same meaning as therein stated when used in this Loan Agreement, unless the context clearly requires otherwise.

“Administrative Fee” or “Administrative Fee Component” means the 0.25% annual fee payable to the Finance Authority as 0.125% of the Loan Agreement Principal Amount then outstanding as a part of each Loan Agreement Payment for the costs of originating and servicing the Loan.

“Aggregate Disbursements” means, at any time after the Closing Date, the sum of all Disbursements.

“Aggregate Program Amount” means, with respect to this Loan Agreement, the sum of \$2,020,000 which amount shall be available for disbursal to the Governmental Unit to pay costs of the Project.

“Aggregate Repayable Disbursements” means, at any time after the Closing Date, the Aggregate Disbursements.

“Approved Requisition” means a requisition in the form of Exhibit “C” to this Loan Agreement, together with the required supporting documentation set out in Exhibit “C” submitted to and approved by the Finance Authority pursuant to Section 4.2 of this Loan Agreement.

“Authorized Officers” means, with respect to the Governmental Unit the Chair, Vice-Chair, Utilities Manager, Deputy Utilities Manager – Finance and Administration, Deputy Utilities Manager – Engineering Division and the County Clerk thereof; and with respect to the Finance Authority, any one or more of the Chairperson, Vice-Chairperson, Secretary and Chief Executive Officer of the Finance Authority, and any other officer or employee of the Finance Authority designated in writing by an Authorized Officer of the Finance Authority.

“Bonds” means drinking water state revolving loan fund revenue bonds, if any, issued hereafter by the Finance Authority and specifically related to this Loan Agreement and the Loan Agreement Payments.

“Closing Date” means the date of execution and delivery of this Loan Agreement as shown on the Term Sheet.

“Debt Service Account” means the debt service account established in the name of the Governmental Unit and administered by the Finance Authority to pay the Loan Agreement Payments under this Loan Agreement as the same become due.

“Department” means the New Mexico Environment Department.

“Disbursement” means an amount caused to be paid by the Finance Authority for an Approved Requisition for costs of the Project, including the Expense Fund Component calculated on the basis of the amount of such Approved Requisition.

“Drinking Water Fundable Priority List” means the list of drinking water projects compiled by the Department pursuant to the Memorandum of Understanding and the Intended Use Plan.

“DWSRLF Act” means the general laws of the State, particularly the Drinking Water State Revolving Loan Fund Act, NMSA 1978, §§ 6-21A-1 through 6-21A-9, as amended; NMSA 1978; NMSA 1978, §§ 4-62-1 through 4-62-10, as amended; and enactments of the Governing Body relating to this Loan Agreement including the Ordinance.

“Drinking Water State Revolving Loan Fund” means the drinking water state revolving loan fund established by the DWSRLF Act.

“Environmental Protection Agency” means the United States Environmental Protection Agency.

“Event of Default” means one or more events of default as defined in Section 10.1 of this Loan Agreement.

“Expense Fund” means the expense fund hereby created to be held and administered by the Finance Authority to pay Expenses.

“Expense Fund Component” means an amount equal to one percent (1%) of each disbursement for the Project, simultaneously withdrawn and deposited in the Expense Fund to pay Expenses.

“Expenses” means the Finance Authority’s costs of issuance of this Loan Agreement and the Bonds, if any, and periodic and regular fees and expenses incurred by the Finance Authority in administering this Loan Agreement, including legal fees.

“Final Loan Agreement Payment Schedule” means the schedule of Loan Agreement Payments due on this Loan Agreement following the Final Requisition, as determined on the basis of the Aggregate Repayable Disbursements.

“Final Requisition” means the final requisition of moneys to be submitted by the Governmental Unit, which shall be submitted by the Governmental Unit on or before the date provided for in Section 4.1(b) of this Loan Agreement.

“Finance Authority Act” means NMSA 1978, §§ 6-21-1 through 6-21-31, as amended.

“Fiscal Year” means the period commencing on July 1 of each calendar year and ending on the last day of June of the next succeeding calendar year, or any other twelve-month period which any appropriate authority may hereafter establish for the Governmental Unit as its fiscal year.

“Generally Accepted Accounting Principles” means the officially established accounting principles applicable to the Governmental Unit consisting of the statements, determinations and other official pronouncements of the Government Accounting Standards Board, Financial Accounting Standards Board, Federal Accounting Standards Board or other principle-setting body acceptable to the Finance Authority establishing accounting principles applicable to the Governmental Unit.

“Governing Body” means the duly organized County Council of the Governmental Unit and any successor governing body of the Governmental Unit.

“Gross Revenues” means all income and revenues directly or indirectly derived by the Governmental Unit from the operation and use of the System, or any part of the System, for any particular Fiscal Year period to which the term is applicable, and includes, without limitation, all revenues received by the Governmental Unit, or any municipal corporation or agency succeeding to the rights of the Governmental Unit, from the System and from the sale and use of electric, gas, water and sanitary sewer services or facilities, or any other service, commodity or facility or any combination thereof furnished by the System.

Gross Revenues do not include:

- (a) Any money received as (i) grants or gifts from the United States of America, the State or other sources or (ii) the proceeds of any charge or tax intended as a replacement therefore or other capital contributions from any source which are restricted as to use;
- (b) Gross receipts taxes, other taxes and/or fees collected by the Governmental Unit and remitted to other governmental agencies; and
- (c) Condemnation proceeds or the proceeds of any insurance policy, except any insurance proceeds derived in respect of loss of use or business interruption.

“Herein,” “hereby,” “hereunder,” “hereof,” “hereinabove” and “hereafter” refer to this entire Loan Agreement and not solely to the particular section or paragraph of this Loan Agreement in which such word is used.

“Independent Accountant” means (i) an accountant employed by the State and under the supervision of the State Auditor, or (ii) any certified public accountant or firm of such accountants duly licensed to practice and practicing as such under the laws of the State, appointed and paid by



the Governmental Unit who (a) is, in fact, independent and not under the domination of the Governmental Unit, (b) does not have any substantial interest, direct or indirect, with the Governmental Unit, and (c) is not connected with the Governmental Unit as an officer or employee of the Governmental Unit, but who may be regularly retained to make annual or similar audits of the books or records of the Governmental Unit.

“Intended Use Plan” means the current plan prepared by the Finance Authority and the Department and approved by the Environmental Protection Agency pursuant to 42 U.S.C. Section 300j-12(b) which establishes criteria for extending drinking water improvements financial assistance to qualifying public drinking water utility systems.

“Interest Component” means the portion of each Loan Agreement Payment paid as interest accruing on the Aggregate Repayable Disbursements then outstanding, calculated from the date of each disbursement.

“Interest Rate” means the rate of interest on this Loan Agreement as shown on the Term Sheet.

“Interim Period” means the period no greater than twenty-seven (27) months, or a longer period as may be approved by the Finance Authority as provided in Section 4.1(b) of the Agreement, beginning on the Closing Date, during which the Finance Authority will disburse moneys to the Governmental Unit to pay costs of the Project, unless extended pursuant to Section 4.1(b) of this Loan Agreement.

“Interim Loan Agreement Payment Schedule” means the anticipated schedule of Loan Agreement Payments due on this Loan Agreement following the Final Requisition, assuming disbursement of the entire Aggregate Program Amount within twenty-seven (27) months of the Closing Date. The Interim Loan Agreement Payment Schedule is attached hereto as Exhibit “B”.

“Loan” means the funds to be loaned to the Governmental Unit by the Finance Authority pursuant to this Loan Agreement, up to the Maximum Principal Amount.

“Loan Agreement” means this loan agreement and any amendments or supplements hereto, including the exhibits attached to this loan agreement.

“Loan Agreement Payment” means, collectively, the Principal Component, the Interest Component, Expenses, and the Administrative Fee Component to be paid by the Governmental Unit as payment on the Aggregate Repayable Disbursements under this Loan Agreement, as shown on Exhibit “B” hereto.

“Loan Agreement Payment Date” means each date a payment is due on this Loan Agreement as shown on the Interim Loan Agreement Payment Schedule, attached hereto as Exhibit “B,” or in the Final Loan Agreement Payment Schedule.

“Loan Agreement Principal Amount” means, as of any date of calculation, the Aggregate Repayable Disbursements then outstanding.

“Loan Agreement Term” means the term of this Loan Agreement as provided under Article III of this Loan Agreement.

“Maximum Repayable Principal” means the maximum amount of Aggregate Repayable Disbursements repayable by the Governmental Unit pursuant to this Loan Agreement, and is equal to the Maximum Principal Amount. The Maximum Repayable Principal is \$2,020,000.

“Maximum Principal Amount” means \$2,020,000.

“Memorandum of Understanding” means the current memorandum of understanding by and between the Finance Authority and the Department pursuant to the DWSRLF Act describing and allocating duties and responsibilities in connection with the Drinking Water State Revolving Loan Fund.

“Net Revenues” means the Gross Revenues of the System owned and operated by the Governmental Unit minus Operation and Maintenance Expenses of the System, indirect charges, amounts expended for capital replacements and repairs of the System, required set asides for debt and replacement requirements and any other payments from the gross revenues reasonably required for operation of the System.

“NMSA 1978” means the New Mexico Statutes Annotated, 1978 compilation, as amended and supplemented from time to time.

“Operating Agreement” means the operating agreement entered into between the Finance Authority and the Environmental Protection Agency, Region 6, for the Drinking Water State Revolving Loan Fund program.

“Operation and Maintenance Expenses” means all reasonable and necessary current expenses of the System, for any particular Fiscal Year or period to which such term is applicable, paid or accrued, related to operating, maintaining and repairing the System, including, without limiting the generality of the foregoing:

(a) Legal and overhead expenses of the Governmental Unit directly related and reasonably allocable to the administration of the System;

(b) Insurance premiums for the System, including, without limitation, premiums for property insurance, public liability insurance and workmen’s compensation insurance, whether or not self-funded;

(c) Premiums, expenses and other costs (other than required reimbursements of insurance proceeds and other amounts advanced to pay debt service requirements on System bonds) for credit facilities;

(d) Any expenses described in this definition other than expenses paid from the proceeds of System bonds;

(e) The costs of audits of the books and accounts of the System;

- (f) Amounts required to be deposited in any rebate fund;
- (g) Salaries, administrative expenses, labor costs, surety bonds and the cost of water, materials and supplies used for or in connection with the current operation of the System; and
- (h) Any fees required to be paid under any operation, maintenance and/or management agreement with respect to the System.

Operation and Maintenance Expenses do not include any allowance for depreciation, payments in lieu of taxes, franchise fees payable or other transfers to the Governmental Unit's general fund, liabilities incurred by the Governmental Unit as a result of its negligence or other misconduct in the operation of the System, any charges for the accumulation of reserves for capital replacements or any Operation and Maintenance Expenses payable from moneys other than Gross Revenues.

"Ordinance" means Ordinance No. 732 adopted by the Governing Body of the Governmental Unit on May 28, 2024, approving this Loan Agreement and pledging the Pledged Revenues to the payment of the Loan Agreement Payments as shown on the Term Sheet, as supplemented from time to time.

"Parity Obligations" means any obligations of the Governmental Unit under this Loan Agreement and any other obligations now outstanding or hereafter issued or incurred, payable from or secured by a pledge of the Pledged Revenues and issued with a lien on the Pledged Revenues on a parity with this Loan Agreement, including any such obligations shown on the Term Sheet.

"Permitted Investments" means securities which are at the time legal investments of the Governmental Unit for the money to be invested, as applicable, including but not limited to the following if permitted by law: (i) securities that are issued by the United States government or by its agencies or instrumentalities and that are either direct obligations of the United States, the federal home loan mortgage association, the federal national mortgage association, the federal farm credit bank, federal home loan banks or the student loan marketing association or that are backed by the full faith and credit of the United States government; (ii) negotiable securities of the State; (iii) money market funds which invest solely in obligations described in clause (i) above which are rated in the highest rating category by Moody's Investors Service, Inc. or S & P Global Ratings; and (iv) the State Treasurer's short-term investment fund created pursuant to NMSA 1978, § 6-10-10.1, as amended, and operated, maintained and invested by the office of the State Treasurer.

"Pledged Revenues" means the Net Revenues of the Governmental Unit pledged to payment of the Loan Agreement Payments by the Ordinance and this Loan Agreement and described in the Term Sheet.

"Principal Component" means the portion of each Loan Agreement Payment paid as principal on this Loan Agreement, based upon the Aggregate Repayable Disbursements, as shown on Exhibit "B" attached to this Loan Agreement.

“Project” means the project(s) described on the Term Sheet.

“Safe Drinking Water Act” means 42 U.S.C. §§ 300f et seq.

“Senior Obligations” means any bonds or other obligations of the Governmental Unit now outstanding or hereafter issued or incurred, payable from or secured by a pledge of the Pledged Revenues and issued with a lien on the Pledged Revenues superior to the lien created by this Loan Agreement, including any such obligations shown on the Term Sheet.

“Service Area” means the area served by the System, whether situated within or without the limits of the Governmental Unit.

“State Environmental Review Process” or “SERP” means the environmental review process adopted by the Finance Authority, as required by and approved by the Environmental Protection Agency, pursuant to the Operating Agreement.

“Subordinated Obligations” means any bonds or other obligations of the Governmental Unit now outstanding or hereafter issued or incurred with a lien on the Pledged Revenues subordinate to the lien created by this Loan Agreement and subordinate to any other outstanding Parity Obligations having a lien on the Pledged Revenues, including any such obligations shown on the Term Sheet.

“System” means the joint utility system designated as the Governmental Unit’s electric, gas, water and wastewater utility system, and all improvements or additions thereto, including additions and improvements to be acquired or constructed with the proceeds of the Loan Agreement.

“Term Sheet” means Exhibit “A” attached to this Loan Agreement.

“Unrequisitioned Principal Amount” means the amount, if any, by which the Maximum Principal Amount exceeds the Aggregate Disbursements at the time the Governmental Unit submits the certificate of completion required pursuant to Section 6.3 of this Loan Agreement.

“Utility Revenue Bonds” means any bonds and other similar indebtedness payable solely or primarily from the Pledged Revenues, including this Loan Agreement, and any Senior Obligations, Parity Obligations and Subordinated Obligations.

## **ARTICLE II REPRESENTATIONS, COVENANTS AND WARRANTIES**

Section 2.1 Representations, Covenants and Warranties of the Governmental Unit. The Governmental Unit represents, covenants and warrants as follows:

(a) Binding Nature of Covenants. All covenants, stipulations, obligations and agreements of the Governmental Unit contained in this Loan Agreement shall be deemed to be the covenants, stipulations, obligations and agreements of the Governmental Unit to the full extent authorized or permitted by law, and such covenants, stipulations, obligations and agreements shall be binding upon the Governmental Unit and its successors and upon any board or body to which

any powers or duties affecting such covenants, stipulations, obligations and agreements shall be transferred by or in accordance with law. Except as otherwise provided in this Loan Agreement, all rights, powers and privileges conferred and duties and liabilities imposed upon the Governmental Unit by the provisions of this Loan Agreement and the Ordinance shall be exercised or performed by the Governmental Unit or by such members, officers, or officials of the Governmental Unit as may be required by law to exercise such powers and to perform such duties.

(b) Authorization of Loan Agreement and Readiness to Proceed. The Governmental Unit is an incorporated county in the State, and is duly organized and existing under the statutes and laws of the State, including specifically Article X, Section 5, New Mexico Constitution. The Governmental Unit is a local authority as defined in the DWSRLF Act. The Governmental Unit is authorized to enter into the transactions contemplated by this Loan Agreement and to carry out its obligations hereunder and thereunder. The Governmental Unit has duly authorized and approved the execution and delivery of this Loan Agreement and the other documents related to the transaction. The Governmental Unit has met all readiness to proceed requirements of the Finance Authority and has met and will continue to meet all requirements of law applicable to this Loan Agreement.

(c) Use of Loan Agreement Proceeds. The Governmental Unit shall proceed without delay in applying the Aggregate Program Amount, pursuant to Section 6.1 of this Loan Agreement to the acquisition and completion of the Project and to no other purpose, as follows:

(i) The Governmental Unit shall requisition moneys to pay for the costs of the Project not less frequently than quarterly following the Closing Date;

(ii) The Governmental Unit shall, within two (2) years after the Closing Date, have completed the acquisition of the Project, and shall within twenty-seven (27) months after the Closing Date have requisitioned the Aggregate Program Amount, or such portion thereof as shall be necessary to complete the Project, unless an extension is agreed to pursuant to Section 4.1(b) of this Loan Agreement.

(d) Payment of Loan Agreement Payments. The Governmental Unit meets and will continue to meet the requirements established by the Finance Authority to assure sufficient revenues to operate and maintain the System for its useful life and repay the Loan. The Governmental Unit shall promptly pay Loan Agreement Payments, as specified in the Interim Loan Agreement Payment Schedule or the Final Loan Agreement Payment Schedule, as applicable, according to the true intent and meaning of this Loan Agreement.

(e) Acquisition and Completion of Project; Compliance with Laws. The Project will be acquired and completed so as to comply with all applicable ordinances, resolutions and regulations, if any, and any and all applicable laws relating to the acquisition and completion of the Project and to the use of the Pledged Revenues.

(f) Necessity of Project. The acquisition and completion of the Project under the terms and conditions provided for in this Loan Agreement is necessary, convenient and in furtherance of the governmental purposes of the Governmental Unit and is in the best interests of the Governmental Unit and the public it serves.

(g) Legal, Valid and Binding Obligation. The Governmental Unit has taken all required action necessary to authorize the execution and delivery of this Loan Agreement. This Loan Agreement constitutes a legal, valid and binding special obligation of the Governmental Unit enforceable in accordance with its terms.

(h) Loan Agreement Term. The Loan Agreement Term does not exceed the anticipated useful life of the Project.

(i) Use of Project. During the Loan Agreement Term, the Project will at all times be used for the purpose of benefiting the Governmental Unit and the public it serves.

(j) No Breach or Default Caused by Loan Agreement. Neither the execution and delivery of this Loan Agreement, nor the fulfillment of or compliance with the terms and conditions in this Loan Agreement, nor the consummation of the transactions contemplated herein, conflicts with or results in a breach of terms, conditions or provisions of any restriction or any agreement or instrument to which the Governmental Unit is a party or by which the Governmental Unit is bound or any laws, ordinances, governmental rules or regulations or court or other governmental orders to which the Governmental Unit or its properties are subject, or constitutes a default under any of the foregoing.

(k) Irrevocable Enactments. While this Loan Agreement remains outstanding and unpaid, any ordinance, resolution or other enactment of the Governing Body applying the Pledged Revenues for the payment of this Loan Agreement shall be irrevocable until this Loan Agreement has been paid in full as to both principal and interest, and shall not be subject to amendment or modification in any manner which would in any way jeopardize the timely payment of Loan Agreement Payments.

(l) Outstanding and Additional Debt. Except for any Senior Obligations, and any Parity Obligations described on the Term Sheet, there are currently no outstanding bonds, notes or other obligations of the Governmental Unit which are payable from and secured by a lien on the Pledged Revenues superior to or on a parity with the lien of this Loan Agreement. No additional indebtedness, bonds or notes of the Governmental Unit, payable on a priority ahead of the indebtedness herein authorized out of Pledged Revenues, shall be created or incurred while this Loan Agreement remains outstanding without the prior written approval of the Finance Authority.

(m) No Litigation. To the knowledge of the Governmental Unit after due investigation, no litigation or proceeding is pending or threatened against the Governmental Unit or any other person affecting the right of the Governmental Unit to execute or deliver this Loan Agreement or to comply with its obligations under this Loan Agreement. Neither the execution and delivery of this Loan Agreement by the Governmental Unit nor compliance by the Governmental Unit with the obligations under this Loan Agreement requires the approval of any regulatory body, or any other entity, which approval has not been obtained or which is not reasonably expected to be obtained.

(n) No Event of Default. No event has occurred and no condition exists which, upon the execution and delivery of this Loan Agreement, would constitute an Event of Default on the part of the Governmental Unit under this Loan Agreement.

(o) Existing Pledges; Pledged Revenues Not Budgeted. Except as described on the Term Sheet the Pledged Revenues have not been pledged or hypothecated in any manner for any purpose at the time of execution and delivery of this Loan Agreement. The portion of the Pledged Revenues necessary to pay the Loan Agreement Payments, as and when due, is not needed or budgeted to pay current or anticipated operational or other expenses of the Governmental Unit.

(p) Expected Coverage Ratio. The Pledged Revenues from the current Fiscal Year are projected to equal or exceed one hundred twenty percent (120%) and, on an ongoing basis during each year of the Loan Agreement Term are reasonably expected to equal or exceed, one hundred twenty percent (120%) of the maximum annual principal and interest due on all outstanding Parity Obligations of the Governmental Unit.

(q) Governmental Unit's Existence. The Governmental Unit will maintain its corporate identity and existence so long as this Loan Agreement is unpaid, unless another political subdivision by operation of law succeeds to the liabilities and rights of the Governmental Unit without adversely affecting to any substantial degree the privileges and rights of the Finance Authority.

(r) Continuing Disclosure. The Governmental Unit covenants that it shall provide continuing disclosure to the Finance Authority, as the Finance Authority may require, that shall include, but not be limited to: Project documents, annual audits, operational data required to update information in any disclosure documents used in connection with assignment or securitizing this Loan Agreement or the Loan Agreement Payments by issuance of Bonds by the Finance Authority, and notification of any event deemed material by the Finance Authority. For the purposes of this Loan Agreement, a material event shall include, without limitation, any violation or alleged violation by a state or federal agency of appropriate jurisdiction, of federal law, regulation, or policy which governs or applies to participants in the Drinking Water State Revolving Loan Fund.

(s) Single Audit Act Requirement. The Governmental Unit acknowledges that the funding provided pursuant to this Loan Agreement is derived in large part from federal grants to the Drinking Water State Revolving Loan Fund program pursuant to the Operating Agreement. During the Loan Agreement Term, the Governmental Unit shall annually, so long as the Governmental Unit expends more or equal to the threshold amount set forth in 2 C.F.R. Section 200.501 during any one Fiscal Year, cause an audit of the books and accounts of its operations in their entirety, or in the alternative an audit of the books and accounts of each of its departments, agencies and other organizational units which expended or otherwise administered the Loan or any other funds derived from the government of the United States, to be completed by an Independent Accountant in accordance with the Single Audit Act Amendments of 1996 (31 U.S.C. Section 7501 et seq.), and applicable regulations thereunder. The audit will be available for inspection by the Finance Authority and by the Environmental Protection Agency.

(t) Construction Requirements. The Governmental Unit shall require any contractor hired by it in connection with the construction of the Project to post a performance and payment bond as provided by NMSA 1978, § 13-4-18, as amended.

Section 2.2 Protective Covenants Regarding Operation of the System. The Governmental Unit further represents, covenants and warrants as follows:

(a) Rate Covenant. The Governmental Unit covenants that it will at all times fix, charge and collect such rates and charges as shall be required in order that in each Fiscal Year in which the Loan is outstanding the Gross Revenues shall at least equal the Operation and Maintenance Expenses of the System for the Fiscal Year, plus one hundred twenty percent (120%) of the maximum annual principal and interest payments due on all outstanding Parity Obligations.

(b) Efficient Operation. The Governmental Unit will maintain the System in efficient operating condition and make such improvements, extensions, enlargements, repairs and betterments to the System as may be necessary or advisable for its economical and efficient operation at all times and to supply reasonable public and private demands for System services within the Service Area of the System.

(c) Records. So long as this Loan Agreement remains outstanding, proper books of record and account will be kept by the Governmental Unit, separate from all other records and accounts, showing complete and correct entries of all transactions relating to the System. However, pursuant to NMSA 1978, § 6-14-10(E), as amended, records with regard to the ownership or pledge of Utility Revenue Bonds are not subject to inspection or copying.

(d) Right to Inspect. The Finance Authority, or its duly authorized agents, shall have the right to inspect at all reasonable times the Project and all records, accounts and data relating to the Project, the Pledged Revenues, and the System.

(e) Audits. Within two hundred seventy (270) days following the close of each Fiscal Year, the Governmental Unit will cause an audit of the books and accounts of the System and its separate systems to be made by an Independent Accountant and the audit to be made available for inspection by the Finance Authority. Each audit of the System shall comply with Generally Accepted Accounting Principles. The audit required by this section may, at the Governmental Unit's discretion, be performed as a part of or in conjunction with the audit required under the Single Audit Act as set forth in Section 2.1(s) of this Loan Agreement.

(f) Billing Procedure. Bills for electric, gas, water and sanitary sewer utility services or facilities, or any combination, furnished by or through the System shall be rendered to customers on a regular basis each month following the month in which the service was rendered and shall be due as required by the applicable ordinance of the Governmental Unit. To the extent permitted by law, if a bill is not paid within the period of time required by such ordinance, water and sanitary sewer utility services shall be discontinued as required by Governmental Unit regulation, policy or ordinance, and the rates and charges due shall be collected in a lawful manner, including, but not limited to, the cost of disconnection and reconnection. Electric, gas, water and sanitary sewer utility services may be billed jointly with each other, provided that each such joint bill shall show separately the electric, gas, water and sanitary sewer utility charges.



(g) Charges and Liens Upon System. The Governmental Unit will pay when due from Gross Revenues or other legally available funds all taxes and assessments or other municipal or governmental charges, lawfully levied or assessed upon the System and will observe and comply with all valid requirements of any municipal or governmental authority relating to the System. The Governmental Unit will not create or permit any lien or charge upon the System or the Gross Revenues or it will make adequate provisions to satisfy and discharge within sixty (60) days after the same accrue, all lawful claims and demands for labor, materials, supplies or other objects, which, if unpaid, might by law become a lien upon the System or the Gross Revenues. However, the Governmental Unit shall not be required to pay or cause to be discharged, or make provision for any tax assessment, lien or charge before the time when payment becomes due or so long as the validity thereof is contested in good faith by appropriate legal proceedings and there is no adverse effect on Finance Authority.

(h) Insurance. Subject, in each case, to the condition that insurance is obtainable at reasonable rates and upon reasonable terms and conditions, in its operation of the System, the Governmental Unit will procure and maintain or cause to be procured and maintained commercial insurance or provide Qualified Self Insurance with respect to the facilities constituting the System and public liability insurance in the form of commercial insurance or Qualified Self Insurance and, in each case, in such amounts and against such risks as are, in the judgment of the Governing Body, prudent and reasonable taking into account, but not being controlled by, the amounts and types of insurance or self-insured programs provided by entities which operate systems such as the System. "Qualified Self Insurance" means insurance maintained through a program of self-insurance or insurance maintained with a fund, company or association in which the Governmental Unit may have a material interest and of which the Governmental Unit may have control, either singly or with others. Each plan of Qualified Self Insurance shall be established in accordance with law, shall provide that reserves be established or insurance acquired in amounts adequate to provide coverage which the Governmental Unit determines to be reasonable to protect against risks assumed under the Qualified Self Insurance plan, including any potential retained liability in the event of the termination of such plan of Qualified Self Insurance. In the event of property loss or damage to the System, insurance proceeds shall be used first for the purpose of restoring or replacing the property lost or damaged and thereafter, and any remainder may be used to redeem Utility Revenue Bonds or be treated as Gross Revenues and used in any legally permissible manner.

(i) Competing Utility System. Unless contrary to any provision of, or required by, applicable law, as long as this Loan Agreement is outstanding, the Governmental Unit prior to granting any franchise or license to a competing utility system, or permitting any person, association, firm or corporation to sell similar utility services or facilities to any consumer, public or private, within the Service Area of the System, shall obtain a written report from an independent utility rate consultant stating that in the opinion of the consultant the use charges in effect immediately prior to the approval of the franchise or license by the Governmental Unit are sufficient to meet the requirement of section 2.1(p) (expected coverage ratio) for the first full calendar year after the approval of the franchise or license, based on the new Service Area of the System.

(j) Alienating System. While this Loan Agreement is outstanding, the Governmental Unit shall not transfer, sell or otherwise dispose of the System, except that the

Governmental Unit may dispose of inadequate, obsolete or worn-out property. For purposes of this Section, any transfer of an asset over which the Governmental Unit retains or regains substantial control shall, for so long as the Governmental Unit has such control, not be deemed a disposition of the System.

(k) Management of the System. If an Event of Default shall occur or if the Pledged Revenues in any Fiscal Year fail to equal principal and interest due on the Senior Obligations and the Parity Obligations, the Governmental Unit shall retain an independent consultant qualified in the management of water and wastewater utility systems to assist in the management of the System so long as such default continues.

(l) Competent Management. The Governmental Unit shall employ experienced and competent personnel to manage the System.

(m) Performing Duties. The Governmental Unit will faithfully and punctually perform all duties with respect to the System required by the Constitution and laws of the State and the regulations, policies or ordinances and resolutions of the Governmental Unit relating to the System and this Loan Agreement, including, but not limited to, making and collecting reasonable and sufficient rates and charges for services rendered or furnished by the System as required by this Loan Agreement and the proper segregation and application of the Gross Revenues.

(n) Other Liens. Except for any Senior Obligations and Parity Obligations listed in the Term Sheet, there are no liens or encumbrances of any nature whatsoever, on or against the System or the Gross Revenues or Net Revenues on parity with or senior to the lien of this Loan Agreement.

Section 2.3 Representations, Covenants and Warranties of the Finance Authority. The Finance Authority represents, covenants and warrants for the benefit of the Governmental Unit:

(a) Legal Status and Authorization of Loan Agreement. The Finance Authority is a public body politic and corporate constituting a governmental instrumentality, separate and apart from the State, duly organized and created under and pursuant to the laws of the State, particularly the Finance Authority Act. The Finance Authority has all necessary power and authority to enter into and perform and observe the covenants and agreements on its part contained in this Loan Agreement and has duly authorized the execution and delivery of this Loan Agreement.

(b) No Breach or Default Caused by Loan Agreement. Neither the execution and delivery of this Loan Agreement, nor the fulfillment of or compliance with the terms and conditions of this Loan Agreement, nor the consummation of the transactions contemplated in this Loan Agreement, conflicts with or results in a breach of the terms, conditions and provisions of any restriction or any agreement or instrument to which the Finance Authority is a party or by which the Finance Authority is bound or constitutes a default under any of the foregoing and will not conflict with or constitute a violation of any constitutional or statutory provision or order, rule, regulation, decree or ordinance of any court, government or governmental authority having

jurisdiction over the Finance Authority, or its property and which conflict or violation will have a material adverse effect on the Finance Authority or the financing of the Project.

(c) No Litigation. To the knowledge of the Finance Authority, there is no litigation or proceeding pending or threatened against the Finance Authority or any other person affecting the right of the Finance Authority to execute or deliver this Loan Agreement or to comply with its obligations under this Loan Agreement. To the knowledge of the Finance Authority, neither the execution and delivery of this Loan Agreement by the Finance Authority, nor compliance by the Finance Authority with its obligations under this Loan Agreement, requires the approval of any regulatory body, or any other entity, which approval has not been obtained.

(d) Legal, Valid and Binding Obligations. This Loan Agreement constitutes a legal, valid and binding obligation of the Finance Authority enforceable in accordance with its terms.

### **ARTICLE III LOAN AGREEMENT TERM**

The Loan Agreement Term shall commence on the Closing Date and shall not terminate until the Governmental Unit's obligations under this Loan Agreement have been paid in full or provision for payment of this Loan Agreement has been made pursuant to Article VIII hereof.

### **ARTICLE IV LOAN; APPLICATION OF MONEYS**

#### **Section 4.1 Application of Loan Agreement Proceeds.**

(a) On the Closing Date, the amount shown on the Term Sheet as the Aggregate Program Amount shall be made available for disbursement by the Finance Authority to the Governmental Unit pursuant to Section 6.2 of this Loan Agreement at the request of the Governmental Unit and as needed by the Governmental Unit to implement the Project.

(b) The Final Requisition shall be submitted by the Governmental Unit within twenty seven (27) months following the Closing Date, except only as otherwise approved in writing by an Authorized Officer of the Finance Authority, based on the Governmental Unit's demonstration, to the reasonable satisfaction of the Authorized Officer of the Finance Authority, that unanticipated circumstances beyond the control of the Governmental Unit resulted in delaying the acquisition and completion of the Project, and submission of the Governmental Unit's Final Requisition.

**Section 4.2 Disbursements; Approval of Payment Requests.** The Governmental Unit shall transmit payment requisitions in the form attached to this Loan Agreement as Exhibit "C" and the supporting documentation required pursuant to Exhibit "C" to the Finance Authority. The Finance Authority or its designee shall review each requisition for compliance with (i) the Project's construction plans and specifications, and (ii) all applicable state and federal laws, rules and regulations, and shall approve or disapprove the requisition accordingly. The Finance Authority shall cause Approved Requisitions to be paid from the State Drinking Water Revolving Loan Fund.

Section 4.3 Expense Fund Deposit. The Finance Authority shall determine the amount of the Expense Fund Component at the time of each payment to the Governmental Unit pursuant to Section 6.2 of this Loan Agreement and deposit such amount to the Expense Fund.

## **ARTICLE V LOAN TO THE GOVERNMENTAL UNIT; PAYMENTS BY THE GOVERNMENTAL UNIT**

Section 5.1 Loan to the Governmental Unit; Payment Obligations Limited to Pledged Revenues; Pledge of Pledged Revenues. The Finance Authority hereby lends to the Governmental Unit and the Governmental Unit hereby borrows from the Finance Authority an amount not to exceed the Maximum Principal Amount. The Governmental Unit promises to pay, but solely from the sources pledged herein, the Loan Agreement Payments as herein provided. Subject to any outstanding Parity Obligations and Senior Obligations, the Governmental Unit does hereby grant a lien on and a security interest in and does hereby convey, assign and pledge unto the Finance Authority and unto its successors in trust forever all right, title and interest of the Governmental Unit in and to (i) the Pledged Revenues to the extent required to pay the Loan Agreement Payments on a parity with any Parity Obligations and subordinate to any Senior Obligations, (ii) the Debt Service Account, and (iii) all other rights hereinafter granted, for the securing of the Governmental Unit's obligations under this Loan Agreement, including payment of the Loan Agreement Payments, provided, however, that if the Governmental Unit, its successors or assigns, shall pay, or cause to be paid, all Loan Agreement Payments at the time and in the manner contemplated by this Loan Agreement, or shall provide as permitted by Article VIII of this Loan Agreement for the payment thereof, and shall pay all other amounts due or to become due under this Loan Agreement in accordance with its terms and provisions then, upon such final payment, this Loan Agreement and the rights created thereby shall terminate; otherwise, this Loan Agreement shall remain in full force and effect. The Loan Agreement Payments shall, in the aggregate, be sufficient to pay the Aggregate Repayable Disbursements, as set forth in the Final Loan Agreement Payment Schedule.

Within five (5) days after each payment of an Approved Requisition during the Interim Period, the Finance Authority shall recalculate on the basis of the Aggregate Repayable Disbursements to that date the Interest Component and Administrative Fee Component next coming due as set out in Section 5.2(a)(i) of this Loan Agreement and shall provide written notice to the Governmental Unit of the recalculated Interest Component and Administrative Fee Component. Within thirty (30) days after the final disbursement, the Finance Authority shall provide a Final Loan Agreement Payment Schedule. The schedule of Loan Agreement Payments, assuming the disbursal of the entire Aggregate Program Amount within twenty-seven (27) months after the Closing Date, identified as the Interim Loan Agreement Payment Schedule, is attached to this Loan Agreement as Exhibit "B". The Finance Authority shall provide a Final Loan Agreement Payment Schedule following the final disbursement which shall supersede the schedule attached as Exhibit "B".

The pledge of the Pledged Revenues and the lien thereon shall be effective upon the Closing Date. The Governmental Unit and the Finance Authority acknowledge and agree that the sources of the Loan Agreement Payments of the Governmental Unit hereunder are limited to the Pledged Revenues, and that the Loan Agreement shall constitute a special, limited obligation of the Governmental Unit. No provision of this Loan Agreement shall be construed or interpreted as

creating a general obligation or other indebtedness of the Governmental Unit or the State within the meaning of any constitutional or statutory debt limitation. No provision of this Loan Agreement shall be construed to pledge or to create a lien on any class or source of Governmental Unit moneys other than the Pledged Revenues, nor shall any provision of this Loan Agreement restrict the future issuance of any bonds or obligations payable from any class or source of Governmental Unit moneys other than the Pledged Revenues. In addition, to the extent not required for the payment of obligations of the Governmental Unit hereunder, the Pledged Revenues may be utilized by the Governmental Unit for any other purposes permitted by law and the laws of the State.

Section 5.2 Payment Obligations of Governmental Unit. The Debt Service Account shall be established and held by the Finance Authority or its designee on behalf of the Governmental Unit. All Loan Agreement Payments received by the Finance Authority or its designee pursuant to this Loan Agreement shall be accounted for and maintained by the Finance Authority or its designee in the Debt Service Account, which account shall be kept separate and apart from all other accounts of the Finance Authority. The amounts on deposit in the Debt Service Account shall be expended and used by the Finance Authority only in the manner and order of priority specified herein.

(a) As a charge and lien, but not an exclusive charge and lien, on the Pledged Revenues (on a parity with the lien on the Pledged Revenues created by any outstanding Parity Obligations and subordinate to any outstanding Senior Obligations), the Governmental Unit shall remit to the Finance Authority and the Finance Authority shall collect and deposit into the Debt Service Account from the Governmental Unit the Pledged Revenues in the manner specified herein.

(i) Payment of Interest Component and Administrative Fee Component during Interim Period.

(A) During the Interim Period, Interest and Administrative Fees shall accrue on the amount of Aggregate Repayable Disbursements, from the date of each Disbursement.

(B) During the Interim Period the Governmental Unit shall monthly, commencing on the first day of the month next following the first payment by the Finance Authority of an Approved Requisition, pay to the Finance Authority for deposit into the Debt Service Account such amount as is necessary, in monthly installments, to pay the Interest Component and Administrative Fee Component on the Aggregate Repayable Disbursements as of each Loan Agreement Payment Date.

(ii) Loan Agreement Payments Following the Interim Period. After the Interim Period, the Governmental Unit shall pay to the Finance Authority for deposit into the Debt Service Account the following amounts:

(A) Interest and Administrative Fee Components. Monthly, commencing on the first day of the month next following the final disbursement, the Governmental Unit shall pay to the Finance Authority for deposit into the Debt Service Account an amount in

equal monthly installments which is necessary to pay the first maturing Interest Component and Administrative Fee Component coming due on this Loan Agreement and monthly thereafter, commencing on each Loan Agreement Payment Date, one-sixth (1/6) of the amount necessary to pay the next maturing Interest Component and Administrative Fee Component on this Loan Agreement as described in the Final Loan Agreement Payment Schedule.

(B) Principal Payments. Monthly, commencing on the first day of the month next following the final disbursement, the Governmental Unit shall pay to the Finance Authority for deposit into the Debt Service Account an amount in equal monthly installments which is necessary to pay the first maturing Principal Component; and thereafter on the first day of each month thereafter, one-twelfth (1/12) of the amount which is necessary to pay the next maturing Principal Component on this Loan Agreement during the Loan Agreement Term, as described in the Final Loan Agreement Payment Schedule.

(iii) Method of Payment. The Governmental Unit shall transfer each month to the Finance Authority, from Pledged Revenues, the amounts set forth in Subsections (i)(C), (ii)(A) and (ii)(B) of this Section 5.2(a) during the time that this Loan Agreement is outstanding, provided, that in the event of any default in making the Loan Agreement Payments by the Governmental Unit, the Finance Authority shall be entitled to seek payment of the amounts due through any of the remedies provided in Article X of this Loan Agreement.

(b) In the event that the balance of payments held in the Debt Service Account should exceed the amount needed to cover Loan Agreement Payments then due, the Finance Authority shall use the balance of the Pledged Revenues received, at the request of the Governmental Unit (i) to credit against upcoming Loan Agreement Payments, or (ii) to distribute to the Governmental Unit for any other purpose permitted by law.

Section 5.3 Manner of Payment. All payments of the Governmental Unit hereunder shall be paid in lawful money of the United States of America to the Finance Authority or its designee at the address designated in Section 11.1 of this Loan Agreement. The obligation of the Governmental Unit to make payments hereunder, from and to the extent of the available Pledged Revenues, shall be absolute and unconditional in all events, except as expressly provided hereunder, and payment hereunder shall not be abated through accident or unforeseen circumstances. Notwithstanding any dispute between the Governmental Unit, the Finance Authority or its designee, any vendor or any other person, the Governmental Unit shall make all deposits hereunder, from and to the extent of the available Pledged Revenues, when due and shall not withhold any deposit hereunder pending final resolution of such dispute, nor shall the Governmental Unit assert any right of set-off or counterclaim against its obligation to make such deposits required hereunder.

Section 5.4. Additional Parity Obligations Payable from Pledged Revenues. No provision of this Loan Agreement shall be construed in such a manner as to prevent the issuance by the Governmental Unit of additional Parity Obligations payable from Pledged Revenues, nor to prevent the issuance of bonds or other obligations refunding all or a part of this Loan Agreement; provided, however, that before any such additional Parity Obligations are actually issued (excluding refunding bonds or refunding obligations which refund Parity Obligations but including parity refunding bonds and obligations which refund Subordinated Obligations as provided in

Section 5.5 hereof), the Governmental Unit shall obtain the written consent of the Finance Authority and it must be determined that:

(a) The Governmental Unit is then current in all of the accumulations required to be made into the Debt Service Account as provided in this Loan Agreement.

(b) No default shall exist in connection with any of the covenants or requirements of the Ordinance or this Loan Agreement.

(c) The Pledged Revenues received by or credited to the Governmental Unit for the Fiscal Year or for any twelve (12) consecutive months out of the twenty-four (24) months preceding the date of issuance of such additional Parity Obligations (the "Historic Test Period") shall have been sufficient to pay an amount representing one hundred twenty percent (120%) of the combined maximum annual principal, interest requirement and the Administrative Fee Component coming due in any subsequent Fiscal Year on the then outstanding Parity Obligations and the Parity Obligations proposed to be issued (excluding the accumulation of any reserves therefor).

(d) A written certification or opinion by the Governmental Unit's treasurer or chief financial officer or by an Independent Accountant that the Pledged Revenues for the Historic Test Period are sufficient to pay said amounts, shall be conclusively presumed to be accurate in determining the right of the Governmental Unit to authorize, issue, sell and deliver the Parity Obligations proposed to be issued.

(e) No provision of this Loan Agreement shall be construed in such a manner as to prevent the issuance by the Governmental Unit of additional bonds or other obligations payable from the Pledged Revenues constituting a lien upon such Pledged Revenues subordinate and junior to the lien of this Loan Agreement nor to prevent the issuance of bonds or other obligations refunding all or part of this Loan Agreement as permitted by Section 5.5 hereof.

(f) The Governmental Unit shall not issue bonds or other obligations payable from the Pledged Revenues having a lien thereon prior or superior to this Loan Agreement, without the written approval of the Finance Authority.

Section 5.5 Refunding Obligations Payable from Pledged Revenues. The provisions of Section 5.4 hereof are subject to the following exceptions:

(a) If at any time after the Closing Date, while this Loan Agreement, or any part thereof, is outstanding, the Governmental Unit shall find it desirable to refund any outstanding bonds or other outstanding obligations payable from the Pledged Revenues, this Loan Agreement, such bonds or other obligations, or any part thereof, may be refunded (but the holders of this Loan Agreement or bonds to be refunded may not be compelled to surrender this Loan Agreement or their bonds, unless this Loan Agreement, the bonds or other obligations, at the time of their required surrender for payment, shall then mature, or shall then be callable for prior redemption at the Governmental Unit's option), regardless of whether the priority of the lien for the payment of the refunding obligations on the Pledged Revenues is changed, except as provided in subparagraph (f) of Section 5.4 hereof and in subparagraphs (b) and (c) of this Section 5.5.

(b) No refunding bonds or other refunding obligations payable from the Pledged Revenues shall be issued on a parity with this Loan Agreement unless:

(i) The outstanding obligations so refunded have a lien on the Pledged Revenues on a parity with the lien thereon of this Loan Agreement and the refunding bonds or other refunding obligations do not increase any aggregate annual principal and interest obligations evidenced by such refunded obligations; or

(ii) The refunding bonds or other refunding obligations are issued in compliance with subparagraphs (a) through (f) of Section 5.4 of this Loan Agreement.

(c) The refunding bonds or other obligations so issued shall enjoy complete equality of lien on the Pledged Revenues with the portion of this Loan Agreement or any bonds or other obligations of the same issue which is not refunded, if any; and the holder or holders of such refunding bonds or such other refunding obligations shall be subrogated to all of the rights and privileges enjoyed by the holder or holders of this Loan Agreement or the bonds or other obligations of this same issue refunded thereby. If only a part of this Loan Agreement or the outstanding bonds and any other outstanding obligations of any issue or issues payable from the Pledged Revenues is refunded, then such obligations may not be refunded without the consent of the holder or holders of the unrefunded portion of such obligations, unless:

(i) The refunding bonds or other refunding obligations do not increase any aggregate annual principal and interest obligations evidenced by such last maturity date of such unrefunded obligations; or

(ii) The refunding bonds or other refunding obligations are issued in compliance with subparagraphs (a) through (f) of Section 5.4 hereof; or

(iii) The lien on the Pledged Revenues for the payment of the refunding obligations is subordinate to each such lien for the payment of any obligations not refunded.

(d) Any refunding bonds or other refunding obligations payable from the Pledged Revenues shall be issued with such details as the Governmental Unit may provide by ordinance or resolution, but without any impairment of any contractual obligations imposed upon the Governmental Unit by any proceedings authorizing the issuance of any unrefunded portion of such outstanding obligations of any one or more issues (including, but not necessarily limited to, this Loan Agreement).

**Section 5.6 Investment of Governmental Unit Funds.** Money on deposit in the Debt Service Account created hereunder may be invested by the Finance Authority or its designee in Permitted Investments at the written direction of the Governmental Unit or, in the absence of such written direction of the Governmental Unit, at the discretion of the Finance Authority. Any earnings on Permitted Investments shall be held and administered in the Debt Service Account and utilized in the same manner as the other moneys on deposit therein for the benefit of the Governmental Unit.

**Section 5.7 Governmental Unit May Budget for Payments.** The Governmental Unit may, in its sole discretion, but without obligation and subject to the Constitution of the State,



governing laws, and its budgetary requirements, make available properly budgeted and legally available funds to defray any insufficiency of Pledged Revenues to pay Loan Agreement Payments; provided, however, the Governmental Unit has not covenanted and cannot covenant to make such funds available and has not pledged any of such funds for such purpose.

## **ARTICLE VI THE PROJECT**

Section 6.1 Agreement to Acquire and Complete the Project. The Governmental Unit hereby agrees that in order to effectuate the purposes of this Loan Agreement and to effectuate the acquisition and completion of the Project, it shall make, execute, acknowledge and transmit any contracts, orders, receipts, writings and instructions with any other persons, firms or corporations and, in general do all things which may be requisite or proper to acquire and complete the Project.

The Governmental Unit agrees to acquire and complete the Project through the application of moneys to be disbursed by the Finance Authority pursuant to Section 6.2 of this Loan Agreement.

Section 6.2 Disbursements. So long as no Event of Default shall occur and the requirements of Section 4.2 are satisfied, the Finance Authority or its designee shall disburse moneys to pay a requisition upon receipt and approval by the Finance Authority or its designee of a requisition substantially in the form of Exhibit "C" attached hereto signed by an Authorized Officer of the Governmental Unit, with required supporting documentation.

Section 6.3 Completion of the Acquisition of the Project. Upon completion of the acquisition of the Project, which shall occur no later than two (2) years after the Closing Date, unless a later date is approved as provided in Section 4.1(b) of this Agreement, an Authorized Officer of the Governmental Unit shall deliver a certificate to the Finance Authority, substantially in the form of Exhibit "D" attached hereto, stating that, to his or her knowledge, the acquisition of the Project has been completed and the Project has been accepted by the Governmental Unit, and all costs have been paid, except for any reimbursements requested pursuant to requisitions submitted prior to the end of the Interim Period. Notwithstanding the foregoing, such certificate shall state that it is given without prejudice to any rights against third parties which exist at the date of such certificate or which may subsequently come into being.

Section 6.4 Unrequisitioned Amounts. In the event that, (1) at the time of the delivery of the certificate of completion required by Section 6.3 hereof, there remains an Unrequisitioned Principal Amount, or (2) the Finance Authority shall not have received a Final Requisition, by the date that is twenty seven (27) months from the Closing Date, unless an extension is approved pursuant to Section 4.1(b) of this Loan Agreement, then the Governmental Unit shall have no right or title to the Unrequisitioned Principal Amount, nor any right to pledge, encumber or draw upon such Unrequisitioned Principal Amount, and the Finance Authority will not approve, honor, or enforce any requisition upon such Unrequisitioned Principal Amount pursuant to this Loan Agreement.

**ARTICLE VII  
COMPLIANCE WITH LAWS  
AND RULES; OTHER COVENANTS**

Section 7.1 Further Assurances and Corrective Instruments. The Finance Authority and the Governmental Unit agree that they will, from time to time, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such supplements hereto and such further instruments as may reasonably be required for correcting any inadequate or incorrect description of the Project or of the Pledged Revenues, or for otherwise carrying out the intention hereof. Authorized Officers are authorized to execute, acknowledge and deliver any such supplements and further instruments.

Section 7.2 Finance Authority and Governmental Unit Representatives. Whenever under the provisions hereof the approval of the Finance Authority or the Governmental Unit is required, or the Governmental Unit or the Finance Authority is required to take some action at the request of the other, such approval or such request shall be given for the Finance Authority or for the Governmental Unit by an Authorized Officer of the Finance Authority or the Governmental Unit, as the case may be, and any party hereto shall be authorized to rely and act on any such approval or request.

Section 7.3 Compliance with Court Orders. During the Loan Agreement Term, the Governmental Unit and the Finance Authority shall observe and comply promptly with all current and future orders of all courts having jurisdiction over the parties hereto, the Project or the Pledged Revenues.

Section 7.4 Compliance with Applicable State and Federal Laws. During the Loan Agreement Term, the Governmental Unit shall comply with all applicable State and federal laws, including, without limitation, the following:

(a) For all contracts, the Governmental Unit shall comply with the New Mexico Procurement Code, NMSA 1978, §§ 13-1-28 through 13-1-199, as amended, or its local procurement ordinances and regulations, as applicable.

(b) For all construction contracts awarded in excess of \$10,000, the Governmental Unit shall comply with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 12, 1967, and as supplemented in Department of Labor regulations (41 C.F.R. chapters 40 and 60). In addition, for all contracts, the Governmental Unit shall comply with all State laws and regulations and all executive orders of the Governor of the State pertaining to equal employment opportunity.

(c) For all contracts awarded for construction or repair, the Governmental Unit shall comply with the Copeland "Anti-Kickback" Act (18 U.S.C. § 874) as supplemented in Department of Labor regulations (29 C.F.R. part 3).

(d) For all construction subcontracts, and subgrants of amounts in excess of \$100,000, the Governmental Unit shall comply with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. § 7606), Section 508 of the

Clean Water Act (33 U.S.C. § 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 C.F.R. Part 15). In addition, for all contracts, the Contractor shall comply with all applicable State laws and regulations and with all executive orders of the Governor of the State pertaining to protection of the environment.

(e) For all contracts the Governmental Unit shall comply with the mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plan issued in compliance with section 362 of the Energy Policy and Conservation Act (42 U.S.C. § 6322).

(f) For all contracts in excess of \$2,000 the Governmental Unit shall comply with applicable standards of the Davis-Bacon Wage Act (40 U.S.C. § 3141 et seq.), as amended and supplemented, relating to wages paid to laborers and mechanics employed by contractors and sub-contractors on a Project funded directly by or assisted in whole or in part by and through the Governmental Unit.

(g) For all contracts, the Governmental Unit shall comply with the requirements of the Environmental Protection Agency's Program for Utilization of Minority and Women's Business Enterprises set out in Title 40, Chapter I, Subchapter B, Part 33 of the Code of Federal Regulations.

(h) For all contracts, the Governmental Unit shall comply with the requirements of Executive Order 13502 on Use of Project Agreements for Federal Construction Projects.

(i) For all contracts, the Governmental Unit shall comply with the requirements of Executive Order dated September 25, 2012 on Strengthening Protections Against Trafficking in Persons in Federal Contracts.

(j) For all contracts, the Governmental Unit shall comply with all federal requirements applicable to the Loan (including those imposed by P.L. 113-76, 2014 Consolidated Appropriations Act, Section 436 and related SRF Policy Guidelines) which the Governmental Unit understands includes, among other, requirements that all of the iron and steel products used in the Project are to be produced in the United States ("American Iron and Steel Requirement") unless (i) the Governmental Unit has requested and obtained a waiver from the Finance Authority pertaining to the Project or (ii) the Finance Authority has otherwise advised the Governmental Unit in writing that the American Iron and Steel Requirement is not applicable to the Project.

(k) For all contracts, the Governmental Unit shall comply with all record keeping and reporting requirements under the Clean Water Act/Safe Drinking Water Act, including any reports required by a Federal agency or the Finance Authority such as performance indicators of program deliverables, information on costs and project progress. The Governmental Unit understands that (i) each contract and subcontract related to the Project is subject to audit by appropriate federal and state entities and (ii) failure to comply with the Clean Water Act/Safe Drinking Water Act and this Agreement may be a default under this Agreement.

(l) For all contracts, the Governmental Unit shall comply with Executive Order 12549 – Debarment and Suspension and all rules, regulations and guidelines issued pursuant to

Executive Order 12549, including compliance with the requirement that each prospective participant in transactions related to the Loan execute a written certification that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in transactions related to the Loan.

(m) For all contracts, the Governmental Unit shall comply with the requirements of section 1450(e) of the Safe Drinking Water Act (42 U.S.C.300j-9(e)) in all procurement contracts, and the Governmental Unit and procurement contractors shall include such a term and condition in subcontracts and other lower tiered transactions. All contracts and subcontracts for the Project shall include in any contract in excess of \$2,000 the contract clauses set out in the EPA publication entitled "Wage Rate Requirements Under the Clean Water Act, Section 513 and the Safe Drinking Water Act Section 1450(e)."

(n) The Governmental Unit shall comply with the requirement of the June 3, 2015 Guidelines for Enhancing Public Awareness of SRF Assistance Agreements issued by the United States Environmental Protection Agency relating to signage, posters, advertisements, website or press releases indicating that financial assistance was received from the EPA for the Project.

(o) The Governmental Unit acknowledges that it is subject to the terms of the Environmental Protection Agency Memorandum titled "Prohibition on Certain Telecommunication and Video Surveillance Services or Equipment in the SRF Programs" dated December 11, 2020. The Governmental Unit shall comply with 2 CFR 200.216 and Section 889 of Public Law 115-232 and shall not use Loan or Subsidy funds to obtain or enter into a contract to obtain covered telecommunications equipment produced or provided by companies listed in the System for Award Management exclusion list at SAM.gov. The exclusion list includes, but is not limited to, Huawei Technologies Company or ZTE Corporation, or any subsidiary or affiliate of such entities.

The Finance Authority or its designee shall have the right to review all contracts, work orders and other documentation related to the Project that it deems necessary to assure compliance with applicable laws, rules and regulations, and may conduct such review as it deems appropriate prior to disbursing funds for payment of an Approved Requisition.

**Section 7.5 Lien Status.** The Loan Agreement Payments constitute an irrevocable lien (but not necessarily an exclusive lien) upon the Pledged Revenues. The Governmental Unit covenants that the Loan Agreement Payments and any Parity Obligations herein authorized to be issued and from time to time outstanding shall be equitably and ratably secured by a lien on the Pledged Revenues and shall not be entitled to any priority one over the other in the application of the Pledged Revenues regardless of the time or times of the issuance of such obligations, it being the intention of the Governmental Unit that there shall be no priority between the Loan Agreement Payments and any such Parity Obligations regardless of the fact that they may be actually issued and delivered at different times.

**Section 7.6 Expeditious Completion.** The Governmental Unit shall complete the Project with all practical dispatch.

## **ARTICLE VIII PREPAYMENT OF LOAN AGREEMENT PAYMENTS**

The Governmental Unit is hereby granted the option to prepay the Principal Component of this Loan Agreement in whole or in part on any day without penalty or prepayment premium, beginning one (1) year after the Closing Date. The Governmental Unit may designate the due date or due dates of the Principal Component or portions thereof being prepaid in the event of a partial prepayment. Any such prepayment shall include accrued interest to the redemption date of the corresponding Bonds to be redeemed, if any, and notice of intent to make such prepayment shall be provided to the Finance Authority or its designee by the Governmental Unit no less than forty-five (45) days prior to the prepayment date. The Finance Authority or its designee shall recalculate the Loan Agreement Payments due under this Loan Agreement in the event of a partial prepayment in a manner which is consistent with the manner in which the Bonds, if any, are prepaid.

## **ARTICLE IX INDEMNIFICATION**

From and to the extent of the Pledged Revenues and to the extent permitted by law, the Governmental Unit shall and hereby agrees to indemnify and save the Finance Authority and its designee, if any, harmless against and from all claims, by or on behalf of any person, firm, corporation or other legal entity arising from the acquisition or operation of the Project during the Loan Agreement Term, from: (i) any act of negligence of the Governmental Unit or breach of any covenant or warranty by the Governmental Unit hereunder; and (ii) the incurrence of any cost or expense in connection with the acquisition or operation of the Project in excess of the Loan Agreement proceeds and interest on the investment of the Loan Agreement proceeds. The Governmental Unit shall indemnify and save the Finance Authority and its designee, if any, harmless, from and to the extent of the available Pledged Revenues and to the extent permitted by law, from any such claim arising as aforesaid from (i) or (ii) above, or in connection with any action or proceeding brought thereon and, upon notice from the Finance Authority or its designee, shall defend the Finance Authority or its designee, if any, in any such action or proceeding.

## **ARTICLE X EVENTS OF DEFAULT AND REMEDIES**

Section 10.1 Events of Default Defined. Any one of the following shall be an Event of Default under this Loan Agreement:

(a) Failure by the Governmental Unit to pay any amount required to be paid under this Loan Agreement on the date on which it is due and payable; or

(b) Failure by the Governmental Unit to observe and perform any covenant, condition or agreement on its part to be observed or performed under this Loan Agreement, other than as referred to in paragraph (a), for a period of thirty (30) days after written notice, specifying such failure and requesting that it be remedied, is given to the Governmental Unit by the Finance Authority or its designee, if any, unless the Finance Authority or its designee, as applicable, shall agree in writing to an extension of such time prior to its expiration; provided, however, if the failure stated in the notice can be wholly cured within a period of time not materially detrimental

to the rights of the Finance Authority or its designee but cannot be cured within the applicable thirty (30) day period, the Finance Authority or its designee will not unreasonably withhold its consent to an extension of such time if corrective action is instituted by the Governmental Unit within the applicable period and diligently pursued until the failure is corrected; and provided, further, that if by reason of force majeure the Governmental Unit is unable to carry out the agreements on its part herein contained, the Governmental Unit shall not be deemed in default under this paragraph (b) during the continuance of such inability (but force majeure shall not excuse any other Event of Default); or

(c) Any warranty, representation or other statement by or on behalf of the Governmental Unit contained in this Loan Agreement or in any instrument furnished in compliance with or in reference to this Loan Agreement is false or misleading in any material respect; or

(d) A petition is filed against the Governmental Unit under any bankruptcy, moratorium, reorganization, arrangement, insolvency, readjustment of debt, dissolution or liquidation law of any jurisdiction, whether now or hereafter in effect, and is not dismissed within thirty (30) days after such filing, but the Finance Authority shall have the right to intervene in the proceedings to protect the Finance Authority's interests; or

(e) The Governmental Unit files a petition in voluntary bankruptcy or seeking relief under any provision of any bankruptcy, moratorium, reorganization, arrangement, insolvency, readjustment of debt, dissolution or liquidation law of any jurisdiction, whether now or hereafter in effect, or consents to the filing of any petition against it under any such law; or,

(f) The Governmental Unit admits insolvency or bankruptcy or its inability to pay its debts as they become due or is generally not paying its debts as such debts become due, or becomes insolvent or bankrupt or makes an assignment for the benefit of creditors, or a custodian (including, without limitation, a receiver, liquidator or trustee) of the Governmental Unit for any of its property is appointed by court order or takes possession thereof and such order remains in effect or such possession continues for more than thirty (30) days, but the Finance Authority shall have the right to intervene in the proceedings to protect its interests.

**Section 10.2 Remedies on Default.** Whenever any Event of Default has occurred and is continuing and subject to Section 10.3 hereof, the Finance Authority may take any or all of the following actions as may appear necessary or desirable to collect the payments then due and to become due or to enforce performance of any agreement of the Governmental Unit in this Loan Agreement:

(a) By mandamus or other action or proceeding or suit at law or in equity to enforce the rights of the Finance Authority under this Loan Agreement against the Governmental Unit, and compel the Governmental Unit to perform or carry out its duties under the law and the agreements and covenants required to be performed by it contained herein; or

(b) By suit in equity enjoin any acts or things which are unlawful or violate the rights of the Finance Authority; or

(c) Intervene in judicial proceedings that affect this Loan Agreement or the Pledged Revenues; or

(d) Cause the Governmental Unit to account as if it were the trustee of an express trust for all of the Pledged Revenues and Aggregate Disbursements (except the Expense Fund Component); or,

(e) Take whatever other action at law or in equity may appear necessary or desirable to collect amounts then due and thereafter to become due under this Loan Agreement or enforce any other of its rights thereunder.

Section 10.3 Limitations on Remedies. A judgment requiring a payment of money entered against the Governmental Unit may reach only the available Pledged Revenues.

Section 10.4 No Remedy Exclusive. Subject to Section 10.3 of this Loan Agreement, no remedy herein conferred upon or reserved to the Finance Authority is intended to be exclusive, and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder as now or hereafter existing at law or in equity. No delay or omission to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver thereof, but any such right and power may be exercised from time to time and as often as may be deemed expedient. In order to entitle the Finance Authority to exercise any remedy reserved in this Article X, it shall not be necessary to give any notice, other than such notice as may be required in this Article X.

Section 10.5 Waivers of Events of Default. The Finance Authority may in its discretion waive any Event of Default hereunder and the consequences of an Event of Default by written waiver; provided, however, that there shall not be waived (i) any Event of Default in the payment of principal of this Loan Agreement at the date when due as specified in this Loan Agreement, or (ii) any default in the payment when due of the interest on this Loan Agreement, unless prior to such waiver or rescission, all arrears of interest, with interest at the rate borne by this Loan Agreement on all arrears of payment of principal and all expenses of the Finance Authority, in connection with such Event of Default shall have been paid or provided. Such waiver shall be effective only if made by written statement of waiver issued by the Finance Authority. In case of any such waiver or rescission, or in case any proceeding taken by the Finance Authority on account of any such Event of Default shall have been discontinued or abandoned or determined adversely, then and in every such case, the Finance Authority shall be restored to its former position and rights hereunder, respectively, but no such waiver or rescission shall extend to any subsequent or other Event of Default, or impair any right consequent thereon.

Section 10.6 No Additional Waiver Implied by One Waiver. In the event that any agreement contained herein should be breached by either party and thereafter waived by the other party, such waiver shall be in writing and limited to the particular breach so waived and shall not be deemed to waive any other breach hereunder.

Section 10.7 Agreement to Pay Attorneys' Fees and Expenses Related to Defaults. In the event that the Governmental Unit should default under any of the provisions hereof and the Finance Authority employs attorneys or incurs other expenses for the collection of payments

hereunder, or the enforcement of performance or observance of any obligation or agreement on the part of the Governmental Unit contained in this Loan Agreement, the Governmental Unit agrees that it shall on demand therefor pay to the Finance Authority the fees of such attorneys and such other expenses so incurred, to the extent that such attorneys' fees and expenses may be determined to be reasonable by a court of competent jurisdiction; provided, however, that the obligation of the Governmental Unit under this Section shall be limited to expenditures from and to the extent of the available Pledged Revenues.

## **ARTICLE XI MISCELLANEOUS**

Section 11.1 Notices. All notices, certificates or other communications hereunder shall be sufficiently given and shall be deemed given when delivered as follows:

If to the Governmental Unit, then to:

Incorporated County of Los Alamos  
Attn.: Utilities Manager  
1000 Central Avenue, Suite 130  
Los Alamos, New Mexico 87544

If to the Finance Authority, then to:

New Mexico Finance Authority  
Attention: Chief Executive Officer  
207 Shelby Street  
Santa Fe, New Mexico 87501

And if to Finance Authority's designated servicing agent for this Loan Agreement, if any, at the address to be provided by the servicing agent. The Governmental Unit and the Finance Authority may, by notice given hereunder, designate any further or different addresses to which subsequent notices, certificates or other communications shall be sent.

Section 11.2 Binding Effect. This Loan Agreement shall inure to the benefit of and shall be binding upon the Finance Authority, the Governmental Unit and their respective successors and assigns, if any.

Section 11.3 Amendments. This Loan Agreement may be amended only with the written consent of the Finance Authority and the Governmental Unit, except as provided in Section 4.1(b) of this Loan Agreement. The consent of the Finance Authority for amendments not affecting the terms of payment of the loan component of this Loan Agreement may be given by an Authorized Officer of the Finance Authority. The execution of any such consent by an Authorized Officer of the Finance Authority shall constitute his or her determination that such amendment does not affect the terms of payment of the loan component of this Loan Agreement.

Section 11.4 No Liability of Individual Officers, Directors or Trustees. No recourse under or upon any obligation, covenant or agreement contained in this Loan Agreement shall be had against any member, employee, director or officer, as such, past, present or future, of the



Finance Authority, either directly or through the Finance Authority or against any officer, employee, director or member of the Governing Body, past, present or future, as an individual so long as such individual was acting in good faith. Any and all personal liability of every nature, whether at common law or in equity, or by statute or by constitution or otherwise, of any such officer, employee, director or member of the Governing Body or of the Finance Authority is hereby expressly waived and released by the Governmental Unit and by the Finance Authority as a condition of and in consideration for the execution of this Loan Agreement.

Section 11.5 Severability. In the event that any provision of this Loan Agreement, other than the requirement of the Governmental Unit to pay hereunder, shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof.

Section 11.6 Execution in Counterparts. This Loan Agreement may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

Section 11.7 Assignment by the Finance Authority. This Loan Agreement (except as to the Administrative Fee and Expense Fund Component) may be assigned and transferred by the Finance Authority to a trustee, which right to assign and transfer is hereby acknowledged and approved by the Governmental Unit.

Section 11.8 Compliance with Governing Law. It is hereby declared by the Governing Body that it is the intention of the Governmental Unit by the execution of this Loan Agreement to comply in all respects with the provisions of the New Mexico Constitution and statutes as the same govern the pledge of the Pledged Revenues to payment of all amounts payable under this Loan Agreement.

Section 11.9 Applicable Law. This Loan Agreement shall be governed by and construed in accordance with the laws of the State.

Section 11.10 Captions. The captions or headings herein are for convenience only and in no way define, limit or describe the scope or intent of any provisions or sections of this Loan Agreement.

*[Remainder of page intentionally left blank.]*

*[Signature pages follow.]*

IN WITNESS WHEREOF, the Finance Authority, on behalf of itself has executed this Loan Agreement, which was approved by the Finance Authority's Board of Directors on January 25, 2024, in its corporate name by its duly authorized officers; and the Governmental Unit has caused this Loan Agreement to be executed in its corporate name and the seal of the Governmental Unit affixed hereto and attested by duly authorized officers. All of the above are effective as of the date first above written.

NEW MEXICO FINANCE AUTHORITY

By \_\_\_\_\_  
Marquita D. Russel, Chief Executive Officer

PREPARED FOR EXECUTION BY OFFICERS OF THE FINANCE AUTHORITY:

SUTIN, THAYER & BROWNE  
A PROFESSIONAL CORPORATION  
As Loan Counsel to the Finance Authority

By \_\_\_\_\_  
Suzanne Wood Bruckner

Approved for Execution by Officers of the Finance Authority:

By \_\_\_\_\_  
Daniel C. Opperman, Chief Legal Officer

INCORPORATED COUNTY OF LOS ALAMOS,  
NEW MEXICO

By \_\_\_\_\_  
Denise Derkacs, Chair

[SEAL]

ATTEST:

By \_\_\_\_\_  
Naomi D. Maestas, County Clerk

6951106

**EXHIBIT “A”**

**TERM SHEET**

**LOAN NO. DW-6368  
TO THE INCORPORATED COUNTY OF LOS ALAMOS, NEW MEXICO**

Governmental Unit:	Incorporated County of Los Alamos, New Mexico
Project Description:	Finance the costs of construction of electrical and mechanical upgrades, specifically the water production replacement of the Supervisory Control and Data Acquisition (“SCADA”) system and related appurtenances of the Project.
Pledged Revenues:	Net Revenues of the System
Currently Outstanding Senior Obligations (Senior Lien Tier):	Governmental Unit’s Utility System Revenue Bonds, Series 2010A-D (PPRF Loan PPRF-2461) maturing in 2030
Currently Outstanding Parity Obligations (Subordinate Lien Tier):	PPRF-3150 maturing in 2034; DW-5456 maturing in 2048; DW-5637 maturing in 2049; DW-5638 maturing in 2049.
Currently Outstanding Subordinate Obligations for Pledged Revenues (Super Subordinate Tier):	<b>OUTSTANDING JUNIOR LIENS OF THE WATER UTILITY:</b> WPF-0089 maturing in 2028; WPF-0156 maturing in 2030; WPF-0157 maturing in 2030; WPF-0220 maturing in 2031; WPF-0221 maturing in 2032; WPF-4826 maturing in 2041; WPF-5081 maturing in 2042.  <b>OUTSTANDING JUNIOR LIENS OF THE JOINT UTILITY DEBT (ELECTRIC, GAS, WATER AND WASTEWATER):</b> CWSRF 09L ARRA Loan maturing in 2031; WPF-0318 maturing in 2035; WPF-0340 maturing in 2035; CWSRF 110 maturing in 2042; WPF-5673 maturing in 2043; WPF-5966 maturing in 2045.

OUTSTANDING JUNIOR LIEN OF THE WATER AND  
WASTEWATER UTILITY:

WPF-3557 maturing in 2038;  
WPF-5426 maturing in 2043.

OUTSTANDING JUNIOR LIEN OF THE WASTEWATER  
UTILITY:

WPF-0063 maturing 2027;  
CWSRF 083 maturing in 2043;  
CWSRF 1438143R maturing in 2035.

Authorizing Legislation:	Governmental Unit Ordinance No. 732 adopted May 28, 2024
Closing Date:	July 12, 2024
Interest Rate:	0.26% (which includes the Administrative Fee)
Maximum Repayable Program Fund Component:	\$2,020,000
Aggregate Program Fund Amount:	\$2,020,000
Maximum Repayable Expense Fund Component:	\$20,000
Maximum Expense Fund Component:	\$20,000
Maximum Principal Amount:	\$2,020,000

**EXHIBIT “B”**

**LOAN AGREEMENT PAYMENT SCHEDULE**

[SEE ATTACHED]

FINAL-DRAFT

**EXHIBIT "C"**

**FORM OF REQUISITION**

RE: \$2,020,000 Loan Agreement by and between the Finance Authority and the Incorporated County of Los Alamos (the "Loan Agreement")

TO: [DW@nmfa.net](mailto:DW@nmfa.net)  
New Mexico Finance Authority  
207 Shelby Street  
Santa Fe, New Mexico 87501  
Attn: Client Services

LOAN NO. DW-6368

CLOSING DATE: July 12, 2024

You are hereby authorized to disburse to the Incorporated County of Los Alamos or its payee with regard to the above-referenced Loan Agreement the following:

REQUISITION NUMBER:		<input type="checkbox"/> Interim Request <input type="checkbox"/> Final Request
AMOUNT OF PAYMENT:	\$	

PURPOSE OF PAYMENT:


☐ This is a request of REIMBURSEMENT of incurred and paid project expenses. (Attach proof of payment, e.g. check stubs, and corresponding invoices)

☐ This is a request of DIRECT PAYMENT to vendor or service provider of incurred project expenses. (Attach invoices)

**PAYEE INFORMATION**

NAME:	
CONTACT NAME:	
ADDRESS:	
PHONE NUMBER:	
FAX NUMBER:	
E-MAIL ADDRESS:	

## WIRING INFORMATION

BANK NAME:	
ACCOUNT NUMBER:	
ROUTING NUMBER:	

Please indicate if this Business is considered a:

<input type="checkbox"/> SBE (Small Business Entrepreneur)	<input type="checkbox"/> MBE (Minority Business Entrepreneur)	<input type="checkbox"/> WBE (Women owned business Entrepreneur)	<input type="checkbox"/> N/A
--	---	--	------------------------------

(Attach SBE/MBE/WBE Certification)

Each obligation, item of cost or expense mentioned herein is for costs of the Project, is due and payable, has not been the subject of any previous requisition and is a proper charge for requisition and payment.

Each obligation, item of cost or expense mentioned herein is not for costs related to the purchase of land or easement.

All representations contained in the Loan Agreement and the related closing documents remain true and correct and the Incorporated County of Los Alamos is not in breach of any of the covenants contained therein.

If this is the final requisition, payment of costs of the Project is complete or, if not complete, the Incorporated County of Los Alamos understands its obligation to complete the acquisition and installation of the Project and shall complete the acquisition and installation of the Project from other legally available funds.

Capitalized terms used herein, are used as defined or used in the Loan Agreement.

DATED: \_\_\_\_\_

By: \_\_\_\_\_  
Authorized Officer

\_\_\_\_\_  
(Print name and title)



**EXHIBIT "D"**

**FORM OF CERTIFICATE OF COMPLETION**

RE: \$2,020,000 Loan Agreement by and between the Finance Authority and the Incorporated County of Los Alamos (the "Loan Agreement")

Loan No. DW-6368

Closing Date: July 12, 2024

TO: NEW MEXICO FINANCE AUTHORITY

I, \_\_\_\_\_, the \_\_\_\_\_ of the  
[Name] [Title or position]

Incorporated County of Los Alamos, hereby certify as follows:

1. The project described in the Loan Agreement (the "Project") was completed and placed in service on \_\_\_\_\_, 20\_\_\_\_.
2. The total cost of the Project was \$ \_\_\_\_\_.
3. Cost of the Project paid from the Loan was \$ \_\_\_\_\_.
4. The portion of the Maximum Principal Amount unexpended for the Project is \$ \_\_\_\_\_.
5. The Project was completed and is and shall be used consistent with and subject to the covenants set forth in the Loan Agreement.

This certificate shall not be deemed to prejudice or affect any rights of or against third parties which exist at the date of this certificate or which may subsequently come into being.

INCORPORATED COUNTY OF LOS ALAMOS,  
NEW MEXICO

By: \_\_\_\_\_

Its: \_\_\_\_\_

STATE OF NEW MEXICO                   )  
COUNTY OF LOS ALAMOS               ) ss. PLEDGED REVENUE CERTIFICATE

WHEREAS, the Governmental Unit, pursuant to Ordinance No. 717 adopted on May 24, 2022 ((the “DW-5638 Ordinance” and, together with the PPRF-3150 Ordinance, the DW-5456 Ordinance and the DW-5367 Ordinance, the “Parity Ordinances”), executed and delivered a Drinking Water State Revolving Loan Fund Loan and Subsidy Agreement dated July 8, 2022 (the “DW-5638 Loan Agreement” and, together with the 2014 Bond Purchase Agreement, the DW-5456 Loan Agreement and the DW-5637 Loan Agreement, the “Parity Loan Agreements”) between the Governmental Unit and the Finance Authority, in the maximum principal amount of \$2,727,000. The DW-5638 Loan Agreement is payable from a lien on the Pledged Revenues; and

WHEREAS, the Governmental Unit, pursuant to Ordinance No. 732 adopted on May 28, 2024 (the “DW-6368 Ordinance”), intends to execute and deliver on the date hereof its Drinking Water State Revolving Loan Fund Loan Agreement in the maximum principal amount of \$2,020,000 for the purpose of the cost of construction of electrical and mechanical upgrades, specifically the water production replacement of the Supervisory Control and Data Acquisition (“SCADA”) system and related appurtenances of the Project (the DW-6368 Loan Agreement”) payable from the Pledged Revenues, as set forth in the DW-5638 Loan Agreement; and

WHEREAS, Section 5.4, the “Additional Parity Obligations” of the DW-5638 Loan Agreement provides as follows:

“Section 5.4. Additional Parity Obligations Payable from Pledged Revenues. No provision of this Loan Agreement shall be construed in such a manner as to prevent the issuance by the Governmental Unit of additional Parity Obligations payable from Pledged Revenues, nor to prevent the issuance of bonds or other obligations refunding all or a part of this Loan Agreement; provided, however, that before any such additional Parity Obligations are actually issued (excluding refunding bonds or refunding obligations which refund Parity Obligations but including parity refunding bonds and obligations which refund Subordinated Obligations as provided in Section 5.5 hereof), the Governmental Unit shall obtain the written consent of the Finance Authority and it must be determined that:

(a) The Governmental Unit is then current in all of the accumulations required to be made into the Debt Service Account as provided in this Loan Agreement.

(b) No default shall exist in connection with any of the covenants or requirements of the Resolution or this Loan Agreement.

(c) The Pledged Revenues received by or credited to the Governmental Unit for the Fiscal Year or for any twelve (12) consecutive months out of the twenty-four (24) months preceding the date of issuance of such additional Parity Obligations (the “Historic Test Period”) shall have been sufficient to pay an amount representing one hundred twenty percent (120%) of the combined maximum annual principal, interest requirement and the Administrative Fee Component coming due in any subsequent Fiscal Year on the then outstanding Senior Obligations, Parity Obligations and the Parity Obligations proposed to be issued (excluding the accumulation of any reserves therefor).

(d) A written certification or opinion by the Governmental Unit's treasurer or chief financial officer or by an Independent Accountant that the Pledged Revenues for the Historic Test Period are sufficient to pay said amounts, shall be conclusively presumed to be accurate in determining the right of the Governmental Unit to authorize, issue, sell and deliver the Parity Obligations proposed to be issued.

(e) With prior written notice to the Finance Authority, no provision of this Loan Agreement shall be construed in such a manner as to prevent the issuance by the Governmental Unit of additional bonds or other obligations payable from the Pledged Revenues constituting a lien upon such Pledged Revenues subordinate and junior to the lien of this Loan Agreement nor to

prevent the issuance of bonds or other obligations refunding all or part of this Loan Agreement as permitted by Section 5.5 hereof.

(f) The Governmental Unit shall not issue bonds or other obligations payable from the Pledged Revenues having a lien thereon prior or superior to this Loan Agreement, without the written approval of the Finance Authority.”; and

WHEREAS, the principal and interest on the outstanding 2010 Senior Lien Obligation, Parity Loan Agreements and the proposed DW-6368 Loan Agreement coming due to their last principal payment date are shown on Exhibit A attached hereto.

NOW THEREFORE, the undersigned do hereby certify as follows:

1. We are familiar with the provisions of the PPRF-2461 Ordinance and the Parity Ordinances authorizing the execution and delivery of the 2010 Senior Lien Obligation and the Parity Loan Agreements and the DW-6368 Ordinance authorizing the execution and delivery of the DW-6368 Loan Agreement, and with the provisions of the 2010 Senior Lien Obligation, the Parity Loan Agreements and the DW-6368 Loan Agreement.

2. We are familiar with the books, accounts and funds of the Governmental Unit pertaining to the Pledged Revenues.

3. Except as stated in the preambles to this Certificate, the Pledged Revenues have not been pledged or hypothecated to the payment of any outstanding senior lien or parity lien obligations and no other outstanding senior lien or parity lien obligations are payable from the Pledged Revenues.

4. The Governmental Unit is not, and has not been in default as to making any payments on the 2010 Senior Lien Obligation or the Parity Loan Agreements, nor under any of the covenants or requirements of the 2010 Senior Lien Obligation or the Parity Loan Agreements.

5. The DW-6368 Loan Agreement is payable from the Pledged Revenues and will constitute a lien upon the Pledged Revenues subordinate to the lien of the outstanding 2010 Senior Lien Obligation and on parity with the liens of the outstanding Parity Loan Agreements.

6. The fiscal year immediately preceding the date of the DW-6368 Loan Agreement is the period commencing on July 1, 2022 and ending in June 30, 2023.

7. The Pledged Revenues for the fiscal year ended June 30, 2023 are fairly stated at \$10,242,788.

8. The combined maximum Aggregate Annual Debt Service Requirements on the 2010 Senior Lien Obligation, the Parity Loan Agreements and the DW-6368 Loan Agreement for the additional bonds test set out in the preambles of this Certificate occurs in Fiscal Year 2027 and is \$2,261,375.68. One hundred twenty percent (120%) of such amount is \$2,713,650.82.

9. The Pledged Revenues of \$10,242,788 (i.e., paragraph 7 above) for the fiscal year immediately preceding the date of the execution and delivery of the DW-6368 Loan Agreement

were sufficient to pay an amount representing one hundred twenty percent (120%) of the combined maximum Aggregate Annual Debt Service Requirements of \$2,261,375.68 on the 2010 Senior Lien Obligation, the Parity Loan Agreements and the DW-6368 Loan Agreement.

10. This certificate is for the benefit of each holder from time to time of the 2010 Senior Lien Obligation, the Parity Loan Agreements and the DW-6368 Loan Agreement and for the benefit of bond counsel in rendering opinions to the effect that the DW-6368 Loan Agreement is secured by a lien pledge on the Pledged Revenues on a parity with the Parity Loan Agreements.

(Signature Page Follows)

WITNESS our hands this 12<sup>th</sup> day of July, 2024.

INCORPORATED COUNTY OF LOS ALAMOS,  
NEW MEXICO

[SEAL]

By \_\_\_\_\_  
Denise Derkacs, Chair

By \_\_\_\_\_  
Melissa Dadzie, Chief Financial Officer

By \_\_\_\_\_  
Naomi D. Maestas, County Clerk

STATE OF NEW MEXICO ) GENERAL AND NO LITIGATION  
 ) ss. CERTIFICATE  
COUNTY OF LOS ALAMOS )

Capitalized terms used in this Certificate have the same meaning as defined in Governmental Unit Ordinance No. 732 adopted on May 28, 2024 (the “Ordinance”), unless otherwise defined in this Certificate or the context requires otherwise.

- |                                 |   |
|---------------------------------|---|
| Chair:                          | Denise Derkacs  |
| Vice-Chair:                     | Theresa Cull  |
| Council Members:                | Melanee Hand<br>Suzie Havemann<br>Keith Lepsch<br>David Reagor<br>Randall T. Ryti |
| County Clerk:                   | Naomi D. Maestas  |
| Acting Chief Financial Officer: | Melissa Dadzie  |

- Loan No. DW-6368

5. There is no reason within our knowledge and belief after due investigation, why the Governmental Unit may not enter into the Loan Agreement with the New Mexico Finance Authority (the "Finance Authority"), as authorized by the Ordinance.

6. The Governmental Unit has duly authorized the execution, delivery and performance of its obligations under the Loan Agreement. The Loan Agreement has been duly authorized, executed and delivered by the Governmental Unit.

7. The Ordinance has been duly signed and adopted in accordance with all applicable laws and has not been repealed, rescinded, revoked, modified, amended or supplemented in any manner except as set forth in the Ordinance. The Ordinance constitutes valid and sufficient legal authority for the Governmental Unit to carry out and enforce the provisions of the Loan Agreement. No referendum petition has been filed with respect to the Ordinance under the provisions of the laws, bylaws or regulations of the Governmental Unit or the State.

8. No event will result from the execution and delivery of the Loan Agreement that constitutes a default or an event of default under the Loan Agreement or the Ordinance, and no event of default and no default under the Loan Agreement or the Ordinance have occurred and are continuing on the date of this Certificate.

9. The Governmental Unit has duly authorized and approved the consummation by it of all transactions and has complied with all requirements and satisfied all conditions, which are required by the Loan Agreement to have been authorized, approved, performed or consummated by the Governmental Unit at or prior to the date of this Certificate. The Governmental Unit has full legal right, power and authority to carry out and consummate the transactions contemplated by the Ordinance and the Loan Agreement.

10. A. All approvals, consents and orders of any governmental authority having jurisdiction in the matter which would constitute a condition precedent to the enforceability of the Loan Agreement or to any of the actions required to be taken by the Ordinance or the Loan Agreement on or prior to the date of this Certificate have been obtained and are in full force and effect; and

B. All approvals, consents and orders of any governmental authority having jurisdiction in the matter which would constitute a condition precedent to the financing of the Project have been obtained and are in full force and effect.

11. Neither the Governmental Unit's adoption of the Ordinance nor any action contemplated by or pursuant to the Ordinance or the Loan Agreement does or will conflict with, or constitute a breach by the Governmental Unit of, or default by the Governmental Unit under, any law, court decree or order, governmental regulation, rule or order, resolution, agreement, indenture, mortgage or other instrument to which the Governmental Unit is subject or by which it is bound.

12. No material adverse change has occurred, nor has any development occurred involving a prospective material and adverse change in, or affecting the affairs, business, financial



condition, results of operations, prospects, properties of the Governmental Unit or the Pledged Revenues since the date of the Ordinance.

13. None of the events of default referred to in Article X of the Loan Agreement has occurred.

14. Subsequent to the adoption of the Ordinance, the Governmental Unit has not pledged or otherwise encumbered the Pledged Revenues. On the date of this Certificate, except as set forth in the Term Sheet, there are no other outstanding obligations with a lien or encumbrance against the Pledged Revenues senior to or on a parity with the lien of the Loan Agreement.

15. The Loan Agreement permits the Governmental Unit to issue additional bonds or other obligations with a lien on the Pledged Revenues, on parity with or subordinate to the lien of the Loan Agreement on the Pledged Revenues upon satisfaction of the conditions set forth in the Loan Agreement. The Loan Agreement prohibits the Governmental Unit from issuing additional bonds or other obligations with a lien on the Pledged Revenues senior to the lien of the Loan Agreement without the prior written approval of the Finance Authority.

16. There is no threatened action, suit, proceeding, inquiry or investigation against the Governmental Unit, at law or in equity, by or before any court, public board or body, nor to the Governmental Unit's knowledge is there any basis therefore, affecting the existence of the Governmental Unit or the titles of its officials to their respective offices, or seeking to prohibit, restrain or enjoin the pledge of revenues or assets of the Governmental Unit pledged or to be pledged to pay the principal, interest, and Administrative Fee on the Loan Agreement, or in any way materially adversely affecting or questioning (a) the territorial jurisdiction of the Governmental Unit; (b) the use of the proceeds of the Loan Agreement for the Project and to pay certain costs of the Finance Authority associated with the administration of its drinking water state revolving fund loan program; (c) the validity or enforceability of the Loan Agreement or any proceedings of the Governmental Unit taken with respect to the Loan Agreement or the Ordinance; (d) the execution and delivery of the Loan Agreement; or (e) the power of the Governmental Unit to carry out the transactions contemplated by the Loan Agreement or the Ordinance.

17. The Governmental Unit has complied with all the covenants and satisfied all the conditions on its part to be performed or satisfied at or prior to the date hereof, and the representations and warranties of the Governmental Unit contained in the Loan Agreement and the Ordinance are true and correct as of the date hereof.

18. The Governmental Unit is not in default, and has not been in default within the ten (10) years immediately preceding the date of this Certificate, in the payment of principal of, premium, if any, or interest on any bonds, notes or other obligations which it has issued, assumed or guaranteed as to payment of principal, premium, if any, or interest except that no representation is made with respect to industrial revenue bonds or conduit bonds payable solely from installment sale or lease payments, loan repayments or other amounts received by the Governmental Unit from private entities.

19. To the best of our knowledge and belief after due investigation, neither the Chair, County Clerk, any member of the Governing Body, nor any other officer, employee or other agent

of the Governmental Unit is interested (except in the performance of his or her official rights, privileges, powers and duties), directly or indirectly, in the profits of any contract, or job for work, or services to be performed and appertaining to the Project.

20. Regular meetings of the Governing Body have been held at 1000 Central Avenue, Los Alamos, New Mexico 87544, the principal meeting place of the Governing Body.

21. The Governing Body has no rules of procedure which would invalidate or make ineffective the Ordinance or other action taken by the Governing Body in connection with the Loan Agreement. The Open Meetings Act Resolution No. 24-01 adopted and approved by the Governing Body on January 9, 2024 establishes notice standards as required by NMSA 1978, § 10-15-1, as amended. The Open Meetings Act Resolution No. 24-01 has not been amended or repealed. All action of the Governing Body with respect to the Loan Agreement and the Ordinance was taken at meetings held in compliance with the Open Meetings Act and Resolution No. 24-01.

22. The Chair and County Clerk, on the date of the signing of the Loan Agreement, and on the date of this Certificate, are the duly chosen, qualified and acting officers of the Governmental Unit authorized to execute such agreements.

23. This Certificate is for the benefit of the Finance Authority.

24. This Certificate may be executed in counterparts.

[Remainder of page left intentionally blank]

[Signature page follows.]

WITNESS our signatures and the seal of the Governmental Unit this 12<sup>th</sup> day of July, 2024.

INCORPORATED COUNTY OF LOS ALAMOS,  
NEW MEXICO

By \_\_\_\_\_  
Denise Derkacs, Chair

[SEAL]

By \_\_\_\_\_  
Naomi D. Maestas, County Clerk

6951110



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# County of Los Alamos

## Staff Report

April 17, 2024

Los Alamos, NM 87544  
www.losalamosnm.us

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**Agenda No.:** 5.B.

**Index (Council Goals):** Quality Excellence - Effective, Efficient, and Reliable Services; Quality Governance - Fiscal Stewardship; DPU FY2022 - 1.0 Provide Safe and Reliable Utility Services; DPU FY2022 - 2.0 Achieve and Maintain Excellence in Financial Performance

**Presenters:** James Alarid, Deputy Utilities Manager - Engineering

**Legislative File:** OR1018-24a

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### Title

Approval of Incorporated County of Los Alamos Ordinance No. 733 An Ordinance Authorizing the Incorporated County of Los Alamos (County) to Submit an Amendment No. 2, to the New Mexico Environment Department (NMED) Clean Water State Revolving Fund (CWSRF), for the Purpose of Increasing the Funding of Loan Number CWSRF 110 for the Bayo Lift Station Elimination Project.

### Recommended Action

**I move that the Board of Public Utilities Approve Incorporated County of Los Alamos Ordinance No. 733 An Ordinance Authorizing the Incorporated County of Los Alamos (County) to Submit an Amendment No. 2, to the New Mexico Environment Department (NMED) Clean Water State Revolving Fund (CWSRF), for the Purpose of Increasing the Funding of Loan Number CWSRF 110 and forward to Council for Introduction and approval.**

### ..Utility Manager's Recommendation

The Utility Manager recommends the Board approve as presented.

### Body

The Bayo Lift Station pumps sewage from all of Barranca Mesa to the Los Alamos Wastewater Treatment Plant. This represents approximately 20% of the sewage treated at the Los Alamos Wastewater Treatment Plant. The lift station is due for some major upgrades and rather than reinvest in the lift station, a gravity sewer line will be constructed to replace the lift station. The gravity sewer line will eliminate the cost of pumping the sewage and eliminate the risk of a significant sewage spill if the lift station failed. The project was bid in June 2023 and the bids were extremely high. After value engineering the project, the scope was reduced and the project was bid again in October and the bids came in \$763,000 lower.

The project was awarded in December 2023 funded by \$1,500,000 from CWSRL 110, and an additional \$1,200,000 funded from FY2024 capital funds reallocated from another project. DPU began working with the New Mexico Environment Department to increase CWSRL 110 by \$1,200,000 to fully fund the project with the same low interest loan. This Amendment No. 2 to CWSRL 110 will increase the loan by the additional \$1,200,000, fully funding the Bayo Lift Station Elimination Project with the loan.

### Alternatives

If Amendment No. 2 is not approved the project will remain funded in part by the capital improvement funds reallocated from another project.

### Fiscal and Staff Impact/Planned Item

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CWSRL 110 is funding the following projects:

Bayo Lift Station Elimination Project	\$ 2,700,000
White Rock Water Reclamation Facility	\$23,500,000
<b>Total</b>	<b>\$26,200,000</b>

#### **Attachments**

A - Ordinance 733

B - Amended Promissory Note

C - Interim Loan Agreement Amendment No. 2

**INCORPORATED COUNTY OF LOS ALAMOS ORDINANCE NO. 733**

**AN ORDINANCE AUTHORIZING THE INCORPORATED COUNTY OF LOS ALAMOS (COUNTY) TO SUBMIT AN AMENDMENT NO. 2, TO THE NEW MEXICO ENVIRONMENT DEPARTMENT (NMED) CLEAN WATER STATE REVOLVING FUND (CWSRF), FOR THE PURPOSE OF INCREASING THE FUNDING OF LOAN NUMBER CWSRF 110**

**WHEREAS**, pursuant to Ordinance No. 720, the Incorporated County of Los Alamos (County) was authorized by the Los Alamos County Council (County Council) to enter into Loan Agreement No. CWSRF 110, with NMED for loan principal funding up to TWENTY-FIVE MILLION DOLLARS (\$25,000,000), plus accrued interest; and

**WHEREAS**, Amendment No. 1 to Loan Number CWSRF 110 directed the County to place “Signs” indicating “project funded by President Biden’s Bipartisan Infrastructure Law” and displaying the Environmental Protection Agency (EPA) logo and an official Building A Better America emblem; and

**WHEREAS**, the County Council has determined that it is in the best interest of County to apply for an increase in the principal amount by ONE MILLION TWO HUNDRED THOUSAND DOLLARS (\$1,200,000), to account for cost overruns, for a total funding amount of TWENTY-SIX MILLION TWO HUNDRED THOUSAND DOLLARS (\$26,200,000); and

**WHEREAS**, the NMED has agreed to increase the loan principal amount under the same terms and conditions set forth in the original loan.

**NOW THEREFORE, BE IT ORDAINED BY THE GOVERNING BODY OF THE INCORPORATED COUNTY OF LOS ALAMOS:**

**Section 1.** Amendment No. 2 to Loan Number CWSRF 110 be submitted to the NMED to increase the principal and loan subsidy grant amount for a total funding amount of TWENTY-SIX MILLION TWO HUNDRED THOUSAND DOLLARS (\$26,200,000), under the same conditions set forth for the original loan.

**Section 2.** The Incorporated County of Los Alamos Utilities Manager or designee is authorized to endorse any necessary loan amendment documents.

**PASSED AND ADOPTED** this 28<sup>th</sup> day of May 2024.

**COUNCIL OF THE INCORPORATED  
COUNTY OF LOS ALAMOS**

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**Denise Derkacs,  
Council Chair**

**ATTEST: (Seal)**

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**Naomi D. Maestas,  
Los Alamos County Clerk**



## AMENDED PROMISSORY NOTE

**To the New Mexico Environment Department (NMED)  
Clean Water State Revolving Loan Fund (CWSRF)  
-also known as-  
Wastewater Facility Construction Loan Program**

**FOR VALUE RECEIVED**, the Incorporated County of Los Alamos (Borrower) promises to pay the NMED at:

New Mexico Environment Department  
Construction Programs Bureau  
1190 S. St. Francis Drive  
P.O. Box 5469  
Santa Fe, New Mexico 87505-5469

or by electronic funds transfer (EFT)

or at such other place as NMED may hereafter designate in writing, the principal amount of

**Twenty-Six Million Two Hundred Thousand Dollars (\$26,200,000)**

or so much of that amount as has been paid by NMED to the Borrower pursuant to the terms of the Interim Loan Agreement (Agreement) or any amendment to the Agreement for Loan Number CWSRF 110 between NMED and the Borrower plus 0.01% project interest annually from the date of each respective disbursement annually until paid in full. Effective on the execution of the Agreement.

The principal plus interest due, if applicable, and payable on this Note shall be payable as follows: Principal loaned, and the subsequent interest shall be due and paid according to the Final Promissory Note as described.

### **Repayment Rate and Schedule**

Annual principal and interest payments will commence not later than one year after completion of the project and shall be paid in annual installments due on the anniversary of the first annual installment. A Final Promissory Note will be processed and executed, and the Agreement will be amended and executed as a Final Loan Agreement to reflect the final amount loaned by NMED to Borrower. The principal amount of the Final Promissory Note and Agreement, as amended, will be an amount equal to that loaned and paid to Borrower under this Note.

### **Source of Repayment**

The Borrower is giving a security interest by dedicating the Pledged Funds defined as Joint Utility System Revenues in accordance with Ordinance No. 720.

Except as stated in the Ordinance, the Pledged Funds have not been pledged to the payment of any outstanding obligations and no other obligations are payable from the Pledged Funds on the date of the Ordinance. The loan will be payable and collectible solely from the Pledged Funds.

### **Assignment**

No assignment by NMED of the right to receive payments under this Note shall affect the Borrower's obligations or rights other than to make payments either by EFT or at the address designated by NMED to the Borrower in writing.

### **Collection and Default**

At the option of NMED, any amount paid by NMED to collect amounts due under this Note or to preserve or protect NMED's rights under the Agreement shall become a part of, and bear interest at the interest rate as set forth in the previous REPAYMENT RATE AND SCHEDULE section above and shall become immediately due and payable by the Borrower to NMED upon demand by NMED. Events of default and remedies upon an event of default as described in the Agreement in COVENANTS are incorporated herein by reference.

### **Prepayment**

The Borrower may prepay all or any part of the principal of this Note without penalty. Extra payments shall, after payment of interest due, be applied to the reduction of principal. After any prepayment of principal, the Borrower shall continue to pay the amounts listed in the Agreement and Final Promissory Note until the entire principal and interest are paid in full.

### **Authority**

This Note is authorized by the Wastewater Facility Construction Loan Act, NMSA 1978, § 74-6A-1 et seq., as amended, the New Mexico Water Quality Control Commission Regulations, 20.7.5 NMAC, the New Mexico Environment Department Regulations, 20.7.6 – 20.7.7 NMAC, and the Borrower's Ordinance No. 720 and Ordinance No. 733 amending the CWSRF 110 principal.

This Note shall not constitute indebtedness or debt within the meaning of any constitutional, charter or statutory provision, or limitation, nor shall this Note be considered or held to be a general obligation of the Borrower. The obligations of the Borrower under the Agreement and Note are payable and collectible solely out of the Pledged Funds as defined in the Agreement, and NMED or any other holders of the Agreement or Note may not look to any general or municipal fund for the payment of the principal or interest on the Agreement or Note.

IN WITNESS WHEREOF, the Borrower has caused this Note to be duly executed and effective as of the date listed below by the Borrower.

BY: \_\_\_\_\_  
Signature of duly authorized Borrower Official  
**Los Alamos County**

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

State of \_\_\_\_\_

County of \_\_\_\_\_

Signed or attested before me on \_\_\_\_\_ by \_\_\_\_\_,  
Date Name of Witness

\_\_\_\_\_  
Notarial Officer Signature

[Official Stamp] Title of Office: \_\_\_\_\_

**NEW MEXICO ENVIRONMENT DEPARTMENT  
CONSTRUCTION PROGRAMS BUREAU  
CLEAN WATER STATE REVOLVING FUND (CWSRF) PROGRAM**

**INTERIM LOAN AGREEMENT  
AMENDMENT No. 2**

Borrower Name: **Los Alamos County**

Loan No. **CWSRF 110**

The purpose of this Amendment No. 2 is to increase the loan principal amount by \$1,200,000 to \$26,200,000.

This Amendment No. 2 to the Interim Loan Agreement is made by the New Mexico Environment Department (NMED) and Los Alamos County (Borrower) (collectively the Parties). This Amendment becomes effective when executed by NMED.

The Borrower has enacted Ordinance Number 720 and Amended Ordinance No. 733 which authorizes execution of the Agreement and all Amendments; authorizes the Borrower to accept loan funds from NMED; and irrevocably pledges the Joint Utility System Revenues for the repayment of this Amendment No. 2, the Agreement, and Note.

**Loan Terms:**

NMED and the Borrower entered into an Agreement on September 7, 2022, and Amendment No. 1 on March 10, 2023. It has become necessary to make changes to the Agreement which expires on September 7, 2024. Increasing the principal amount will allow for the completion of this project. All conditions of the Agreement not identified in this Amendment No. 2 remain the same.

The Parties mutually agree to the following Agreement changes:

**SECTION III. LOAN AMOUNT:**

NMED agrees to increase the loan principal amount to the Borrower in the amount of: **One Million Two Hundred Thousand Dollars and Zero Cents (\$1,200,000.00) for a total loan amount of: Twenty-Six Million Two Hundred Thousand Dollars and Zero Cents (\$26,200,000.00)** (Loan Amount) at the interest rate of 0.1% annually upon the terms and conditions set forth in the Interim Loan Agreement and the Interim Promissory Note.

Provided the Borrower complies with the Construction Conditions and the Loan Subsidy Grant Requirements, the loan principal amount will be available until September 7, 2024.

**SECTION IV. PROJECT CONDITIONS/Sub-section A:**

Upon execution of this Agreement, the Borrower shall adhere to completing construction by September 7, 2024, and to expeditiously initiate and achieve Project Completion.

**THE PARTIES AGREE** that this Amendment No. 2 becomes effective upon execution by NMED Secretary. By executing this Amendment No. 2, the undersigned represents authorization to act on behalf of the Borrower.

BY: \_\_\_\_\_  
Signature of duly authorized Borrower Official  
**Los Alamos County**

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

**Issued and administered by:**

New Mexico Environment Department  
Wastewater Facility Construction Loan Program  
Clean Water State Revolving Loan Fund

BY: \_\_\_\_\_  
Judith L. Kahl, P.E., Bureau Chief, Constructions Programs Bureau  
Signed pursuant to February 19, 2024, Secretary of Environment Delegation Order



# County of Los Alamos

## Staff Report

April 17, 2024

Los Alamos, NM 87544  
www.losalamosnm.us

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**Agenda No.:** 6.A.  
**Index (Council Goals):**  
**Presenters:** Board of Public Utilities  
**Legislative File:** 18076-24

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### **Title**

Approval of Board of Public Utilities Meeting Minutes for March 6 and March 20, 2024

### **Recommended Action**

**I move that the Board of Public Utilities approve the meeting minutes as presented.**

### **Body**

Draft minutes are sent to members after each meeting for their review. Members may then send changes to be incorporated prior to final approval of the minutes at the next regular meeting.

### **Attachments**

- A - Draft BPU Work Session Minutes - 3/6/24
- B - Draft BPU Regular Session Minutes - 3/20/24



# County of Los Alamos

1000 Central Avenue  
Los Alamos, NM 87544

## Minutes

### Board of Public Utilities Work Session

*Robert Gibson, Chair; Eric Stromberg, Vice-chair;  
Matt Heavner; Charles Nakhleh, and, Steve Tobin, Members;  
Philo Shelton, Ex Officio Member  
Anne Laurent, Ex Officio Member  
Theresa Cull, Council Liaison*

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Wednesday, March 6, 2024

5:30 PM

Municipal Bldg., Council Chambers

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Public Participation: In person or <https://us06web.zoom.us/j/89412512522>

#### **1. CALL TO ORDER**

\*\*\*\*\*

This work session of the Incorporated County of Los Alamos Board of Public Utilities was held on Wednesday, March 6, 2024 at 1000 Central Ave., Council Chambers. Members of the public were notified of the ability to attend and provide public comment either in person or over Zoom. Board Chair Robert Gibson called the meeting to order at 5:32 pm. The following board members were in attendance:

\*\*\*\*\*

Present 6 - Members Heavner, Nakhleh, Tobin, Gibson, Shelton, and Laurent  
Absent 1 - Member Stromberg

#### **2. PUBLIC COMMENT**

Chair Gibson called for public comment on any item. There was none.

#### **3. APPROVAL OF AGENDA**

Chair Gibson called for discussion or a motion to approve the agenda.

\*\*\*\*\*

Member Nakhleh moved and Member Tobin seconded that the agenda be approved as presented. The motion passed by the following vote:

\*\*\*\*\*

Yes: 4 - Members Heavner, Nakhleh, Tobin, and Gibson  
Absent: 1 - Member Stromberg

#### **4. PRESENTATIONS**

##### **4.A. [18157-24](#) LANL Presentation on "Net Zero Emissions Planning & Implementation"**

Mr. Shelton, Utilities Manager introduced Mr. Jesse Freedman, the Net Zero Program Manager - Utilities & Infrastructure at LANL. A copy of Mr. Freedman's presentation was included in the meeting packet.

Member Tobin spoke.

Member Gibson spoke.  
Ms. Kendall spoke.  
Mr. Shelton spoke.  
Member Heavner spoke.  
Member Nakhleh spoke.

**No action was taken on this item.**

**4.B.     [16956-24](#)     UNM Electricity Grid Research Results**

Ms. D'Anna introduced the UNM Department of Economics research team:  
Janie Chermak, Professor & Chair, Department of Economics  
Zuzia Olszowka, Professor of Economics and PhD Student  
Yuting Yang, Assistant Professor of Economics

Professor Chermack provided a brief overview of the project: The Department of Public Utilities (DPU) and the University of New Mexico Department of Economics partnered in an electric grid research project, "Smart Meters and Household Characteristics: Estimating load profiles and changes in consumption behavior." Ms. Olszowka led the presentation. A copy of the presentation slides were included in the meeting packet.

Member Heavner spoke.  
Member Nakhleh spoke.  
Dr. Chermak spoke.  
Dr. Yang spoke.  
Member Tobin spoke.  
Member Gibson spoke.

**No action was taken on this item.**

**5.       BUSINESS**

**5.A.     [18478-24](#)     Action to Suspend Procedural Rules for Work Session**

Chair Gibson called for discussion or a motion to suspend procedural rules.

\*\*\*\*\*

**Member Tobin moved and Member Nakhleh seconded that the Board of Public Utilities suspend their procedural rules for the March 6, 2024 work session so that formal action may be taken. The motion passed by the following vote:**

\*\*\*\*\*

**Yes:       4 - Members Heavner, Nakhleh, Tobin, and Gibson  
Absent:   1 - Member Stromberg**

**5.B.     [18476-24a](#)     Approval of the Termination and Settlement Agreement and Release of Claims between the Incorporated County of Los Alamos, New Mexico, and**



Uniper Global Commodities North America LLC

Mr. Shelton, Utilities Manager reviewed the history of the agreements between Los Alamos County (LAC) and Uniper Global Commodities North America LLC (UGCNA.) He also led the discussion on the items that LAC and UGCNA agreed to under the Termination and Settlement Agreement and Release of Claims.

Member Tobin spoke.

\*\*\*\*\*

**Member Tobin moved and Member Heavner seconded that the Board of Public Utilities approve the Termination and Settlement Agreement and Release of Claims between the Incorporated County of Los Alamos, New Mexico, and Uniper Global Commodities North America LLC, and forward to Council for approval. The motion passed by the following vote:**

\*\*\*\*\*

**Yes: 4 - Members Heavner, Nakhleh, Tobin, and Gibson**

**Absent: 1 - Member Stromberg**

**5.C. [AGR1028-24a](#) Approval of a Short-term Power Purchase Agreement to Replace the Uniper Agreements**

Mr. Shelton, Utilities Manager provided background information on the research for replacement power. Mr. Olbrich, Deputy Utilities Manager - Power Supply led the discussion. In summary, if the BPU and County Council approve the Termination and Settlement Agreement and Release of Claims between the Incorporated County of Los Alamos, New Mexico, and Uniper Global Commodities North America LLC, then the DPU will need to secure a new source for the 40 MW of firm, around-the-clock power that is being lost from Uniper. Given the short time available to secure the new source of power and the current favorable pricing, DPU is seeking to enter into a short-term Power Purchase Agreement (PPA) to begin replacement power delivery on April 1, 2024, and end no later than February 28, 2026, for 40 MW of firm power, delivered to Four Corners 345kV or San Juan 345kV. The end date is selected to align with the planned Phase 1 power delivery from the Foxtail Flats Solar and Storage agreements. This replacement power will not be renewable or come with any Renewable Energy Certificates.

Member Heavner spoke.

Member Tobin spoke.

Member Gibson spoke

Chair Gibson provided an opportunity for public comment; there was none.

\*\*\*\*\*

**Member Tobin moved and Member Nakhleh seconded that the Board of Public Utilities approve a Power Purchase Agreement with Mercuria Energy America, LLC, in the amount of \$51,334,560.00 and a contingency in the amount of \$3,690,720.00, for a total of \$55,025,280.00, plus applicable gross receipts tax, for the purpose of buying power and energy to serve the Los Alamos Power Pool's electric load, and forward to Council for approval. The motion passed by the following vote:**

\*\*\*\*\*

**Yes: 4 - Members Heavner, Nakhleh, Tobin, and Gibson**

**Absent: 1 - Member Stromberg**

**5.D. [17994-24](#)**

**Annual Update on Water System**

Mr. Moseley, Deputy Utilities Manager - GWS Services presented an update on the water system. This year's report is similar in scope and format to previous reports; including primary performance measure dashboard data, with trends and comparisons to national standards and DPU goals (Conservation, Strategic Plan & Budget). Discussion including both the physical and financial condition of the water system sub-systems: Water Distribution (DW), Water Production (WP) and Non-Potable (NP) System as well as the overall Water Fund itself are reported. Also included are recent AMT (Asset Management Team) achievements and challenges and some significant planned near-term future O&M Goals, Action Items and Major Projects.

Member Tobin spoke.

Mr. Shelton spoke.

Ms. Kendall spoke

Member Nakhleh spoke.

Member Heavner spoke.

**No action was taken on this item.**

**5.E. [17974-24](#)**

**Discuss BPU Booth at Farmers Market**

Chair Gibson acknowledged County Manager Laurent's presence in her new role. He then introduced the topic. The board agreed to have more of a public presence. Beginning in 2024 it was suggested that members begin manning a booth at Farmer's Market in order to meet customer and listen to concerns. County Council has a booth set up on the last Thursday of the month except for the month of August when the booth is set up during the County Fair week, Thursday, August 8, 2024. Chair Derkacs offered that BPU is welcome to join the County Council at their booth. The schedule posted on the Farmer's Market website is:

Spring to Fall: May - October

Location: Ashley Pond Park

Thursdays: 7 AM - 12:30 PM

Saturdays: 8 AM - 12 PM

Vice Chair Derkacs reported that Council is usually manning the table from 9:00 - 11:00 am. Typically there are two Councilors present. Staff are also present at their own booths for the entire time. There is the possibility of providing handouts. Usually Councilors address comments from citizens. Member Gibson is not available in April, but open to attending at other times.

No action was taken on this item.

**6. PUBLIC COMMENT**

Chair Gibson called for public comment on any item. There was none.

**7. ADJOURNMENT**

The meeting adjourned at 8:48 pm

\*\*\*\*\*

**APPROVAL**

\_\_\_\_\_  
**Board of Public Utilities Chair Name**

\_\_\_\_\_  
**Board of Public Utilities Chair Signature**

\_\_\_\_\_  
**Date Approved by the Board**



LOS ALAMOS

# County of Los Alamos

## Minutes

### Board of Public Utilities

1000 Central Avenue  
Los Alamos, NM 87544

*Robert Gibson, Chair; Eric Stromberg, Vice-chair;  
Matt Heavner; Charles Nakhleh, and, Steve Tobin, Members;  
Philo Shelton, Ex Officio Member  
Anne Laurent, Ex Officio Member  
Theresa Cull, Council Liaison*

Wednesday, March 20, 2024

5:30 PM

Municipal Bldg., Council Chambers

Public Participation: In person or <https://us06web.zoom.us/j/88515885437>

#### **1. CALL TO ORDER**

This regular meeting of the Incorporated County of Los Alamos Board of Public Utilities was held on Wednesday, March 20, 2024 at 1000 Central Avenue in Council Chambers. Board Chair Robert Gibson called the meeting to order at 5:30 p.m. Members of the public were notified of the ability to participate and provide public comment in-person or over Zoom. The following board members were in attendance:

\*\*\*\*\*

Present: 7 - Board Members Gibson, Stromberg, Tobin, Nakhleh, Heavner, Shelton, and Laurent

#### **2. PUBLIC COMMENT**

Chair Gibson called for public comment on items on the Consent Agenda or those not otherwise included on the agenda. There was none.

#### **3. APPROVAL OF AGENDA**

Chair Gibson called for discussion or a motion to approve the agenda.

\*\*\*\*\*

Member Stromberg moved and Member Tobin seconded that the agenda be approved as amended. The motion passed by the following vote:

\*\*\*\*\*

Yes: 5 - Board Members Heavner, Nakhleh, Tobin, Stromberg, and Gibson

#### **4. BOARD BUSINESS**

##### **a. Chair's Report**

Chair Gibson reported that the first Boards & Commissions Luncheon on March 14 was well attended. The Transportation Board did grumble a bit that the BPU stole their member (Member Heavner), but he was acquired fairly. The next B&C Luncheon is scheduled for May 9 and Member Tobin has volunteered to attend. Chair Gibson also reported that there is a Climate Action Plan Workshop scheduled for April 2 at 6pm in Council Chambers. Chair Gibson said that he plans on attending in person and asked other members if they were interested. Member Tobin stated that he would attend

in-person. Member Heavner will also observe remotely and not participate (which will avoid a quorum).

**No action was taken on this item.**

**b. Board Member's Reports**

There were none.

**No action was taken on this item.**

**c. Utilities Manager's Report**

Mr. Shelton reviewed his written report which is attached to the minutes. He provided summarized comments and responded to board member inquiries as appropriate.

Member Tobin spoke.

**No action was taken on this item.**

**d. County Manager's Report**

Ms. Anne Laurent reported that her first notable action was signing the Uniper settlement agreement. She also reported that Deputy County Manager interviews are underway and she is excited to have that position filled. There is a Conversation with the County Manager scheduled for March 21 at the Library. And as Chair Gibson reported there is public input on the Climate Action Plan scheduled for April 2. Finally, Council agreed to \$2 million in matching funds for the Broadband Middle Mile Grant application.

There were no questions from the board.

**No action was taken on this item.**

**e. Council Liaison's Report**

Council Vice Chair Cull participated remotely and reported on recent Council activities that were of note to the board and department.

There were no questions from board members.

**No action was taken on this item.**

**f. Environmental Sustainability Board Liaison's Report**

Mr. Armand Groffman was absent and no written report was submitted.

**No action was taken on this item.**

**g. General Board Business**

**g.1. [16994-24](#) Appointment of Board Member to County Audit Committee for 2024**

Chair Gibson called for volunteers to the Audit Committee. Member Gibson was the only volunteer. Chair Gibson then called for discussion or a motion.

\*\*\*\*\*

**Member Nakhleh moved and Member Tobin seconded that the Board of Public Utilities nominate Member Gibson to fill the vacant position on the County's Audit Committee and appoint them for remainder of Calendar Year 2024. He further recommended that the Utilities Manager notify the Chief Financial Officer of the nominee. The motion passed by the following vote:**

\*\*\*\*\*

**Yes: 5 - Board Members Heavner, Nakhleh, Tobin, Stromberg, and Gibson**

## **h. Board Expenses**

- h.1. [18506-24](#)** Approval of Board Expenses for Member Heavner to attend the ECA Forum in May 2024.

Chair Gibson called for discussion or a motion.

Mr. Shelton spoke and shared that the County's ECA membership reimburses for two member to attend. Member Heavner's and Councilor Ryti's expenses could be reimbursed and Mr. Shelton's travel would be covered by the DPU budget.

Member Heaver spoke.

There was no further discussion or public comment.

\*\*\*\*\*

**Member Nakhleh moved and Member Tobin seconded that the Board of Public Utilities approve travel expenses not to exceed \$2,500.00 for Member Matt Heavner to attend the ECA Forum in Kennewick, WA in May 2024. The motion passed by the following vote:**

\*\*\*\*\*

**Yes: 5 - Board Members Heavner, Nakhleh, Tobin, Stromberg, and Gibson**

## **5. PUBLIC HEARING(S)**

- 5.A. [OR1011-24a](#)** Approval & Recommendation to Council of the Incorporated County of Los Alamos Ordinance No. 731, an Ordinance Authorizing the Incorporated County of Los Alamos (Borrower) to Enter Into a Loan Agreement With the New Mexico Environment Department (NMED) for the Purpose of Obtaining Project Loan Funds in the Principal Amount of \$800,000 Plus (0.01%) Accrued Interest; and Loan Subsidy Grant Funds in the Amount of \$200,000 for a Total Funded Amount of \$1,000,000; Designating the Use of the Funds for the Bayo Non-potable Booster Station Refurbishment As Approved by NMED; Declaring the Necessity for the Loan; Providing That the Loan Will Be Payable and Collectible Solely From the Borrower's Pledged Revenues Defined Below; Prescribing Other Details Concerning the Loan and the Security Therefore

Mr. James Alarid, Deputy Utility Manager - Engineering presented. He reported that Ordinance 731 will authorize the Department of Public Utilities (DPU) to execute a Clean Water State Revolving Loan (CWSRL) in the amount of \$800,000 with a \$200,000 subsidy grant. The loan and grant will fund the refurbishment of the existing Bayo Booster Station located adjacent to the composting facility in Pueblo Canyon. The booster station pumps treated effluent from the Los Alamos Wastewater Treatment Plant to a tank at the Los Alamos Middle School for irrigating the golf course and North Mesa ball fields. The booster station has been in service for 32 years. The work will include various mechanical and electrical upgrades which include a new disinfection system, motor control center,

electric gear, valves, air relief /vacuum valves, instrumentation & controls and miscellaneous antiquated features in need of replacement. Design of these improvements will take place this spring and construction will take place the winter and spring of 2025. The Bayo Non-Potable Booster Station is the single means to pump effluent into Los Alamos and this rehabilitation effort will prepare the facility for many years of reliable operation. He closed by sharing that the \$1,000,000 award will fund the construction of this planned project which is budgeted in FY2025. Revenues from the joint utility systems will be pledged to secure the loan. Finally, if the Ordinance is not approved, the award of the loan and grant will be lost

Member Nakhleh spoke.

Member Tobin spoke.

Member Gibson spoke.

Mr. Clay Moseley spoke.

There was no public comment or board discussion.

\*\*\*\*\*

**Member Stromberg moved and Member Tobin seconded that the Board of Public Utilities approve and recommend to Council that Incorporated County of Los Alamos Ordinance No. 731 be adopted to authorize Los Alamos County to Enter Into a Loan Agreement with the New Mexico Environment Department. The motion passed by the following vote:**

\*\*\*\*\*

**Yes: 5 - Board Members Heavner, Nakhleh, Tobin, Stromberg, and Gibson**

## **6. CONSENT AGENDA**

Chair Gibson called for discussion or a motion.

\*\*\*\*\*

**Member Tobin moved and Member Stromberg seconded that the Board of Public Utilities approve the items on the Consent Agenda as presented and that the motions in the staff reports be included in the minutes for the record. The motion passed by the following vote:**

\*\*\*\*\*

**Yes: 5 - Board Members Heavner, Nakhleh, Tobin, Stromberg, and Gibson**

- 6.A. [18075-24](#)** Approval of Board of Public Utilities Meeting Minutes for February 7 & 21, 2024

**I move that the Board of Public Utilities approve the meeting minutes as presented.**

- 6.B. [18055-24a](#)** Award of Bid No. IFB 24-02R for the Purpose of Water Production Wells Mechanical and Electrical Upgrades with Pillar Innovations, LLC

**I move that the Board of Public Utilities approve the Award of Bid No. IFB 24-02R for the Purpose of Water Production Wells Mechanical and Electrical Upgrades with Pillar Innovations, LLC in the Amount of \$4,061,397.00, a contingency of \$406,100.00 for a total project budget of 4,467,497.00, plus Applicable Gross Receipts Tax,**

**I further move that the Board of Public Utilities approve Budget Revision 2024-55 and include in the meeting minutes for the record,**

**I further move that the Board of Public Utilities approve the Grant Analysis and Financial Matrix Form authorizing staff to apply for a Rural Infrastructure Loan and Grant, and forward to Council for approval.**

- 6.C. [18097-24](#) Authorization to Submit an Application for DOE Industrial Assessment Centers Implementation Grant for HVAC Upgrades at the Los Alamos Wastewater Treatment Plant Blower Building.

**I move that the Board of Public Utilities Authorize the Utility Manager or Deputy Utility Manager of Finance and Administration to submit an Application for DOE Industrial Assessment Centers Implementation Grant for HVAC Upgrades at the Los Alamos Wastewater Treatment Plant Blower Building.**

- 6.D. [AGR1027-24a](#) Approval of Services Agreement No. AGR 24-47 with Molzen Corbin & Associates Inc. for the Purpose of Engineering Services for the Bayo Non-Potable Booster Station Rehabilitation Project

**I move that the Board of Public Utilities approve Services Agreement No. AGR24-47 with Molzen Corbin & Associates Inc. in the amount of \$313,930.00, plus applicable gross receipts tax, for the purpose of Engineering Services for the Bayo Non-Potable Booster Station Rehabilitation Project and forward to Council for approval.**

## **7. DEPARTMENT BUSINESS**

- 7.A. [17998-24b](#) Approval of the DPU FY2025 Budget

Ms. Karen Kendall, Deputy Utility Manager - Finance & Administration presented. Some of the attachments in the published meeting packet changed. So, she distributed a full copy of Attachments A-G during the meeting and reviewed each of them. Those copies are attached to the minutes.

Member Nakhleh spoke.  
Member Gibson spoke.  
Member Tobin spoke.  
Member Stromberg spoke.  
Member Heavner spoke.  
Mr. Shelton spoke.

There was no public comment. Chair Gibson called for further discussion or comments from board members.

Member Nakhleh spoke.  
Member Tobin spoke.  
Member Gibson spoke.

The board applauded Ms. Kendall for all of her hard work.

\*\*\*\*\*

**Member Heavner moved and Member Nakhleh seconded that the Board of Public Utilities approve the Fiscal Year 2025 budget as presented and forward to Council for adoption. I further move that the Board of Public Utilities approve the FY2025 budget option as presented and forward to Council for approval. The motion passed by the following vote:**

\*\*\*\*\*

**Yes: 5 - Board Members Heavner, Nakhleh, Tobin, Stromberg, and Gibson**

- 7.B. [18210-24](#) DPU Quarterly Report - Fiscal Year 2024/Quarter 2

Mr. Philo Shelton, Utilities Manager, presented. Ms. D'Anna was absent. He highlighted



the budget, the Uniper project and the efforts of his and Mr. Olbrich's predecessors. Mr. Shelton also mentioned that this is the last appearance of Member Wright on the board page. He also mentioned Mr. Mark Martinez's recognition of Safety Employee of the Quarter and his recent promotion. Other highlights included SETI, Solar Distributed Generation, Improvements to the Hydros at El Vado, The "Ghost Hunt", overall performance and the debt profile.

Member Gibson spoke.

Member Tobin spoke.

Member Stromberg spoke.

**No action was taken on this item.**

## **8. STATUS REPORTS**

### **8.A. [18086-24](#) Status Reports for February 2024**

Mr. Philo Shelton provided the following status reports in the meeting packet. He responded to board member inquiries and provided clarifying information as appropriate.

- 1). Electric Reliability Update
- 2). Accounts Receivables Report
- 3). Risk/Safety Report

Member Tobin spoke.

Member Heavner spoke.

Member Stromberg spoke.

**No action was taken on this item.**

## **9. UPCOMING AGENDA ITEMS**

### **9.A. [18064-24](#) Tickler File for March to June 2024**

Chair Gibson highlighted the agenda items for the upcoming work session and regular meeting. Members discussed.

Member Heavner asked to schedule an update from EcoClub.

Member Stromberg asked about EV Fires, Ms. Laurent will relay concerns to the LAC Fire Department

**No action was taken on this item.**

## **10. PUBLIC COMMENT**

Chair Gibson called for public comment on any item. There was none.

**11.    ADJOURNMENT**

The meeting adjourned at 7:22 p.m.

\*\*\*\*\*

**APPROVAL**

\_\_\_\_\_  
Board of Public Utilities Chair Name

\_\_\_\_\_  
Board of Public Utilities Chair Signature

\_\_\_\_\_  
Date Approved by the Board

**ATTACHMENTS**

4.C. - Utilities Manager's Report 3/20/2024

5.A. - Attachment A, LAC Ordinance No. 731 (final)

7.A. - Approval of the DPU FY25 Budget, Attachments A-H (final)



# County of Los Alamos

## Staff Report

April 17, 2024

Los Alamos, NM 87544  
www.losalamosnm.us

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**Agenda No.:** 7.A.  
**Index (Council Goals):**  
**Presenters:** Ben Olbrich, Deputy Utilities Manager - Power Supply  
**Legislative File:** 18243-24

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### Title

Integrated Resource Plan (IRP) Implementation Update

### Body

This briefing describes the efforts of staff to identify, evaluate and develop new generation resources for the Los Alamos Power Pool, in consideration of the generation needs and preferred portfolio identified by the 2022 Integrated Resource Plan.

### Attachments

A - 20240417\_BPU\_IRP\_Implementation\_Update

# Integrated Resource Plan (IRP) Implementation Update

April 17, 2024

# LAPP Goals

- Provide reliable & cost-effective power
- Achieve carbon free goals
  - LAC carbon neutral by 2040 goal
  - Executive Order 14057: 100% carbon pollution-free electricity (net annual) by 2030, including 50% ATC carbon pollution-free electricity
- Build a diverse generation and storage portfolio
- Transition to a 15% positive reserve margin
- Continuously evaluate status and look for new reliable, cost competitive, and preferably carbon free resources

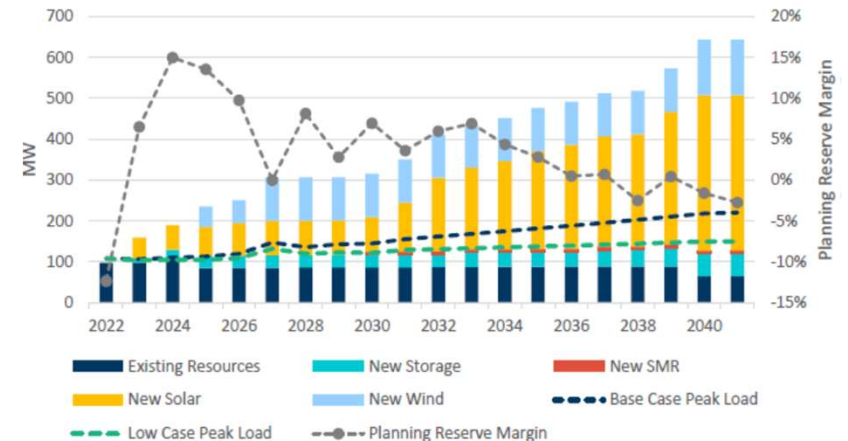
# LOAD FORECAST & PREFERRED PORTFOLIO

- The IRP guides resource planning
- Changes from the 2022 IRP
  - 8MW CFPP project ended 11/8/2023
  - 15+25MW Uniper PPAs terminated 3/20/24
  - Foxtail Flats Solar 170MW PPA, 80MW/320MWh ESA executed 3/8/2024
  - Mercuria 40MW ATC PPA executed 3/20/24
  - 4MW Geothermal and 10MW gas turbine in consideration through UAMPS
  - Wind unlikely due to transmission

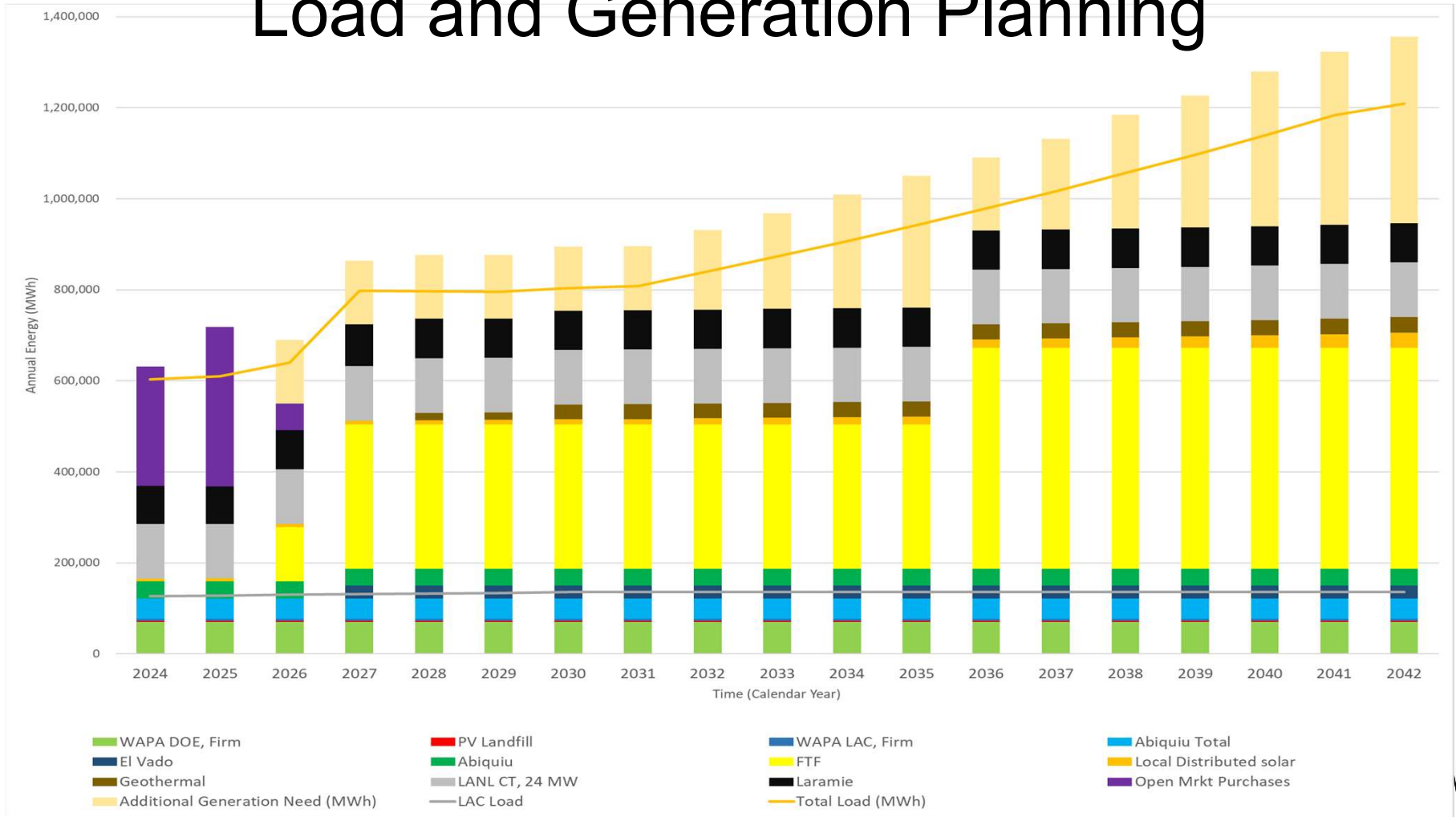
Exhibit 3: LAC and LANL IRP Preferred Resource Plan Cumulative New Builds Summary

Year	Storage MW	Solar MW	Wind MW	SMR MW	Total MW
2025	30	70	50	0	150
2027	30	85	105	0	220
2030	30	85	105	8	228
2035	35	240	105	8	388
2040	55	380	135	8	578
2041	55	380	135	8	578

Exhibit 4: Preferred Resource Plan Resources, LAPP Peak Load, and PRM



# Load and Generation Planning



# Additional Generation Needs

YEAR	2024	2025	2026	2027	2028	2029	2030	2035	2040
Total Load (MWh)	603,000	610,000	640,000	797,000	796,000	796,000	804,000	942,000	1,139,000
Total Generation (MWh)	660,000	754,000	575,000	755,000	770,000	769,000	789,000	795,000	973,000
Additional Generation Need (MWh)	-	-	145,000	145,000	145,000	145,000	135,000	290,000	340,000
Additional ATC Power Capacity (MW)	-	-	18	18	18	18	17	36	42
Margin (MWh)	58,000	143,000	80,000	102,000	119,000	118,000	120,000	143,000	174,000
Reserve Margin (%)	10%	24%	12%	13%	15%	15%	15%	15%	15%



# Future Resource Being Investigated

Planned

Unplanned

Investigating

Types		Resources	Considerations
Baseload	Thermal	Combined Cycle (CC)	Inconsistent with carbon neutral goal
		Laramie River Station (LRS)	Exit when economical, no later than 2042 <sup>1</sup>
	Nuclear	Carbon Free Power Project (CFPP)	Subscription levels: 0, 8, 36 MW
	Hybrid	ATC PPA with 28% Renewable <sup>2</sup>	Near term bridge PPA to replace San Juan Unit 4
	Firm Renewables	Solar + Wind	Uniper contract + more
		Solar + Battery	Solar weather dependent
		Geothermal	High cost, opportunistic and geography dependent
		Fuel Cells	< 5 MW size, implemented in other national labs
Peaking	Thermal	Reciprocating Internal Combustion Engine (RICE)	Explore in IRP for dispatchability and balancing
		Simple Cycle Gas Turbine (SCGT)	Explore in IRP for dispatchability and balancing
	Storage	Pumped Hydro	Cost and ownership of water rights; Opportunistic and geography dependent
		Lithium-ion Battery	Duration considerations
		Vanadium Redox Flow Battery	High-cost; lack of actual projects development
Intermittent	Renewables	Solar (onsite or offsite)	Weather dependent
		Onshore Wind	Weather dependent; transmission constraints

Source: Los Alamos County 2022 Integrated Resource Plan, p. 45, exhibit 32.

# IRP Implementation Tasks

- Currently pursuing off-peak night energy starting March 2026 to supplement Foxtail Flats and baseload resources
- Currently pursuing new dispatchable and carbon-free generation
- Currently monitoring long-duration storage technologies
- Planning to conduct new IRP after July 2025 Electric Coordination Agreement is effective

The End



# County of Los Alamos

## Staff Report

April 17, 2024

Los Alamos, NM 87544  
www.losalamosnm.us

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**Agenda No.:** 7.B.

**Index (Council Goals):**

**Presenters:** Stephen Marez, Deputy Utilities Manager - Electric Distribution

**Legislative File:** 18244-24

---

### **Title**

FY2024 Electric Reliability Plan Update

### **Body**

This presentation by Stephen Marez, Deputy Utility Manager - Electric Distribution is an update to the Electric Reliability Plan “ERP” which is a living-document. The purpose for this report is to have a path forward to achieve and maintain a SAIDI of 60 minutes or less for the residents of Los Alamos County. The SAIDI (System Average Interruption Duration Index) is commonly used as a reliability indicator for electric power utilities. The ERP addresses the reliability indices, impacts on reliability and plans for future development.

### **Attachments**

A - FY23 Electric Reliability Plan

B - ERP Presentation 2023

**LOS ALAMOS COUNTY DEPARTMENT OF PUBLIC UTILITIES**

# **FY 2024 ELECTRIC RELIABILITY AND RESILIENCE PLAN**

**(FOR INFORMATION & DISCUSSION ONLY)**

Stephen Marez, PE, PMP  
Deputy Utility Manager  
Electric Distribution

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## Reliability and Resilience

The true definition of reliability is the measured resilience of the system. This report is the update to the Electric Reliability Plan “ERP” and is a living-document. The purpose for this report is to have a path forward to achieve an electric distribution system that is resilient to exterior stress and system growth. A system that can maintain service during environmental changes. A system that can recover from external impacts and changes. An electric distribution system that can maintain a SAIDI of 60 minutes or less for the residents of Los Alamos County.

System resilience is achieved through the implementation of engineering best practices, effective operation management, and responsible financial administration. The steps to achieve system resilience are basic. Understand the strengths and weaknesses of the organization. Identify the threats, define the impacts of the threats, assess the vulnerabilities of the system, prioritize the risks of the threats, and develop solutions to mitigate the threats.

There is always a focus on actions to improve the system resilience. Capital projects have improved the main three phase system resilience and overall reliability. These projects have been able to minimize outage durations by offering redundancy in the circuit configurations.

The Los Alamos County Department of Public Utilities “LACDPU”, in this case electric distribution “ED”, spends most of its operational budget on reactive operations and maintenance “O&M”. Proactive inspections and assessments are ongoing. The department spends a great deal of time and funds supporting County, commercial and residential customer projects.

The continued growth of the county is a concern to management. The ability of the system to respond to growth and changing conditions is limited. Future actions are needed to prepare for and adapt to changing conditions. Proper planning and increased revenue will be needed to meet system demands. The County has plans to reduce and eliminate natural gas consumption in the county so this will lead to an all-electric county. The increase in distributed generation and electric vehicle charging will add stress to the distribution system. The distribution system is not currently designed and constructed to support this objective. The complete reconstruction of the distribution system will be required.

## **Terms to Know**

### **Resilience**

The ability of the power sector to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions through adaptable and holistic planning and technical solutions. <sup>1</sup>

### **Reliability**

A measure of whether a power system can provide regular, consistent power, typically defined by System Average Interruption Duration Index (SAIDI), Customer Average Interruption Duration Index (CAIDI), and System Average Interruption Frequency Index (SAIFI). <sup>1</sup>

### **Threat**

Anything that can damage, destroy, or disrupt the power sector. Threats can be natural, human caused, or technological. Threats are not typically within the control of power system planners and operators. They may consist of wildfires, hurricanes, storm surges, cyberattacks, and others. This term is often used interchangeably with *hazard*. <sup>1</sup>

### **Vulnerability**

Weaknesses within infrastructure, processes, or systems, or the degree of susceptibility to various threats. Different measures can be taken to reduce vulnerability or improve adaptive capacity to threats to the power sector. Vulnerabilities are typically identified through stakeholder interviews, technical analyses, and/ or literature reviews. <sup>1</sup>

### **Risk**

The potential for loss, damage, or destruction of key resources or power system assets resulting from exposure to a *threat*. Risk is evaluated as the product of the *threat* likelihood and *vulnerability* severity scores.<sup>1</sup>

## **References,**

### **1. POWER SECTOR RESILIENCE PLANNING GUIDEBOOK**

A Self-Guided Reference for Practitioners

Sherry Stout, Nathan Lee, Sadie Cox, and James Elsworth

*U.S. Department of Energy's National Renewable Energy Laboratory*

Jennifer Leisch

*United States Agency for International Development*



## Department Goals

The evaluation of outages and the assessment of the system is essential. Engineering will need to identify the threats to the system. The construction of a robust system that is engineered to withstand weather events and protect against contact with animals and humans. Identify the impact and consequences of power loss on customers. The impact on customers can include health, safety, financial loss and loss of access to vital services.

Identify the vulnerabilities of the system, in planning, design and construction. The assessment of the distribution system identifies weaknesses in the system and allows engineering to prioritize and mitigate the weaknesses that make the system vulnerable to threats. Management will then develop emergency plans and procedures to mitigate the extent of and duration of system outages. The vulnerability of the system will include process definition and personnel experience. Proper training and periodic review of emergency response procedures will mitigate the threats, reduce the risks and eliminate vulnerabilities.

Identify the cause and impact of power outages on the commercial customers. The nature of the County and its customers' demands reliable power. This is a highly educated and active community.

Identify and prioritize the critical loads within the system. Repairs and replacements are prioritized by the number of customers affected and the duration of outages.

Identify strengths and weaknesses in administration and management. The use of technology and proper process management aids management.

Identify the risks associated with possible external threats. The risk of tree fall, animal contact or weather-related events are the main causes of outages. The system is designed and built to address these risks.

These efforts are continuously reviewed and implemented by staff. The operation of the utility focuses on problem identification, repair, and mitigation. The outage data gathered is documented in the monthly reliability report.

The detailed condition assessment of the system will be reported in December with the presentation of the Asset Management Report. System assessments will be completed in November and a report with budget recommendations will be developed.

## County Development Plans

The County Master Plan for future development is a dynamic process. The County is now in the process of establishing a county wide broadband to home system. This effort directly involves the electric utility. The installation of fiber on existing power poles will require engineering review and operations construction.

The broadband utility, whether county owned or privately operated, will have to establish a pole attachment and conduit lease agreement just as Comcast and Lumen have done.

Each pole will have to be reviewed to meet NESC specifications. If the pole requires modification, the utility will perform the modifications and charge the broadband utility. This process will take valuable time away from utility crew projects.

Engineering will review each application for attachment and process the work orders as required. Engineering will also create Task orders and purchase orders as part of contract management.

Many new projects are proposed to increase housing in the County. The County is also moving forward on the installation of electric charging stations for various customer groups. The commercial charging stations will require three phase transformers for group 2 or 3 charging. The same is true for school bus charging and fleet vehicles. Level 1 chargers can be operated on single phase transformer. Each of these installations will require extensive line extensions to connect to the system. Electric switches will have to be installed to protect the branch circuits. Residential car chargers are not reported to the utility. The demand on the system will increase as these are installed in greater numbers. A time of use billing charge will have to be implemented to assist in demand management. The utility does not currently have the capability of TOU billing.

Construction of facilities has other obstacles.

The supply chain is not operating at its best levels. Most product costs and lead times have increased tenfold. Nationwide disasters and Covid have created a supply shortage. These external stresses make it extremely difficult to operate the utility. Lead times are still at 50 to 60 weeks for most electric cable and equipment.

### Department Staff

The reliability of the system is only as good as the people operating the utility. Staff must be maintained to continue the improvement of the utility. Throughout the Covid years and still today, the electric distribution department has remained fully staffed and on duty. The entire department was on site every day throughout the pandemic period. This is a description of the utility staff and their function.

### Engineering

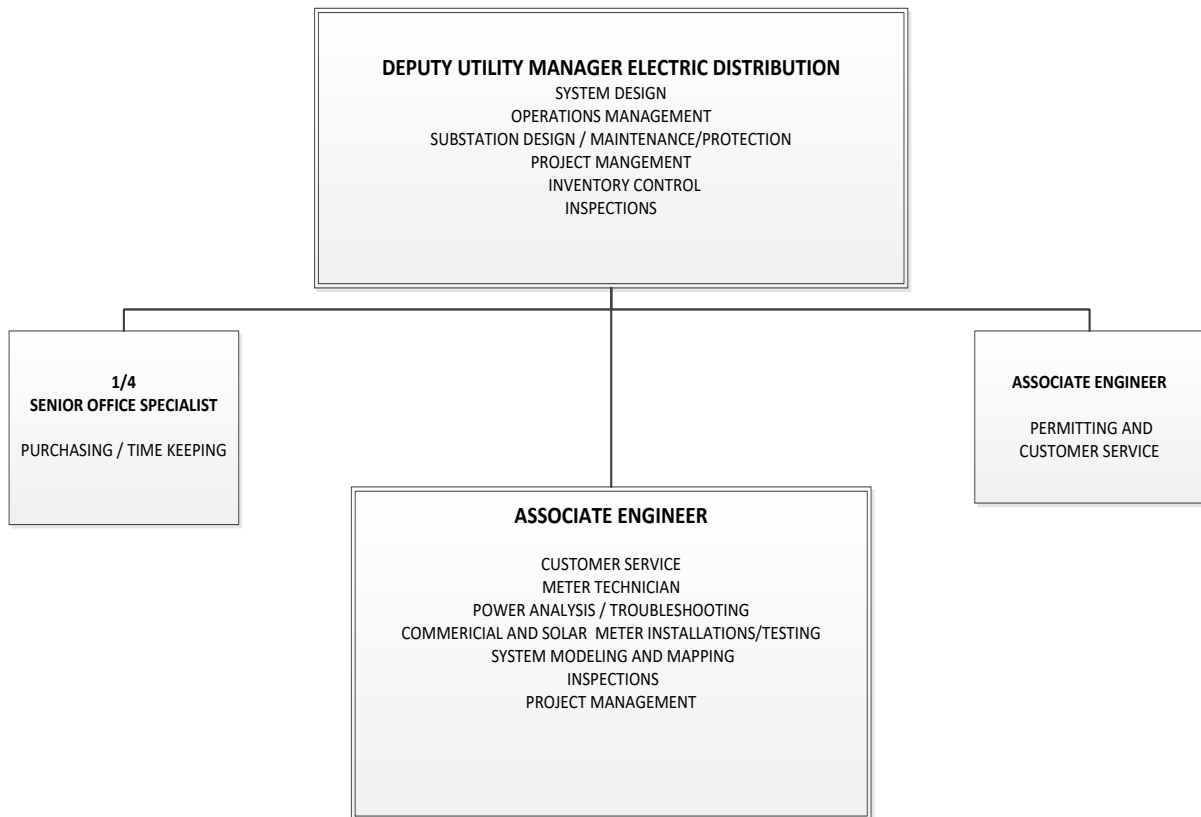
The administration and engineering department includes Deputy Manager Stephen Marez P.E., Engineering Associate Mariano Montoya, and Engineering Associate Michael Salazar. Stephen Marez has been with the department for 22 years. Mariano has been with the engineering department for just over a year. Mariano manages electric metering, project management and system modeling. Michael Salazar has been with the department for 19 years. Michael Salazar manages the tree trimming contract and all electric utility permits.

The engineering department performs the following:

- Project In House Project Designs – For the Utility, County, Residential & Commercial
- System Assessments and Inspections
- Data Collection- Sensus, Munis, GE power systems, Sweitzer systems
- Project Development and Budgeting – Asset Management program
- Procurement and Inventory material management- Specifications, Purchasing
- Project Management
- System Modeling- AutoCAD and Milsoft
- System Protection- Relay and Recloser controls
- Substation construction and maintenance
- Switch Station construction and maintenance
- System Mapping – ArcGIS In house management

- Operations- Management, Design, Planning, Logistics, Work Orders and Support
- Safety and Training- Equipment Testing and Replacement
- Customer Service- Permits – Upgrades, New Construction, Solar
- Distributed Generation Management – Solar, Battery
- Electric Metering- Data Collection, System Analysis, Commercial Meter Installations, Testing, Customer Service.

### Existing Electric Distribution Engineering Staff



### Operations Management

Direct supervision of the electric distribution department. Twelve Employees which include three supervisors, seven linemen and two engineer's associates. Providing the crews with detailed project plans and switching procedures. Communicating effectively with Line Supervisors and their crews. Manage the ongoing procurement requirements to sustain operations, capital projects and system maintenance. Providing continued support to all County departments and their capital projects.

### Metering

The analysis of the large commercial electric metering in the County is ongoing and will be furthered with the use of test equipment designed to test commercial meters under load. The replacement of all commercial meters in the AMI project and the installation of radio repeaters and collectors. Review commercial accounts in conjunction with Utility billing.

All new installations are inspected for correctness and the information provided to the billing department. The Net meters in the system are being evaluated and documented accurately. All information is verified and confirmed by Engineering. The Smart meter program is supported by Engineering.

### Outage Response

A major goal of any distribution system engineer is to minimize outages. The concerns include both the number of outages as well as the duration of these outages. The occurrence of outages is inevitable. Every outage is a learning experience in which proactive measures can be implemented to prevent future outages. Materials and equipment must be managed effectively to minimize response and restoration times.

### Safety

It is of the greatest importance that safety be an integral part of my training. Continuously work to maintain workplace safety. Conduct meetings with all personnel to discuss switching procedures and jog safety. Document and address safety issues as they are brought to my attention by the line electricians and other people.

### Office Management

Utilize office tools to maximize performance:

- AutoCAD- Prepare all designs and construction details
- ArcGIS – Update and maintain all Electric Distribution layers
- Munis- Update and maintain all Electric Distribution layers
- Sensus RNI – Software to monitor and retrieve data from meters
- Excel- Data Spreadsheets and graphs
- Visio- System diagrams
- Enervista- Software to monitor and program protection relays
- GE Power Management- Software to monitor and program protection reclosers
- Milsoft- Engineering analysis and modeling software – ongoing project

## **Assessment of job duties**

**Project Management**- Direct all aspects of Electric Utility Projects including development of the project plan, design drawings, budget, schedule, execution, and closeout. Communicate effectively and coordinate project activities with all affected agencies, departments, and stakeholders.

**Standard of Measurement**- Develop a well thought out project plan. Ensure that project quality assurance measures are implemented throughout the project. Execute project with high level of customer service and environmental stewardship.

**Electric Condition Assessment** -Direct the creation of work orders for condition assessment. Record findings and maintain records for future projects.

**Standard of Measurement** - Complete and accurate records of existing infrastructure. Information that is readily available to all engineers for use in design and troubleshooting.

**Preventive Maintenance**- Utilize information collected from condition assessment to develop necessary maintenance programs and projects. Provide evaluation and rating method for prioritization for projects to be done. Direct all aspects of project development and execution. Track maintenance programs to coordinate data collection and mapping.

**Standard of Measurement**- Ensure project prioritization, development and execution are effectively carried out. Projects are directly related to the improvement of system reliability and customer service.

**Data Collection and Mapping** - Conduct and coordinate data collection efforts with operations. Collect historical data of repairs and problems. Maintain As built drawings of current projects. Maintain system drawings in AutoCAD and ArcGIS. Provide information and data collected as part of the condition assessment. Coordinate mapping and presentation of data collection with Engineering. Meet all requirements of asset management.

**Standard of Measurement**- Well coordinated data collection and use of historical data. Maps produced and updated in a timely fashion. Assets are correctly accounted for and documented.

**Training**- Recommend training programs and equipment for electric distribution personnel to maintain safety procedures and awareness.

**Standard of Measurement**- Maintain a work force that is certified and trained in all applicable work practices.

**Customer Service**- Assist customers in all aspects of Utility Department operations including Electric and GWS inquiries. Provide information on existing utilities and permitting requirements. Provide cost estimates and define customer responsibilities on commercial and large residential projects. Resolve customer grievances. Provide information to the Public Information office regarding outages and projects. Coordinate activities with other County departments.

**Standard of Measurement**- Maintain high level of customer satisfaction. Meet requirements for public information.

**Inspections** -Conduct inspections of electric infrastructure according to defined schedules. Maintain inspection logs. Create Work Orders for inspections of battery banks and other equipment which require PPE and line electrician participation. Create Work Orders for maintenance of equipment.

**Standard of Measurement-** Maintain Utility records and comply with all defined requirements.

**Materials Management** –Define material requirements for all projects and normal operations. Order materials for projects and stage materials prior to project start date.

Work with warehouse personnel to identify procurement issues which cause inefficiencies and delays. Work with Supervisors to define ready stock requirements and maintain stock levels. Communicate effectively with management and procurement to resolve inventory issues. Work with management to define material specifications.

**Standard of Measurement-** Maintain inventory levels at levels which are sufficient to perform maintenance and execute projects.

**System Protection** – Inspect electronic system protection equipment according to defined schedules. Make changes to settings as defined by management. Download information as required to evaluate system operation.

**Standard of Measurement-** Operation of system protection as defined by management.

**Operations Management:**

Manage line crew work activities.

Develop work schedules.

Develop switching plans and staking sheets.

Inspect projects as required.

Responsible for procurement and inventory.

Conduct meetings and maintain documentation in the Asset Management Program.

Coordinate activities with other departments.

Respond to all outages as required.

Meet with the public as needed.

Respond to customer complaints and resolve them.

Work with contractors to successfully complete all projects.

Coordinate with and support Engineering in utilities and the general county.

Create and maintain drawings and maps.

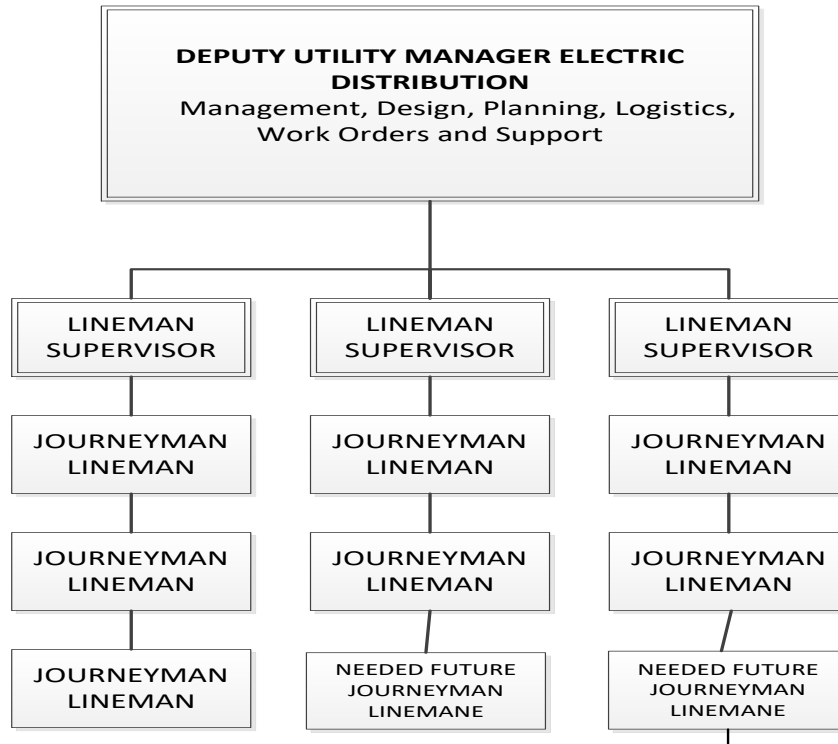
Perform new installations and maintenance of commercial meters.

The increase in distributed generation installations and electric car chargers is a strain on the antiquated distribution system. The need for system reconstruction has never been greater. The accelerated rate of system reconstruction projects will require increased funding and manpower. Staffing in operations will have to be increased to meet the demands of the department. Contractor services will be utilized for the construction of underground facilities, but ED crews will continue to install all conductors and electric equipment. The utility can contract services to install conductors and equipment, but the costs of such projects will increase greatly. Reorganization of the department and the creation of a separate meter department will have to be seriously considered soon. Future delays in projects will be inevitable.

#### Electric Distribution **Operations Staff**

The electric operations department has ten qualified Journeyman Linemen. The electric operations department has ten qualified Journeyman Linemen. First a 4-person crew assigned primarily to the overhead distribution system to replace rotten poles, weathered cross-arms and aged or obsolete transformers. The challenge with the overhead distribution system is that a portion of it is at least 40 years of age and operating near or past its useful life. A second 3-person crew is primarily dedicated to pro-actively replacing live-front and obsolete switchgear, transformers, and sections of underground power lines that have failed multiple times. Line crews also convert open secondary service lines to insulated triplex service lines. The third 3-person crew primarily works on major capital improvement projects that replaces the aged infrastructure but adds improved reliability features such as new line protection facilities, loops, tie-lines, or 3 phase conversions. These duties are in addition to customer service and the operation of the utility which occupies at least one crew each week full time. New service connections, solar system installations, panel upgrades, power outages, power quality issues and customer concerns are some of the duties addressed by the utility line crews. One lineman is responsible for onsite standby duty each week. The crew with the standby lineman will perform customer service disconnect/reconnects and answer all customer outage or trouble calls. This affects the ability of the crew to complete assigned projects. When required, all linemen will respond to large scale outages.

## Existing Electric Distribution Operations Staff





## Electric Distribution Department Projects

### ***In Construction:***

El Mirador Subdivision  
Barranca Tank  
Lift Stations  
The Hills Apartments  
El Mirador Subdivision  
Arbolada Subdivision  
Pinion Elementary School  
Arkansas Place Apartments  
Los Alamos Switch Station -LASS  
3400 Arizona Communications Tower- Pending Procurement  
EV Car Charging Stations- Muni and Visitors Center

### ***Designs Complete Awaiting Construction:***

DP Road Phase 2  
Century Bank Project  
Power Pole Replacements  
Padmount Switch Replacements  
Overlook ballpark Communications Tower- Pending Procurement  
Myrtle Apartments Master Metering- Pending Contractor Mobilization  
LASS Feeder Conductor Installations  
Chamisa Elementary School  
Canada Bonita

### ***In Design and Procurement:***

Trinity/Oppenheimer Primary Replacement  
Sherwood Rounds  
Jemez Fire Protection Project  
La Senda Primary Replacement  
East Gate Primary Cable Replacement  
White Rock Visitors Center Food Trucks and Pavilion  
East Jemez Conduit intercepts for LASS feeders  
Middle School Gymnasium

### ***Future Projects in Planning:***

Los Pueblos Electric Primary Replacement  
East Gate Primary Replacements  
Pet Pangea  
EV Community Car Charging Stations  
Electric School Bus Charging Stations  
Fleet Electric Charging Stations

### ***Pending Developer Information for Design:***

Los Alamos Broadband Project  
Los Alamos Center Plaza  
Tres Alamos

### Distributed Generation

Los Alamos County now has over 507 customers in process or connected to the utility with Solar system installations. The connected load is 4303KW with 143KW pending (as of 4/1/2024). The Department goal for distributed generation is 6000 KW (6 MW).

<b>NUMBER OF CUSTOMERS</b>	<b>507</b>
<b>TOTAL KW</b>	<b>4446</b>
<b>CONNECTED KW</b>	<b>4303</b>
<b>Connected Residential KW</b>	<b>2589</b>
<b>Connected Commercial KW</b>	<b>1713</b>
<b>KW Pending</b>	<b>143</b>

The installation of the new AML system improved outage response times with the implementation of the outage identification. The new Sensus meter software allows staff to see all meters affected by an outage. The line crews can then respond directly to the area without extensive troubleshooting and inspections. Supply Chain issues have delayed the deployment of all commercial meters. Over 300 new customers are expected by the end of FY24. The utility will meet the benchmark of 6000KW soon and a new level will have to be determined by the Utility Board.

### Reliability Indices

#### Analysis of Performance Measures

LACDPU measures its system reliability with four (4) performance factors as defined by IEEE Standard 1366-2003.

SAIDI = System Average Interruption Duration Index. This is the total duration of interruption for the average customer during a predefined period of time; or

$$\text{SAIDI} = \frac{\text{Sum of all customer outage durations}}{\text{Total number of Customers Served}}$$

SAIFI = System Average Interruption Frequency Index. This is how often the average customer experiences an outage over a predefined period of time; or

$$\text{SAIFI} = \frac{\text{Total number of customer interruptions}}{\text{Total number of Customers Served}}$$

CAIDI = Customer Average Interruption Duration Index. This is the average time required to restore service; or

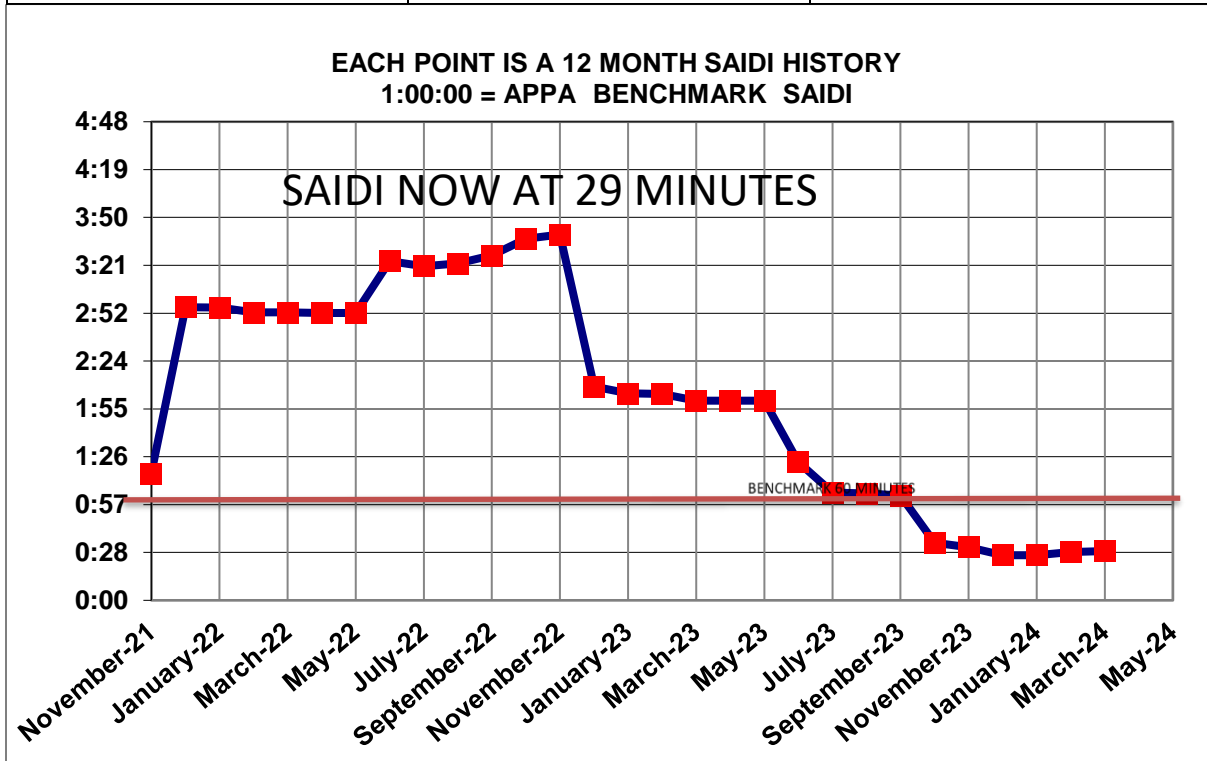
$$\text{CAIDI} = \frac{\text{Sum of all customer outage durations}}{\text{Total number of customer interruptions}} = \frac{\text{SAIDI}}{\text{SAIFI}}$$

ASAI = Average System Availability Index. This is the fraction of time that a customer has received power during the defined reporting period; or

$$\text{ASAI} = \frac{\text{Service hours available} - \text{SAIDI}}{\text{Customer demand hours}} = \frac{8760 - \text{SAIDI}}{8760}$$

Table 1. Reliability Performance Measurement Factors

Total # Accounts	9045	-
Total # Interruptions	36	-
Sum Customer Interruption Durations	4465:36:00	hours:min:sec
#Customers Interrupted	2567	
SAIFI	0.28	int./cust.
SAIDI	0:29	hours:min
CAIFI	1.40%	
CAIDI	1:44	hours:min
ASAI	99.9995%	



The calculations are based on a 12-month history. All outages' effects will remain in the calculations for one year as demonstrated in Figure 10 and 11.

Figure 1. Graph of LAC SAIDI

### Overview of SAIDI & Disturbances

We continue to have sporadic and random underground line section failures throughout the system; and this can be expected into the future. Areas with direct bury conductors more than 30 years are subject to failure. During the fault identification, isolation, and re-routing of power (around failed line section), we've had some residual (secondary) failures. The issue is having to close-in into a faulted line with a standard 200-amp elbow. Some underground subdivisions may have 10 transformers daisy-chained, and the only recourse is close-in into the fault section one or two times. The utility installed fault indicators along the system in order to identify faulted sections of line faster.

Human causes of outages also occur due to digging. In these cases, the utility files a third-party damage report and charges the contractor for the repairs.

On the overhead system we've had a few outages due to tree contact with the electric lines. Tree branches blowing into the open-secondary (un-insulated) in customer back-yards. The ongoing replacement of open secondary conductors with insulated triplex conductors mitigates these outages.

The utility has an ongoing contract with a tree trimming contractor to proactively trim trees as they grow into power lines. Outages due to tree contacts have been reduced. The damage caused by a tree fall can be extensive. The value in having a resilient system is far worth the cost of trimming trees. The utility also prevents major pole and transformer failures largely because of our pole replacement and transformer replacement program. Although the transformer replacement program has slowed down due to supply chain constraints.

### Description of Distribution System and Impacts on Reliability

#### The Local Distribution Grid:

The townsites source for power is a radial line from TA3. The loss of the canyon crossing will cause a townsite wide outage. Several sub feeders are available for service, but they cannot support the entire townsite. The single most important reliability project the department needs to undertake is the construction of a second switch station for the Los Alamos town site. The *Los Alamos Switchgear Substation "LASS"* is located at the County Eco Center site. The new switch station is critical to meet the future electrical supply needs of Los Alamos and will help maintain the system reliability success ED has demonstrated in the last decade.

The addition of the LASS station will greatly assist in the redundancy of the supply system. The system as constructed will not support the full electrification of the townsite. The entire distribution grid will have to be reconstructed to support such an endeavor.

## Threats to the System

Case in point:

Townsite outage October 14, 2021 (report from LANL engineering)

*The cause of the outage that occurred that night was found to be an Old TA-3 Substation Transformer TR2 differential relay that triggered both high side breakers and low side secondary main (03-1682 breaker 1983) to open. Breaker 1983 opening interrupted power from the new TA-3 Substation via duct bank k to 1682 loads (Both TC-1 and TC-2). LANL crews restored power in 10 minutes.*

Townsite outage October 22, 2021

*The outage was caused by the failure of a potential transformer in the new TA-3 substation. A breaker opening interrupted power from the new TA-3 Substation via duct bank K to 1682 loads (Both TC-1 and TC-2). The townsite was being supplied power from that station. LANL crews restored power in 2 hours.*

Townsite outage November 13, 2022

*The outage was caused by a failure of the townsite feeder TC1 at the TA-3 substation. A breaker opening interrupted power from the new TA-3 Substation via duct bank K to 1682 loads TC1. The townsite was being supplied power from that station. LANL and LAC crews restored power in 2 hours.*

Townsite outage November 16, 2022

*The repair of the TC1 line failure on the 13<sup>th</sup> was required. A transfer of power in the circuit 13 feeder caused a line failure which delayed the project by one hour. The planned outage duration was four hours.*

## Townsite Distribution System

The Townsite switch station serves almost 6500 customers with primarily 6 feeders; and a feeder outage may affect between 800 to 3600 customers. Figure 8. illustrates how having two additional substation sources will configure the Los Alamos distribution grid such that the 6500 customers can be served by 12 feeders: thereby substantially reducing the customers per feeder. i.e. potential feeder power outages would affect less customers into the future!

The Townsite switch station has six (6) feeders, #13, #14, #15, #16, #17, and #18. In addition, LANL provides *primary metering* points to LACDPU to serve other LAC customers via LANL distribution lines including Royal Crest mobile home park, NM Consortium Building, Los Alamos Medical Center (LAMC), Ski Hill, Pueblo & Rendija Canyons, and Totavi in San Idelfonso Pueblo. Overall, eight (8) distribution feeders serve the Los Alamos community as illustrated in Figure 2.

LACDPU owns and operates the Electric Distribution System (EDS) in Los Alamos and White Rock areas. The EDS is comprised of approximately 66% underground (UG) distribution and 34% overhead (OH) distribution serving approximately 8,500 customers. There are approximately 6,500 customers in the Los Alamos area and 2,550 customers in White Rock.

There are two operating distribution voltages in the LACDPU's system, 13.2 KV line-to-line (7.62KV line-to-neutral) in Los Alamos Townsite; and 12.47 KV line-to-line (7.2KV line-to-neutral) in White Rock. LAC can utilize the same distribution system components such as poles, fuses, wire, insulators, rubber goods, switchgear, etc. in both areas because the components are rated at 15KV line-to-line. However, LACDPU must keep different transformer inventories for Townsite and White Rock because of the different operational voltages.

#### Photovoltaic and Electric Vehicle installations and Impacts

The electric distribution grid is absorbing production from PV installations. The impact of the reverse flows will soon exceed the capacity of conductors and transformers in the system. Electric vehicle chargers will increase the load on the system at traditionally off-peak times. This is a stress on the system because solar systems do not function at night. Homes that are currently installing solar systems are also increasing the size of their services to accommodate EV chargers and heat pumps. The upgrades to transformers and conductors required will be scattered throughout the county as areas are affected and show signs of stress or failure. Most repairs and upgrades will be performed by operations crews with operations budgets. The operating budget of the utility will have to increase to meet the challenges.

#### Future Goals Set for an ALL-Electric Los Alamos County

The Utility Board of Los Alamos County set a future goal to eliminate gas consumption in the County. This would mean that all homes and businesses would be completely operated with electricity. The current distribution system will not support this as it exists today. Although the main backbone three phase systems have been upgraded, they would require replacement by 2050. The residential areas within the county are not adequately sized to handle the increased load. The utility will require the reconstruction of all residential areas within the county. In addition, a very large number of homes do not have the correct power panel size to provide whole home electric consumption. The homes will have to be upgraded and new service lines will have to be installed. The increased addition of photovoltaic systems and car chargers is now having an impact on the distribution grid. Current staffing levels will not support the expansions and upgrades needed to move toward total electrification.

#### Age and replacement challenges

A portion of the OH system conductors exceed 40 years and is operating at or near the end of its useful life. Similarly, a large portion of the UG system was installed during the 1970s with cable technology that was good for 30-40 years. Therefore, LACDPU must plan to proactively replace those sections of the distribution network that experience and show signs of failure; having a 15-year replacement strategy is a good start. It will require over 24 million dollars over the 10-year period to accomplish this goal. This estimate does not include upgrades sufficient for all electrification. This estimate is with current inflation costs. Inflation will also increase in the near term. The utility needs a rate increase to keep up with the cost of operating the

electric distribution system. Appendix B illustrates the age of subdivisions within the county.

### Access to infrastructure

The OH and UG systems have repair and replacement challenges which may impact the SAIDI as replacement projects are underway. Figure 3. illustrates a map area of inaccessible areas due to right-of-way encroachment or customer blockage. Having inadequate work access or having to work around landscaped areas, etc., make it difficult for LACDPU to replace rotten poles and overloaded transformers. For the UG system, having to dig in and around areas congested with buried utilities makes it difficult to dig for routine repairs; more so when having to install replacement lines. Overhead system replacement work needs to be performed while the existing power line is energized or while *hot*. *Hot* work safety procedures require the feeder over-current protection be disabled (from normal reclosing) while the work is being performed. This means that an inadvertent line contact may kick-out an entire feeder (or line section) while the *hot work* is underway. Similarly, and with underground systems, replacement of live-front (uninsulated) equipment will generally require an outage *before and after* the work; again, for safety purposes. Therefore, replacing portions of the existing system will generally require the disabling of the overcurrent protection, small power outages or switchovers, additional safety precautions, slower work processes, etc. Replacement projects may impact on the SAIDI temporarily and will increase the cost of replacement.

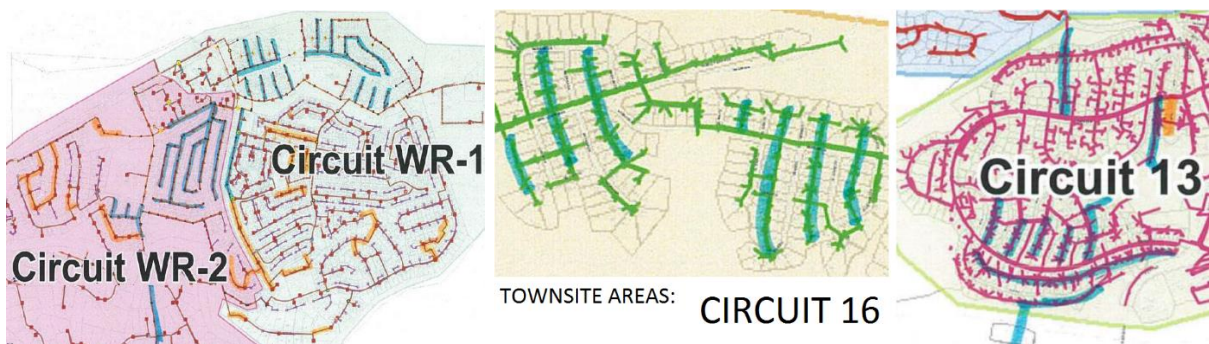


Figure 3. Areas not readily accessible

### Maintain - Repair or Replace!

Through the Asset Management Program process, the lingering question is whether to maintain, repair or replace. Based in the Asset Management Program AMP, LACDPU will continue to operate under the following guidance:

1. LACDPU must adequately maintain its electric distribution system moving forward so that equipment can reach and exceed its useful life. For OH, this means pole inspection and treatment every 10 years for new poles and 5 years for older poles. For UG, this means continuing with the AMP features with respect to quarterly inspections & routine O&M.
2. LACDPU must continue to track repairs to its distribution system; after several failures, UG sections must be planned for replacement.

3. LACDPU must continue to prioritize replacement efforts to critical feeder sections which impact the most customers and have the biggest impact on the SAIDI.

The next sections provide short-term and long-term action plans, “Plans” that must be constructed in parallel largely because of the age of the distribution system. The Plans do impact the revenue requirements for the utility, but LACDPU is conscientious about implementing the Plans over several years. The LACDPU strategy is to continue to improve the system reliability yet maintain electrical rates below rates of neighboring utilities. Also, LACDPU will continue to ask for utility board feedback with regards to electric reliability, value, and the increased level of rates to support those two efforts. LACDPU’s goal is to strive to provide the highest level of reliable, utility service its customers expect to receive.

## Discussion of Short-Term Action Plans

### Asset Management Program (AMP) for OH

Under the department’s AMP, each of 10 crew members is responsible for his Feeder. Six linemen are assigned to the six overhead distribution feeders: 13, 15, 16, EA4, WR1 & WR2. Each year, the AMP program requires that each lineman perform quarterly line patrols, a detailed feeder assessment, and provide input with regards to feeder areas that require immediate and long-term action plans. For example, tree trimming, leaning pole, loose guy wire, etc. would be considered an immediate action. Feeder conversions, tie-lines, reconductoring, etc. would be considered long term actions.

### Overhead Pole Replacement Program

The EA4 overhead line is the connection between the townsite and Guaje/Rendija Canyons. The EA4 overhead line is the primary source of power for the townsite water system in Guaje canyon. The utility is currently issuing a request for a bid on a system design to replace the feeder. The replacement will be an upgraded system. The new lines will be transmission grade with larger conductors to support future growth. The EA4 line can also be used as a back feed to feeder 16.



### Infrared OH and UG line inspection

During the winter, the department will continue to *infrared* critical sections of the underground and overhead systems to look for hot spots as illustrated in Figure 14. Hot spots are areas that have loose connections leading to high-resistant points; these points will eventually burn up, fail, and cause a power outage.

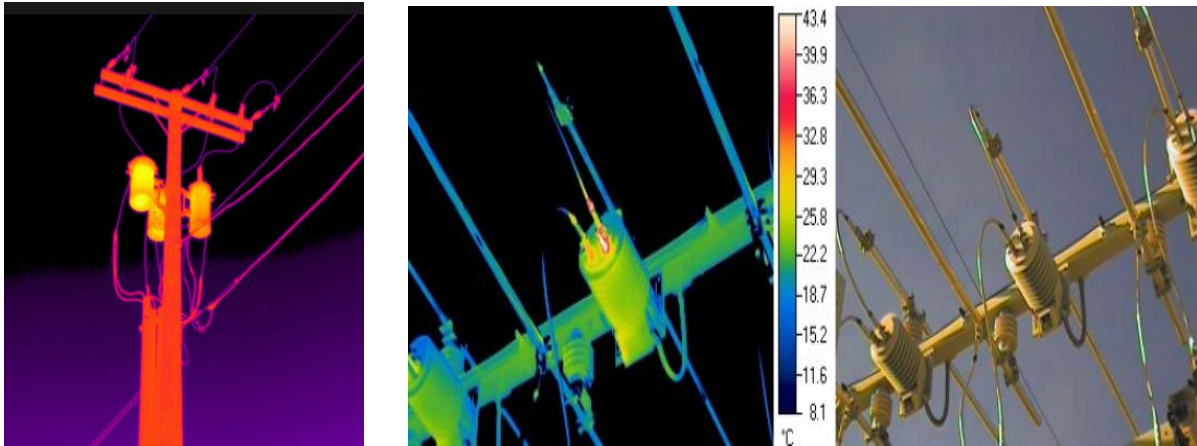


Figure 4. Infra-red picture for transformer pole & air break switch

### Asset Management Program (AMP) for UG

Four linemen are assigned to the four underground distribution feeders: 14, 17, 18, & LAMC/Landfill. Similarly, each year the linemen perform quarterly line patrols, a detailed feeder assessment, and provide input with regards to feeder areas that require immediate and long-term action plans. For example, unlevelled equipment, equipment oil leakage, rodent intrusion, equipment tagging, etc. would be considered an immediate action. Switch replacement, live-front transformer replacement, rust or oxidation painting, etc., would be considered a long-term action plan.

### UG Primary Replacement Program

As previously stated, much of the existing primary underground distribution system consists of typical 1970s cable standards with 30–40-year cable life expectancy including: non-jacketed, direct buried, 175 mil insulation, XLP (cross link poly), non-strand filled cable. Today's primary underground cable has a 40–50-year cable life expectancy including: exterior jacket, 220 mil (more insulation), TRXLPE (tree retardant cross link poly) or EPR (ethylene propylene rubber), strand-filled and installed in conduit. Conduit has been installed in the county since 2001. The department recently acquired a new cable pulling machine. The machine is equipped with a winch to pull cable into the conduit.

LACDPU continues to experience primary cable failures in subdivision areas, but mainly during the wet seasons. Moist ground tends to accelerate the *treeing effect* in the cable insulation leading to primary cable failures. The *tree effect* provides the shorting path, or *fault*, between the energized conductor and grounded neutral.

When primary cable sections experience two or more *faults*, the line section is ranked with a low or high priority. When high priority primary line sections are designed for replacement, other engineering and reliability upgrade features are added. For example, radial lines may be converted to loops, single phase lines may be converted to three phase, ridding of live-front equipment, adding sectionalizing points, re-routing for accessibility, etc. The idea is to ensure that even if the newly installed line fails, power can be restored even faster than before while impacting the least number of customers. Some examples include, the Canyon URD Project, San Idelfonso, Sioux Village, Del Note / Del Sol, Tsankawi, Meadow Lane, NM4, Trinity, Arizona, 35<sup>th</sup> street, 36<sup>th</sup> Street, Woodland, Club Road, 48<sup>th</sup> Street, Diamond Drive, 15<sup>th</sup> Street, WR2 Loop Addition, Trinity Apartment Replacement Project, NM502, DP Road phase 1, Rim Road, Connie, Cheryl, Aragon, Longview, La Paloma and the Los Alamos Medical Center LAMC. Replacement with the LASS Feeder project are projects which included loops, tie-points, and other reliability improvement designs as part of the original replacement project.

## Discussion of Long-Term Action Plans

### New LASS Substation Addition

The top reliability project for LACDPU is the construction of the new LASS Substation addition near the County landfill as illustrated in Figure 17. The LASS Substation is needed to maintain the SAIDI target into the future. LASS is also critical to the supply of steady and reliable electric power to the residents of the Los Alamos Townsite; more so if the Townsite area is expected to grow electrically.



Figure 5. LASS station Location Relative to LANL

The LASS substation will relieve load from the existing Townsite Substation. The station will tie to TA-3 on breakers LC1 and LC2. Under existing conditions and for a TC1 feeder outage, the Townsite peak demand exceeds the TC2 feeder ampacity rating as illustrated in Table 3. below. The loading condition may worsen as Los

Alamos County succeeds in bringing in electrical growth addition at the former 901 Trinity Site and DP Road.

Table 3. TC2 Feeder Loading for a TC1 Feeder Outage

Feeder	Size	Rating	Max Carrying Load	Townsite Peak Load
TC1	(2) 500 mcm CU	720 amp	16 MW	
TC2	1000 mcm Cu	615 amp	14.1 MW	16 MW

The LASS Substation will add feeder sources to maintain and improve the SAIDI and the system reliability in the Townsite area as illustrated in Figure 18. and as follows:

1. Reduce the number of customers on Townsite substation feeders 13, 15, & 16 (by moving half the customers on those feeders to LASS).
2. Provide new feeders 13T, 15T, 16T, S6, SM6.
3. Provide power to LACDPU customers with LACDPU power lines and not from LANL power lines, i.e., Transfer Station, LAMC (S6), Elk Ridge MH Park.
4. Add 50% additional system redundancy during scheduled or unscheduled outages to Townsite Substation Feeders. Feeders 13T, 15T, & 16T on LASS can back feed feeders on Townsite 13, 15, 16, Ski Hill and LAMC.

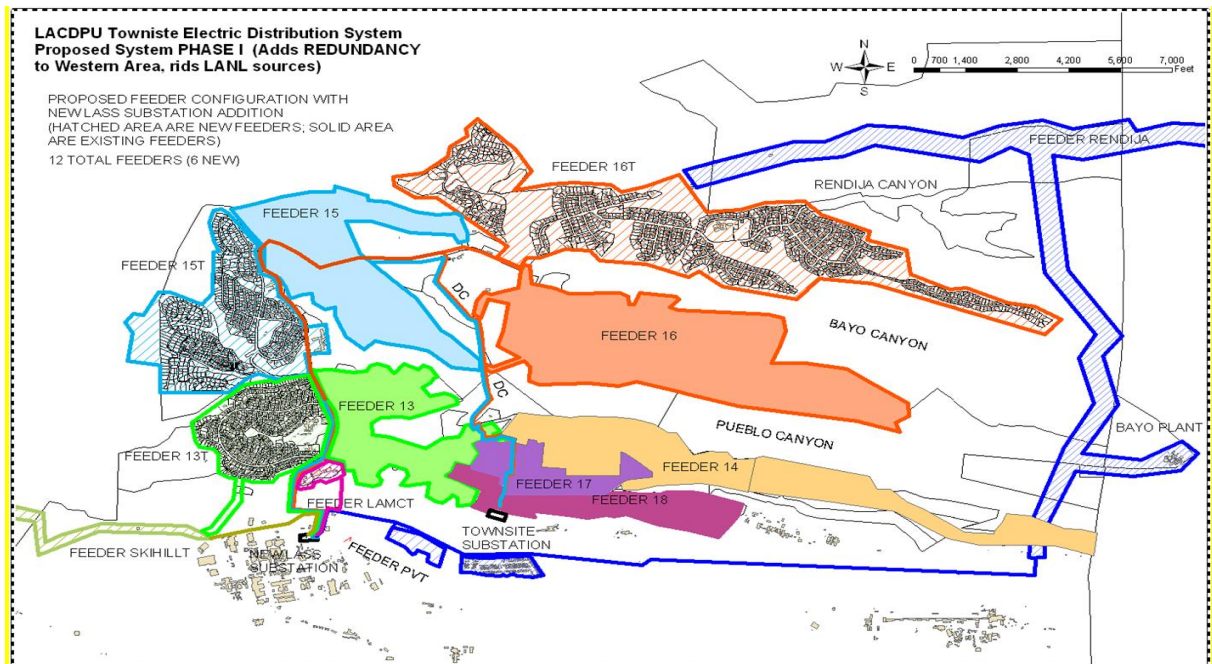


Figure 6. Los Alamos distribution area with LASS substation addition

### Distribution system SCADA expansion

The LACDPU power production group (LACP) has SCADA capabilities at the Townsite and White Rock substations. LACP monitors the individual feeder relay for breaker status and real-time power flows. During a power outage, the LACDPU lineman must patrol the power line to find and isolate the problem; then, return to the substation to develop a restoration plan and restore power. LACP has dispatch locations at LANL TA-3 and PCS building #5.

The LACDPU electric distribution department will develop and install a SCADA system which will monitor the electric equipment in the field. The system will cost approximately \$250,000. The system will incorporate information from the AMI, ArcGIS and the Milsoft Modeling system to provide real time system status to crews in the field and engineering. The new SCADA system will be based in Building #5 at PCS. The system should be budgeted in FY25.

Electrical Engineering utilizes an electric distribution modeling system developed by Milsoft. The system is called WindMil. The model provides essential information on circuit loading and connectivity options. The model can analyze circuit configurations to ensure that circuits are not overloaded, and loads are balanced. The model is a living system that is modified as improvements are made in the system. With the implementation of a SCADA system, the model will provide real-time system performance. The Milsoft package can then be expanded to provide a full real-time outage management system. The information will be accessible to linemen and engineers remotely also to assist in outage response. This is the future of the system.

Feeders 13 and 16 have four feeder line electronic reclosers (EOCRs) that can be integrated into the SCADA system. The EOCRs will be replaced and retrofitted with a SCADA card, a cell modem, and integrated into a new communication system. Feeder 15 is in the process of having a new recloser installed when it arrives. These *node additions* can be mapped into the SCADA system for remote monitoring. With SCADA control, an outage can be detected by LAC electric distribution crews and immediately be aware of the power outage area. Linemen can then dispatch directly to the problem area and not have to rely on customer outage calls. When the linemen isolate and repair the overhead power line problem, the lineman can restore power quickly.

Similarly, and after the new LASS substation is constructed, all *back feeding* tie-points can be fitted with scada system radios. Current engineering designs are underway to present budget requests for the new SCADA system. During power outages, the switches can be remotely monitored by engineers to help the LACDPU linemen re-route and restore power more efficiently. In summary, developing a new SCADA system into the distribution feeder network will help LACDPU identify outages quickly; allow lineman to be dispatched directly to the problem areas, and allow LACDPU the ability to re-route power and restore power quickly and efficiently.



### Three Phase Primary OH Backbone Rebuild

Table 4. illustrates the feeder length of the main three-phase OH back bone system with pole quantities. The long-term plan is to replace all three phase back bone poles to ensure the long-term reliability; a single major back-bone pole failure could potentially impact thousands of customers. Single-phase pole laterals which serve less than 50 customers will be replaced on a lower priority basis. The main canyon crossings have been replaced.

FEEDER #	# OF POLES	MILES OF LINE
13	81	3.44
Ski Hill	70	3.5
15	111	3.15
16	137	4.53
WR1	65	1.83
WR2	73	3.41
EA4	150	9
TOTALS	687	28.86

Table 4. Three Phase Main Feeder OH Backbone Lengths  
Primary UG Improvement Projects:

Major underground replacement projects or additions were constructed in the past: 0.8 mile, WR2 Loop Addition, 1.2-mile, Canyon Road Rebuild Project, and 1.0 mile, Tsikumu Village Primary Replacement Project. The three projects had become burdensome to LACDPU customers and affected the SAIDI year after year. The projects not only replaced the failed underground sections but also added three phase power line sections and new single phase primary loops. Each small project cost about \$500K and it will be difficult to sustain those type of projects in the future without impacting utility rates. Costs for materials are rising rapidly.

Major underground capital replacement projects have been identified in the immediate future by the asset management team. LACDPU is prepared to deal with major SAIDI impact projects as they may arise in the future. A list of major projects includes the Los Pueblos and Totavi area, La Senda and Pajarito Acres, Timber Ridge, La Vista and Big Rock Loop.

Other long term UG projects which will provide long-term reliability improvement is the addition of new UG or OH Loops. LACDPU has many radial lines which power anywhere from 30 to 100 customers; a failure on the radial line leaves few alternatives to restore power in a timely fashion. By identifying these long radial power lines, LACDPU can install new Loops within reasonable costs. Figure 7. illustrates priority areas for Loop additions in White Rock.

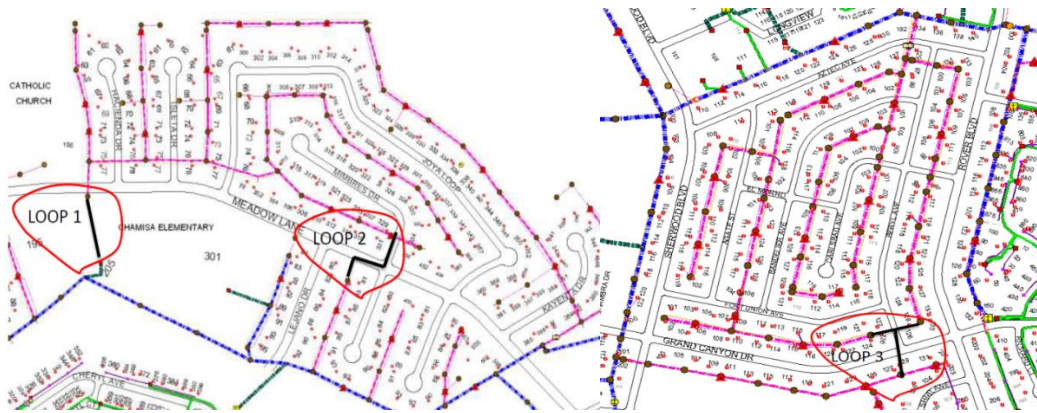


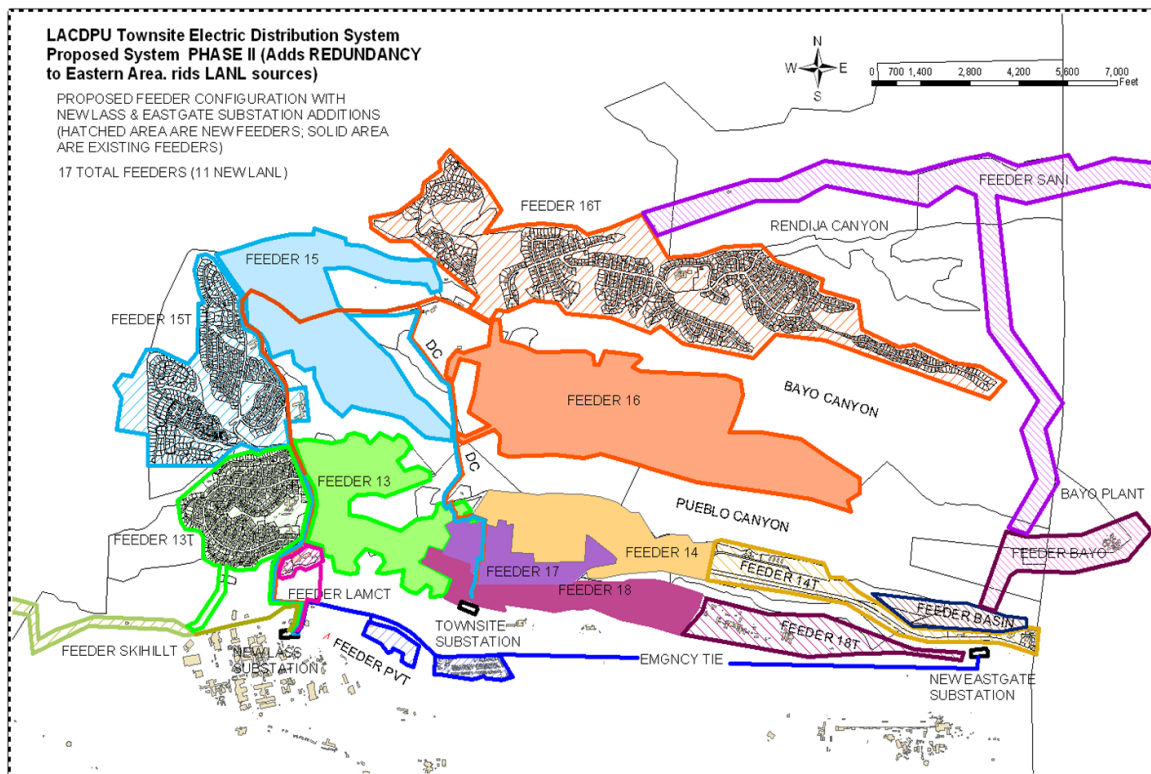
Figure 7. Single Phase Loop Addition Targets in White Rock

The LACDPU has many underground subdivisions with single phase primary laterals with 10+ transformers configured in a daisy-chain. When LACDPU experiences a faulted line section, it must identify the fault, isolate it, then back feed the outage area from a new power source. Back feed is done by manually transferring electrical load with a 200-amp elbow; at least two times during the restoration process. With continual line section failures, the manual back feeding process is resulting in secondary and residual failures, i.e. elbows or other weakened points. Therefore, LACDPU must look at other engineering solutions in identifying and isolating failed line sections so that no secondary or residual failures occur.

#### New East gate Substation Addition

The proposed East gate substation is similar in need to the LASS substation except that it provides a power source and feeder redundancy to the east side of Los Alamos. The substation need will be in proportion to the electrical needs for development along DP Road and the Camino Entrada area. The LAC-LANL jointly owned EA4 feeder is 9 miles in length and spans across rough mesa terrain from Pueblo to Rendija Canyons. The EA4 feeder provides power to the wastewater treatment Plant, water wells and pumps along Rendija Canyon, and to the San Idelfonso - Totavi area. The age and condition of the EA4 feeder, construction ability, and inaccessibility may prove to be an unreliable feeder source into the future without major capital investment. Also, power outages to the EA4 feeder may shut down critical LAC water and wastewater treatment facilities unpredictably. Replacement costs for the EA4 feeder will exceed 2 million dollars.

Figure 8. illustrates the added redundancy to the east side of Los Alamos with the addition of the new East gate substation. The substation adds new feeders for the DP road area (18T), Pajarito Cliffs Site, Bayo Plant, San Idelfonso, and a new feeder 14T to add redundancy to the Townsite substation's Feeder 10. This project would be in the 5–7-year outlook. An alternative prime location is the east side of TA-21. If and when the TA-21 area is converted to county ownership.



## Future System Reliability Projects

### 10 Year Capital Project Plan (\$23.5 Million over 10 years)

2024 - EA4 LINE DESIGN \$250,000  
2024 - SKI HILL \$2,800,000  
2024 - OPENNHEIMER / TRINITY / TIMBER RIDGE \$1,200,000  
2024 - DP ROAD PHASE II \$ 600,000  
2025 - EA4 RECONSTRUCTION \$5 MILLION  
2025 - 2026 - PIEDRA LOOP \$ 800,000  
2025 - 2026 - LA SENDA \$1 MILLION  
2027 - 2028 - LOS PUEBLOS \$1.6 MILLION  
2028 - NAVAJO \$300,000  
2028 - EAST GATE SUBSTATION DESIGN \$500,000  
2029 - ESTATES – LA MESA \$ 700,000  
2029 - BROADVIEW – COPPER – MOUNTAIN VIEW \$ 450,000  
2029 - BIG ROCK LOOP - \$300,000  
2029 - ARAGON AVE \$ 900,000  
2030 - EASTGATE SUBSTATION \$ 4 MILLION  
2030 - BRYCE AVE. \$ 800,000  
2030 - RIDGEWAY \$ 450,000  
2031 - WESTERN AREA \$700,000  
2031 - EASTERN AREA \$600,000  
2031-2032 - PONDEROSA ESTATES \$900,000  
2032 - DENVER STEELS \$ 600,000  
2032 - 2033 - ROVER \$1.2 MILLION

## Conclusion

In 2001 the Cerro Grande Fire North community reconstruction began and was completed in 2004. In 2006 the first system wide condition assessment was completed. LACDPU was struggling with the system reliability and the SAIDI was over 5 hours per consumer. At that time, there were many problems in the distribution system and LACDPU needed to develop short-term and long-term action plans to address the different infrastructure issues. In 2005 the townsite switch station was installed providing new breaker control and feeder separations. The cross-canyon loads were separated from the downtown circuits. In 2005 the White Rock substation Unit 2 failed and was replaced in 2006 with new switchgear which provided the additional WR3 feeder. In 2010, the department developed an Electric Reliability Plan, “ERP”; the ERP identified the issues and problems in three different work areas: engineering, overhead, and underground. The 2010 ERP described the strategy for the short-term and long-term action plans in the three work areas. During 2010, increased revenue funds were authorized to address the different action plans and the SAIDI steadily decreased. The workload was tough and LACDPU crews all too often functioned in a reactive mode, i.e. problem occurs, fix it, move on to another problem.



Also in 2011, the ERP was updated, and the action plans were updated as well. Increased revenue funds were authorized to continue with the action plans and the SAIDI continued to decrease. By 2012, the ED department had started to catch up with the increased workload and the department reorganized its FTES (full time employees). Two operations staff retired but were replaced with two new linemen; this allowed the department to develop a third line operations crew.

By 2013 and 2014, the ED department was able to catch up enough that 2 crews were primarily assigned to pro-active O&M and replacement projects. For the first time in recent memory, LACDPU can properly plan and replace sections of the electrical distribution grid which have failed in the past. By the same time, LACDPU had met its SAIDI target. However, the SAIDI target would not have been possible without the increased revenue and operational funds authorized.

In 2019 the engineering staff was reduced with the resignation of the Deputy Utility Manager for electric distribution. In 2020 the COVID pandemic shut down the supply chain and most operations. Construction of housing did not slow down, even as lumber prices skyrocketed. In 2020 an associate engineer was hired, and he resigned in 2021. In 2022 a new associate engineer was hired and is now active in the engineering program. The availability of electrical engineers is diminished. It will be difficult to maintain skilled electrical engineering staff in the future. The current, acting, Deputy Utility Manager for electric distribution is eligible for full retirement next year. Planning for future upgrades is dependent on the funding and labor provided to the department. The current disasters in the United States have compounded the supply chain crisis. Costs continue to escalate and lead times are expanded. Many supply companies have stopped taking orders due to the backlog in orders. The department will require the addition of several FTE positions to meet the goals of the County Administration. The department will now receive 60% of an associate engineer FTE from Power Production. The department will advertise for an Electrical Engineering Manager in July 24. This will be a difficult position to fill.

The Asset Management Program incorporates field inspections from the linemen into the system condition assessment. The linemen provide the necessary information to prioritize system replacement requirements. These requirements are then entered into the next budget cycle for the Utility Board and Council.

Though LACDPU has met the SAIDI target of 1 hour or less, there are still challenges ahead as identified in this, the FY2024 Reliability Plan update. The drive to meet the SAIDI target begins with the customers who expect a steady and reliable electrical supply but ends with them as well; because the customers must sustain the electrical rates which provide the revenue stream to meet and sustain the SAIDI target. However, LACDPU recognizes the balance between electric reliability WITH the retail cost for electricity within the neighboring utilities AND how much LACDPU customers are willing to support. Therefore, LACDPU will continue to engage its customers through a customer survey on this issue. Also, Increased installation of solar panels in the county and energy conservation measures are decreasing revenue to the department.

## Appendix A:

### OUTAGE RESTORATION PROCEDURE

The purpose for this document is to formalize a **consistent procedure** when responding to outages affecting the substation breakers or electronic and hydraulic reclosers “OCRs”; collaboratively referred to OCDs.

#### **BACKGROUND:**

As you are aware, Engineering and Operations is continuously being graded on its SAIDI which is the Sum of Customer Interruption Durations / Total number of consumers. The goal is to have a SAIDI less than 60 minutes but ours consistently exceeds that value. At the present time, maintaining a SAIDI of 60 minutes will be difficult to achieve due to the age of our electrical system and the lack of system redundancy. As we continue the overhead rebuild process, continue our bad underground replacement strategy and add additional substations, the SAIDI will trend down. In the meantime though, it is very important that we don't impact the SAIDI more than necessary during the outage restoration process. The following procedure attempts to minimize outage time but also makes you aware of the potential impacts of energizing the OCDs under 3 phase conditions.

#### **FACTS ABOUT OUTAGES:**

According to NRECA and other studies, 70-80 percent of Faults on overhead systems are temporary or of a transient nature. In addition, 70% of all Faults are single-line-to ground Faults. What this means is that 50% - 56% of the time, **RESETTING** the OCD and **CLOSING IN** (on 1 shot) will restore power. However, it's also important to recognize that 30% of the time, a larger problem such as phase-to-phase, 3 phase Fault, “tree online”, “downed power pole”, etc. could exist. Energizing a PH-PH or 3PH fault creates substantially higher fault currents than 1 PH faults thereby potentially causing greater equipment damage; even worse, energizing a permanent fault near human contact could be disastrous.

Therefore, the following procedure shall be used when responding to OCD type outages: When a breaker operates – call Stephen Marez 505-780-0481 and begin public information procedures.

Obtain outage information from the Meter Management System. Determine which protective devices have operated.

### **STEP 1:**

**BEFORE** you energize an OCD, INTERROGATE the substation breaker or OCR control. **Here's what you want to look for:**

- 2 or 3 Phase Faults (other than 1 Ph).
- Ph to Ph (or 2 phase) generally means “slapping of lines” - watch for that on long spans (such as canyon crossings).
- 3 Ph Faults generally means something fell across line, pole down, etc. i.e. a PERMANENT Fault, **don't RECLOSE but start patrolling**; look for areas with trees, call dispatch to see if anyone reported an accident;
- Faults higher than 4000 amps for **Townsite**; a value this high is within **the first mile** and so take a quick **patrol before energizing**.
- The OCDs are preprogrammed to provide a distance to the Fault, look for that value and phase.
- Faults around 3000 amps are immediately downstream of the OCRs at North and Barranca Mesas, perform a quick patrol.
- Faults higher than 3000 amps for **White Rock** are within 0.75 miles; 2200 amps (Rover) - 1300 amps (Sherwood) are at the end of the lines.

### **STEP 2:**

If you do want to close the OCD (remember it's OK 55% of the time), **FIRST**, **place the OCD on Non-Reclosing** or 1-Shot before energizing.

- For the Multilin substation breakers, place the breaker on “Recloser Disabled”. Note: any operation within 30 seconds after a manual close, even when placed on NORMAL (reclosers ENABLED), **will lock-out the breaker**; we experienced this before.
- For the ABB OCRs, place the breaker on “Recloser Blocked”.

### **STEP 3:**

If the OCD holds after the several minutes, place the OCD back to NORMAL by disabling the Non-Reclosing or Recloser Blocked functions or Enabling the Recloser Function.

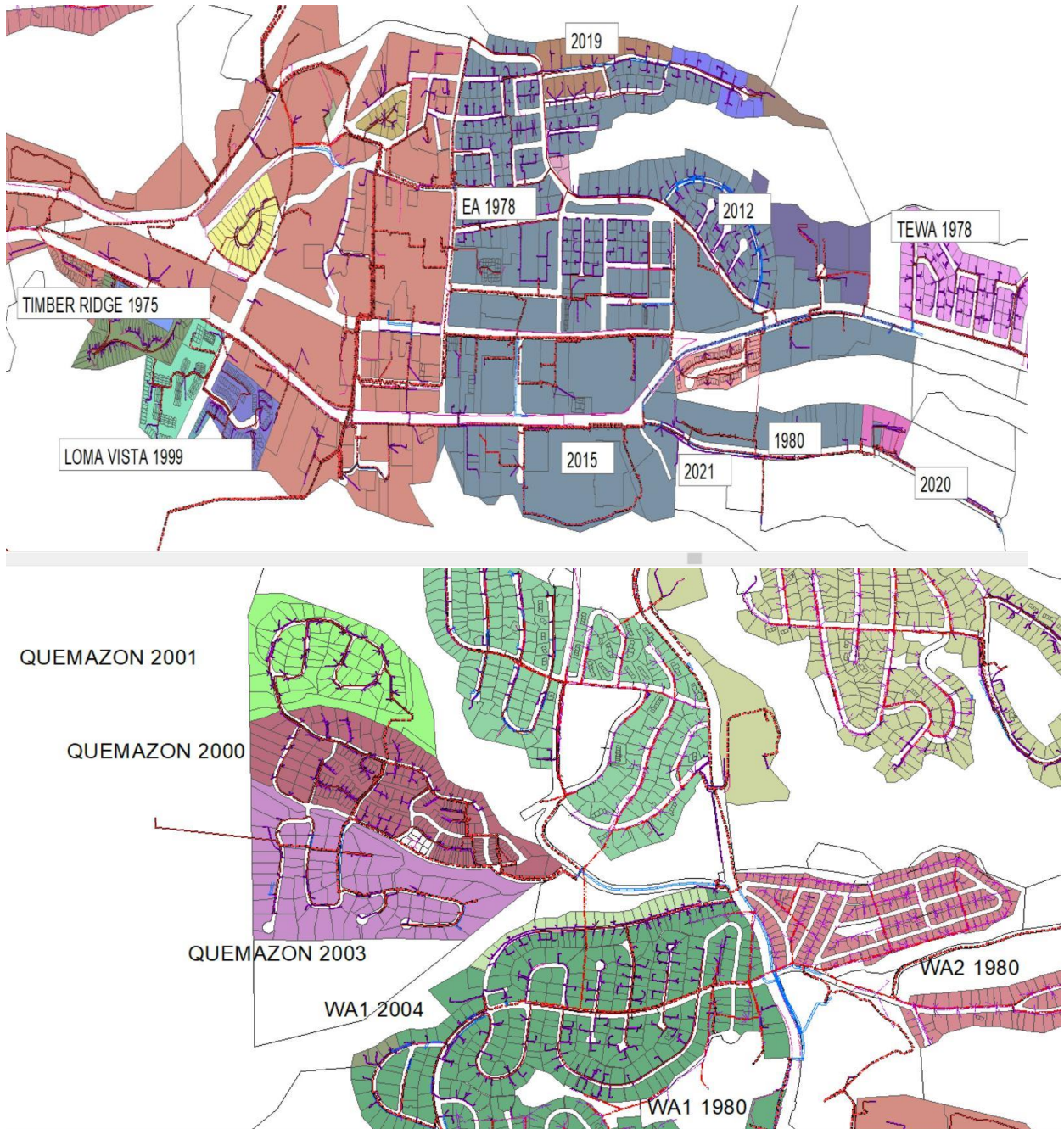
### **ADDITIONAL INSTRUCTIONS:**

- Do not respond on the **FIRST OCCURRENCE** when Dispatch calls about a voltage sag or blink to the LANL system. When there is a substation breaker operation at The LAC Townsite substation, EVERYONE tied to

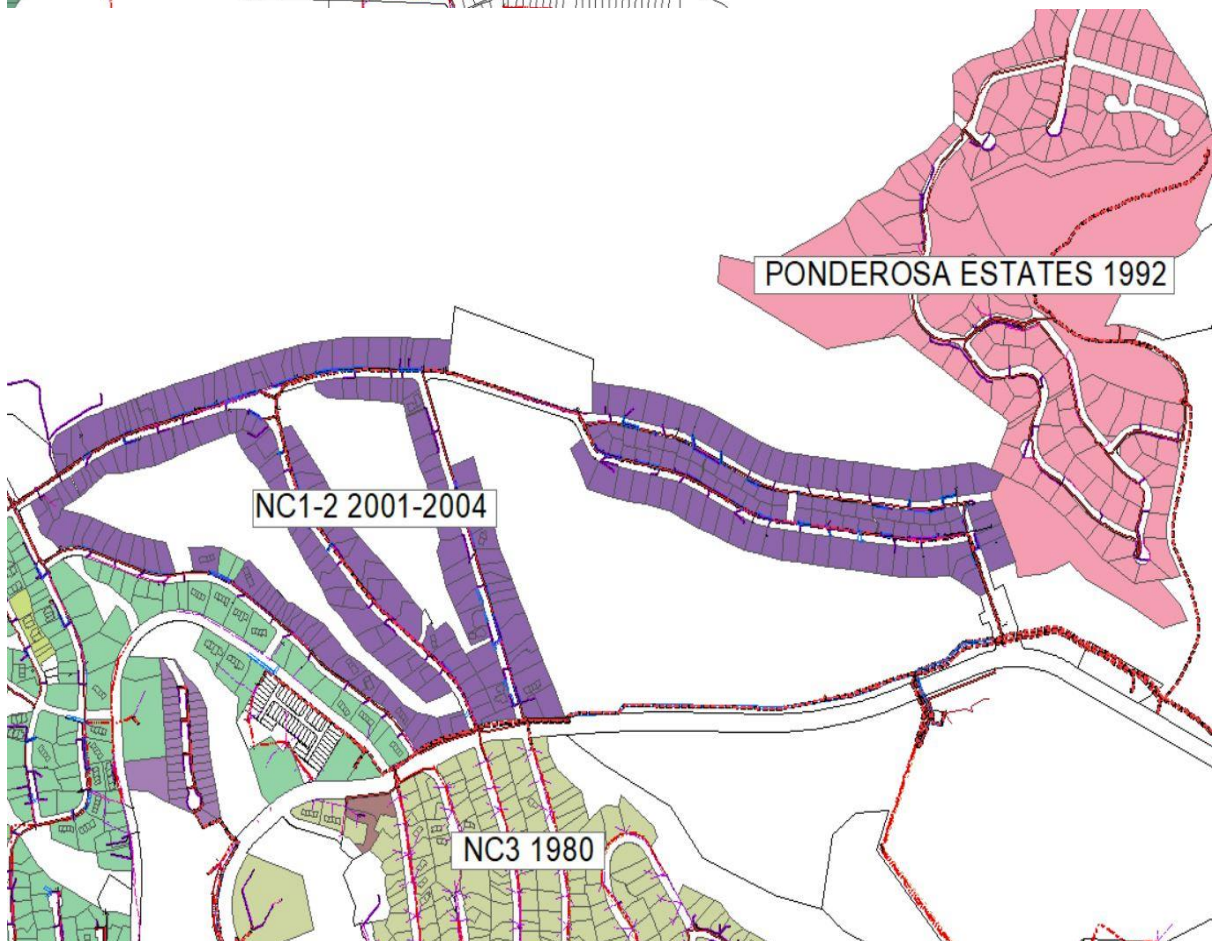
- the substation (including LANL) will experience a voltage sag or flicker. Keep note of the occurrence; if the problem persists **SEVERAL** times (say 3 blinks), then go to the substation, determine which feeder experienced the operation, interrogate the OCD, and patrol.
- Similarly, if someone calls that their lights went off-and-on; take note of the call but don't respond unless it happens on **SEVERAL** occasions. It's obvious the OCD/OCR is doing its job; recall that 70-80% of Faults are momentary or transient in nature.
  - In either situation, notify Stephen Marez about the incident on the following day. We will then download the OCD information and follow up on the cause and location of the disturbance.

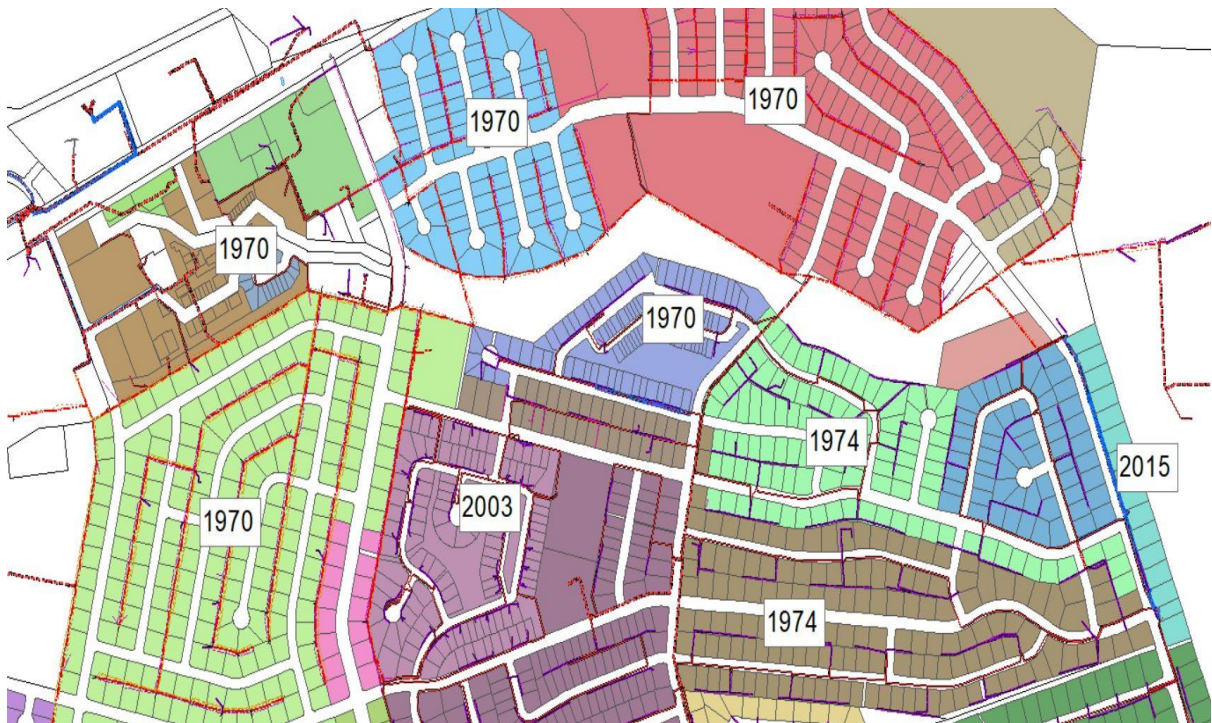
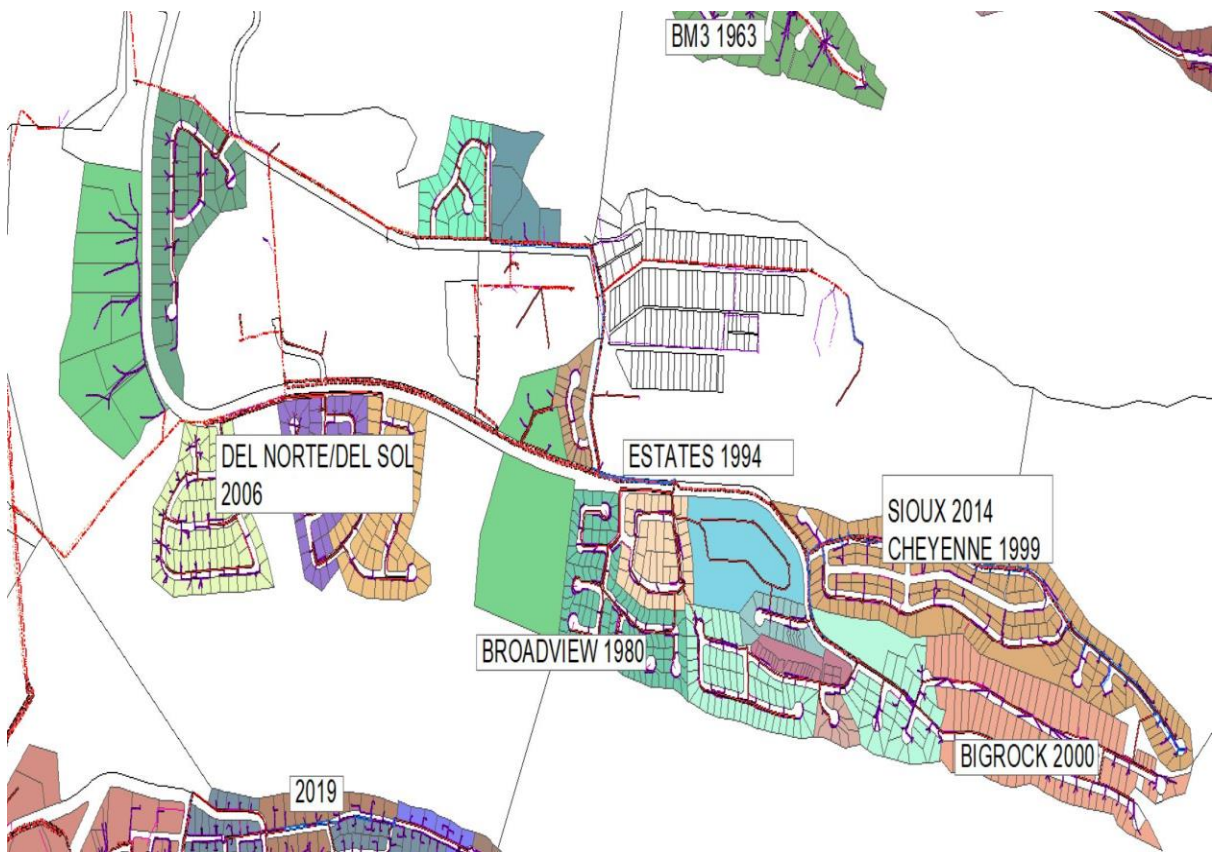
TO ALL LINE CREWS: ANY QUESTIONS ASK !!

## Appendix B: SUBDIVISION MAPS WITH AGE

















## Appendix C

<b>CIRCUIT-PRIORITY-RANK</b>	<b>DESCRIPTION</b>
13-1-1	REPLACE 1000' 3 PHASE PRIMARY 500MCM FROM OPPENHEIMER TO TIMBER RIDGE
13-1-2	REPLACE 1000' 3 PHASE PRIMARY 1/0 CABLE ON OPPENHEIMER FROM TRINITY TO THE SOUTH
13-1-3	REPLACE 1000' 3 PHASE PRIMARY 500MCM FROM STATION TO OPPENHEIMER
13-1-4	REPLACE SWITCHES SC1305A, SC1309 AND SC1309A
13-1-5	NEED TO REPLACE TRANSFORMERS 725 AND 726
13-1-6	NEED TO RELOCATE TRANSFORMERS 1058, 1059 TO SIDEWALK
13-1-7	NEED TO REPLACE TRANSFORMERS 856 AND 857
14-1-1	REPLACE 15TH AND IRIS SWITCH SC1401A
14-1-2	REPLACE YMCA SWITCH SC1401A2
14-1-3	REPLACE YMCA TRANSFORMER #1117
14-1-4	REPLACE SOMBRILLO SWITCH SC 1404A AND REPLACE LINE TO NM502
14-1-5	REPLACE EASTGATE SWITCH T23201
14-2-1	REPLACEMENT OF TRANSFORMERS: 852,969,787,788,972,968,970,1117
14-2-2	SHANNON SWITCH INSTALL JUNCTION AND REMOVE SC20505
14-2-3	REPLACEMENT OF SWITCHES SC1404A,1405,1406,1407,1406A,1408,1409,1406B,1410
15-1-1	REPLACE URD PRIMARY LINE FROM SYCAMORE TO PUEBLO COMPLEX
15-1-2	REPLACE SC1517 PMH9 AT QUEMAZON
15-1-3	REPLACE SC 1501A ON ROSE STREET
15-1-4	REPLACE SC1512 URBAN AT NORTH ROAD
15-1-5	INSTALL LOOP FEED FOR TOTAVI
16-1-1	INSTALL PRIMARY J-BOXES AT 897 & 921 ESTATES DR.
16-1-2	REPLACE PRIMARY CABLE IN LA MESA RRAILER PARK

16-1-3	INSTALL PRIMARY J-BOXES AT CORNER OF KRISTI LN AND BROADVIEW
16-1-4	INSTALL PRIMARY J-BOXES AT CORNER OF TIFFANY AND BROADVIEW
16-1-5	REPLACE 1 PHASE PRIMARY SECTIONS ON LOS PUEBLOS : 2000' TOTAL
16-2-1	REPLACEMENT OF SWITCHES 1603A, 1604,1605,1605A,1605B,1610
16-1-2	REPLACE PRIMARY CABLE IN LA MESA RRAILER PARK
17-1-1	REPLACE POLE #6152
17-1-2	REPLACE POLE #6154
17-1-2	REPLACE POLE 6137
17-1-3	REPLACE POLE #6138
17-1-4	REPLACE POLE # 6143
17-1-5	REPLACE POLE #6144
17-1-6	REPLACE POLE #6034
17-1-7	REPLACE POLE #6011
17-1-8	REPLACE POLE #6002
17-1-9	REPLACE POLE #6037
18-1-1	REPLACE SWITCH SC1803
18-1-2	INSTALL TRANSFORMER PAD AT MERRICK -
18-1-3	REPLACE OPEN DELTA TRANSFORMERS AT DP ROAD
18-1-4	REMOVE TRANSFORMER 1101 FROM MAIN TIE TO 18 AT DP ROAD
EA4-1-1	DESIGN AND REPLACEMENT
WR1-1-1	REPLACE 4 PADMOUNT SWITCHES ON ARAGON AVE.,WR3-3,WR3-4,WR3-5,WR3-6
WR1-1-2	CHANGE OUT TRANSFORMER P3631 AT DNCU MALL
WR1-1-3	CONDUCTOR REPLACEMENT LA SENDA AND PIEDRA LOOP
WR2-1-1	REPLACE CONDUCTOR VALLE DEL SOL



# **ELECTRIC RELIABILITY PLAN**

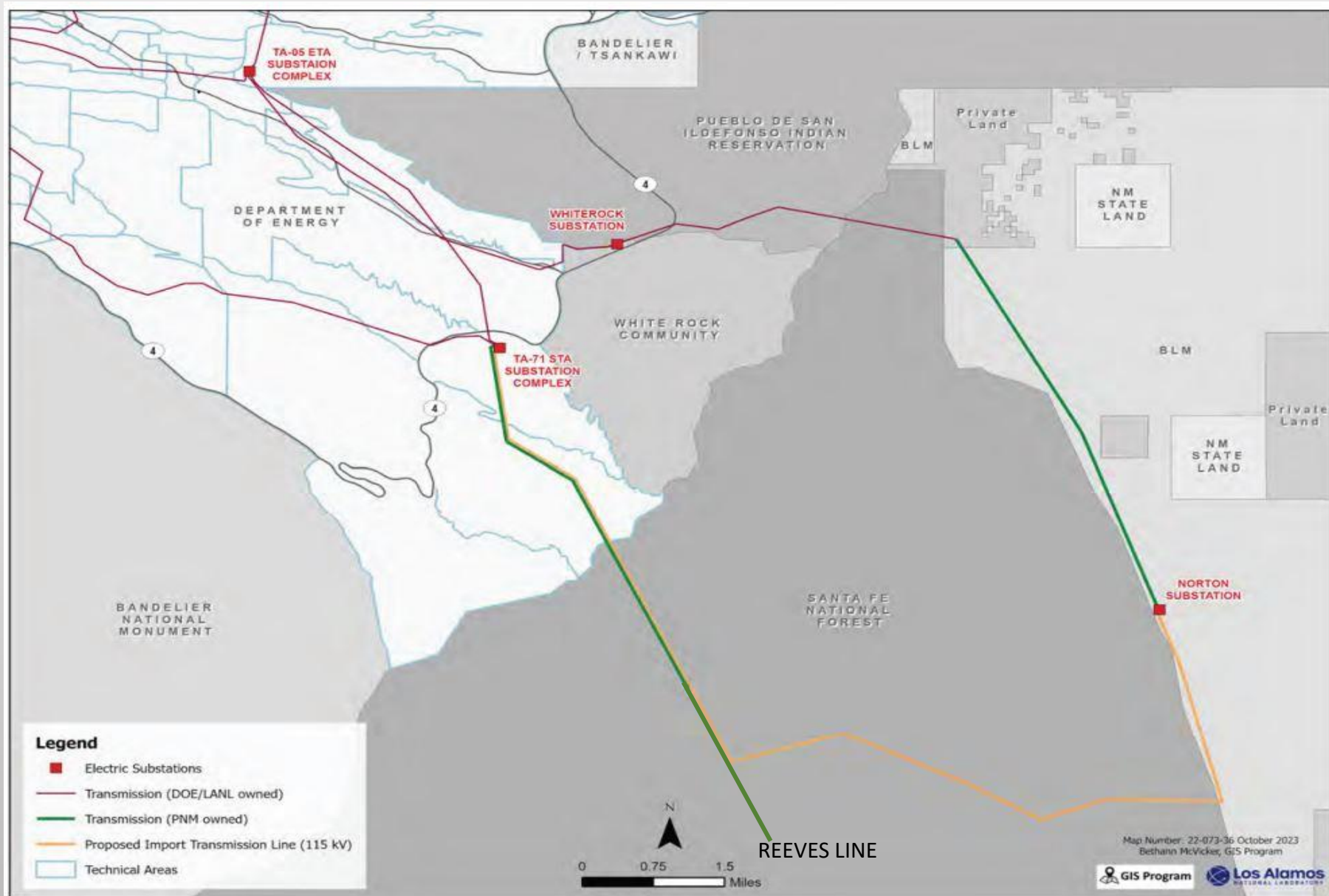
**INFORMATION AND DISCUSSION**

Stephen Marez, PE, PMP  
Deputy Utility Manager  
Electric Distribution

- TRANSMISSION SYSTEM
- DISTRIBUTION SYSTEM
- RELIABILITY MEASURES
- SHORT TERM ACTION PLANS
- LONG TERM ACTION PLANS



# REGIONAL 115KV TRANSMISSION

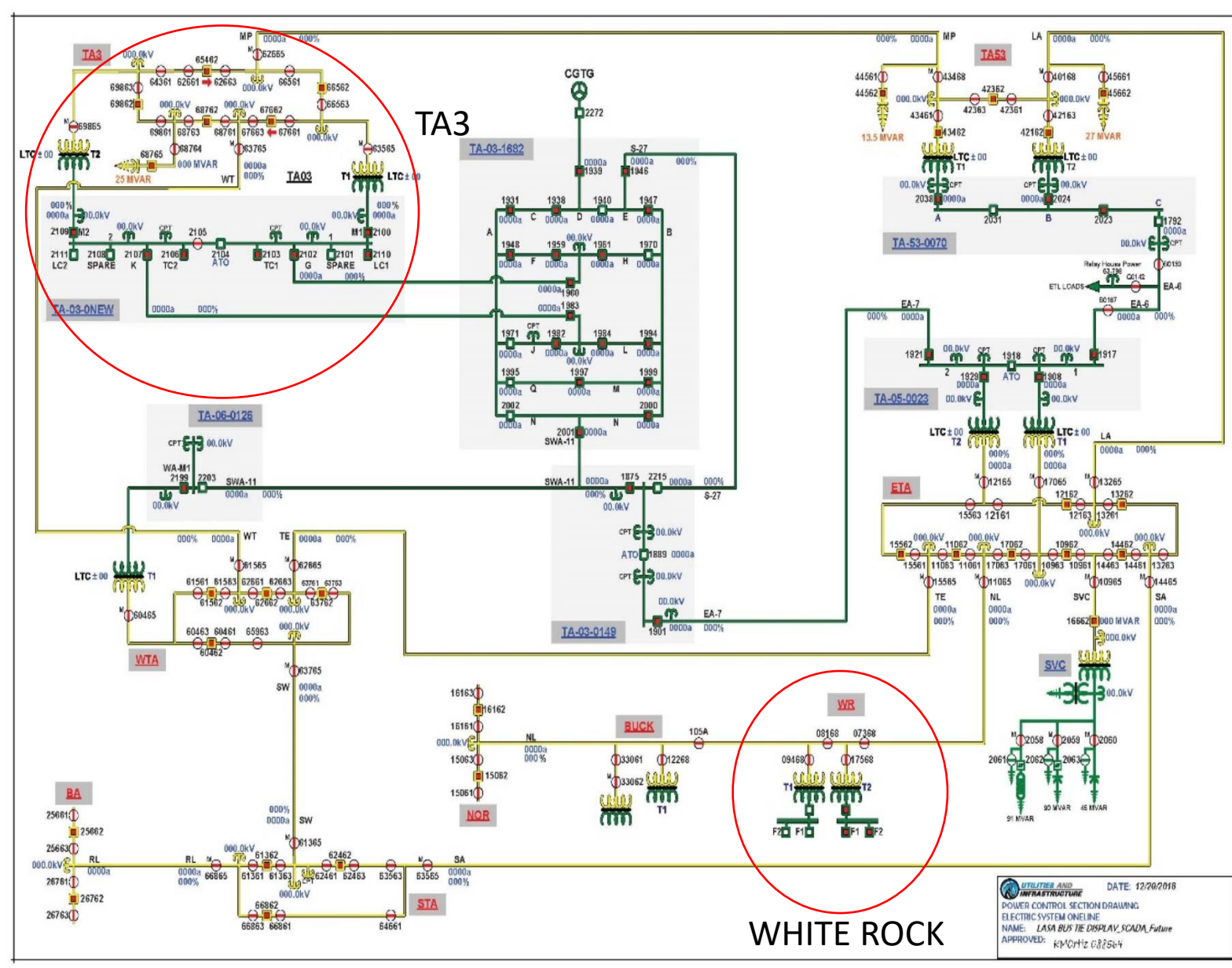


# PROPOSED 3<sup>RD</sup> TRANSMISSION LINE

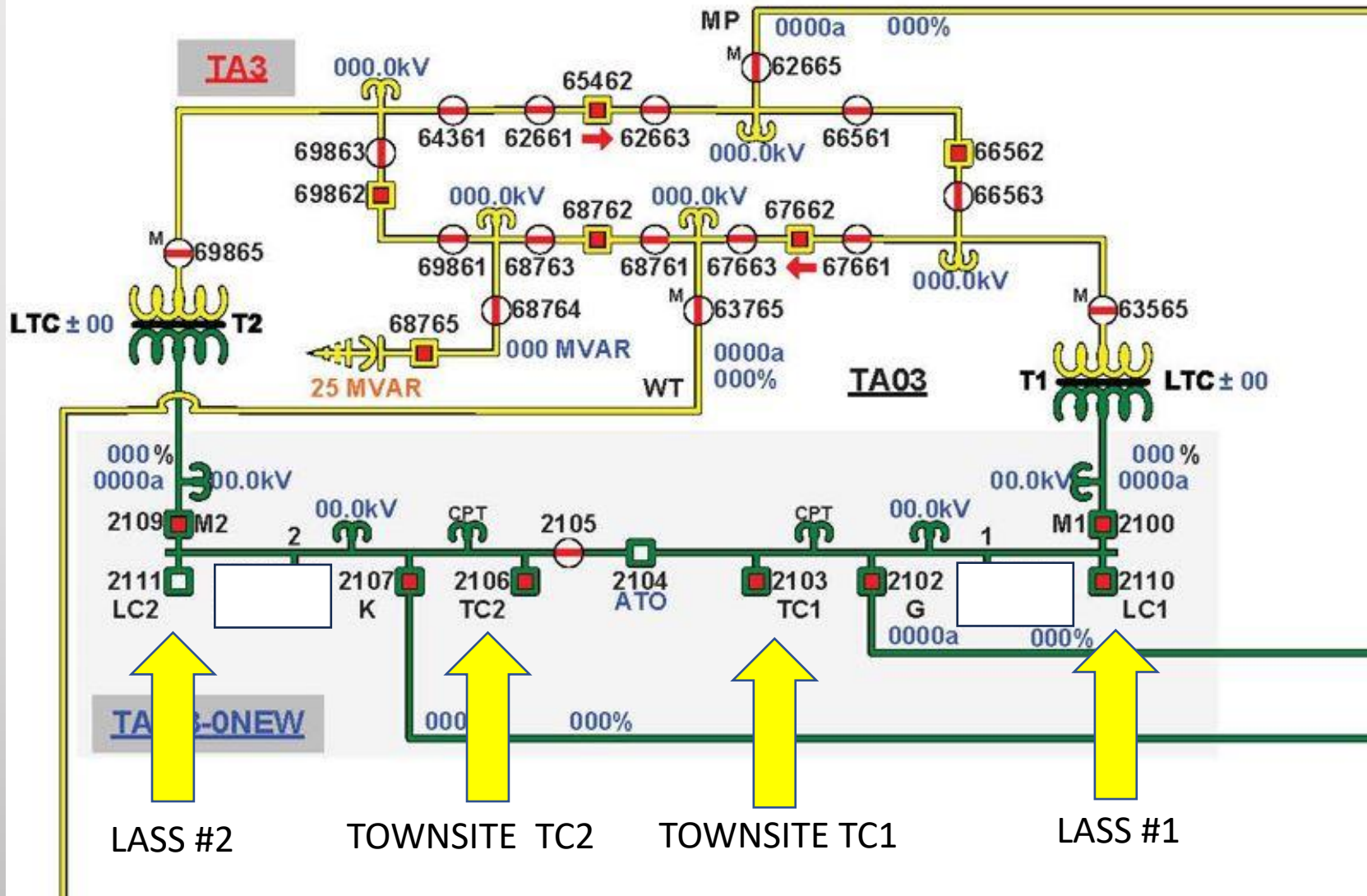




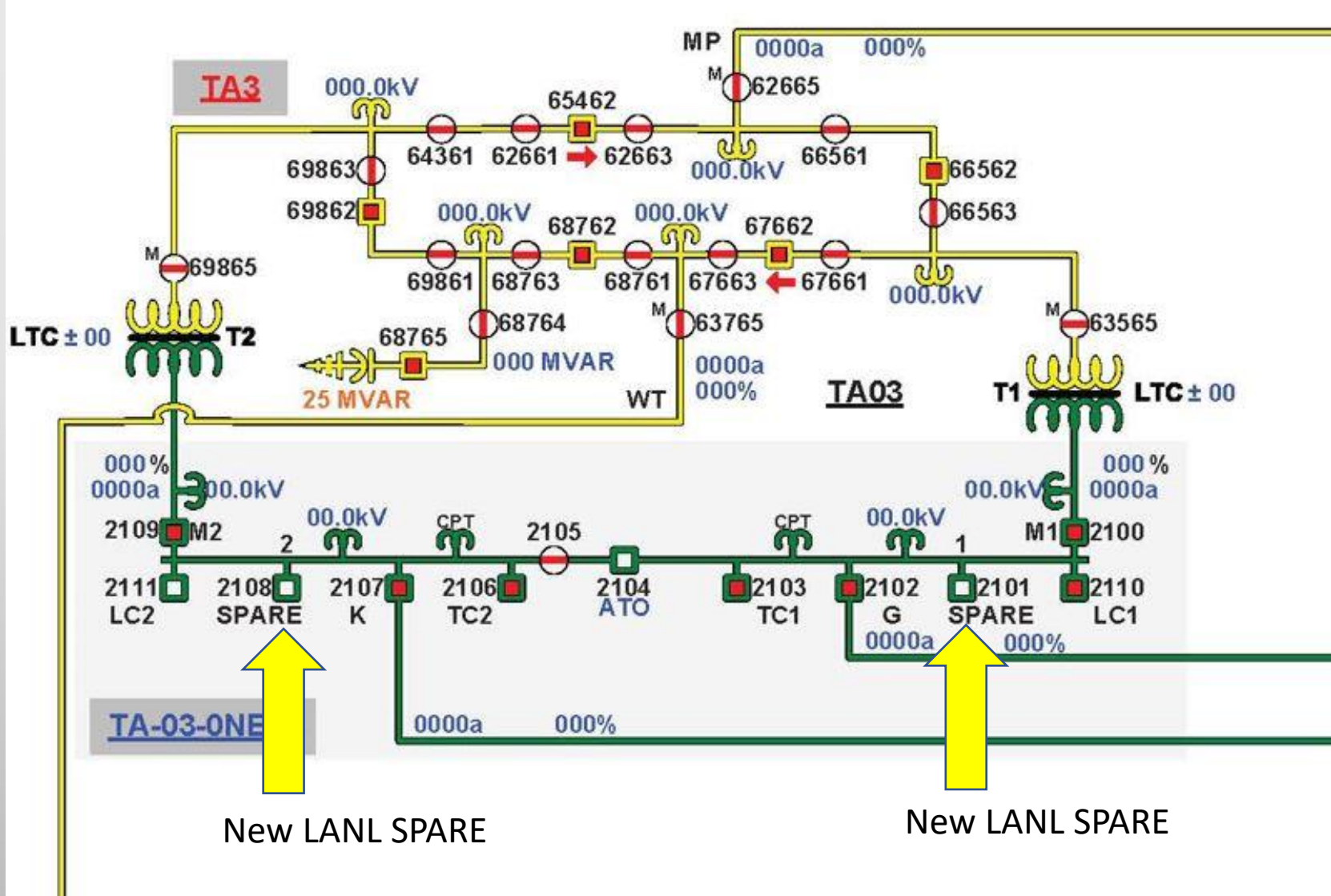
# LOS ALAMOS COUNTY AREA TRANSMISSION SYSTEM



# TA-3 Substation



# VERTICAL BREAKER ACQUISITION



# VERTICAL BREAKER ACQUISITION

The TA-3 substation contains two spare breaker sections designated for LANL use.

The new LASS facility was connected to TA-3 using the two spare breaker sections as tie circuits LC1 and LC2.

The spare breakers will have to be replaced with new breaker sections and be made available to LANL.

Los Alamos County will pay \$2,447,726 over a three year period for the construction of two vertical breaker sections within the TA-3 substation.

# TOWNSITE FEEDER CIRCUITS

Circuit 13: Western Area and Ski Hill

Circuit 14: Eastern Area and Pajarito Cliff Site

Circuit 15: Quemazon , North Community, Ponderosa Estates

Circuit 16: North Mesa and Barranca Mesa

Circuit 17: Downtown Commercial North of Trinity

Circuit 18: Downtown Commercial South of Trinity and DP Road

## FUTURE LASS FEEDERS

Circuit 13T: Western Area and Ski Hill

Circuit 15T: Quemazon , North Community, Ponderosa Estates

Circuit 16T: North Mesa and Barranca Mesa

Circuit SM6: LANL HRL Building with tie to Circuit 13

Circuit S6: Los Alamos Medical Center

Circuit S3: East Jemez Road – Eco Center , Elk Ridge

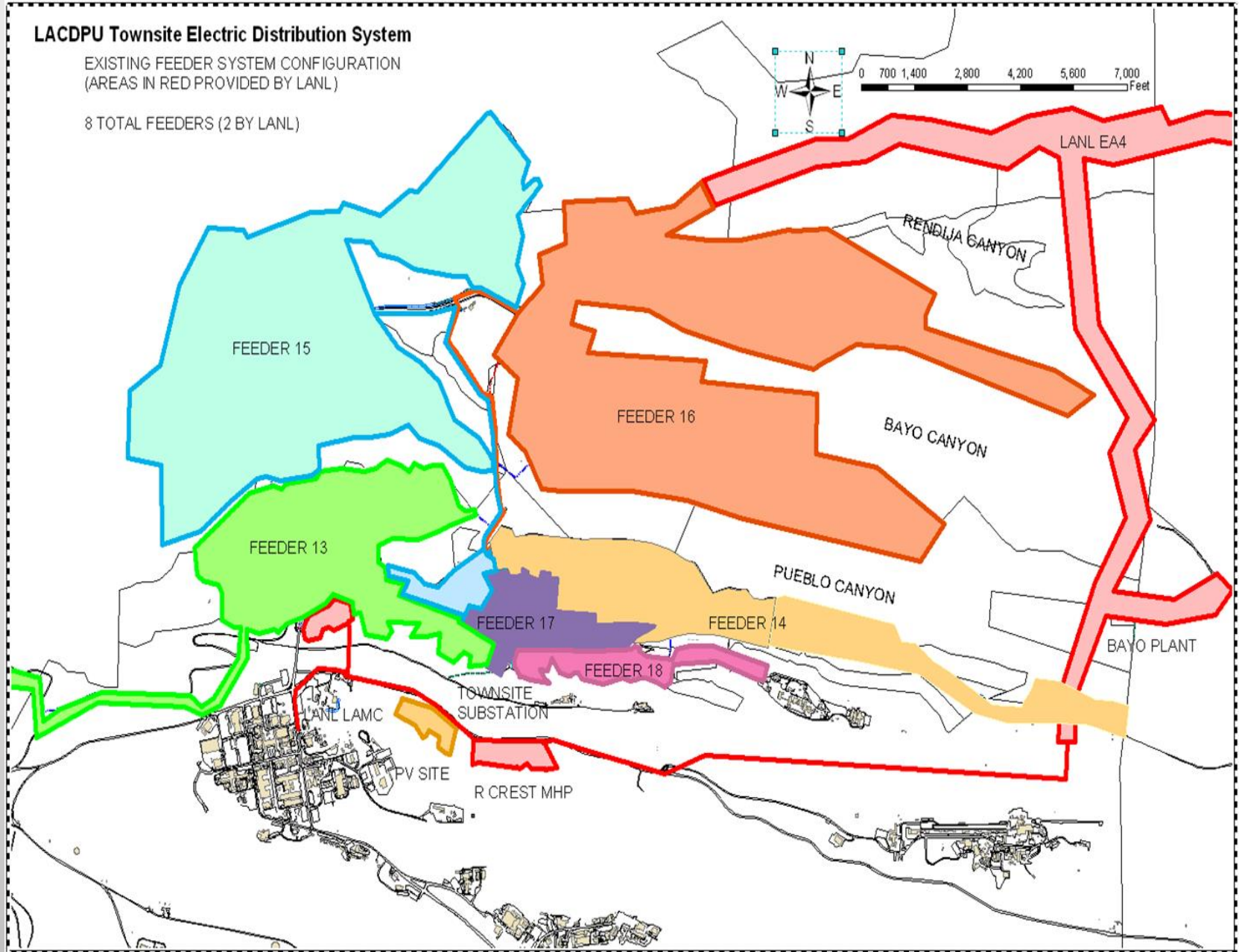
Circuit S18: West Jemez Road – Research Park and New Ski Hill Feeder



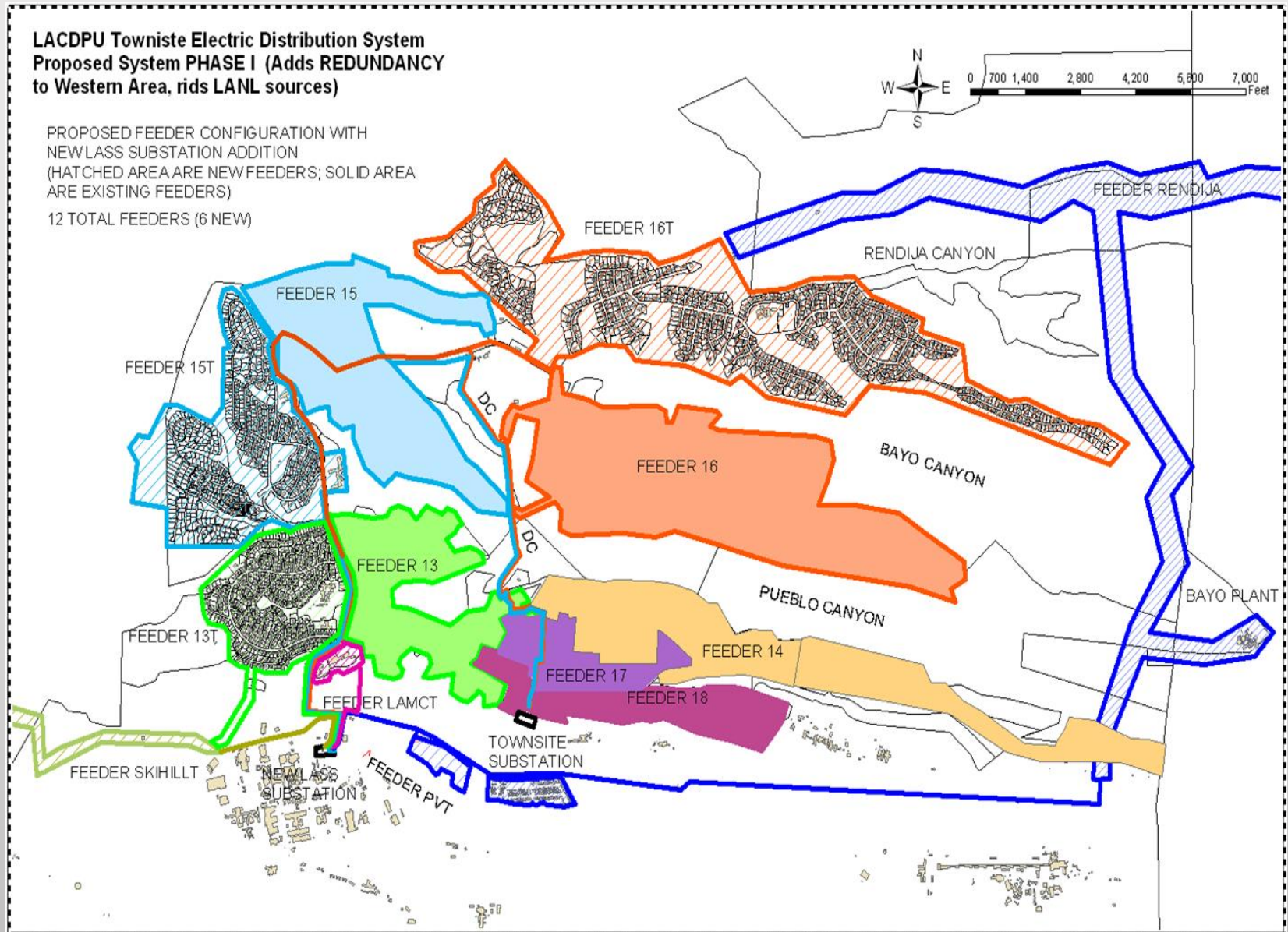
## LACDPU Townsite Electric Distribution System

EXISTING FEEDER SYSTEM CONFIGURATION  
(AREAS IN RED PROVIDED BY LANL)

8 TOTAL FEEDERS (2 BY LANL)



# Los Alamos Distribution Area with LASS



**The LASS Substation will add feeder sources to maintain and improve the SAIDI and the system reliability in the Townsite area as illustrated in the next slide.**

- Provide new feeders 13T, 15T, 16T, S6, SM6, S18.**
- S18 will provide new independent ski hill tie line**
- Reduce the number of customers on Townsite substation feeders 13, 15, & 16 (by moving half the customers on those feeders to LASS). Reducing the number of customers affected by primary feeder outages.**
- Provide power to LACDPU customers at the Eco Station, LA Medical Center (S6) and Elk Ridge MH Park.**
- Add 50% additional system redundancy during scheduled or unscheduled outages to Townsite Substation Feeders. Feeders 13T, 15T, & 16T on LASS can back feed feeders on Townsite 13, 15, 16 and the Ski Hill.**



# Los Alamos Switch Station (LASS)





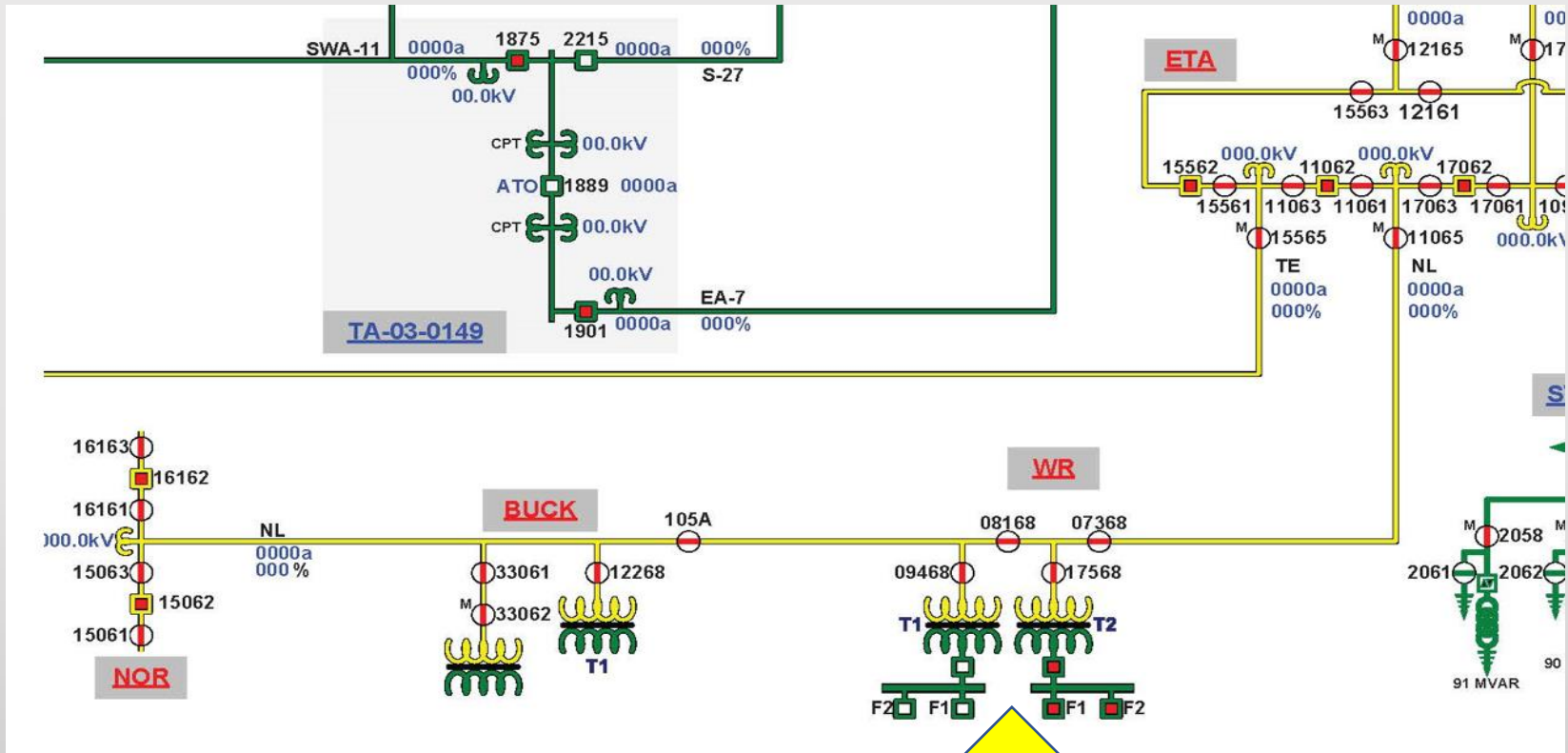




## EAST JEMEZ ROAD CROSSING



# WHITE ROCK SUBSTATION



WHITE ROCK SUBSTATION



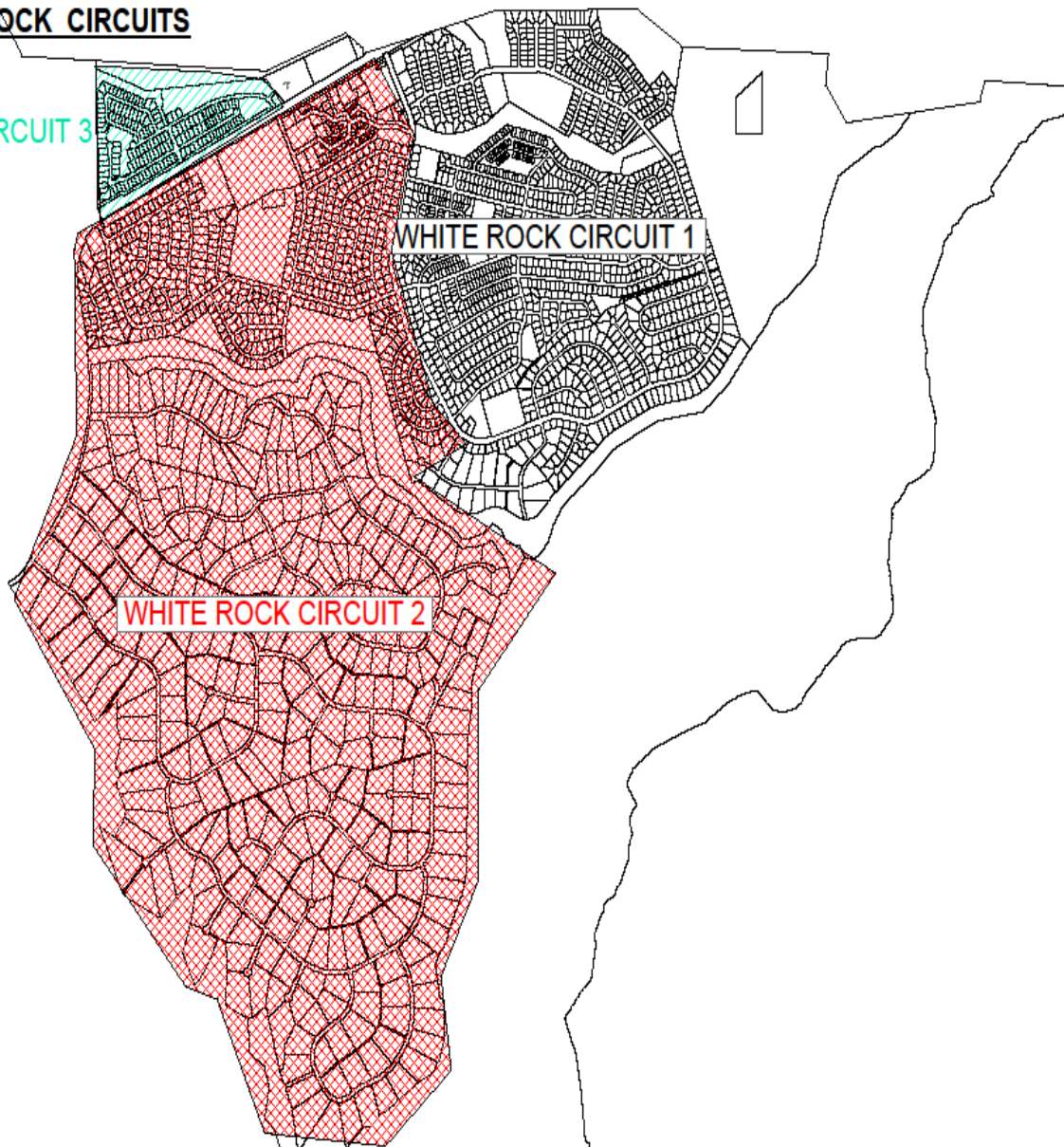


## WHITE ROCK CIRCUITS

WHITE ROCK CIRCUIT 3

WHITE ROCK CIRCUIT 1

WHITE ROCK CIRCUIT 2



# RECENT POWER OUTAGES

DATE	CALL	CIRCUIT	CAUSE	START TIME	END TIME	DURATION	METERS
2/27/2024	Utilities	13	WEATHER	6:30	7:20	0:50	20
2/27/2024	Utilities	SKI HILL	TREE	6:30	12:30	6:00	16
3/7/2024	Utilities	14	URD Failure	22:15	0:00	1:45	80
3/7/2024	Utilities	14	URD Failure	22:15	1:15	3:00	7
3/7/2024	Utilities	14	URD Failure	23:00	2:00	3:00	9
3/15/2024	Utilities	13	WEATHER	11:31	12:30	0:59	7
3/15/2023	Utilities	ELK RIDGE	WEATHER	11:30	12:30	1:00	43
3/15/2023	Utilities	15	WEATHER	11:00	13:30	2:30	4
3/15/2023	Utilities	15	WEATHER	11:00	12:00	1:00	24

GREEN TREE FELL DUE TO HIGH WINDS AND SNOW



**PONDEROSA TREE ACROSS SKI HILL OVERHEAD FEEDER**



## RECENT SYSTEM OUTAGES



**CREWS REPLACING BROKEN CROSS ARMS CAUSED BY  
THE TREE IN THE PREVIOUS SLIDE**



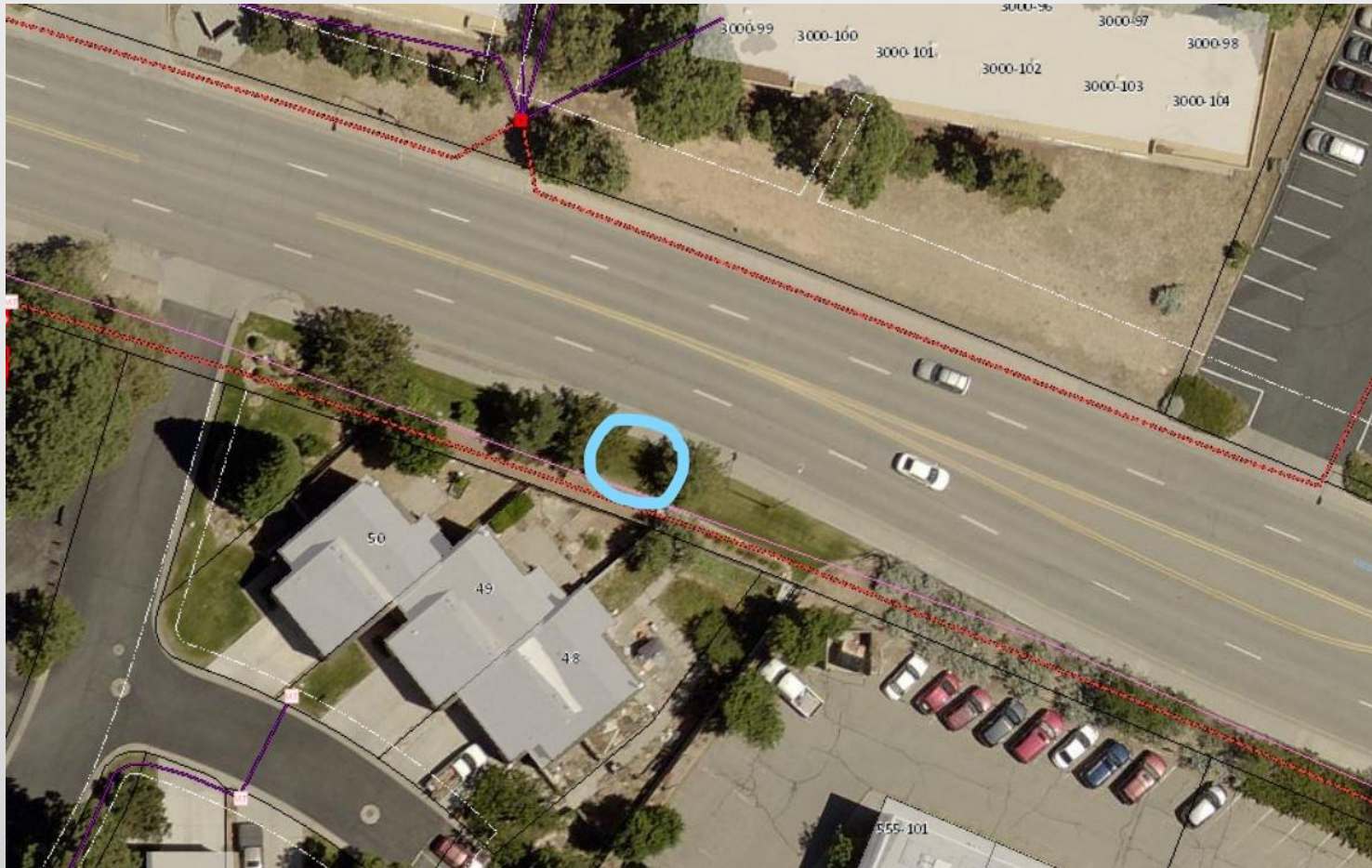
## RECENT SYSTEM OUTAGES





## OUTAGE DUE TO RUNAWAY TRUCK STRIKING POWER POLE

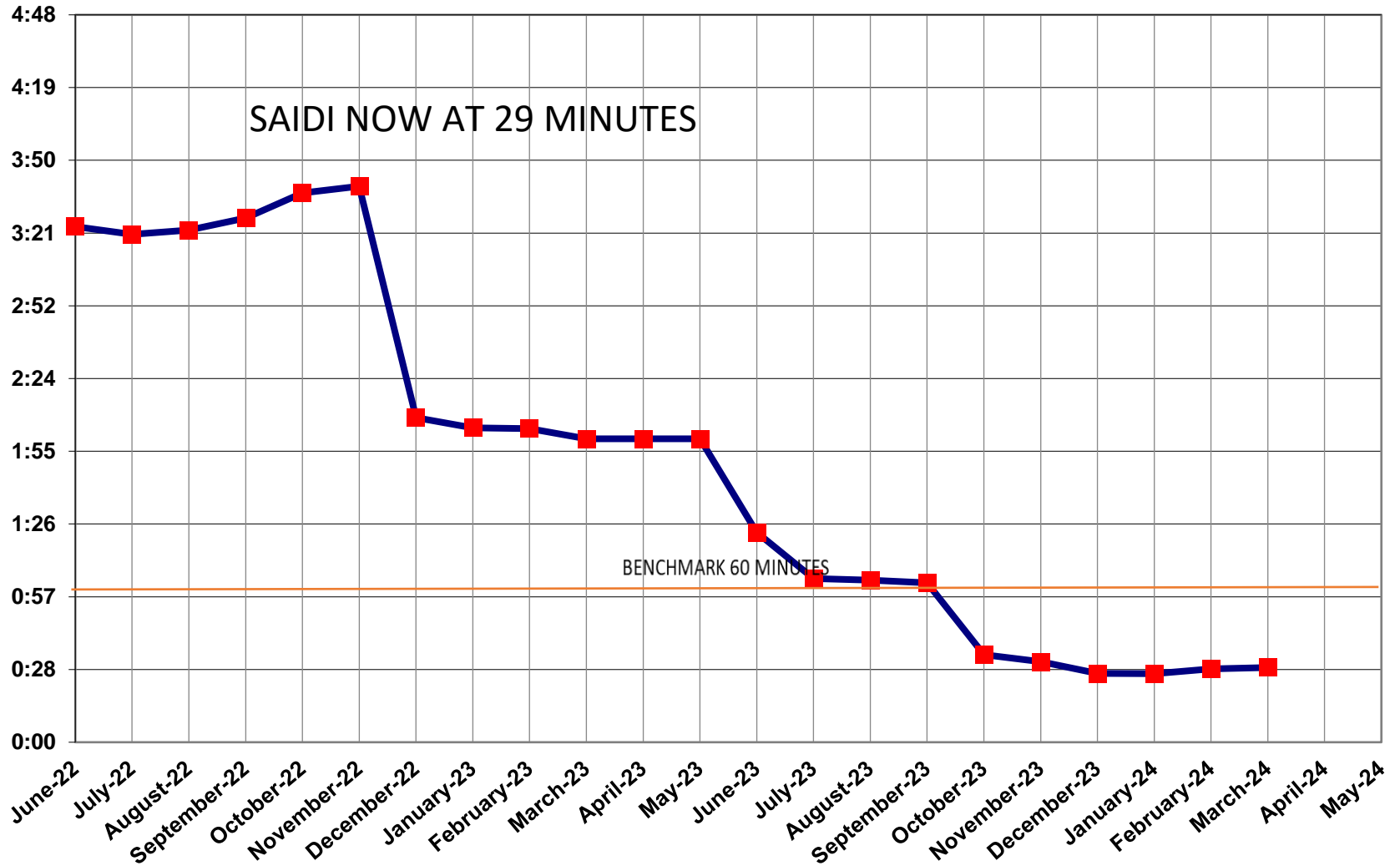




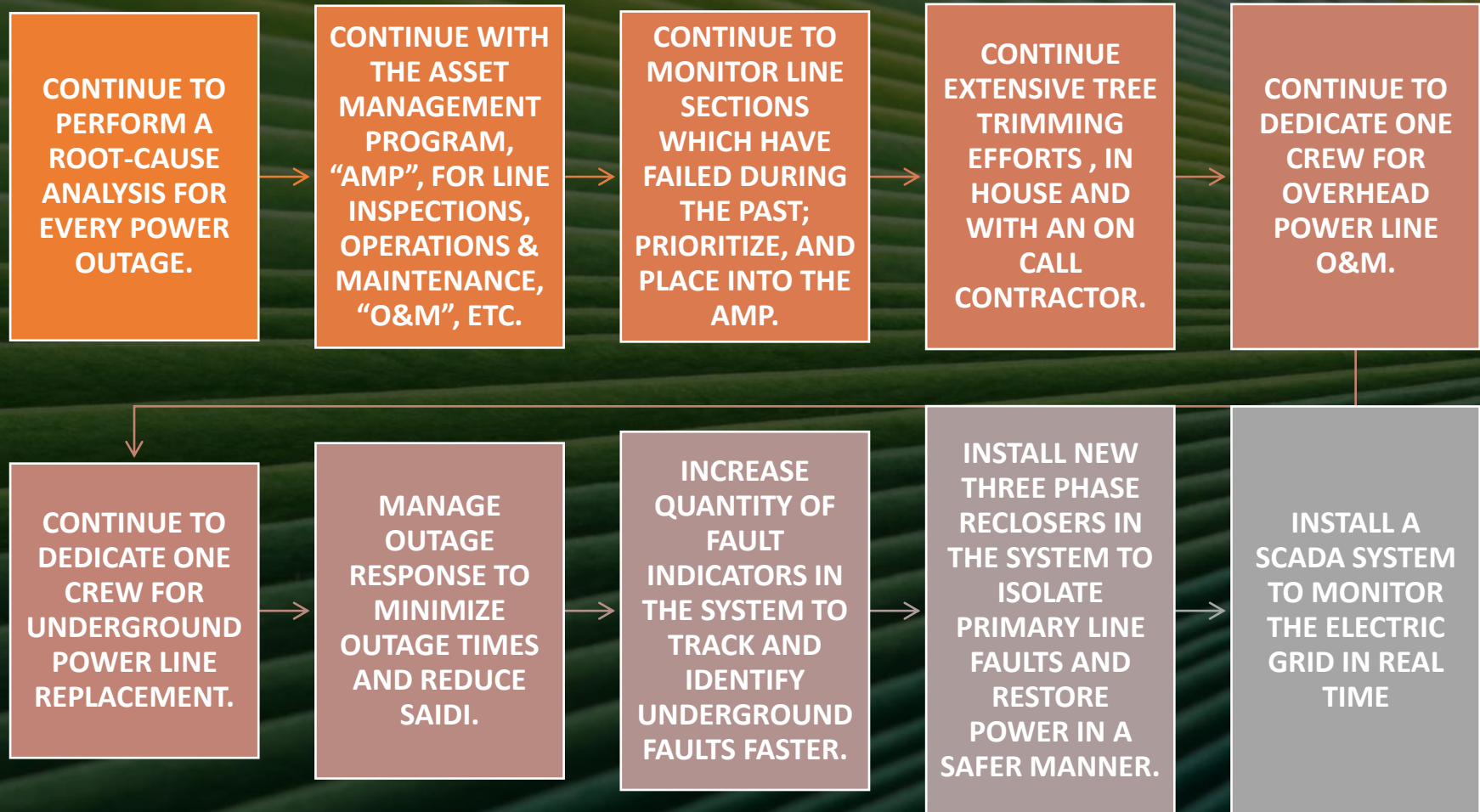
**UNDERGROUND FAULT ON FEEDER 13 BY  
TIMBER RIDGE 12-22-21  
Feeder 13 Replacement Project is now in Design  
Future budget pending**



EACH POINT IS A 12 MONTH SAIDI HISTORY  
1:00:00 = APPA BENCHMARK SAIDI



# Strategy for Improving the SAIDI



## TREE TRIMMING EFFORTS

- LACDPU TRIMS TREES WITH LINE CREWS AND WITH CONTRACTED PROFESSIONALS.
- TRIMMING TREES IS HIGHLY DANGEROUS AND WE DO NOT WANT CUSTOMERS TO TRIM NEAR POWER LINES. THE UTILITY PROVIDES A PUBLIC INFORMATION SEGMENT .  
<https://ladpu.com/WhoTrims>
- OUTAGES DUE TO TREE LIMBS IN POWER LINES IS NOW RARE DUE TO DEPARTMENT EFFORTS

# **Short- Term Action Plans**

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**Asset Management  
Program for OH**

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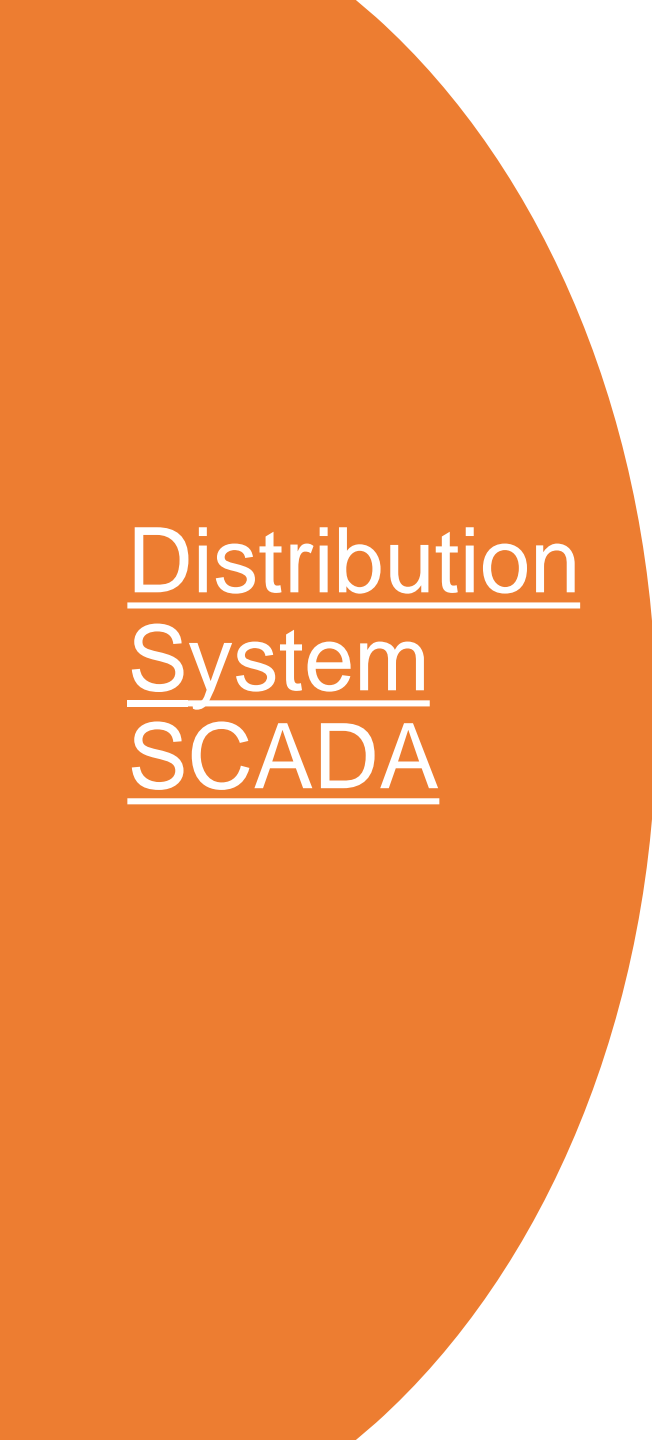
**Overhead Pole and Line  
Replacement Program**

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**Asset Management  
Program for UG**

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**UG Primary  
Replacement Program**

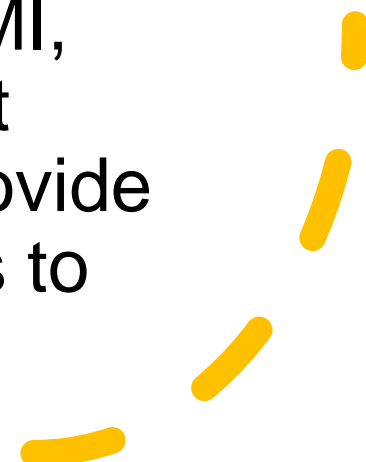


## Distribution System SCADA

The DPU electric distribution department will develop and install a SCADA system which will monitor the electric equipment in the field.

The LASS scada is complete, townsite modules will be complete by December 24.

The system will eventually incorporate information from the Station SCADA, AMI, ArcGIS, and the Milsoft Modeling system to provide real time system status to crews in the field and engineering.





# AMI System

## OUTAGE MESSAGE PROCESS

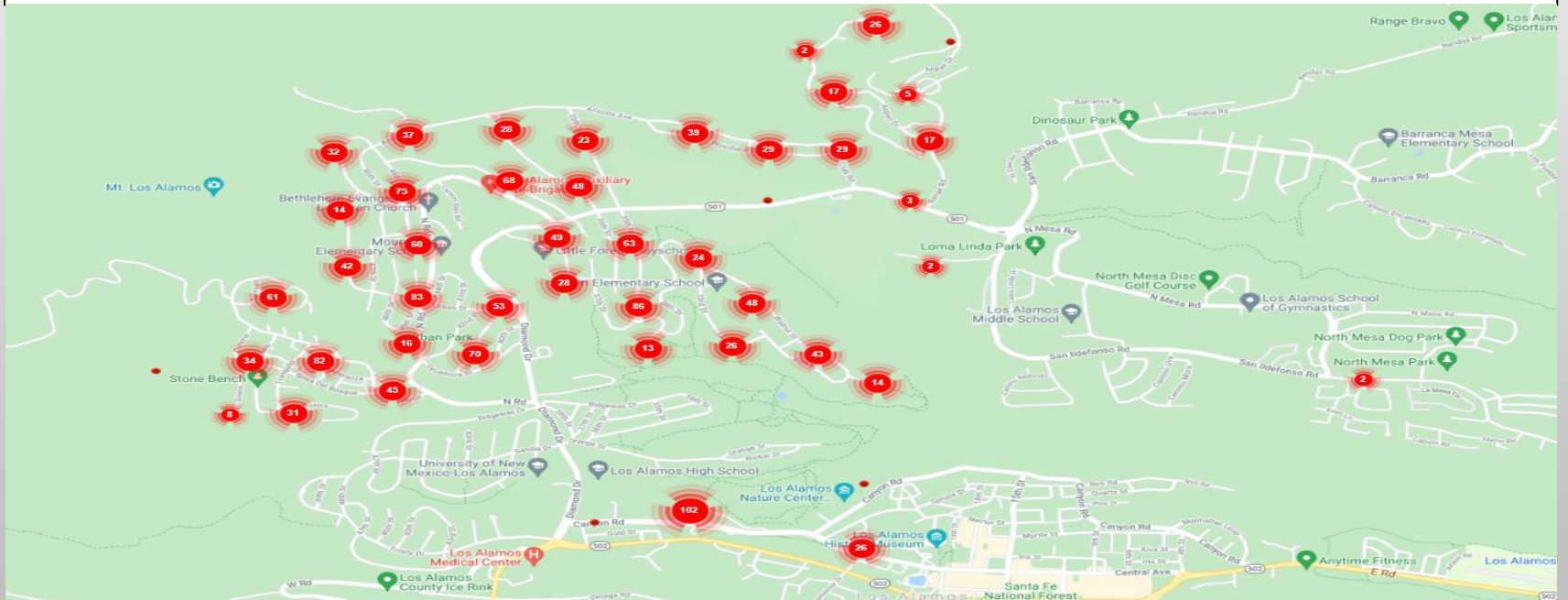
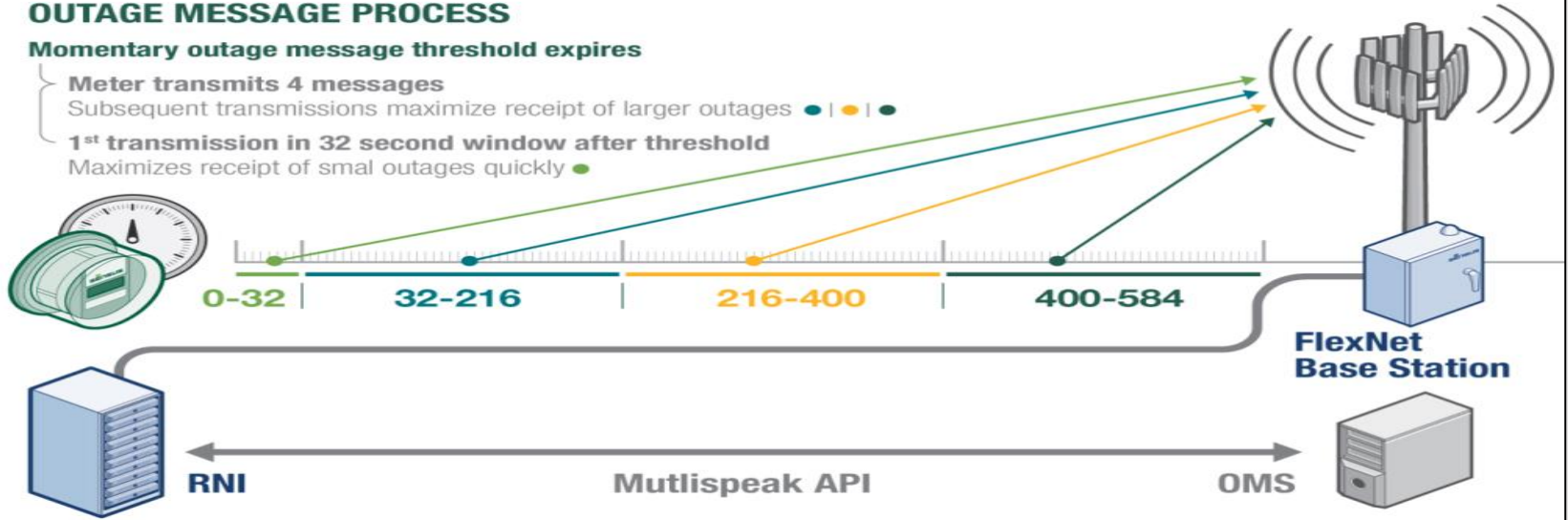
## Momentary outage message threshold expires

### Meter transmits 4 messages

Subsequent transmissions maximize receipt of larger outages ● | ● | ●

**1<sup>st</sup> transmission in 32 second window after threshold**

Maximizes receipt of small outages quickly



# 10 Year Project Proposals

2023 -TOTAVI	COMPLETE
	COMPLETE
2024 - EA4 LINE DESIGN	ADVERTISED 4/4/24
2024 - SKI HILL - DESIGN COMPLETE	\$2,000,000
2024 - OPENNHEIMER / TRINITY / TIMBER RIDGE	RFB IN PROCESS \$1,200,000
2024 - DP ROAD PHASE II MAY 24	\$600,000
2025 - EA4 RECONSTRUCTION	\$3,000,000
2025 - 2026 - PIEDRA LOOP	\$800,000
2025 - 2026 - LA SENDA	\$1,000,000
2026 - 2027 - LOS PUEBLOS	\$1,600,000
2028 - NAVAJO	\$300,000
2028 - EAST GATE SUBSTATION DESIGN	\$500,000
2029 - ESTATES	\$700,000
2029 - BROADVIEW	\$450,000
2029 - BIG ROCK LOOP	\$300,000
2029 - ARAGON AVE \$ 900,000	\$900,000
2030 – EASTGATE SUBSTATION	\$4,000,000
2030 - BRYCE AVE.	\$800,000
2030 - RIDGEWAY	\$450,000
2030 - WESTERN AREA	\$700,000
2031 - EASTERN AREA	\$600,000
2031 - PONDEROSA ESTATES	\$900,000
2032 - DENVER STEELS	\$600,000
2032 – ROVER	\$1,200,000
TOTAL	\$23,500,000

# SUPPLY CHAIN

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Planning for future upgrades is dependent on the funding provided to the department.

The Covid crisis and current disasters in the United States have compounded the supply chain crisis.

Costs continue to escalate and lead times are expanded. Many supply companies have stopped taking orders due to the backlog in orders.

# Future Goals Set for an ALL-Electric Los Alamos County

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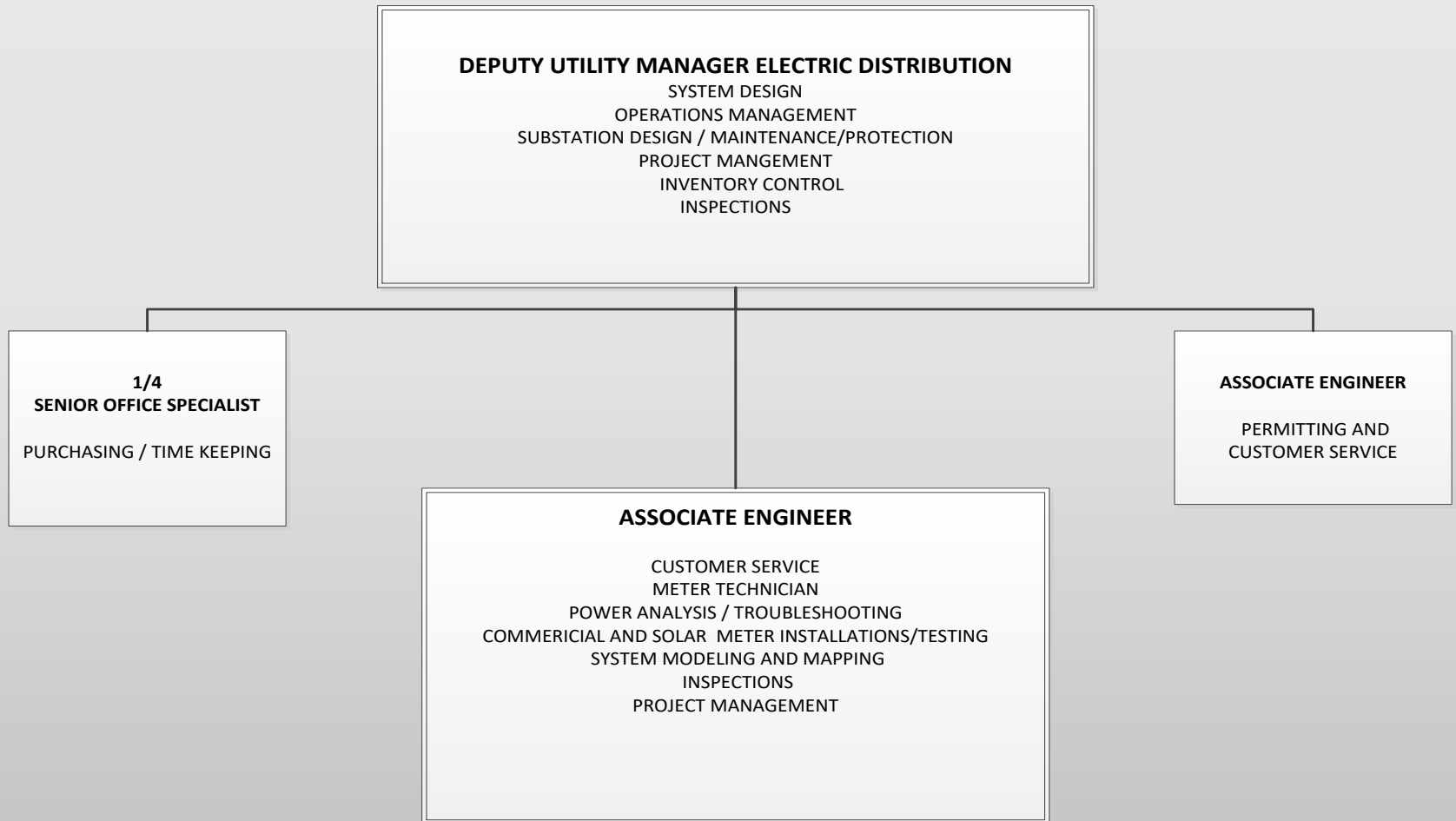
- The Utility Board of Los Alamos County set a future goal to eliminate gas consumption in the County. This would mean that all homes and businesses would be completely operated with electricity.
- The current distribution system will not support this as it exists today. Although the main backbone three phase systems have been upgraded, it would require replacement by 2050.

# Future Goals Set for an ALL-Electric Los Alamos County

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- The utility will require the reconstruction of all residential areas within the county.
- In addition, a very large number of homes do not have the correct power panel size to provide whole home electric consumption.
- The homes will have to be upgraded and new service lines will have to be installed.
- Current staffing levels will not support the expansions and upgrades needed to move toward total electrification.

# EXISTING ENGINEERING STAFF



# Distributed Generation and Electric Vehicle Impacts on the System

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- The electric distribution grid is absorbing production from increased distributed generation.
- The impact of increased loads and reverse power flows will soon exceed the capacity of conductors and transformers in the system.
- Electric vehicle chargers and battery installations will increase the load on the system at traditionally off-peak times.
- This is a stress on the system due to the fact that solar systems do not function at night, and cars are charged in the evenings.

# Distributed Generation and Electric Vehicle Impacts on the System

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- Homes that are currently installing solar systems are also increasing the size of their services to accommodate EV chargers and heat pumps.
- Most repairs and upgrades will be performed by operations crews with operations budgets. The operating budget of the utility will have to increase to meet the challenges.
- The department will require additional FTE positions to meet these goals based on the results of the upcoming electrification study.



# QUESTIONS



# County of Los Alamos

## Staff Report

April 17, 2024

Los Alamos, NM 87544  
www.losalamosnm.us

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**Agenda No.:** 7.C.

**Index (Council Goals):** Quality Governance - Fiscal Stewardship; DPU FY2022 - 2.0 Achieve and Maintain Excellence in Financial Performance

**Presenters:** Karen Kendall, Deputy Utilities Manager - Finance

**Legislative File:** 18607-24b

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### Title

Approval of Budget Revision 2024-60 Uniper Settlement and Change to Debt Coverage Ratio

### Recommended Action

I move the Board of Public Utilities recommend the Uniper Settlement Funds be invested in a combination of a laddered treasury portfolio and the New Mexico Local Government Investment Pool (LGIP) in accordance with the County Investment Policy as overseen by the County's Chief Financial Officer.

I further move that BPU provides guidance to the Utility Manager to use the settlement funds and associated interest income to:

- 1) bring Electric Distribution and Electric Production reserves up to their required balances per DPU Financial Policies and the County Charter Section 509 and Section 40-63;
- 2) cover increased cost of power to minimize rate increases beyond those already anticipated in long term plans; and
- 3) upgrade electric production and distribution systems to meet expected increased electrification demands over the next three to ten years.

I further move that BPU approve Budget Revision 2024-60 as presented and forward to Council for consideration.

I further move to amend Objective 2.3 of the DPU/BPU FY2025 Strategic Focus Areas, Goals & Objectives to reduce the debt coverage ratio target from 1.6 to 1.3.

### ..Utilities Manager's Recommendation

The Utilities Manager recommends that the Board approve the motions as presented.

### Body

In March, the Department of Public Utilities received a settlement from Uniper for the cancellation of two power agreements. The first was for 25 megawatts at an average price of \$62.25 per megawatt hour. The second was for 15 megawatts at a price of \$39.67 per megawatt hour. The total settlement was \$58 million. The replacement power contract is at a price of \$76.75 per megawatt hour. The additional power costs for FY2024 are approximately \$2.2 million and for FY2025 are approximately \$8.7 million. Attachment A is a budget revision to recognize the \$58 million settlement and the estimated interest income.

Staff recommends investing the settlement funds less funding reserves and covering the additional power costs for FY24 and FY25. Investing the settlement funds meets the

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requirements of the County's Investment Policy and has been reviewed and agreed to by the County's Chief Financial Officer. This investment strategy allows DPU to 1) bring Electric Distribution and Electric Production reserves up to their required balances per DPU Financial Policies and the County Charter Section 509 and Section 40-63; 2) cover increased cost of power to minimize rate increases beyond those already anticipated in long term plans; and 3) upgrade electric production and distribution systems to meet expected increased electrification demands over the next three to ten years. The estimated interest returns are based on amounts provided by the County's Investment Advisor and interest assumptions included in the FY2025 proposed budget.

The following reserves are required per the County Charter, DPU Financial Guidance and the DPU Schedule of Funds. Staff recommends fully funding these reserves for the Electric Fund as required. The total amount to fully fund the Electric reserves is \$12,138,000. Interest earned on the Electric reserves are included in Attachment A - Settlement Investment Overview.

Operations Reserve (180 days of bud operations and maintenance, excluding commodities)

Debt Service Reserve (as required by loan docs)

Retirement/Reclamation Reserve (per agreements)

Capital Expenditure Reserve (annual depreciation + 2.5%)

Rate Stabilization Reserve (where pass-through rate for commodities not in place)

Contingency Reserve (single largest equipment with potential for failure DPU Asset Team)

As requested, Staff provided additional resources for required debt coverage ratios. This supports the recommended new target of 1.3.

New Mexico Finance Authority 1.3

GDS 1.2 to 1.25

Utility Financial Solutions Rate Managers Presentation 1.17 to 1.25

Water Trust Board 1.2

### **Alternatives**

If the Board does not approve the recommended actions, the settlement proceeds will remain unbudgeted and the existing debt coverage ratio will not be achieved.

### **Fiscal and Staff Impact**

See attached budget revision

### **Attachments**

A - Settlement Investment Overview

B - 2024-60 Budget Revision

[illegible]

\$76.50 vs. \$39.67

Budget Revision 2024-60

BPU Meeting Date: April 17, 2024

Council Meeting Date: May 7, 2024

	Fund & Department	Org	Object	Revenue (decrease)	Expenditures (decrease)	Transfers In(Out)	Fund Balance (decrease)
1	Joint Utilities Fund - Electric Production	51185195	6949	\$ 58,000,000	\$ -	\$ -	\$ 58,000,000
2	Joint Utilities Fund - Electric Production	51185195	6115	\$ 470,000	\$ -	\$ -	\$ 470,000
<b>Description:</b> The purpose of this budget revision is to budget for increase the budget for Other Judgement Settlements (6949) and Interest Income for FY2024 associated with the Uniper Settlement.							
<b>Fiscal Impact:</b> The net fiscal impact to the Joint Utilities Fund is an increase in revenue and Fund Balance by \$58,470,000.							

Karen Kendall

04/10/2024

Preparer

Erika Thomas

Date

Budget & Performance Manager



# County of Los Alamos

## Staff Report

April 17, 2024

Los Alamos, NM 87544  
www.losalamosnm.us

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**Agenda No.:** 7.D.

**Index (Council Goals):** Quality Governance - Fiscal Stewardship; DPU FY2022 - 2.0 Achieve and Maintain Excellence in Financial Performance

**Presenters:** James Alarid, Deputy Utilities Manager - Engineering

**Legislative File:** 18304-24

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### Title

Approval of Changes to the Department of Public Utilities Rules & Regulations - Fee Schedule

### Recommended Action

**I move that the Board of Public Utilities Approve the changes to the Department of Public Utilities Rules & Regulations - Fee Schedule**

### ..Utilities Manager's Recommendation

The Utilities Manager recommends that the Board approve the motion as presented.

### Body

The Department of Public Utilities Rules & Regulations - Fee Schedule was last updated on July 20, 2022. Most of the fees associated with new service installations for the gas, water and electric utilities are being raised. The primary reason for the increases are due to increased staff salaries and materials cost inflation since July 2022. All gas work on steel gas systems are now going to be estimated costs at the time of service due to the need to contract the work out and the difficulty of establish accurate fixed fees. The service work which includes cutting and patching asphalt are being raised due to the current high price to patch asphalt.

### Attachments

A - Revised Fee Schedule Redlined  
B - Revised Fee Schedule

**RULES AND REGULATIONS  
FEE SCHEDULE (FS)**

<b>Administrative Fees</b>		
Account Initiation and Transfer Fee	\$10	
Reconnection following disconnection for non-payment – normal hours (non-AMI)	\$60	Per trip to location, 8:00 AM to 4:00 PM M-F
Reconnection following disconnection for non-payment – normal hours Electric only.	\$10	Remote turn-on with AMI, 8:00 AM to 4:00 PM M-F
Reconnection following disconnection for non-payment – after normal hours	<del>\$200</del> <u>\$300</u>	Per trip to location, after hours, weekends and holidays
Door Hanger Fee	\$25	Per occurrence
<b>Deposits</b>		
Residential	\$60 per meter	
Commercial	Variable	Two times the highest anticipated monthly bill
Fire hydrant meter	\$2,000	Refundable upon meter return (All commodity charges shall be at the filed and approved rate schedule)
<b>Service Fees</b>		
Disconnection or reconnection of electric, gas or water – normal hours – No charge for first trip in a 24-hr period, thereafter each trip is <del>\$75</del> <u>\$100</u>	No Charge (first trip) <del>\$75</del> <u>\$100</u> each additional trip	Per trip to location, 8:00 AM to 4:00 PM M-F
Emergency disconnection or reconnection of electric, gas or water – after normal hours	No Charge	Per trip to location, after hours, weekends and holidays
Non –Emergency_ disconnection or reconnection of electric, gas or water – after normal hours	<del>\$200</del> <u>\$300</u>	Per trip to location, after hours, weekends and holidays
Furnace check fees	<del>\$100</del> <u>\$150</u>	For up to two furnaces
<b>Meter Test Fees (Requested by customer)</b>		
Electric meters, all sizes	\$125	
Water meters 5/8 inch through 1-1/2 inch	\$150	
Water meters greater than 1-1/2 inch (in place test)	\$150	
<b>Construction Fees</b>		
<b>New Service Installations</b>		
100 amp electric residential service installation less than 150 feet	<del>\$850</del> <u>\$950</u>	Prepaid
200 amp electric residential service installation less than 150 feet	<del>\$1200</del> <u>\$1400</u>	Prepaid
Residential Net Meter application & inspection (2 trips), incremental cost of Net meter, labor and materials to install Net meter and make any necessary upgrades to the existing transformer serving the resident.	<del>\$400</del> <u>\$450</u>	Prepaid
Commercial Net Meter application & inspection (2 trips), incremental cost of Net meter and labor to install Net meter	<del>\$500</del> <u>\$550</u>	Prepaid
All other electric service installations	Estimated cost	Prepaid

¾ inch gas residential service installation less than 150 feet	<del>\$1368</del> <del>\$1700</del>	Prepaid
¾ inch service line up to 150 feet, tap to main, and meter, out of road	<del>\$1536</del> <del>\$1950</del>	Prepaid
¾ inch service line up to 150 feet, tap to main in paved road, and meter	<del>\$3648</del> <del>\$4200</del>	Prepaid
Install ¾" – 1" excess flow valve on existing polyethylene service line	<del>\$650</del> <del>\$750</del>	Prepaid
steel Install ¾" – 1" excess flow valve on existing service line	<del>\$2540</del> <u>Estimated cost</u>	Prepaid
Install gas valve on existing polyethylene service line	<del>\$700</del> <del>\$850</del>	Prepaid
Install gas valve on existing steel service line	<del>\$2850</del> <u>Estimated cost</u>	Prepaid
All other gas service installations	Estimated cost	Prepaid
5/8 x ¾" water meter	<del>\$570</del> <del>\$700</del>	Prepaid
5/8 x ¾" water meter with box, install out of road	<del>\$2220</del> <del>\$2500</del>	Prepaid
5/8 x ¾" water meter with box, with tap in paved road	<del>\$4110</del> <del>\$5000</del>	Prepaid
4 inch sewer tap and saddle with sewer main exposed by customer	<del>\$430</del> <del>\$500</del>	Prepaid
All other work including sewer installations, service relocations and replacement	Estimated cost	Prepaid
<b>North Mesa Connection Charges</b>		
\$250 charge per undeveloped unit where the unit is located in a subdivision where the final plat has been formally accepted by the County, the charge shall be paid for by the individual customer or contractor at the time a water meter is requested	\$250 per unit	
Where the unit is located in a subdivision where the final plat has not been accepted by the County, the charge shall be paid by the subdivision's developer at the time the final plat is filed with the County	\$250 per unit	
<b>Inspection Fees for Subdivisions/Commercial Utility Infrastructure</b>		
Fees for inspection will be based on a percentage of the construction cost estimate for the public Utility infrastructure. Estimate shall be prepared by a Professional Engineer, registered in the state of New Mexico and signed and sealed by the New Mexico Professional Engineer and provided to County Utility Engineering Department for written approval.	5% of construction cost estimate for the public Utility infrastructure	1.If construction scope and or cost increases by 10 percent or more than original approved scope, inspection fee will be revised accordingly 2. Utility Department reserves right to modify fees if needed.



**RULES AND REGULATIONS  
FEE SCHEDULE (FS)**

<b>Administrative Fees</b>		
Account Initiation and Transfer Fee	\$10	
Reconnection following disconnection for non-payment – normal hours (non-AMI)	\$60	Per trip to location, 8:00 AM to 4:00 PM M-F
Reconnection following disconnection for non-payment – normal hours Electric only.	\$10	Remote turn-on with AMI, 8:00 AM to 4:00 PM M-F
Reconnection following disconnection for non-payment – after normal hours	\$300	Per trip to location, after hours, weekends and holidays
Door Hanger Fee	\$25	Per occurrence
<b>Deposits</b>		
Residential	\$60 per meter	
Commercial	Variable	Two times the highest anticipated monthly bill
Fire hydrant meter	\$2,000	Refundable upon meter return (All commodity charges shall be at the filed and approved rate schedule)
<b>Service Fees</b>		
Disconnection or reconnection of electric, gas or water – normal hours – No charge for first trip in a 24-hr period, thereafter each trip is \$100	No Charge (first trip) \$100 each additional trip	Per trip to location, 8:00 AM to 4:00 PM M-F
Emergency disconnection or reconnection of electric, gas or water – after normal hours	No Charge	Per trip to location, after hours, weekends and holidays
Non –Emergency_ disconnection or reconnection of electric, gas or water – after normal hours	\$300	Per trip to location, after hours, weekends and holidays
Furnace check fees	\$150	For up to two furnaces
<b>Meter Test Fees (Requested by customer)</b>		
Electric meters, all sizes	\$125	
Water meters 5/8 inch through 1-1/2 inch	\$150	
Water meters greater than 1-1/2 inch (in place test)	\$150	
<b>Construction Fees</b>		
<b>New Service Installations</b>		
100 amp electric residential service installation less than 150 feet	\$950	Prepaid
200 amp electric residential service installation less than 150 feet	\$1400	Prepaid
Residential Net Meter application & inspection (2 trips), incremental cost of Net meter, labor and materials to install Net meter and make any necessary upgrades to the existing transformer serving the resident.	\$450	Prepaid
Commercial Net Meter application & inspection (2 trips), incremental cost of Net meter and labor to install Net meter	\$550	Prepaid
All other electric service installations	Estimated cost	Prepaid

	¾ inch gas residential service installation less than 150 feet	\$1700	Prepaid
	¾ inch service line up to 150 feet, tap to main, and meter, out of road	\$1950	Prepaid
	¾ inch service line up to 150 feet, tap to main in paved road, and meter	\$4200	Prepaid
	Install ¾" – 1" excess flow valve on existing polyethylene service line	\$750	Prepaid
steel	Install ¾" – 1" excess flow valve on existing service line	Estimated cost	Prepaid
	Install gas valve on existing polyethylene service line	\$850	Prepaid
	Install gas valve on existing steel service line	Estimated cost	Prepaid
	All other gas service installations	Estimated cost	Prepaid
	½ x ¾" water meter	\$700	Prepaid
	½ x ¾" water meter with box, install out of road	\$2500	Prepaid
	½ x ¾" water meter with box, with tap in paved road	\$5000	Prepaid
	4 inch sewer tap and saddle with sewer main exposed by customer	\$500	Prepaid
	All other work including sewer installations, service relocations and replacement	Estimated cost	Prepaid
<b>North Mesa Connection Charges</b>			
	\$250 charge per undeveloped unit where the unit is located in a subdivision where the final plat has been formally accepted by the County, the charge shall be paid for by the individual customer or contractor at the time a water meter is requested	\$250 per unit	
	Where the unit is located in a subdivision where the final plat has not been accepted by the County, the charge shall be paid by the subdivision's developer at the time the final plat is filed with the County	\$250 per unit	
<b>Inspection Fees for Subdivisions/Commercial Utility Infrastructure</b>			
	Fees for inspection will be based on a percentage of the construction cost estimate for the public Utility infrastructure. Estimate shall be prepared by a Professional Engineer, registered in the state of New Mexico and signed and sealed by the New Mexico Professional Engineer and provided to County Utility Engineering Department for written approval.	5% of construction cost estimate for the public Utility infrastructure	1.If construction scope and or cost increases by 10 percent or more than original approved scope, inspection fee will be revised accordingly 2. Utility Department reserves right to modify fees if needed.



# County of Los Alamos

## Staff Report

April 17, 2024

Los Alamos, NM 87544  
www.losalamosnm.us

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**Agenda No.:** 7.E.

**Index (Council Goals):** Quality Excellence - Effective, Efficient, and Reliable Services; DPU FY2022 - 1.0 Provide Safe and Reliable Utility Services

**Presenters:** Karen Kendall, Deputy Utilities Manager - Finance and Stephen Marez, Deputy Utilities Manager - Electric Distribution

**Legislative File:** 18305-24b

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### Title

Approval of Proposed Changes to the Department of Public Utilities Rules & Regulations, Rule E-5 Interconnection with Cogeneration and Small Power Producers

### Recommended Action

**I move that the Board of Public Utilities approve the proposed changes to the Department of Public Utilities Rules & Regulations, Rule E-5 Interconnection with Cogeneration and Small Power Producers**

### ..Utilities Manager's Recommendation

The Utilities Manager recommends that the Board approve the motion as presented.

### Body

At the April 3, 2024 work session, staff presented proposed changes to Rule E-5 Interconnection with Cogeneration and Small Power Producers and updates to the related construction standards as shown in the associated application. Additionally, GDS consultants provided feedback on the billing practices relating to cogeneration supporting the proposed changes to E5.05. The proposed changes are detailed in Attachment A and a clean version of E-5 is included in Attachment B.

At the April 3, 2024 work session, staff distributed an analysis of the new net billing arrangement. There was an error in that handout which incorrectly reported total kwh received from solar customers. The amount shown on April 3rd was the dollars credited, not kwh. A corrected analysis is provided here as Attachment C.

The impact of changing to directly billing the wholesale rate is \$113,782 for calendar year 2023. This breaks down to an average annual reduction of \$251.73 per household. The last time the annual true up was conducted was for calendar year 2019. DPU is proposing to not retroactively perform the true up for calendar years 2020 through 2023. If this motion is approved by the Board, the changes will take effect immediately.

### Alternatives

If the rule changes are not approved, DPU will need to perform the annual true-up and collect the overpayment amounts from solar customers.

### Fiscal and Staff Impact

See attachment C

### Attachments

- 
- A - Rule E-5 Revised Redline
  - B - Rule E-5 Revised
  - C - PV Solar Application Packet
  - D - Analysis of Payments to Solar Customers

**RULES AND REGULATIONS  
ELECTRIC (E)  
RULE E-5  
INTERCONNECTION - CONNECTION WITH COGENERATION  
AND SMALL POWER PRODUCERS**

**E-5.01 GENERAL**

The purpose of this rule is to provide for the purchase of energy from customers of the Utility meeting the interconnection requirements for Qualifying Facilities.

All interconnections with the electric distribution system require prior written approval by the Utility department of Engineering, the completion of the Interconnection Agreement (see Appendix I) and the payment of all applicable fees.

**E-5.02 DEFINITIONS**

As used in this rule, unless otherwise specified:

- A. "Qualifying Facility" means a cogeneration or a small power production facility which meets the criteria for qualification contained in 18 C.F.R. Section 292.203, or such other criteria as may be reasonably prescribed by rule by the Utility.
- B. "Customer" means a customer of Utility who owns or operates a Qualifying Facility.
- C. kW – Kilowatts is a measure of power: 1,000 watts = 1 kW
- D. kWh – Kilowatt Hours is a measure of the consumption of energy. A 1 kW heater used over one hour will consume 1 kWh of energy.
- E. PV – Photovoltaic: PV system inverters and generators are sized according to the maximum power output they can produce in kW.
- F. AC – Alternating Current
- G. DC – Direct Current
- H. "Battery Storage" system – includes equipment or facilities like a Tesla Powerwall™ and includes electric vehicles with bidirectional charging capability.

**E-5.03 PURCHASES OF ENERGY FROM CUSTOMER-OWNED QUALIFYING FACILITIES**

Utility may purchase from the community, up to 6,000 kW of capacity, in the aggregate, of solar, wind, or other renewable energy from eCustomer-owned Qualifying Facilities within the service area of Utility.

The Customer system maximum installed capacity for any individual residential location is limited to the capacity in kW sufficient to produce energy up to the level of total consumption of the residence based on actual consumption for the immediately preceding twelve months, using standard efficiency and availability calculations for the Los Alamos service area as defined by the Department, with a maximum allowed generation per Customer of 10 kW DC. Battery Storage may be installed with solar PV or wind generation within the same system size requirements. All battery installations must have a Utility approved transfer switch installation.

The Customer system maximum installed capacity for any commercial location is limited to the capacity in kW sufficient to produce energy up to the level of total consumption of the eCustomer based on actual consumption for the immediately preceding twelve months, using standard efficiency and availability calculations as defined by the Department, with a maximum allowed of 100 kW DC, if the capacity available on the transformer serving the eCustomer is sufficient. For commercial eCustomers, an upgrade of transformer capacity will be at the eCustomer's expense.

The Customer shall submit system specifications which size the output of the PV system to offset existing average annual consumption. The eCustomer can obtain this information from the ir utility bill or

by calling eCustomer service (505-662-8333). The utility will compare the previous annual consumption to the proposed production using the "PVWATTS" website (<https://pvwatts.nrel.gov/>) or an equivalent energy output estimation method.

#### **E-5.04 PROCEDURE FOR INTERCONNECTION**

- A. General. Unless otherwise specifically provided for in a special interconnection agreement negotiated with the Utility, the procedures for standard interconnection agreements and interconnections set forth in this rule shall be followed.
- B. Conditions of interconnection. Utility shall interconnect with any Qualifying Facility which:
- 1) is covered by a signed standard or special interconnection agreement between the eCustomer and Utility, which is consistent with the approved form of agreement set forth in this rule;
  - 2) is capable of operating safely and commencing the delivery of power into the Electric Utility's system, including but not limited to protection from over currents, fault currents, frequency disturbances, and voltage differentials;
  - 3) has met all applicable safety and performance standards established by local and national electrical codes, including the most recent National Electrical Code (NEC), the most recent National Electrical Safety Code (NESC), the Institute of Electrical and Electronics Engineers (IEEE), and Underwriters Laboratories, as well as all applicable safety and performance standards adopted by rule of the Utility that are necessary to protect public safety and system reliability;
  - 4) was constructed in accordance with a design that has been submitted to and approved by the Utility;
  - 5) has been installed by a licensed electrician who has obtained all required permits and inspections.
- C. Isolation transformers and disconnection switches. Utility shall not require an isolation transformer for interconnection of single phase photovoltaic or wind Facilities meeting the requirements of Subsection B of this section. If Utility determines that an isolation transformer is required for other types of Qualifying Facilities, the Utility may require the transformer by providing written notice to the Customer at the time of application. The eCustomer shall have installed and maintained in proper operating condition, at Customer's sole expense, a separate load break disconnect switch as a visible means of disconnection, unless the eCustomer and Utility shall agree in writing to the use of the meter as a visible means of disconnecting single-phase photovoltaic facilities.
- D. Meters. A single reversible meter shall be used unless an alternate metering arrangement is agreed to by the eCustomer and Utility. The register shall be used to measure the amount of energy delivered by the Utility to the eCustomer and will ~~reverse enabling measurement~~ measure of the amount of energy which is produced by the Qualifying Facility and delivered to Utility. The eCustomer shall be required to pay the cost of the required related metering equipment with the exception of the meter. Within twenty (20) days of receiving notification from the eCustomer of the intent to interconnect, the Utility will notify the eCustomer of any metering costs. Charges for special metering costs shall be paid by the eCustomer, or arrangements for payment agreed to between the eCustomer and Utility, prior to the Utility authorizing interconnected operation.
- E. Liability insurance. Customers are urged to obtain adequate liability insurance to cover risks, liabilities, and consequences, which may arise as a result of interconnection with a utility system. For good cause shown, the Utility may require a eCustomer to obtain general liability insurance.
- F. Provision of interconnection agreement. The Utility shall provide a standard interconnection agreement within ten (10) days of a request for such form. When a eCustomer enters into an interconnection agreement pursuant to this rule, the Utility shall provide the eCustomer with a copy of that interconnection agreement. Utility shall provide a blank ~~form of~~ application form for

interconnection within ten (10) days of a written request for such form. The Utility shall maintain a file of each interconnection agreement entered into by the Utility.

#### **E-5.05 METERING CALCULATION**

Utility shall calculate each eCustomer's bill for the billing period using the standards and conditions stated in this section.

- A. Applicable rate. Customers shall be billed for service in accordance with the rate structure and monthly charges that the eCustomer would be assigned if the eCustomer had not interconnected a Facility with the Utility's system, plus any incremental cost of required metering equipment. Energy produced or eConsumed on a monthly basis shall be measured in accordance with standard ~~net~~ metering practice. Power supplied to the eCustomer will be billed at the eCustomer's applicable rate under the Utility's current rate schedule.
- B. Credit for ~~excess energy supplied to the Utility. If electricity generated by the customer exceeds the electricity supplied by the Utility during a billing period, the Utility shall credit the customer through a balancing account for the excess kilowatt-hours of energy generated, by crediting the customer for the net energy supplied to the Utility. The rate paid or credited to the Customer for energy supplied to the Utility will be based on the rate of the~~ Utility's Electric Coordination Agreement (ECA) total average capacity and energy costs, for a twelve-month rolling average, calculated from the Los Alamos County Resource Pool invoices for the previous year. The ~~Customers balancing account shall be closed out annually and any funds owing to the Customer will be paid within 30 days.~~

#### **E-5.06 COMPLAINTS AND INVESTIGATIONS**

Any disputes over the implementation of this rule shall be addressed in accordance with dispute resolution procedures set forth in the rules governing service from the Utility.

#### **E-5.07 SEVERABILITY**

If any part of this rule or any application thereof is held invalid, the remainder of this rule or its application to other situations or persons shall not be affected.

#### **E-5.08 EXEMPTION OR VARIANCE**

- A. Any interested person may file an application for an exemption or a variance from the requirements of this rule. Such application shall:
  - 1) describe the situation which necessitates the exemption or variance;
  - 2) set forth the effect of complying with this rule on the utility and its eCustomers if the exemption or variance is not granted;
  - 3) identify the Section of this rule for which the exemption or variance is requested;
  - 4) describe the result which the request will have if granted;
  - 5) state how the exemption or variance will promote the achievement of the purposes of this rule; and,
  - 6) state why no other reasonable alternative is available.
- B. If the Utility determines that the exemption or variance is consistent with the purposes of this rule, the exemption or variance may be granted. The Utility may, at its option, require an informal conference or formal evidentiary hearing prior to the granting of the variance. All exemption or variance requests will be considered on an individual basis and the eCustomer shall be responsible for all necessary system upgrade costs as determined by the utility.

## **E-5.09      REQUEST FOR STAY PENDING AMENDMENT, EXEMPTION, OR VARIANCE**

A request for an amendment, exemption, or a variance from the requirements of this rule may include a request that the Utility stay the application of the affected portion of this rule for the transaction specified in the motion. Utility has the sole discretion to determine whether to grant a request for an amendment, exemption or variance or an accompanying request for a stay. In reviewing such request, Utility will not act unreasonably.

## **E-5.10      CUSTOMER INFORMATION**

Utility will provide information to all eCustomers regarding this rule, including, but not limited to, contact persons and a description of terms and conditions for purchases from Qualifying Facilities.



**RULES AND REGULATIONS  
ELECTRIC (E)  
RULE E-5  
INTERCONNECTION - CONNECTION WITH COGENERATION  
AND SMALL POWER PRODUCERS**

**E-5.01 GENERAL**

The purpose of this rule is to provide for the purchase of energy from customers of the Utility meeting the interconnection requirements for Qualifying Facilities.

All interconnections with the electric distribution system require prior written approval by the Utility department of Engineering, the completion of the Interconnection Agreement (see Appendix I) and the payment of all applicable fees.

**E-5.02 DEFINITIONS**

As used in this rule, unless otherwise specified:

- A. "Qualifying Facility" means a cogeneration or small power production facility which meets the criteria for qualification contained in 18 C.F.R. Section 292.203, or such other criteria as may be reasonably prescribed by rule by the Utility.
- B. "Customer" means a customer of Utility who owns or operates a Qualifying Facility.
- C. kW – Kilowatts is a measure of power: 1,000 watts = 1 kW
- D. kWh – Kilowatt Hours is a measure of the consumption of energy. A 1 kW heater used over one hour will consume 1 kWh of energy.
- E. PV – Photovoltaic: PV system inverters and generators are sized according to the maximum power output they can produce in kW.
- F. AC – Alternating Current
- G. DC – Direct Current
- H. "Battery Storage" system – includes equipment or facilities like a Tesla Powerwall™ and includes electric vehicles with bidirectional charging capability.

**E-5.03 PURCHASES OF ENERGY FROM CUSTOMER-OWNED QUALIFYING FACILITIES**

Utility may purchase from the community, up to 6,000 kW of capacity, in the aggregate, of solar, wind, or other renewable energy from Customer-owned Qualifying Facilities within the service area of Utility.

The Customer system maximum installed capacity for any individual residential location is limited to the capacity in kW sufficient to produce energy up to the level of total consumption of the residence based on actual consumption for the immediately preceding twelve months, using standard efficiency and availability calculations for the Los Alamos service area as defined by the Department, with a maximum allowed generation per Customer of 10 kW DC. Battery Storage may be installed with solar PV or wind generation within the same system size requirements. All battery installations must have a Utility approved transfer switch installation.

The Customer system maximum installed capacity for any commercial location is limited to the capacity in kW sufficient to produce energy up to the level of total consumption of the Customer based on actual consumption for the immediately preceding twelve months, using standard efficiency and availability calculations as defined by the Department, with a maximum allowed of 100 kW DC, if the capacity available on the transformer serving the Customer is sufficient. For commercial Customers, an upgrade of transformer capacity will be at the Customer's expense.

The Customer shall submit system specifications which size the output of the PV system to offset existing average annual consumption. The Customer can obtain this information from their utility bill or by calling Customer service (505-662-8333). The utility will compare the previous annual consumption to the proposed production using the "PVWATTS" website (<https://pvwatts.nrel.gov/>) or an equivalent energy output estimation method.

#### **E-5.04 PROCEDURE FOR INTERCONNECTION**

- A. General. Unless otherwise specifically provided for in a special interconnection agreement negotiated with the Utility, the procedures for standard interconnection agreements and interconnections set forth in this rule shall be followed.
- B. Conditions of interconnection. Utility shall interconnect with any Qualifying Facility which:
- 1) is covered by a signed standard or special interconnection agreement between the Customer and Utility, which is consistent with the approved form of agreement set forth in this rule;
  - 2) is capable of operating safely and commencing the delivery of power into the Electric Utility's system, including but not limited to protection from over currents, fault currents, frequency disturbances, and voltage differentials;
  - 3) has met all applicable safety and performance standards established by local and national electrical codes, including the most recent National Electrical Code (NEC), the most recent National Electrical Safety Code (NESC), the Institute of Electrical and Electronics Engineers (IEEE), and Underwriters Laboratories, as well as all applicable safety and performance standards adopted by rule of the Utility that are necessary to protect public safety and system reliability;
  - 4) was constructed in accordance with a design that has been submitted to and approved by the Utility;
  - 5) has been installed by a licensed electrician who has obtained all required permits and inspections.
- C. Isolation transformers and disconnection switches. Utility shall not require an isolation transformer for interconnection of single phase photovoltaic or wind Facilities meeting the requirements of Subsection B of this section. If Utility determines that an isolation transformer is required for other types of Qualifying Facilities, the Utility may require the transformer by providing written notice to the Customer at the time of application. The Customer shall have installed and maintained in proper operating condition, at Customer's sole expense, a separate load break disconnect switch as a visible means of disconnection, unless the Customer and Utility shall agree in writing to the use of the meter as a visible means of disconnecting single-phase photovoltaic facilities.
- D. Meters. A single reversible meter shall be used unless an alternate metering arrangement is agreed to by the Customer and Utility. The register shall be used to measure the amount of energy delivered by the Utility to the Customer and will measure the amount of energy which is produced by the Qualifying Facility and delivered to Utility. The Customer shall be required to pay the cost of the required related metering equipment with the exception of the meter. Within twenty (20) days of receiving notification from the Customer of the intent to interconnect, the Utility will notify the Customer of any metering costs. Charges for special metering costs shall be paid by the Customer, or arrangements for payment agreed to between the Customer and Utility, prior to the Utility authorizing interconnected operation.
- E. Liability insurance. Customers are urged to obtain adequate liability insurance to cover risks, liabilities, and consequences, which may arise as a result of interconnection with a utility system. For good cause shown, the Utility may require a Customer to obtain general liability insurance.
- F. Provision of interconnection agreement. The Utility shall provide a standard interconnection agreement within ten (10) days of a request for such form. When a Customer enters into an interconnection agreement pursuant to this rule, the Utility shall provide the Customer with a copy of that interconnection agreement. Utility shall provide a blank application form for interconnection within ten (10) days of a written request for such form. The Utility shall maintain a file of each interconnection agreement entered into by the Utility.

#### **E-5.05 METERING CALCULATION**

Utility shall calculate each Customer's bill for the billing period using the standards and conditions stated in this section.

- A. Applicable rate. Customers shall be billed for service in accordance with the rate structure and monthly charges that the Customer would be assigned if the Customer had not interconnected a Facility with the Utility's system, plus any incremental cost of required metering equipment. Energy produced or Consumed on a monthly basis shall be measured in accordance with standard metering practice. Power supplied to the Customer will be billed at the Customer's applicable rate under the Utility's current rate schedule.
- B. Credit for energy supplied to the Utility. The credit to the Customer for energy supplied to the Utility will be based on the rate of the Utility's Electric Coordination Agreement (ECA) total capacity and energy costs, for a twelve-month rolling average, calculated from the Los Alamos County Resource Pool invoices.

#### **E-5.06 COMPLAINTS AND INVESTIGATIONS**

Any disputes over the implementation of this rule shall be addressed in accordance with dispute resolution procedures set forth in the rules governing service from the Utility.

#### **E-5.07 SEVERABILITY**

If any part of this rule or any application thereof is held invalid, the remainder of this rule or its application to other situations or persons shall not be affected.

#### **E-5.08 EXEMPTION OR VARIANCE**

- A. Any interested person may file an application for an exemption or a variance from the requirements of this rule. Such application shall:
  - 1) describe the situation which necessitates the exemption or variance;
  - 2) set forth the effect of complying with this rule on the utility and its Customers if the exemption or variance is not granted;
  - 3) identify the Section of this rule for which the exemption or variance is requested;
  - 4) describe the result which the request will have if granted;
  - 5) state how the exemption or variance will promote the achievement of the purposes of this rule; and,
  - 6) state why no other reasonable alternative is available.
- B. If the Utility determines that the exemption or variance is consistent with the purposes of this rule, the exemption or variance may be granted. The Utility may, at its option, require an informal conference or formal evidentiary hearing prior to the granting of the variance. All exemption or variance requests will be considered on an individual basis and the Customer shall be responsible for all necessary system upgrade costs as determined by the utility.

#### **E-5.09 REQUEST FOR STAY PENDING AMENDMENT, EXEMPTION, OR VARIANCE**

A request for an amendment, exemption, or a variance from the requirements of this rule may include a request that the Utility stay the application of the affected portion of this rule for the transaction specified in the motion. Utility has the sole discretion to determine whether to grant a request for an amendment, exemption or variance or an accompanying request for a stay. In reviewing such request, Utility will not act unreasonably.

#### **E-5.10 CUSTOMER INFORMATION**

Utility will provide information to all Customers regarding this rule, including, but not limited to, contact persons and a description of terms and conditions for purchases from Qualifying Facilities.

# Los Alamos County Utilities

## Application for Operation of Customer-Owned Generation

**NOTE: This application should be completed and returned to the Utility to commence the process request. The information in this application will be used by the Utility to determine the electrical requirements for the utility and generator interface.**

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### OWNER/APPLICANT INFORMATION

Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

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### PROJECT DESIGN ENGINEER (as applicable)

Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

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### ELECTRICAL CONTRACTOR (if different than project design engineer)

Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

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### TYPE OF GENERATOR

Photovoltaic \_\_\_\_\_ Wind \_\_\_\_\_

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### EST. LOAD, GEN. RATING AND MODE OF OPERATION

The following information will be used to design the Utility customer interconnection. This information is not intended as a commitment or contract for billing purposes.

Total Site Load \_\_\_\_\_ (kW)

Type: Residential \_\_\_\_\_ Commercial \_\_\_\_\_ Industrial \_\_\_\_\_

Generator Rating \_\_\_\_\_ (kW) Estimated Annual Generation \_\_\_\_\_ (kWh)

**Mode of Operation** (*at customer delivery point*)

Parallel (*standard*) \_\_\_\_\_ Isolated (*non-standard*) \_\_\_\_\_

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## DESCRIPTION OF PROPOSED INSTALLATION AND OPERATION

Give a general description of the proposed installation and when you plan to operate the generator. **Separately, provide a site map** of the generator installation relative to the electrical service entrance (utility meter location).

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### INVERTER DATA (if available)

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_  
Rated Power Factor (%): \_\_\_\_\_ Rated Voltage (Volts): \_\_\_\_\_ Rated Amperes: \_\_\_\_\_  
Inverter Type (ferroresonant, step mod., pulse wm, etc): \_\_\_\_\_



### CIRCUIT BREAKER (if available)

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_  
Rated Voltage and Phase (1PH or 3PH): \_\_\_\_\_ Rated ampacity (*Amps*) \_\_\_\_\_  
*Short Circuit Interrupting rating (Amperes):* \_\_\_\_\_ BIL Rating: \_\_\_\_\_



### ADDITIONAL INFORMATION

*Separately and for your PV system, please provide a detailed one-line diagram for the equipment illustrated in the diagram below. Also, refer to the LAC typical PV system installation diagram for additional detail requirements.*

**Typical residential generator installation diagram:**



## **SIGN OFF AREA**

The customer agrees to provide the Utility with the generator interconnection requirements called for in this application. Note: Failure to comply with these requirements may delay the processing of this application. In addition, the customer agrees to comply with the requirements called for in the Standard Interconnection Agreement and in the Utility's Electric Rule E-5. The customer understands that rates and rate structures are not guaranteed to any point in the future.

\_\_\_\_\_  
Applicant

\_\_\_\_\_  
Date

---

## **ELECTRIC UTILITY CONTACT FOR APPLICATION SUBMISSION AND FOR MORE INFORMATION:**

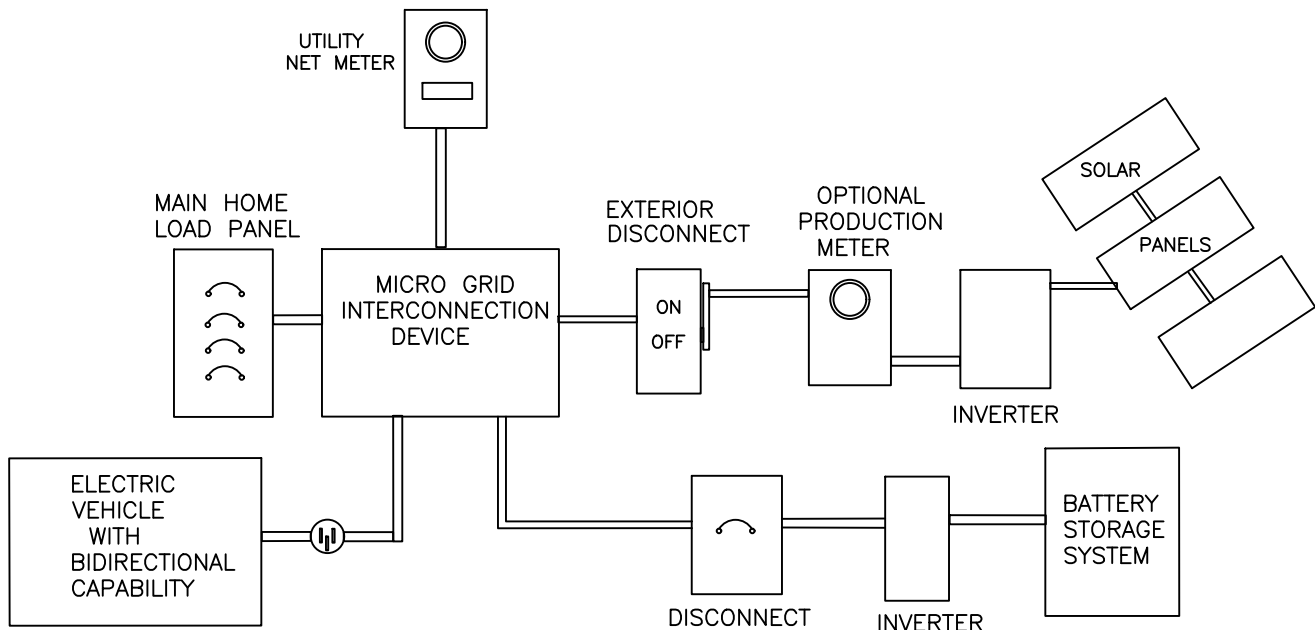
Utility contacts:      Mariano Montoya, Engineering Associate

Address:                1000 Central Avenue, Suite 130  
                             Los Alamos, New Mexico 87544

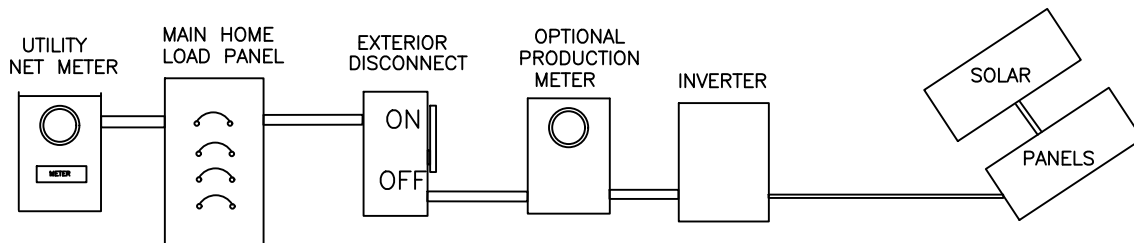
Phone:                 (505) 663-1828

e-mail:                 [mariano.montoya@lacnm.us](mailto:mariano.montoya@lacnm.us)

## PHOTOVOLTAIC INSTALLATION WITH BATTERY BACKUP AND VEHICLE TO HOME (V2H) CHARGING CAPABILITY



## TYPICAL PHOTOVOLTAIC INSTALLATION



### NOTES

- 1.) ALL ELECTRIC INSTALLATIONS SHALL FOLLOW NATIONAL ELECTRIC CODE, NATIONAL ELECTRIC SAFETY CODE, LOS ALAMOS COUNTY COMMUNITY DEVELOPMENT AND NM CONSTRUCTION INDUSTRIES STANDARDS.
- 2.) THE SERVICE METER SHALL BE CLEAR AND ACCESSIBLE TO UTILITY PERSONNEL AT ALL TIMES.
- 3.) THE AC DISCONNECT SWITCH SHALL BE FOR UTILITY USE ONLY AND MOUNTED NEXT TO THE UTILITY METER.
- 4.) THE CUSTOMER PV METER FOR MEASURING ENERGY PRODUCED BY THE PV SOURCE SHALL BE LABELED "PV METER". THE CUSTOMER PV (REC) METER IS OPTIONAL IF THE INVERTER INCLUDES A METER. PV METER IS PROVIDED AND OWNED BY THE CUSTOMER.
- 5.) THE NET METER IS PROVIDED AND OWNED BY THE UTILITY. IT IS USED TO MEASURE THE AMOUNT OF ENERGY DELIVERED BY THE UTILITY TO THE CUSTOMER AND THE ENERGY PRODUCED BY THE QUALIFYING PRODUCTION FACILITY AND DELIVERED TO THE UTILITY.
- 6.) ALL SERVICE ENTRANCE EQUIPMENT SHALL BE GROUPED TOGETHER : CLEAR AND ACCESSIBLE TO UTILITY AT ALL TIMES.

**RULES AND REGULATIONS  
ELECTRIC (E)  
RULE E-5  
INTERCONNECTION - CONNECTION WITH COGENERATION  
AND SMALL POWER PRODUCERS**

APPLICATION INCLUDES RULE E-5 FOR CUSTOMER REFERENCE



**STANDARD INTERCONNECTION AGREEMENT**  
INCORPORATED COUNTY OF LOS ALAMOS DEPARTMENT OF PUBLIC UTILITIES  
STANDARD INTERCONNECTION AGREEMENT FOR  
QUALIFYING FACILITIES

\_\_\_\_\_ (“Customer”) and the Incorporated County of Los Alamos, New Mexico, by and through its Department of Public Utilities (“Utility or County”), referred to collectively as parties and individually as party, agree as follows:

**1. QUALIFYING FACILITY (“Facility”):**

Customer's electric service account number \_\_\_\_\_

Type of generating facility \_\_\_\_\_  
(Solar, Wind, etc.)

Rated generating capacity \_\_\_\_\_ (kW)

Customer and facility address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Facility will be ready for operation on or about \_\_\_\_\_ (date)

**2. OPERATING OPTION**

2.1. Customer has elected to operate its Qualifying Facility in parallel with Utility's system.

2.2. Customer understands that if this agreement is accepted, connection and operation of customer's Qualifying Facility must meet at all times all applicable safety and performance standards, including those established by the National Electrical Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), Underwriters Laboratories (UL), the National Electrical Safety Code (NESC), and all additional safety and performance standards of Utility that are necessary to protect public safety and system reliability.

Customer shall be subject to the terms and conditions set forth in the Utility's Electric Rule E-5 for Interconnection – Connection with Cogeneration and Small Power Producers (“Utility Rule”), a copy of which is attached to this agreement. Customer hereby acknowledges that Customer has read this rule. Electric rates, including net metering customers, are subject to change.

**3. UTILITY RULE.** This Agreement shall be subject to and interpreted consistent with the provisions of Utility Electric Rule E-5.

**4. CREDIT FOR NET ENERGY.** Credit for net energy shall be in accordance with the Utility's Rule, E-5.05, Metering Calculation.

**5. INTERRUPTION OR REDUCTION OF DELIVERIES**

5.1. Utility shall not be obligated to accept or pay for and may require Customer to interrupt or reduce deliveries of available energy in the following circumstances:

- a. When necessary, in order to construct, install, maintain, repair, replace, remove, or inspect any of its equipment or part of its system; or
- b. If Utility reasonably determines that curtailment, interruption, or reduction is necessary because of emergencies, forced outages, force majeure, or compliance with prudent electrical practices.

5.2. To the extent practicable, Utility shall give Customer reasonable notice of the possibility that interruption or reduction of deliveries may be required.

5.3. Notwithstanding any other provision of this agreement, if at any time Utility reasonably determines that:

- a. The Customer's facility may endanger Utility personnel or other persons or property, or
- b. the continued operation of this facility may endanger the integrity or safety of Utility's electric system, then Utility shall have the right to immediately disconnect and lock out Customer's facility from Utility's electric system. No prior notice to the customer is required in circumstances where the Utility reasonably determines that the immediate action is necessary provided that the Utility shall notify Customer as soon as practicable. Customer's facility shall remain disconnected until such time as Utility is reasonably satisfied that the conditions referenced in this Section have been corrected.

## 6. INTERCONNECTION

6.1. Customer shall deliver the as-available energy to Utility at the Utility's meter.

6.2. Customer shall pay for designing, installing, operating, and maintaining the electric generating facility in accordance with all applicable laws and regulations, including the requirements of Utility for interconnection of a Qualifying Facility with Utility's electric system.

6.3. Utility shall furnish and install a standard kilowatt-hour NET meter. Customer shall provide and install a meter socket and any related interconnection equipment per Utility's requirements.

6.4. Utility shall meter the Customer's usage by using two registers. A separate register shall be used for measurement of energy flows in each direction at the point of delivery. Metering shall be at the expense of the Customer.

6.5 Customer shall provide a clearly understandable sketch or one-line diagram showing the Qualifying Facility, the interconnection equipment, breaker panel(s), disconnect switches and metering, to be attached to this Agreement.

6.6 The customer must provide an exterior, lockable disconnect switch to allow Utility personnel to physically disconnect the Customer's Facilities from the Utility.

6.7 Customer shall not commence parallel operation of the generating facility until written approval of the interconnection facilities has been given by Utility. Such approval shall not be

unreasonably withheld or delayed. Notwithstanding the foregoing, Utility approval to operate Customer's Qualifying Facility in parallel with Utility's electrical system should not be construed as an endorsement, confirmation, warranty, guarantee or representation concerning the safety, operating characteristics, durability or reliability of Customer's Qualifying Facility. Utility shall have the right to have its representatives present at the initial testing of Customer's protective apparatus.

## 7. MAINTENANCE AND PERMITS

7.1. Customer shall maintain the generating facility and interconnection facilities in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to, this interconnection requirement, and

7.2. Customer shall obtain any governmental authorizations and permits required for the construction and operation of the electric generating facility and interconnection facilities.

8. ACCESS TO PREMISES. Utility may enter Customer's premises:

- a. to inspect, at all reasonable hours, Customer's protective devices and read or test meters; and
- b. to disconnect, without notice, the interconnection facilities, if Utility reasonably believes a hazardous condition exists and such immediate action is necessary to protect persons, or Utility's facilities, or property of others from damage or interference caused by Customer's facilities, or lack of properly operating protective devices.

## 9. INDEMNITY AND LIABILITY

9.1. Subject to all limitations contained in applicable state law, including the New Mexico Tort Claims Act, each party shall indemnify the other party, its directors, officers, agents and employees against all loss, damages expense and liability to third persons for injury to or death of persons or injury to property caused by the indemnifying party's engineering design, construction ownership or operations of, or the making of replacements, additions or betterment to, by failure of, any of such party's works or facilities used in connection with this agreement by reason of omission or negligence, whether active or passive. The indemnifying party shall, on the other party's request, defend any suit asserting a claim covered by this indemnity. The indemnifying party shall pay all costs that may be incurred by the other party in enforcing this indemnity. It is the intent of the parties hereto that, where negligence is determined to have been contributory, principles of comparative negligence will be followed and each party shall bear the proportionate cost of any loss, damage, expense and liability attributable to that party's negligence.

9.2. Nothing in this agreement shall be construed to create any duty to any standard of care with reference to or any liability to any person not a party to this agreement. Neither Utility, its officers, agents or employees shall be liable for any claims, demands, costs, losses, causes of action, or any other liability of any nature or kind, arising out of the engineering, design construction, ownership, maintenance or operation of, or making of replacements, additions or improvements to, customer's facilities by customer or any other person or entity.

9.3. Neither Utility, its officers, agents or employees shall be liable for damages to the electrical generating equipment caused by an electrical disturbance on the Utility system or on the system of another, whether or not the electrical disturbance results from the negligence of Utility.

10. GOVERNING LAW. This agreement shall be interpreted, governed, and construed under the laws of the state of New Mexico as if executed and to be performed wholly within the state of New Mexico.

11. AMENDMENT, MODIFICATIONS OR WAIVER. Any amendments or modifications to this agreement shall be in writing and agreed to by both parties. The failure of any party at any time or times to require performance of any provision hereof shall in no manner affect the right at a later time to enforce the same. No waiver by any party of the breach of any term or covenant contained in this agreement, whether by conduct or otherwise, shall be deemed to be construed as a further or continuing waiver of any such breach or a waiver of the breach of any other term or covenant unless such waiver is in writing.

12. NOTICES. All written notices shall be directed as follows:

Attention:     Utilities Manager  
                  1000 Central Avenue, Suite 130  
                  Los Alamos, New Mexico 87544

Attention:     CUSTOMER  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_

Customer notices to Utility pursuant to this Agreement shall refer to the Customer's electric service account number set forth in Section 1 of this agreement

13. TERM OF AGREEMENT. This Agreement shall be in effect when signed by the Customer and Utility and shall remain in effect for one year and from year to year unless terminated by either party after the initial year on ten (10) days' prior written notice.

14. ASSIGNMENT. This Agreement and all provisions hereof shall inure to and be binding upon the respective parties hereto, their personal representatives, heirs, successors, and assigns. Customer shall not assign this Agreement or any part hereof without the prior written consent of Utility, and such unauthorized assignment may result in the termination of this Agreement.

15. ATTACHMENTS. This Agreement includes the following attachments, as labeled and incorporated herein by reference:

a. Utility's Electric Rule E-5 Interconnection – Connection with Cogeneration and Small Power Producers.

b. Customer's completed Application for Operation of Customer-Owned Generation.

- c. Customer's site plan and one-line diagram for generation source including service entrance requirements, disconnecting means, panels, breakers, wire types and sizes, etc.
- d. Utility's written authorization to interconnect (this form), and completed service request form (when applicable--for new service installations).

IN WITNESS WHEREOF, the parties have caused two originals of this agreement to be executed by their duly authorized representatives. This agreement is effective as of the last date set forth below.

#### CUSTOMER

Name (Printed): \_\_\_\_\_

Signature: \_\_\_\_\_

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

Date: \_\_\_\_\_

#### UTILITY

Philo Shelton,  
Utilities Manager

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Los Alamos County Code of Ordinances;**  
**Chapter 16 – Development Code**

**Sec. 16-279. Solar energy collection system.**

(a)

When a solar energy collection system is installed on a lot, accessory structures or vegetation on an abutting lot shall not be located so as to block the solar collector's access to solar energy. The portion of a solar collector that is protected is that portion which:

(1)

Is located so as not to be shaded between the hours of 10:00 a.m. and 3:00 p.m. by a hypothetical 12-foot obstruction located on the lot line; and

(2)

Has an area not greater than one-half of the heated floor area of the structure, or the largest of the structures served.

(b)

Subsection (a) of this section does not apply to accessory structures or vegetation existing in any abutting lot at the time of installation of the solar energy collection system, or on the date of adoption of this chapter, whichever is later. Subsection (a) of this section controls any accessory structure erected on, or vegetation planted in, abutting lots after the installation of the solar energy collection system.

(c)

A statement that a solar energy collection system has been installed on a lot, and a right to solar access is claimed, shall be filed and recorded with the county clerk on the day the building permit for the improvement is issued. A copy of the recorded statement shall be provided to the community development department by the person owning the solar energy collection system. The solar energy collection system must be completed and have a final inspection by the county building inspector within one year from the statement's recorded date.

*(Ord. No. 85-210, § 3, 1994; Code 1985, § 17.40.090)*

## Design Criteria for Los Alamos County PV Installations

Ground Snow Load	Wind Speed (mph)	Seismic Design Category	Subject to damage from			Winter Design Temp	Ice Barrier Underlayment required	Flood Hazards	Air Freezing Index	Mean Annual Temp
			Weathering	Frost Line Depth	Termite					
30 Lbs	90	D †	Moderate	3' LA 2' WR	Slight to Moderate	10	Yes	Sept. '87	650	45-50

†

1613.5.4 Design spectral response acceleration parameters. Substitute the following text:

Five-percent damped design spectral response acceleration at short periods,  $S_{DS}$ , = 0.75 g, and at 1-second period,  $S_{D1}$ , = 0.64 g.

Replace in Sections 11.3 and 11.4.5 of ASCE 7, the definition for  $T_o$  from  $T_o = 0.2 S_{D1}/S_{DS}$  to  $T_o = 0.1$  sec.



# Ground Mounted Photovoltaic and Hot Water Solar Panels

Los Alamos County Community Development Department  
1000 Central Avenue, Suite 150, Los Alamos, NM 87544  
505-662-8120 Fax 505-662-8363

## Requirements for Ground Mounted Installation

2 copies of all documentation required

Provide:	PROVIDED	NA
1. Building Permit Application completed and signed.		
2. Site Plan showing location, site utilities, setbacks and easements		
3. Height of tallest portion of completed assembly from the finished grade.		
4. Engineering* for the foundation of the system		
5. Engineering* for the rack assembly		
6. Engineering* for P.V. Panel attachment to the rack.		
7. New Mexico one Call		
<b>Required inspections for Ground Mounted:</b> 1. Excavation and steel 2. Final.		
Note: Permits will only be issued to electrical contractors.		
*Engineering must address gravity, wind, snow and seismic loads. Panels and rack must be rated and listed.		



Date: \_\_\_\_\_

Plan/Permit #: \_\_\_\_\_

Plan Review Fee: \_\_\_\_\_

Floodplain: \_\_\_\_\_

Please complete all areas on this form that apply. Incomplete applications may delay process.

\_\_\_\_ Residential

\_\_\_\_ Commercial

Project Address: \_\_\_\_\_

Owner: \_\_\_\_\_ Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Contractor: \_\_\_\_\_ Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Address: \_\_\_\_\_ License #: \_\_\_\_\_

Design Professional (if applicable): \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_ Email: \_\_\_\_\_

Main Point of Contact: Owner: \_\_\_\_ Contractor: \_\_\_\_ Design Professional: \_\_\_\_

**Type of Work:**

<input type="checkbox"/> Accessory Structure	<input type="checkbox"/> Fence **	<input type="checkbox"/> Remodel	<input type="checkbox"/> Sun Room	<input type="checkbox"/> Sign Permanent
<input type="checkbox"/> Addition	<input type="checkbox"/> Fireplace	<input type="checkbox"/> New Dwelling	<input type="checkbox"/> Photovoltaic	<input type="checkbox"/> Sign Temporary
<input type="checkbox"/> Curb-Cut	<input type="checkbox"/> Foundation	<input type="checkbox"/> New Roof	<input type="checkbox"/> Re-Roof	<input type="checkbox"/> Window/Door
<input type="checkbox"/> Deck/Porch Carport	<input type="checkbox"/> Grading/Excav.	<input type="checkbox"/> Other	<input type="checkbox"/> Siding/Stucco	<input type="checkbox"/> Demo

Square Footage: Heated \_\_\_\_\_ Garage: \_\_\_\_\_ Deck, Carport, Porch or Patio Cover \_\_\_\_\_ Total Sq. Ft. \_\_\_\_\_

Valuation of Work: \$ \_\_\_\_\_ Number of Stories: \_\_\_\_\_ Height \_\_\_\_\_

Description of Work: \_\_\_\_\_

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Signature: \_\_\_\_\_

I understand that by entering my name above, it constitutes as a legal signature.

\*\*Easement Encroachment. This permit authorizes the permit holder to construct/install a non-permanent structure (requires no subsurface foundation or structural member), within the boundaries of an existing public utility easement. Whenever this is the case, permittee shall be fully responsible (at permit holder's cost) for the removal and replacement of such non-permanent structure(s), at any time County personnel or County contractor may deem the structure interferes with work on the public utility for which the easement is in place. Any encroachment to the right of way or easements shall ensure that exiting drainage patterns are being maintained and unimpeded as applicable.

Bldg: \_\_\_\_\_ Util: \_\_\_\_\_  
Plng: \_\_\_\_\_ PW: \_\_\_\_\_ Fire: \_\_\_\_\_

1000 Central Avenue, Suite 150  
Los Alamos, NM 87544  
P 505.662.8120 F 505.662.8363



# Building Guide for Roof Mounted Photovoltaic and Hotwater Solar Panels

## Requirements for Roof Mounted Installation

2 copies of all documentation required

Provide:	PROVIDED	NA
1. Building Permit Application completed and signed.		
2. <b>Roof Plan</b> (1/4" scale Min) include size and type of rafters, type of decking, slope of roof, type of existing roofing, and number of existing roof coverings.		
3. <b>Panel Layout Plan</b> (1/4" scale Min) Show exact panel locations, provide weight, panels in pounds and/size. Provide dead load weight per attachment point, and number of attachment points.		
4. <b>Anchoring system for panel rack.</b> Include engineering* and flashing details for mounts.		
5. <b>Anchoring system of P. V. Panels to rack</b> (welded attachment of panels to rack will not be allowed) Include engineering* for panels and their attachments to rack.		
6. Height of tallest portion/ point of completed assembly from the finished grade.		
<b>Required inspections for Roof mounted:</b> 1 Rack Installation and Flashing. 2. Final.		
*Engineering must address gravity, wind, snow and seismic loads. Panels and rack must be rated and listed.		

This handout was developed by the Los Alamos County Community Development Department as a basic plan submittal under the current codes. It is not intended to cover all circumstances. Los Alamos County will not be held responsible for the design of P. V. Solar System.

FORM DATE: 08/02/10

Date: \_\_\_\_\_

Plan/Permit #: \_\_\_\_\_

Plan Review Fee: \_\_\_\_\_

Floodplain: \_\_\_\_\_

Please complete all areas on this form that apply. Incomplete applications may delay process.

\_\_\_\_ Residential

\_\_\_\_ Commercial

Project Address: \_\_\_\_\_

Owner: \_\_\_\_\_ Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Contractor: \_\_\_\_\_ Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Address: \_\_\_\_\_ License #: \_\_\_\_\_

Design Professional (if applicable): \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_ Email: \_\_\_\_\_

Main Point of Contact: Owner: \_\_\_\_ Contractor: \_\_\_\_ Design Professional: \_\_\_\_

**Type of Work:**

<input type="checkbox"/> Accessory Structure	<input type="checkbox"/> Fence **	<input type="checkbox"/> Remodel	<input type="checkbox"/> Sun Room	<input type="checkbox"/> Sign Permanent
<input type="checkbox"/> Addition	<input type="checkbox"/> Fireplace	<input type="checkbox"/> New Dwelling	<input type="checkbox"/> Photovoltaic	<input type="checkbox"/> Sign Temporary
<input type="checkbox"/> Curb-Cut	<input type="checkbox"/> Foundation	<input type="checkbox"/> New Roof	<input type="checkbox"/> Re-Roof	<input type="checkbox"/> Window/Door
<input type="checkbox"/> Deck/Porch Carport	<input type="checkbox"/> Grading/Excav.	<input type="checkbox"/> Other	<input type="checkbox"/> Siding/Stucco	<input type="checkbox"/> Demo

Square Footage: Heated \_\_\_\_\_ Garage: \_\_\_\_\_ Deck, Carport, Porch or Patio Cover \_\_\_\_\_ Total Sq. Ft. \_\_\_\_\_

Valuation of Work: \$ \_\_\_\_\_ Number of Stories: \_\_\_\_\_ Height \_\_\_\_\_

Description of Work: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Signature: \_\_\_\_\_

I understand that by entering my name above, it constitutes as a legal signature.

\*\*Easement Encroachment. This permit authorizes the permit holder to construct/install a non-permanent structure (requires no subsurface foundation or structural member), within the boundaries of an existing public utility easement. Whenever this is the case, permittee shall be fully responsible (at permit holder's cost) for the removal and replacement of such non-permanent structure(s), at any time County personnel or County contractor may deem the structure interferes with work on the public utility for which the easement is in place. Any encroachment to the right of way or easements shall ensure that exiting drainage patterns are being maintained and unimpeded as applicable.

Bldg: \_\_\_\_\_ Util: \_\_\_\_\_

Plng: \_\_\_\_\_ PW: \_\_\_\_\_ Fire: \_\_\_\_\_

1000 Central Avenue, Suite 150  
 Los Alamos, NM 87544  
 P 505.662.8120 F 505.662.8363

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	CY2023
Energy Received from Solar Customers (kwh)	90,815	101,660	188,294	197,606	290,777	302,105	273,283	292,469	185,502	243,942	248,829	148,392	2,563,674
	4%	4%	7%	8%	11%	12%	11%	11%	7%	10%	10%	6%	100%
<b>Wholesale Rate**</b>	<b>\$ 0.073443</b>	<b>\$ 0.075241</b>	<b>\$ 0.076673</b>	<b>\$ 0.076895</b>	<b>\$ 0.076282</b>	<b>\$ 0.076248</b>	<b>\$ 0.074827</b>	<b>\$ 0.073895</b>	<b>\$ 0.071042</b>	<b>\$ 0.071643</b>	<b>\$ 0.071726</b>	<b>\$ 0.068456</b>	
<b>Retail Rate</b>	<b>\$ 0.1152</b>	<b>\$ 0.1152</b>	<b>\$ 0.1152</b>	<b>\$ 0.1152</b>	<b>\$ 0.1152</b>	<b>\$ 0.1152</b>	<b>\$ 0.1152</b>	<b>\$ 0.1152</b>	<b>\$ 0.1152</b>	<b>\$ 0.1282</b>	<b>\$ 0.1282</b>	<b>\$ 0.1282</b>	
<b>Energy Received-Wholesale Rate</b>	<b>\$ 6,670</b>	<b>\$ 7,649</b>	<b>\$ 14,437</b>	<b>\$ 15,195</b>	<b>\$ 22,181</b>	<b>\$ 23,035</b>	<b>\$ 20,449</b>	<b>\$ 21,612</b>	<b>\$ 13,178</b>	<b>\$ 17,477</b>	<b>\$ 17,848</b>	<b>\$ 10,158</b>	<b>\$ 189,889</b>
Energy Received - Retail Rate	\$ 10,462	\$ 11,711	\$ 21,691	\$ 22,764	\$ 33,498	\$ 34,802	\$ 31,482	\$ 33,692	\$ 21,370	\$ 31,273	\$ 31,900	\$ 19,024	\$ 303,670
<b>Overpayment</b>	<b>\$ 3,792</b>	<b>\$ 4,062</b>	<b>\$ 7,254</b>	<b>\$ 7,569</b>	<b>\$ 11,316</b>	<b>\$ 11,768</b>	<b>\$ 11,033</b>	<b>\$ 12,080</b>	<b>\$ 8,191</b>	<b>\$ 13,797</b>	<b>\$ 14,052</b>	<b>\$ 8,866</b>	<b>\$ 113,782</b>

0.074 Ave Wholesale Rate	\$ 251.73
0.118 Ave Retail Rate	Average
0.045 Difference	

Energy Delivered to Solar Customers (kwh)	393,877	418,808	434,133	324,286	214,941	273,090	224,473	412,126	251,270	239,981	275,446	385,266	3,847,697
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\*\*Wholesale = rolling 12-month ECA capacity and energy cost from the Power Pool Invoice



# County of Los Alamos

## Staff Report

April 17, 2024

Los Alamos, NM 87544  
www.losalamosnm.us

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**Agenda No.:**

**Index (Council Goals):**

**Presenters:** Philo Shelton, Utilities Manager

**Legislative File:** 18087-24

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### **Title**

Status Reports for March 2024

### **Body**

Each month the Board receives in the agenda packet informational reports on various items. No presentation is given, but the Board may discuss any of the reports provided.

### **Attachments**

A - Electric Reliability Report

B - Accounts Receivables Report

C - Risk & Safety Report

**Los Alamos County**  
**Department of Public Utilities**

Electric Distribution  
Reliability

April 17, 2024

Stephen Marez

Deputy Utility Manager  
Electric Distribution

<b>Twelve Month History</b>	<b>MARCH 24</b>	
<b>Total # Accounts</b>	<b>9045</b>	
<b>Total # Interruptions</b>	<b>36</b>	
<b>Sum Customer Interruption Durations</b>	<b>4465:36:00</b>	<b>hours:min</b>
<b># Customers Interrupted</b>	<b>2567</b>	
<b>SAIFI (APPA AVG. = 1.0)</b>	<b>.28</b>	<b>int./cust.</b>
<b>SAIDI (APPA AVG. = 1:00)</b>	<b>00:29</b>	<b>hours:min</b>
<b>CAIDI</b>	<b>1:44</b>	<b>hours:min/INT</b>
<b>ASAI</b>	<b>99.9998%</b>	<b>% Available</b>

- **SAIFI - System Average Interruption Frequency Index**

A measure of interruptions per customer (Per Year)

$$\text{SAIFI} = \frac{(\text{Total number of customer interruptions})}{(\text{Total number of customers served})}$$

- **SAIDI – System Average Interruption Duration Index**

A measure of outage time per customer if all customers were out at the same time (hours per year)

$$\text{SAIDI} = \frac{(\text{Sum of all customer outage durations})}{(\text{Total number of customers served})}$$

- **CAIDI – Customer Average Interruption Duration Index**

A measure of the average outage duration per customer (hours per interruption)

$$\text{CAIDI} = \frac{(\text{Sum of all customer outage durations})}{(\text{Total number of customer interruptions})} = \frac{\text{SAIDI}}{\text{SAIFI}}$$

- **ASAI – Average System Availability Index**

A measure of the average service availability (Per unit)

$$\text{ASAI} = \frac{(\text{Service hours available})}{(\text{Customer demand hours})} = \frac{8760 - \text{SAIDI}}{8760}$$

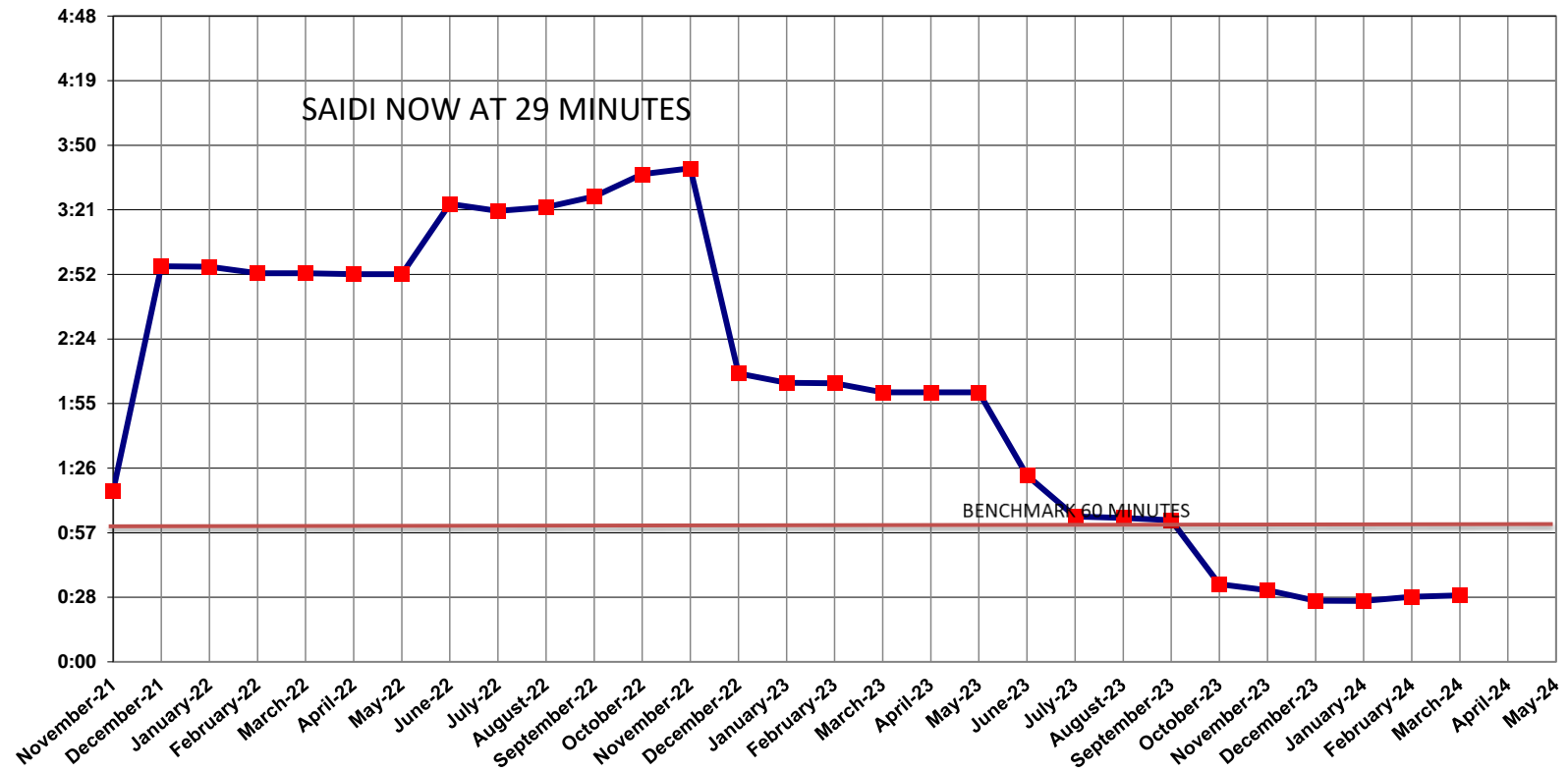




CIRCUIT SAIDI IS CALCULATED ACCORDING TO THE NUMBER OF CUSTOMERS IN EACH CIRCUIT RESPECTIVELY

<u>Running SAIDI Circuit 13</u>	<u>Running SAIDI Circuit 14</u>	<u>Running SAIDI Circuit 15</u>	<u>Running SAIDI Circuit 16</u>	<u>Running SAIDI Circuit 17</u>	<u>Running SAIDI Circuit 18</u>	<u>Running SAIDI Circuit EA4 &amp; ELK RIDGE</u>	<u>Running SAIDI Circuit WR1</u>	<u>Running SAIDI Circuit WR2</u>	<u>Monthly SAIDI</u>		<u>Monthly Customer Minutes out of service</u>	<u>WEATHER SAIDI</u>
			0:00:10							0:00:02		
			0:00:08						MAY	0:00:02	9:00:00	
0:06:56										0:01:16		
0:05:51										0:01:04		
0:43:32										0:07:58		
0:28:42										0:05:15	2345:10:00	
0:01:08										0:00:13	2185:26:00	
				0:06:34					JUNE	0:00:09	2046:50:00	
			0:01:47							0:00:22		
0:01:38										0:00:18		
0:05:59										0:01:06		
0:00:26										0:00:05		
		0:06:26								0:01:20		
			0:00:23				0:02:21			0:00:25		
0:00:58										0:00:05	606:05:00	
							0:00:48			0:00:11		
				0:25:00						0:00:08		
				0:06:15						0:00:35	197:12:00	
	0:04:31									0:00:09	176:10:00	
				0:01:36						0:00:16		
0:01:05				0:12:03					JULY	0:00:02	176:10:00	
										0:00:12		
							0:03:24			0:00:17	940:16:00	
		0:20:40							AUGUST	0:00:36		
		0:02:53							SEPTEMBER	0:04:17	0:04:17	
						0:07:16			OCTOBER	0:00:36	0:00:36	
0:00:36									DEC	0:00:08	0:00:08	
0:03:29										0:00:07		0:00:07
	0:15:35								FEBRUARY	0:00:38	0:00:45	
	0:02:20									0:00:56		
	0:03:00									0:00:08		
0:00:15										0:00:11		
						0:15:38				0:00:03		
		0:00:19								0:00:17		
		0:00:46								0:00:04		
									MARCH	0:00:10	0:00:00	0:00:33
1:40:21	0:04:31	0:04:31	0:00:10	0:39:26	0:00:00	0:07:16	0:06:33	0:00:00	<b>Total</b>	0:29:37		0:00:40
1655	539	1875	1842	209	213	165	1586	961	9045			

EACH POINT IS A 12 MONTH SAIDI HISTORY  
1:00:00 = APPA BENCHMARK SAIDI



# **STATUS REPORTS**

## **ACCOUNTS RECEIVABLES**

PREPARED BY

Joann Gentry  
Business Operations Manager -  
Technology & Customer Service

Los Alamos County Utilities Department  
Active Receivables Over 90 Days Past Due  
April 1, 2024

<i>Account</i>	<i>Customer ID</i>	<i>Acct Type</i>	<i>Comments</i>	<i>90 - 119</i>	<i>120 +</i>
3002326	2217168		Left property, didn't call. Moving back to owner	56.79	53.72
3007154	2021905		Utilities off - Will file lien	129.88	0.00
3002177	2016744		Utilities off - Stable Lot	37.85	143.41
3010128	2114898		Utilities off - Stable Lot	37.85	218.37
3007256	2022141		Utilities off - Lien on file	270.05	330.75
3006139	2025374		Utilities off - Lien on file	391.00	213.88
3009211	2217351		Utilities off - Lien on file	129.88	1,591.84
3003865	2011906		Utilities off - Lien on file	0.00	3,913.66

**8 Accounts**

<b>\$ 1,053.30</b>	<b>\$ 6,465.63</b>
	<b><u>\$ 7,518.93</u></b>

Los Alamos County Utilities Department  
Receivables More than 60 Days Inactive Accounts  
April 1, 2024

YEAR	OUTSTANDING 4/1	# OF ACCOUNTS	OUTSTANDING 3/1	# OF ACCOUNTS
FY20	\$ 24,762.64	98	\$ 24,762.64	98
FY21	\$ 33,815.55	110	\$ 34,080.76	110
FY22	\$ 29,943.25	153	\$ 28,099.81	154
FY23	\$ 18,794.11	272	\$ 18,009.01	277
FY24	\$ 7,873.69	214	\$ 698.27	222
<b>TOTAL</b>	<b>\$ 115,189.24</b>	<b>847</b>	<b>\$ 105,650.49</b>	<b>861</b>

YEAR	Account Type	OUTSTANDING 4/1	# OF ACCOUNTS	OUTSTANDING 3/1	# OF ACCOUNTS
FY20	Residential	\$ 20,247.10	91	\$ 20,247.10	91
	Commercial	\$ 4,515.54	7	\$ 4,515.54	7
FY21	Residential	\$ 28,977.34	97	\$ 29,242.55	97
	Commercial	\$ 4,838.21	13	\$ 4,838.21	13
FY22	Residential	\$ 21,695.75	139	\$ 19,852.31	140
	Commercial	\$ 8,247.50	14	\$ 8,247.50	14
FY23	Residential	\$ 8,773.04	243	\$ 8,170.48	246
	Commercial	\$ 10,021.07	29	\$ 9,838.53	31
FY24	Residential	\$ 10,990.51	201	\$ 4,615.40	208
	Commercial	\$ (3,116.82)	13	\$ (3,917.13)	14
<b>TOTAL</b>		<b>\$ 115,189.24</b>	<b>847</b>	<b>\$ 105,650.49</b>	<b>861</b>

# STATUS REPORTS

## Risk & Safety

PREPARED BY:

Victoria DeVargas

Risk Manager

DEPARTMENT OF PUBLIC UTILITIES CLAIMS					
Information Provided by the County Risk Manager					
YEAR	REPORT MONTH	BPU MTG DATE	TORT CLAIMS	WORKERS COMP	PROPERTY DAMAGE
2024	MAR	4/17/2024	1) Claimant states a power surge caused damage to fixtures and appliance in home. 2) Claimant has increased water bill due to leak at water meter.	1) WP employee sustained injuries from a Motor Vehicle Collision (hit by 3rd party)	1) ED employee hit another county vehicle with front bumper of bucket truck; 2) WP vehicle possibly totaled in motor vehicle collision with 3rd party
2024	FEB	3/20/2024	NONE	NONE	NONE
2024	JAN	2/21/2024	NONE	NONE	1) Damage to tailgate of dump truck while GWS was loading asphalt.
2023	DEC	1/17/2024	1) Claimant found and removed plastic bucket debris found in their water pipes from main water lines.	1) WWTP employee smashed finger while operating equipment	NONE
2023	NOV	12/6/2023	NONE	WP employee injured his foot when a piece of concrete fell from the loader.	NONE
2023	OCT	11/15/2023	NONE	NONE	NONE
2023	SEP	10/18/2023	Claimant states water pressure blew off faucet causing flooding in the residence;	NONE	NONE
2023	AUG	9/20/2023	Four claimants state backflow of sewage into their residences. <i>*Please note that these claims were submitted to the contractor insurance.</i>	NONE	Non-County owned truck hit power pole on the ski hill. <i>*Please note claim being submitted to vehicle owner's insurance.</i>
2023	JUL	8/16/2023	NONE	NONE	NONE
2023	JUN	7/19/2023	1) Claimant states alleged failure to detect and rectify a gas leak resulting in damages to residence/property. 2) Claimant states a backed up sewage line pushed sewage into their home resulting in damage to the residence.	NONE	Claim in which a Utilities employee reported that the toolbox slid in the truck he was driving, and it broke the truck's rear window.
2023	MAY	6/21/2023	NONE	A GWS employee alleges leg/ankle strain from being struck by the fender of a dual wheel truck after he allegedly responded to the driver's inquiry at a job site. This injury is reflected in the OSHA Incidence Rate spreadsheet.	A WWTP employee avoiding an oncoming car, misjudged clearance and slid off the road into a tree.
2023	APR	5/17/2023	1). County directed by homeowner to shut off only water service for the winter, but County shut off gas and electric also, causing freezing conditions and plumbing damage in the house. 2). Claimant alleges a piece of asphalt left on street by County maintenance crew after repairs became embedded in her tire.	NONE	1). A GWS employee allegedly struck a concrete slab causing significant damage to the underside and steering controls of the vehicle. 2). GWS unit 1216 was found with a broken rear left window where parked under shed behind Bldg. 5; glass on ground; unknown party caused damage.
2023	MAR	4/19/2023	Claimant resident's fence was on County right of way, and ED had to cut the fence in order to work on a transformer. No liability; we recommended denial.	NONE	NONE
2023	FEB	3/15/2023	NONE	NONE	Utilities Hydroelectric employee was plowing snow when he slid into a ditch due to hazardous conditions. Side mirror and wheel/rim were damaged.
2023	JAN	2/15/2023	Claimant reports sewer back-up related to County main back-up. County staff acknowledge responsibility.	NONE	LAPD reported a hit and run damage to a Utility box; no suspects.
2022	DEC	1/18/2023	NONE	NONE	ED employee misjudged backing and backed Unit 1213 into a piece of equipment; very minor damage.
2022	NOV	12/7/2022	NONE	NONE	NONE
2022	OCT	11/16/2022	LA Public Schools made claim for two burned out motors which they attribute to a power outage.	NONE	NONE
2022	SEP	10/19/2022	NONE	NONE	NONE
2022	AUG	9/21/2022	NONE	NONE	NONE
2022	JUL	8/17/2022	NONE	NONE	An EP employee experienced a stone chipping to his windshield while operating his assigned vehicle. No recovery.
2022	JUN	7/20/2022	NONE	1). A GWS employee fell while securing a Vector boom; strained leg; lost 6 days then back to full duty. 2). A WP employee working on trailer strained his knee; examined and released to full duty.	NONE
2022	MAY	6/15/2022	Claimant experienced sewer water damage to basement and contents due to a County main back-up. Claimant called ServePro initially, and insurance has approved continuing mitigation and restoration services.	An Electrical Distribution employee caught and fractured two fingers in a cable reel. The employee was treated and released to work with restriction. Employee will require follow-up treatment.	NONE
2022	APR	5/18/2022	NONE	NONE	NONE
2022	MAR	4/20/2022	NONE	NONE	1). WP employee accidentally broke window of truck. 2). GWS Backhoe front bucket apparatus came loose, damaged hood of machine.
2022	FEB	3/16/2022	Claimant alleges property damage due to water line leak. Minor.	NONE	NONE
2022	JAN	2/16/2022	There were no Utilities related tort claims filed with regard to any January incidents.	An Electrical Distribution employee slipped and fell on parking lot ice, currently working with restrictions.	A GWS employee backing into space lost control of his personal vehicle, struck NE corner of Bldg. 5, causing significant damage. Employee provided insurance information. Risk will recover damages for the County.
2021	DEC	1/19/2022	NONE	NONE	NONE
2021	NOV	12/15/2021	NONE	NONE	NONE
2021	OCT	11/17/21	Claimant alleges furnace dame as result of replacement of gas meter.	NONE	NONE
2021	SEP	10/20/21	1). Claimant states damage to various fixtures in building new filtration system was installed. 2). Claimant states gas leak to regulator caused damage to GLR-04	NONE	NONE
2021	AUG	09/15/21	NONE	NONE	NONE
2021	JUL	08/18/21	NONE	NONE	NONE
2021	JUN	07/21/21	NONE	NONE	NONE
2021	MAY	06/16/21	NONE	NONE	NONE
2021	APR	05/19/21	NONE	NONE	NONE
2021	MAR	04/21/21	NONE	NONE	NONE
2021	FEB	03/17/21	1). GWS employee backed into parked unoccupied motorist's vehicle. 2). GWS snowplow slid into motorist under icy conditions.	An ED employee slipped and fell on ice; injured right wrist/hand; able to return to work with no lost days.	A GWS employee backed into a shed at the Aquatic Center. GWS is repairing damage.
2021	JAN	02/24/21	NONE	NONE	1). A GWS employee misjudged backing clearance and backed vehicle 1113 into 1202, with minor damage. 2). A Utilities EP Hydro employee misjudged backing clearance and backed vehicle 1242 into a parked snow plow, resulting only in a small hole in 1242 tailgate. Winter weather conditions.

YEAR	REPORT MONTH	BPU MTG DATE	TORT CLAIMS	WORKERS COMP	PROPERTY DAMAGE
2020	DEC	01/20/21	On DP Road, GWS driver making turn misjudged clearance and struck a support leg of a flagging machine owned by Southwest Safety; \$3800+- damage claimed.	NONE	NONE
2020	NOV	12/16/20	Claimant alleges that lightning struck a County utility pole causing a voltage surge that damaged his computer. Recommended for denial.	NONE	Claim in which a Utilities employee reported that the toolbox slid in the truck he was driving, and it broke the truck's rear window.
2020	OCT	11/18/20	Claim involving Electrical Distribution: a claimant alleges that home appliances were damaged due to a failure of their neutral conductor, causing voltage overload in part of their electrical panel. ED has responded that the County has no way of knowing or predicting that a house service conductor will fail. Claim has been recommended for denial.	NONE	NONE
2020	SEP	10/21/20	NONE	A lineman fractured/lacerated his right middle finger when removing a heavy manhole cover; returned to duty same day.	NONE
2020	AUG	09/16/20	Resident and her insurer claim sewer back-up damage due to County main problem	GWS worker using high pressure wand; wand slipped, causing contact and skin abrasion to wrist.	NONE
2020	JUL	08/19/20	Water main repair caused debris to enter residence plumbing, clogging house facilities; plumber's bill claimed.	NONE	Break-in reported at El Vado. Damage and theft of federally owned property being stored on premises; no damage or theft to County.
2020	JUN	07/15/20	A claimant experienced water damage to his residence due to a County water line leak.	Lineman lacerated his hand using a knife to splice cable (6/8/2020)	NONE
2020	MAY	06/17/20	NONE	NONE	NONE
2020	APR	05/20/20	NONE	NONE	NONE
2020	MAR	04/15/20	NONE	NONE	NONE
2020	FEB	03/18/20	NONE	NONE	NONE
2020	JAN	02/19/20	Resident incurred plumber bill; didn't know outage was due to main break.	NONE	NONE



## LOS ALAMOS COUNTY - RISK MANAGEMENT

March 2024

MONTH	ADMIN	EL DIST	EL PROD	GWS	WA PROD	WWTP
	Hours Worked	Hours Worked	Hours Worked	Hours Worked	Hours Worked	Hours Worked
Jan - 2024	2843.0	1474.0	1736.0	2678.0	1250.0	1187.0
Feb - 2024	3743.0	1962.0	1928.0	3624.0	1587.0	1462.0
Mar - 2023	3443.0	1795.0	1797.0	3309.0	1373.0	1471.0
Apr - 2023	3668.0	1815.0	2185.0	3148.0	1468.0	1306.0
May - 2023	3540.0	1623.0	2132.0	3716.0	1366.0	1279.0
June - 2023	5461.0	2533.0	2758.0	5205.0	2065.0	1585.0
July - 2023	3884.0	1540.0	1894.0	3428.0	1360.0	986.0
Aug - 2023	4175.5	1761.8	1914.0	3876.8	1342.3	1113.5
Sept - 2023	3613.3	1665.0	1777.8	3304.9	1411.6	1038.0
Oct - 2023	3442.5	1660.8	1799.8	3103.1	1358.5	1045.5
Nov - 2023	5281.8	2227.0	2607.3	4466.3	1762.0	1936.0
Dec - 2023	3629.8	1925.0	1812.3	3559.9	1415.0	1298.5
<b>Total Hrs Worked -&gt;</b>	<b>46724.7</b>	<b>21981.5</b>	<b>24341.0</b>	<b>43419.1</b>	<b>17758.3</b>	<b>15707.5</b>
<b>Number of Recordable Injury and Illness Cases*</b>	0	0	0	1	1	1
<b>OSHA Recordable Injury &amp; Illness Incidence Rate</b>	0.00	0.00	0.00	4.61	11.26	12.73
<b>Number of OSHA Days Away Days Restricted (DART) cases</b>	0	0	0	0	0	0
<b>OSHA Days Away Days Restricted (DART) Rate</b>	0.00	0.00	0.00	0.00	0.00	0.00

### INJURY DATES:

05-17-23: (GWS) THE RECENT GWS INJURY IS AN ALLEGED STRAIN OF ANKLE/LEG; EMPLOYEE TREATED AND RELEASED TO FULL DUTY.

11-15-23: (WP) employee injured foot when a piece of concrete fell from the loader. Employee treated and released to full duty.

12-26-23: (WWTP) Employee smashed finger operating equipment. Employee treated and released to full duty.

3-4-34: (WP) employee injured in motor vehicle collision. Employee currently being treated, released to full duty.

**TOTAL UTILITIES PERFORMANCE:** 4 INJURIES X 200,000 = 200,000/169,932.1 ACTUAL HOURS WORKED = 4.71 OSHA RECORDABLE INJURIES PER 100 FTE

**NATIONAL PERFORMANCE, UTILITIES (NAICS 22):** 1.7 OSHA RECORDABLE INJURIES PER 100 FTE

**INJURIES REQUIRING MEDICAL ATTENTION BEYOND FIRST AID ARE REQUIRED TO BE CONSIDERED OSHA RECORDABLE INJURIES , RETAINED IN THIS RECORD**



# County of Los Alamos

## Staff Report

April 17, 2024

Los Alamos, NM 87544  
www.losalamosnm.us

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**Agenda No.:**

**Index (Council Goals):**

**Presenters:** Philo Shelton, Utilities Manager

**Legislative File:** 18065-24

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**Title**

Tickler File for the Next Three Months

**Attachments**

A - Tickler File May - July 2024



# County of Los Alamos

## Combined Tickler

Los Alamos, NM 87544  
www.losalamosnm.us

**BPU & Council**

File Number	Title	
<b>Agenda Date: 05/01/2024</b>		
18688-24	<b>Presentation</b> Los Alamos High School Eco Club Presentation <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>Business</b>  <b>Length of Presentation:</b> <b>Sponsors:</b> Philo Shelton, Utilities Manager
18340-24	<b>Presentation</b> DPU Charter & Broadband <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>BUSINESS</b>  <b>Length of Presentation:</b> <b>Sponsors:</b> Philo Shelton, Utilities Manager and Thomas Wyman, Assistant County Attorney
18388-24	<b>Personnel Matter</b> Statement Regarding Closed Session Pursuant to § 10-15-1 (H)(2) of the New Mexico Open Meetings Act, NMSA 1978, the Board of Public Utilities met in closed session on May 1, 2024 at 5:30 pm to discuss information pertaining to limited personnel matters: Utilities Manager Performance Review <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>CALL TO ORDER</b>  <b>Length of Presentation:</b> <b>Sponsors:</b> Board of Public Utilities
18386-24a	<b>Closed Session</b> Utilities Manager Performance Review <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>CLOSED SESSION</b>  <b>Length of Presentation:</b> <b>Sponsors:</b> Board of Public Utilities
18459-24	<b>Presentation</b> Update from NMED - Hazardous Waste Bureau on the Nature, Extent and Remediation of the Chromium Plume at Los Alamos, New Mexico <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>PRESENTATIONS</b>  <b>Length of Presentation:</b> 45 MIN <b>Sponsors:</b> Philo Shelton, Utilities Manager
18463-24	<b>Briefing/Report (Dept,BCC) - Action Requested</b> Discussion on Power Purchase Agreements and/or Ownership of Generation Resources <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>PRESENTATIONS</b>  <b>Length of Presentation:</b> <b>Sponsors:</b> Ben Olbrich, Deputy Utilities Manager - Power Supply and Steve Tobin, Board - Commission or Committee Member

**Agenda Date: 05/07/2024**

File Number	Title	
18607-24	<b>Budget Item</b> Approval of Budget Revision ____ for Uniper Settlement <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>Consent</b>  <b>Length of Presentation:</b> <b>Sponsors:</b> Karen Kendall, Deputy Utilities Manager - Finance
OR1018-24	<b>Ordinance</b> Introduction of Incorporated County of Los Alamos Ordinance No. 733 AN ORDINANCE AUTHORIZING THE INCORPORATED COUNTY OF LOS ALAMOS (COUNTY) TO SUBMIT AN AMENDMENT NO. 2, TO THE NEW MEXICO ENVIRONMENT DEPARTMENT (NMED) CLEAN WATER STATE REVOLVING FUND (CWSRF), FOR THE PURPOSE OF INCREASING THE FUNDING OF LOAN NUMBER CWSRF 110 BY \$1,200,000 FOR THE BAYO LIFT STATION ELIMINATION PROJECT. <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>Introduction of Ordinance</b>  <b>Length of Presentation:</b> <b>Sponsors:</b> James Alarid, Deputy Utilities Manager - Engineering
OR1015-24	<b>Ordinance</b> Introduction of Incorporated County of Los Alamos Ordinance No. 732; An Ordinance Authorizing the Execution and Delivery of a Loan Agreement ("Loan Agreement") By and Between the Incorporated County of Los Alamos, New Mexico (the "Governmental Unit") and the New Mexico Finance Authority, Evidencing a Special Limited Obligation of the Governmental Unit to Pay a Principal Amount of No More Than \$2,020,000, Together with Interest, Expenses, and Administrative Fees Thereon, for the Purpose of Financing the Costs of Construction of a Water Booster Station, Electrical and Mechanical Upgrades to Several Booster Stations and Related Appurtenances of the Project; Providing for the Pledge and Payment of the Principal, Administrative Fees and Interest Due Under the Loan Agreement Solely From the Net Revenues of the Joint Utility System of the Governmental Unit; Setting an Interest Rate for the Loan; Approving the Form of and Other Details Concerning the Loan Agreement; Ratifying Actions Heretofore Taken; Repealing All Action Inconsistent with This Ordinance; and Authorizing the Taking of Other Actions in Connection with the Execution and Delivery of the Loan Agreement <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>Introduction of Ordinance</b>  <b>Length of Presentation:</b> <b>Sponsors:</b> James Alarid, Deputy Utilities Manager - Engineering
OR1011-24b	<b>Ordinance</b> Adoption of Incorporated County of Los Alamos Ordinance No. 731, an Ordinance Authorizing the Incorporated County of Los Alamos (Borrower) to Enter Into a Loan Agreement With the New Mexico Environment Department (NMED) for the Purpose of Obtaining Project Loan Funds in the Principal Amount of \$800,000 Plus (0.01%) Accrued Interest; and Loan Subsidy Grant Funds in the Amount of \$200,000 for a Total Funded Amount of \$1,000,000; Designating the Use of the Funds for the Bayo Non-potable Booster Station Refurbishment As Approved by NMED; Declaring the Necessity for the Loan; Providing That the Loan Will Be Payable and Collectible Solely From the Borrower's Pledged Revenues Defined Below; Prescribing Other Details Concerning the Loan and the Security Therefore <b>Department Name:</b> DPU	<b>Public Hearing</b>  <b>Length of Presentation:</b>

File Number	Title
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**Drop Dead Date:**

**Sponsors:** James Alarid, Deputy Utilities Manager - Engineering

**Agenda Date: 05/15/2024**

<b>18389-24</b>	<b>Personnel Matter</b>	<b>CALL TO ORDER</b>
	Statement Regarding Closed Session Pursuant to § 10-15-1 (H)(2) of the New Mexico Open Meetings Act, NMSA 1978, the Board of Public Utilities met in closed session on May 15, 2024 at 5:30 pm to discuss information pertaining to limited personnel matters: Utilities Manager Performance Review <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>Length of Presentation:</b> <b>Sponsors:</b> Board of Public Utilities
<b>18386-24b</b>	<b>Closed Session</b>	<b>CLOSED SESSION</b>
	Utilities Manager Performance Review  Pursuant to § 10-15-1 (H)(2) of the New Mexico Open Meetings Act, NMSA 1978, the Board of Public Utilities will meet in closed session to discuss information pertaining to limited personnel matters. <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>Length of Presentation:</b> <b>Sponsors:</b> Board of Public Utilities
<b>18392-24a</b>	<b>Budget Item</b>	<b>CONSENT</b>
	Overview of the ECA Budget Process and Approval of DOE/LAC Resource Pool Budget for Fiscal Years 2025 & 2026 <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>Length of Presentation:</b> <b>Sponsors:</b> Ben Olbrich, Deputy Utilities Manager - Power Supply and Karen Kendall, Deputy Utilities Manager - Finance
<b>18390-24a</b>	<b>Budget Item</b>	<b>CONSENT</b>
	Approval of Budget Revision 2024-xx for Purchased Power in the Electric Utility. <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>Length of Presentation:</b> <b>Sponsors:</b> Karen Kendall, Deputy Utilities Manager - Finance and Ben Olbrich, Deputy Utilities Manager - Power Supply
<b>18077-24</b>	<b>Minutes</b>	<b>CONSENT</b>
	Approval of Board of Public Utilities Meeting Minutes <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>Length of Presentation:</b> <b>Sponsors:</b> Board of Public Utilities
<b>18385-24</b>	<b>Status Report</b>	<b>STATUS REPORTS</b>
	Status Reports <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>Length of Presentation:</b> <b>Sponsors:</b> Philo Shelton, Utilities Manager
<b>18066-24</b>	<b>Calendar</b>	<b>TICKLER</b>
	Tickler File for the Next Three Months <b>Department Name:</b> DPU <b>Drop Dead Date:</b>	<b>Length of Presentation:</b> <b>Sponsors:</b> Philo Shelton, Utilities Manager

File Number	Title
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**Agenda Date: 05/28/2024**

<b>18390-24</b>	<p><b>Budget Item</b></p> <p>Approval of Budget Revision 2024-xx to Authorize an Increased Budget for Purchased Power in the Electric Utility in the Amount of \$ ____</p> <p><b>Department Name:</b> DPU</p> <p><b>Drop Dead Date:</b></p>	<p><b>CONSENT</b></p> <p><b>Length of Presentation:</b></p> <p><b>Sponsors:</b> Karen Kendall, Deputy Utilities Manager - Finance and Ben Olbrich, Deputy Utilities Manager - Power Supply</p>
<b>18392-24</b>	<p><b>Budget Item</b></p> <p>Approval of DOE/LAC Resource Pool Budget for Fiscal Years 2025 &amp; 2026</p> <p><b>Department Name:</b> DPU</p> <p><b>Drop Dead Date:</b></p>	<p><b>CONSENT</b></p> <p><b>Length of Presentation:</b></p> <p><b>Sponsors:</b> Ben Olbrich, Deputy Utilities Manager - Power Supply and Karen Kendall, Deputy Utilities Manager - Finance</p>
<b>18689-24</b>	<p><b>Public Hearings</b></p> <p>Adoption of Incorporated County of Los Alamos Ordinance No. 733 An Ordinance Authorizing the Incorporated County of Los Alamos (County) to Submit an Amendment No. 2, to the New Mexico Environment Department (NMED) Clean Water State Revolving Fund (CWSRF), for the Purpose of Increasing the Funding of Loan Number CWSRF 110 by \$1,200,000 for the Bayo Lift Station Elimination Project.</p> <p><b>Department Name:</b> DPU</p> <p><b>Drop Dead Date:</b></p>	<p><b>Public Hearing</b></p> <p><b>Length of Presentation:</b></p> <p><b>Sponsors:</b> James Alarid, Deputy Utilities Manager - Engineering</p>
<b>OR1015-24b</b>	<p><b>Ordinance</b></p> <p>Adoption of Incorporated County of Los Alamos Ordinance No. 732; An Ordinance Authorizing the Execution and Delivery of a Loan Agreement ("Loan Agreement") By and Between the Incorporated County of Los Alamos, New Mexico (the "Governmental Unit") and the New Mexico Finance Authority, Evidencing a Special Limited Obligation of the Governmental Unit to Pay a Principal Amount of No More Than \$2,020,000, Together with Interest, Expenses, and Administrative Fees Thereon, for the Purpose of Financing the Costs of Construction of a Water Booster Station, Electrical and Mechanical Upgrades to Several Booster Stations and Related Appurtenances of the Project; Providing for the Pledge and Payment of the Principal, Administrative Fees and Interest Due Under the Loan Agreement Solely From the Net Revenues of the Joint Utility System of the Governmental Unit; Setting an Interest Rate for the Loan; Approving the Form of and Other Details Concerning the Loan Agreement; Ratifying Actions Heretofore Taken; Repealing All Action Inconsistent with This Ordinance; and Authorizing the Taking of Other Actions in Connection with the Execution and Delivery of the Loan Agreement</p> <p><b>Department Name:</b> DPU</p> <p><b>Drop Dead Date:</b></p>	<p><b>PUBLIC HEARING</b></p> <p><b>Length of Presentation:</b></p> <p><b>Sponsors:</b> James Alarid, Deputy Utilities Manager - Engineering</p>

File Number	Title	
18578-24	<b>Briefing/Report (Dept,BCC) - Action Requested</b>	<b>BUSINESS</b>
	Review of Utilities Assistance Program (UAP) ~~~~ last presented 6/7/23	
	<b>Department Name:</b> DPU	<b>Length of Presentation:</b>
	<b>Drop Dead Date:</b>	<b>Sponsors:</b> Karen Kendall
18579-24	<b>Report</b>	<b>BUSINESS</b>
	Department of Public Utilities Quarterly Report for Fiscal Year 2024 - Quarter 3	
	<b>Department Name:</b> DPU	<b>Length of Presentation:</b>
	<b>Drop Dead Date:</b>	<b>Sponsors:</b> Philo Shelton and Catherine D'Anna
18398-24	<b>Briefing/Report (Dept, BCC) - No action requested</b>	<b>BUSINESS</b>
	Quarterly Update on Utility System - Wastewater System	
	<b>Department Name:</b> DPU	<b>Length of Presentation:</b>
	<b>Drop Dead Date:</b>	<b>Sponsors:</b> Clay Moseley, Deputy Utilities Manager - GWS Services

**Agenda Date: 06/26/2024**

18576-24	<b>Report</b>	<b>BUSINESS</b>
	Quarterly Conservation Program Update	
	<b>Department Name:</b> DPU	<b>Length of Presentation:</b>
	<b>Drop Dead Date:</b>	<b>Sponsors:</b> Abbey Hayward, Water & Energy Conservation Coordinator
18078-24	<b>Minutes</b>	<b>CONSENT</b>
	Approval of Board of Public Utilities Meeting Minutes	
	<b>Department Name:</b> DPU	<b>Length of Presentation:</b>
	<b>Drop Dead Date:</b>	<b>Sponsors:</b> Board of Public Utilities
18088-24	<b>Status Report</b>	<b>STATUS REPORTS</b>
	Status Reports	
	<b>Department Name:</b> DPU	<b>Length of Presentation:</b>
	<b>Drop Dead Date:</b>	<b>Sponsors:</b> Philo Shelton
18067-24	<b>Calendar</b>	<b>TICKLER</b>
	Tickler File for the Next Three Months	
	<b>Department Name:</b> DPU	<b>Length of Presentation:</b>
	<b>Drop Dead Date:</b>	<b>Sponsors:</b> Philo Shelton

**Agenda Date: 07/17/2024**

18637-24	<b>Minutes</b>	<b>CONSENT</b>
	Approval of Board of Public Utilities Meeting Minutes	
	<b>Department Name:</b> DPU	<b>Length of Presentation:</b>
	<b>Drop Dead Date:</b>	<b>Sponsors:</b> Board of Public Utilities
18090-24	<b>Status Report</b>	<b>STATUS REPORTS</b>

File Number	Title
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Status Reports

**Department Name:** DPU

**Length of Presentation:**

**Drop Dead Date:**

**Sponsors:** Philo Shelton

**18068-24**

**Calendar**

**TICKLER**

Tickler File for the Next Three Months

**Department Name:** DPU

**Length of Presentation:**

**Drop Dead Date:**

**Sponsors:** Philo Shelton