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#### UTAH PUBLIC SERVICE COMMISSION

October 7, 2010

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The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

RE:

*PacifiCorp* 

Docket No. ER10- -000

Docket No. 10-999-01

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d (2006), Part 35 of the Federal Energy Regulatory Commission's ("Commission") regulations, 18 C.F.R. Part 35 (2010), and Order No. 714<sup>1</sup> regarding electronic filing of tariff submittals, PacifiCorp hereby tenders for filing the following jurisdictional agreement:

1. Project Construction Agreement ("Agreement") dated September 16, 2010, between Logan City Light and Power ("Logan City") and PacifiCorp, to be designated as PacifiCorp Rate Schedule FERC No. 663.

#### 1. Background and Reason for Filing

PacifiCorp owns and operates certain transmission facilities in Utah. Logan City is a municipal electric utility serving load in and around Cache County, Utah, and it has an existing point of interconnection with PacifiCorp at PacifiCorp's Green Canyon Substation. Logan has requested an additional point of interconnection for its proposed new West Logan substation to be located immediately adjacent to PacifiCorp's Bridgerland-Green Canyon 138 kV transmission line (the "Project") to reliably serve its loads.

Logan City has requested that PacifiCorp perform certain work to accommodate Logan City's request. PacifiCorp has determined that, in order to accommodate Logan City's request, certain upgrades will be required to PacifiCorp's Project. PacifiCorp and Logan City have agreed that Logan City will construct certain Project facilities, which shall be owned by PacifiCorp. PacifiCorp has agreed to perform certain work required to complete the project according to the terms set forth in the Agreement. The parties to the Agreement have committed to execute an interconnection agreement for the new West Logan substation point of interconnection on or before the date of the Project's

<sup>&</sup>lt;sup>1</sup> Electronic Tariff Filings, Order No. 714, 124 FERC ¶ 61,270 (2008).

completion.

PacifiCorp respectfully requests that the Commission accept the Agreement, attached as Enclosure 1 hereto, for filing.

#### 2. Effective Date

PacifiCorp respectfully requests that the Commission establish an effective date of December 7, 2010, 61 days from the date of this filing.

#### 3. Designation

PacifiCorp respectfully requests that the Agreement be designated as PacifiCorp Rate Schedule FERC No. 663.

#### 4. Enclosure

The following enclosure is attached hereto:

Enclosure 1 Project Construction Agreement between Logan City and PacifiCorp, to be designated as PacifiCorp Rate Schedule FERC No. 663.

#### 5. Communications

All communications and correspondence regarding this filing should be forwarded to the following persons:

Mary M. Wiencke
PacifiCorp
825 N.E. Multnomah, Suite 1800
Portland, OR 97232
(503) 813-5058
(503) 813-7252 (facsimile)
mary.wiencke@pacificorp.com

Mark M. Rabuano
PacifiCorp
825 N.E. Multnomah, Suite 1800
Portland, OR 97232
(503) 813-5744
(503) 813-7252 (facsimile)
mark.rabuano@pacificorp.com

If you have any questions, or if I can be of further assistance, please do not hesitate to contact me.

Respectfully Submitted,

/s/ Mary M. Wiencke Mary M. Wiencke Mark Rabuano

Attorneys for PacifiCorp

# PROJECT CONSTRUCTION AGREEMENT PROJECT TITLE: LOGAN CITY LIGHT AND POWER – WEST LOGAN SUBSTATION

This Project Construction Agreement (the "Agreement") made and entered into this 16th day of September, 2010, between Logan City Light and Power, hereinafter called "Logan" or "Customer", and *PacifiCorp*, hereinafter called "PacifiCorp" or "Company", is for work to be performed by Company for Customer (hereinafter referred to as the "Project"). Hereinafter, Logan and PacifiCorp may be individually referred to as a "Party" or collectively referred to as the "Parties".

#### RECITALS:

- A. WHEREAS, PacifiCorp is a transmission provider which owns and operates certain facilities for the transmission of electric power and energy located in Utah; and
- B. WHEREAS, Logan is a municipal electric utility serving load in and around Cache County, Utah, and has an existing point of interconnection with PacifiCorp at PacifiCorp's Green Canyon Substation; and
- C. WHEREAS, Logan has requested an additional point of interconnection for its proposed new West Logan substation to be located immediately adjacent to PacifiCorp's Bridgerland-Green Canyon 138 kV transmission line at pole #193, approximately 2.5 miles west of Green Canyon substation near 1800 North and 850 West in Logan City, Utah to reliably serve its loads and has requested that PacifiCorp perform certain work to accommodate Logan's request; and
- D. WHEREAS, PacifiCorp has determined that to accommodate Logan's request, certain upgrades will be required to the PacifiCorp's Bridgerland-Green Canyon 138 kV transmission line (the "Project"), as further described and detailed in this Agreement; and
- E. Whereas, PacifiCorp and Logan City have agreed that Logan will construct certain Project facilities, which shall be owned by PacifiCorp, as set forth herein; and
- F. WHEREAS, PacifiCorp has agreed to perform certain work required to complete the Project according to the terms set forth herein; and
- G. WHEREAS, the Parties further agree to negotiate and execute a Transmission Interconnection Agreement for West Logan point of interconnection on or before the completion of the Project.

NOW THEREFORE, the Parties enter into this Agreement with the understanding that each

mutually benefits from this Agreement. The parties further agree to the following:

#### 1. TERM & TERMINATION

The term of this Agreement shall commence on the 16th day of September, 2010, subject to another date being designated by the Federal Energy Regulatory Commission ("Commission"), ("Effective Date") and shall terminate upon the later of ninety (90) days following the completion of construction of the Project or December 31, 2010.

#### 2. SCOPE AND PERFORMANCE OF WORK:

- a. Project Description and Scope. The Project shall consist of the construction of a line tap of Company's Bridgerland-Green Canyon 138 kV line with two (2) motor operated air break switches and a new Company substation, located adjacent to Customer's new West Logan Substation, consisting of a 138 kV circuit breaker and associated disconnect switches, electrical equipment/materials, relaying, communication equipment, and control building (the "Project Facilities").
- b. Company Responsibilities. Company agrees to engineer, procure, and install the Project Facilities as depicted in the attached one-line diagram (Exhibit A), and outlined in the attached Scope of Work (Exhibit B).
- c. Customer Responsibilities. Customer agrees to engineer, procure, and install its new West Logan Substation, including interchange metering, and complete the Project Facilities for Company as required and outlined in the attached Scope of Work (Exhibit B).

#### 3. OWNERSHIP/RESPONSIBILITY FOR COSTS:

Ownership of the Project Facilities shall be as follows: Upon completion of the new point of interconnection, Company shall own the Project Facilities. Customer shall own its new West Logan Substation located adjacent to Company's new point of interconnection substation.

Customer shall be responsible for all costs to design and construct the Project Facilities and its West Logan Substation.

The estimated cost for Company's Scope of Work is \$1,260,600 which includes \$1,028,100 for Direct Assigned Facilities costs and \$232,500 for Network Upgrade Facilities Costs. Direct Assigned Facilities costs are those costs associated with the installation of those facilities between the Point of Interconnection and the Point of Change of Ownership and Network Upgrade Facilities costs are those cost associated with the installation of facilities on Company's transmission system side of the Point of Interconnection as shown on Exhibit A. Accordingly, in consideration of the work to

be performed by Company, Customer agrees to pay the estimated cost of one million two hundred sixty thousand six hundred dollars (\$1,260,600) in three payments as follows: \$250,000 within thirty (30) days after execution of agreement; \$800,000 thirty (30) days prior to procurement of materials; and \$210,600 thirty (30) days prior to the commencement of construction of Company's scope of work. Specific date for the payments for procurement and construction shall be determined during the preparation of the Project Schedule pursuant to Section 4 of this Agreement. Company reserves the right to stop all work on Company's Scope of Work in the event that Customer does not provide a required payment in accordance with the Project Schedule. Customer shall reimburse Company for the actual cost to complete the work. Company shall seek written approval from the Customer for actual cost that will exceed the estimated cost by more than ten percent (10%). Following completion of the Project, Company and Customer shall calculate their actual costs for both Direct Assigned and Network Upgrade Facilities each completed. Actual costs shall include all direct costs plus applicable overheads. The Parties will forward a copy of their calculation of their actual cost to each other within one hundred twenty (120) days after completion of The actual cost for all Network Upgrades will be a construction for final accounting. credit to the Customer in the final accounting of actual costs. Following the Parties final accounting, Company will either invoice Customer for additional amount owed or refund Customer amount overpaid.

Company and Customer shall keep accurate and complete accounting records of the costs for their respective scopes of work in support of all cost billings and claims in accordance with generally accepted accounting principles. Company or Customer, or their audit representative, shall have the right at any reasonable time or times to examine, audit, and copy the records, vouchers, and their source documents which relate to any claim or compensation other than pricing elements, if any, which are fixed in amount by this Agreement. Such documents shall be available for examination, audit, and copying for three (3) years after the completion or termination of this Agreement.

#### 4. PROJECT SCHEDULE:

It is estimated that the upgrades required to interconnect and deliver power at the new point of interconnection could be completed within 10 months of the execution of this Agreement. A detailed schedule will be developed jointly between Company and Customer for the completion of the Customer built Project Facilities during the detailed design phase of this project, including progress payment dates, which will commence upon execution of the Agreement and receipt of Customer's initial \$250,000 payment for the estimated cost of Company's scope of work pursuant to Section 3 above.

#### 5. OPERATION AND MAINTENANCE:

The Parties agree that operation and maintenance of the Project Facilities shall be as described and set forth in a future agreement between the Parties. The Parties agree to

work diligently and in good faith to negotiate and execute such agreement on or before the completion of construction of the Project.

#### 6. STANDARD OF WORK:

All work performed pursuant to this Agreement by either Party or their agents shall be performed in a good and workmanlike manner in accordance with Good Utility Practice and with any and all prudent and applicable safety and reliability standards. As used in this Agreement, Good Utility Practice shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

#### 7. CHANGES:

The Parties may at any time in writing mutually agreed to by both Parties require changes and/or additions within the general scope of this Agreement or any amendment hereto, direct the omission of, or variation in Work, or alter the schedule. If such direction results in a material change in the amount or character of the Work, an equitable adjustment in estimated costs and other such provisions of this Agreement as may be affected, shall be made and this Agreement shall be modified in writing accordingly.

No change shall be binding upon the Parties until a change order is executed by each Party which EXPRESSLY STATES THAT IT CONSTITUTES A CHANGE ORDER TO THIS AGREEMENT. THE ISSUANCE OF INFORMATION, ADVICE, APPROVALS, OR INSTRUCTIONS VERBALLY OR BY AN EXCHANGE OF E-MAIL OR IN ANY OTHER MANNER SHORT OF A WRITING EXECUTED BY BOTH PARTIES SHALL NOT CONSTITUTE AN AUTHORIZED CHANGE ORDER PURSUANT TO THIS PROVISION.

#### 8. INSPECTION:

Logan may, at its discretion, inspect Company construction work in progress upon reasonable notice and with supervision by Company.

Company will inspect all Customer provided construction for the Project at Customer's expense. Customer will provide company with a reasonable schedule of construction to allow inspection coordination. Customer will provide testing results to Company as specified in the technical specifications.

#### 9. TESTING:

Before the new facilities required for the Project are energized, such new facilities shall be tested by Company to ensure their safe and reliable operation in accordance with Good Utility Practice, all applicable Federal Energy Regulatory Commission, North American Electric Reliability Corporation and Western Electricity Coordinating Council criteria and requirements, and all applicable federal, state, and local law, regulations, and requirements. If testing indicates that modifications are required, Customer shall bear the cost of all such modifications in accordance with the cost allocation in Section 3 above, except to the extent that any such modifications are required as a result of Company's or its agent's or its subcontractors' negligence, willful misconduct, or failure to comply with Good Utility Practice.

#### 10. ACCESS:

Company shall grant Customer and their designees reasonable escorted access to the Project Facilities consistent with such access rights as are established in prior agreements between the Parties, <u>provided</u> that Customer provides Company with reasonable notice and complies with Company's safety and security rules.

#### 11. GOVERNING LAW:

Enforcement or interpretation of this Agreement shall be in the state court of the State of Utah, and all parties hereby submit to the jurisdiction of said court for the stated purpose. Furthermore, this Agreement shall be governed by and construed in accordance with the laws of the State of Utah.

#### 12. NO PARTNERSHIP:

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 13 NON-ASSIGNABILITY:

Neither this Agreement, nor any part thereof, may be assigned, without the express written consent of the other Party which consent will not be unreasonably withheld. Any attempt to assign this Agreement will be deemed voidable.

#### 14. PROVISIONAL REMEDIES:

Either party may seek provisional legal remedies, if in such party's judgment such action is necessary to avoid irreparable damage or preserve the status quo.

#### 15. ENTIRE CONTRACT:

This Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof and there are no oral or written understandings, representations or commitments of any kind, express or implied, which are not expressly set forth herein.

#### 16. NOTICES:

Any correspondence regarding this work shall be directed to the appropriate party as shown below:

#### Logan:

Jeffrey White, Director Logan City Light and Power 233 North Main Logan, Utah 84321 Phone: (453) 716-9744 Fax: (453) 716-9701 e-mail: jwhite@loganutah.org

PacifiCorp:

Director, Transmission Services

**PacifiCorp** 

825 NE Multnomah Street, Suite 1600

Portland, OR 97232 Phone (503) 813-6712 Fax (503) 813-6893

#### 17. BILLING AND PAYMENT:

Billings and payments shall be sent to the addresses set out below:

Customer:

Logan City Light and Power

Attention:

Jeffrey White

Address:

233 North Main

Logan, Utah 84321

Fax No.:

(453) 716-9701

e-mail:

jwhite@loganutah.org

PacifiCorp:

PacifiCorp Transmission

Attention:

Central Cashiers

Address:

1033 N.E. 6<sup>th</sup> Avenue

Portland Oregon 97232

#### 18. INDEMNIFICATION:

Each Party ("Indemnifying Party") agrees to protect, defend, indemnify and hold harmless the Other Party, its officers, employees and agents (collectively the "Indemnified Party") against and from any and all liability, suits, loss, damage, claims, actions, costs and expenses of any nature, including court costs and attorney's fees, arising out of injury to or death of the Indemnifying Party or its subcontractors of any tier, their employees, agents or guests, or any other person or persons, or any and all destruction, loss or damage to property arising in any way in connection with, or related to, the Indemnifying Party's performance of any Work or any of its obligations under the Agreement, except as to injury to persons or damage to property caused by the negligence of the Indemnified Party.

The indemnification obligations set forth herein shall not be limited by amounts or types of damages, compensation or benefits payable by or for the Indemnifying Party, contractors, subcontractors, sub-subcontractors, material suppliers or any person or entity for which any of them may be liable, under workers compensation acts, or any disability or employee benefit acts, in the event claims are asserted against persons or entities indemnified under this Paragraph 18 by an employee of the Indemnifying Party, a contractor, a subcontractor, a sub-subcontract or, a material supplier, anyone directly or indirectly employed by any of them or anyone (or for whose acts they may be liable.)

Moreover, at the request of the Indemnified Party, the Indemnifying Party shall defend any action, claim or suit asserting a claim that might be covered by this indemnity. The Indemnifying Party shall pay all costs and expenses that may be incurred by the Indemnified Party in enforcing this indemnity and defense agreement, including attorney's fees actually paid by the Indemnified Party.

#### 19. LIMITATION OF LIABILITY:

Except as otherwise expressly provided in this Agreement, each Party's liability to the other Party for any loss, cost, claim, injury, damage, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as specifically authorized by this Agreement.

#### 20. FORCE MAJEURE:

A Party shall not be subject to any liability or damages for inability to meet its obligations under this Agreement to the extent that such failure shall be due to causes beyond the control of the Party, including, but not limited to the following: (a) the operation and effect of any new or modified rules, regulations and orders promulgated by the Federal Energy Regulatory Commission, any applicable state public utility commission, any municipality, or any governmental agency of the United States, or subdivision thereof (so long as the claiming party has not applied for or assisted in the application for, and has opposed where and to the extent reasonable, such government action); (b) restraining order, injunction or similar decree of any court; (c) any Force Majeure event.

Force Majeure shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

Provided, the Party claiming Force Majeure shall make every reasonable attempt to remedy the cause thereof as diligently and expeditiously as possible. Except for the obligation to pay amounts owed when due, time periods for performance obligations of either Party herein shall be extended for the period during which Force Majeure was in effect.

#### 21. SUCCESSORS:

This Agreement will be binding upon the Parties and will inure to the benefit of their successors.

#### 22. SEVERABILITY:

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

### 23. MULTIPLE COUNTERPARTS:

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

## 24. CONTRACTORS AND SUBCONTRACTORS:

Nothing in this Agreement shall prevent Company from utilizing the services of any third party contractor or subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that Company shall require its third party contractor and subcontractor to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such third party contractor and subcontractor.

#### 25. NO THIRD-PARTY BENEFICIARIES:

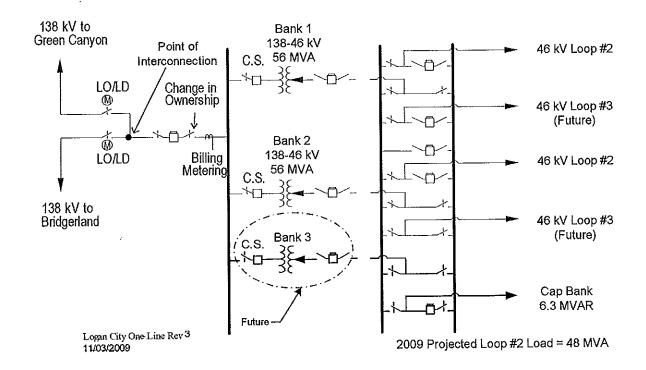
This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

IN WITNESS WHEREOF, the Parties hereto have entered into this Agreement effective as of the day and year first herein above written.

PACIFICORP	LOGAN CITY LIGHTAND POWER				
Signature	Signature				
Kenneth Houston Printed Name of Signor	Jeff White Printed Name of Signor				
Director, Transmission Title of Signor	<u>Director</u> Title of Signor				
Sept. 16, 2010 Date	9-10-2010 Date				

## Exhibit A One-Line Diagram

## Proposed New "West Logan Substation" 138/46 kV Substation #7



#### Exhibit B Scope of Work

The following outlines the design, procurement, installation, testing and ownership of equipment for new interconnection of Customer's West Logan Substation with the Company's 138-kV Bridgerland- Green Canyon transmission line.

#### Company's Substation

The Company's substation is to be located adjacent to the Customer's new interconnection substation. The facility is to be completely enclosed within a chain link fence that is to contain one 24' double wide gate. The fence height is to be 8' which is made up of 7' of fabric and 1' of barbed wire. The yard is to be laid out with room to allow maintenance vehicles to access the control house and the equipment. The Customer's ground mat and Company's ground mats are to be tied together. Unless a grounding study dictates otherwise, the minimum size for the ground conductor is 4/0 CU. A/C power is to be supplied by the Customer. Through the detailed design phase the preferred method will need to be determined regarding Loop Opening or Line Dropping (or both) devices for the two substation line switches. A draft responsibility matrix has been developed and attached at the end of this Scope of Work and will be confirmed among customer and company during the design phase to verify that all components are addressed.

The major substation equipment identified is as follows:

- One (1) 138-kV, 2000 Amp Circuit Breaker
- Two (2) 138-kV, 2000 Amp, TPST, Vertical Break, Motor Operated Switch and equipped with grounding blades (may need to add LO or LD device)
- Two (2) 138-kV, 2000 Amp, TPST, Vertical Break, Manually Operated Switch
- One (1) 125 Volt, 100 AH Battery System Using EnerSys 3CC-5 & a 2-step Seismic Zone 4 Battery Rack
- One (1) 130 VDC, 120 VAC, 60 Hz.,16 Amp Wall Mounted Battery Charger
- Three (3) 98-kV MCOV Surge Arresters
- Three (3) 138-kV CCVT's

One (1) - 13' x 19' Control Building

#### CUSTOMER WILL BE RESPONSIBLE FOR

Customer shall provide property for Company's substation through either fee ownership or a perpetual easement in a format acceptable to Company and recorded in the name of the Company for the land upon which the Company's equipment will be located. Customer shall provide labor, equipment, materials, pre-commissioning per attached matrix, to construct Company's substation subject to Company's design and technical specifications.

Customer shall provide property, access roads, landscape, rough grading, fence, ground grid, finsh gravel/grading and provide misc. materials such as insulators, bus, conduits, cables etc. per company standards.

Customer shall assist in commissioning and correct any deficiencies that occur.

Customer shall provide station service for Company's substation.

Customer shall provide warranty of work performed.

#### COMPANY WILL BE RESPONSIBLE FOR

The Company will be responsible for the design, procurement of major materials, inspection, witness testing, commissioning, fiber communications and terminations, and ownership of a new 138-kV interconnection substation to connect Customer's new West Logan Substation to Company's Bridgerland-Green Canyon 138-kV line. This interconnection substation will consist of one 138-kV circuit breaker, associated switches, electrical equipment and materials, relaying, SCADA, communications facilities.

## Customer's Substation

The Customer will be responsible for the procurement, installation and ownership of a 138-kV / 46-kV substation that will tie into the Company's substation at the tap point of the Bridgerland-Green Canyon 138-kV transmission line.

## Company's Transmission Line

#### COMPANY WILL BE RESPONSIBLE FOR

Company will design transmission loop into Company's substation of Company's Bridgerland-Green Canyon 138 kV transmission line. Company will procure transmission materials for transmission line work. Company will design and perform all work pertaining to bringing fiber optic cable into Company's substation from existing transmission line. Customer will be responsible to provide and install fiber optic conduit pathway or get-away to facilitate Company's fiber optic cable route as detailed in final design.

#### CUSTOMER WILL BE RESPONSIBLE FOR

Customer shall perform construction to loop 138kV line into substation. Customer shall be required to coordinate all outages with Company and per outage process.

#### **Protection and Control Requirements**

Adding the interconnection substation and tap to Customer's substation to the Bridgerland–Green Canyon line will convert the line from a two terminal to a three terminal line. Customer's transmission system will be a third source feeding potential Bridgerland–Green Canyon line faults. The Bridgerland–Green Canyon line utilizes a permissive under-reach transfer trip (POTT) pilot line relaying system. This pilot line relaying system uses the optical fiber cable on the line as the communication media. With the addition of the interconnection substation similar relays as are at Green Canyon substation will be installed at the interconnection substation to operate for faults on the Bridgerland–Green Canyon line. This new set of relays will communicate over the optical fiber cable to the relays at both Bridgerland and Green Canyon. The existing relay systems at Bridgerland and Green Canyon substations will need to be modified to accommodate the three terminal line configuration. These modifications are relatively minor involving optical fiber jumper and relay setting changes.

Since the Company's substation will be adjacent to the Customer's substation the ground mat of the two facilities will be tied together. By tying the ground mats together it makes it possible to use a bus differential relay system to detect faults on the 138-kV intertie between the two systems. The bus differential relay system will be located in the Company's substation. The Customer will need to provide the output of current transformers from each of the transformers to be fed into the bus differential relays. The bus differential relay will trip the Customer's circuit switchers as will as the breaker in the Company's substation.

The 138-kV breaker at the Company's substation will be equipped with a breaker failure relay which will transfer trip the remote terminals, over the fiber optic cables, for a failure of that breaker to interrupt a line fault.

Local and remote control of the motor operated air break switches will be installed in the Company's substation. An automatic sectionalizing control scheme will be installed for these switches.

## COMPANY WILL BE RESPONSIBLE FOR

Company will design, purchase, checkout, and test protection and control facilities for the Company's interconnection substation.

#### CUSTOMER WILL BE RESPONSIBLE FOR

Customer will install protection and control equipment, cable, and conduit. Customer will test and checkout facilities prior to company checkout and test.

#### **GREEN CANYON SUBSTATION**

The following outlines the design, procurement, installation, testing and ownership of equipment for Company's Green Canyon Substation.

#### COMPANY WILL BE RESPONSIBLE FOR

The Company will be responsible for the design, procurement, installation and ownership of the three-terminal scheme that is to replace the existing relays.

#### BRIDGERLAND SUBSTATION

The following outlines the design, procurement, installation, testing and ownership of equipment for Company's Bridgerland Substation.

#### COMPANY WILL BE RESPONSIBLE FOR

The Company will be responsible for the design, procurement, installation and ownership of the three-terminal scheme that is to replace the existing relays.

#### INTERCHANGE METERING

The following outlines the design, procurement, installation, testing and ownership of equipment required for the metering.

The interchange metering will be located inside the Customer's substation. The primary metering design package will include three combined 138-kV current/voltage instrument transformers. The metering design will include disconnect facilities to remove the instrument transformers without interrupting the load. The metering will include a 12 inch panel with two revenue meters. The primary meter will be used for standard transmission accounting and retail sales via the MV-90 translation system. The primary meter will also provide all SCADA MW, MVAR, MWH data. The second meter will serve as a backup to the primary meter. Both the primary and backup meters will require a dial-up phone line.

#### CUSTOMER WILL BE RESPONSIBLE FOR

Customer will design, procure and install own and maintain metering structure, instrument transformers, primary and back-up metering, and communications equipment required for the new point of delivery per Company standards and clearances.

#### **COMMUNICATIONS**

The following outlines the design, procurement, installation, testing and ownership of equipment for Company's communications equipment.

There is existing fiber on the Bridgerland-Green Canyon line. Company will drop the OPGW fiber from the Bridgerland-Green Canyon line into the interconnection substation control building and back out to the line. At the interconnection substation, DMX explore will be installed with Multiplex equipment for the SCADA Telementary and meter dial up equipment. SEL 2830 fiber modems are required for each protection circuit over the fiber to Customer, Green Canyon and Bridgerland. SEL 2830 fiber modems are

also required at Customer's substation, Green Canyon and Bridgerland (the other end of the lines). A telemetry circuit to Goshen Substation is required. Additional communication channel cards are required at Bridgerland, Cutler, Goshen and SOCC to bring the data into the dispatch center.

A remote terminal unit (RTU) will also be installed at the Company's interconnection substation. This RTU besides providing control and indication of the 138-kV breaker and motor operated switches at the substation will also provide the following metering information from the Customer's interchange metering:

#### Analogs:

- Interchange MW
- Interchange MVAR

#### Accumulator Pulses:

• Interchange metering kWH

The interchange real power MW will need to be telemetered to the Company's Energy Control Center in Salt Lake City independent of the analog signal supplied to the RTU.

#### COMPANY WILL BE RESPONSIBLE FOR

The Company will be responsible for the design, procurement, installation and ownership of the required equipment to connect the interconnection substation to Company's existing communications system with fiber. Telemetry and meter dialup equipment will be required for each protection circuit over the fiber to Customer's Green Canyon and Bridgerland substations. Additional communication channel cards are required at other communications sites to bring the data into the dispatch center.

RESPONSIBILITY MATRIX ON FOLLOWING PAGE:

ogan City-New Interconnection				<del> </del>		
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		RMP			Logan	<b>.</b>
ogan City Sub	Materials	Labor	Other	Materials	Labor	Other
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Conduits, cables etc				X	X	
Protection & Control	X				X	
Control Building	Х				X	
Communications: Fiber, SCADA, terminations	X	X				
Station service, including backup	1 - 2-2			X	Х	<u> </u>
Responsible for materials once received	<u> </u>	<u> </u>				Х
Responsible for materials office reserved	··· ·· · · · · · · · · · · · · · · · ·					
Metering structure- 138kV(Logan Substation)	<del>                                     </del>	-	-	X	Х	
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Metering switches-138kV				1 x	X	
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Construction inspection		X _				
Project Management		Х	.		-	
Pre-commissioning per RMP matrix		<del>                                     </del>	ļ. — —		Х	X
Commissioning/testing		X	ļ	_	<u> </u>	
Warranty, as-builts, documentation	<u></u>		<u> </u>		<del> </del>	X
Maintenance/replacement costs					<u> </u>	X_
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SCC Communications	X	X				
	1					
Goshen Communications	X	X	I			
COSHOT CONTINUENCE		T -				
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Note: Logan City is responsible for all costs, All L	.ogan City r	provided ma	terials Will	pe new and p	er Pacifico	in shece

# PROJECT CONSTRUCTION AGREEMENT PROJECT TITLE: LOGAN CITY LIGHT AND POWER – WEST LOGAN SUBSTATION

This Project Construction Agreement (the "Agreement") made and entered into this hereinafter called "Logan" or "Customer", and PacifiCorp, hereinafter called "PacifiCorp" or "Company", is for work to be performed by Company for Customer (hereinafter referred to as the "Project"). Hereinafter, Logan and PacifiCorp may be individually referred to as a "Party" or collectively referred to as the "Parties".

#### RECITALS:

- A. WHEREAS, PacifiCorp is a transmission provider which owns and operates certain facilities for the transmission of electric power and energy located in Utah; and
- B. WHEREAS, Logan is a municipal electric utility serving load in and around Cache County, Utah, and has an existing point of interconnection with PacifiCorp at PacifiCorp's Green Canyon Substation; and
- C. WHEREAS, Logan has requested an additional point of interconnection for its proposed new West Logan substation to be located immediately adjacent to PacifiCorp's Bridgerland-Green Canyon 138 kV transmission line at pole #193, approximately 2.5 miles west of Green Canyon substation near 1800 North and 850 West in Logan City, Utah to reliably serve its loads and has requested that PacifiCorp perform certain work to accommodate Logan's request; and
- D. WHEREAS, PacifiCorp has determined that to accommodate Logan's request, certain upgrades will be required to the PacifiCorp's Bridgerland-Green Canyon 138 kV transmission line (the "Project"), as further described and detailed in this Agreement; and
- E. Whereas, PacifiCorp and Logan City have agreed that Logan will construct certain Project facilities, which shall be owned by PacifiCorp, as set forth herein; and
- F. WHEREAS, PacifiCorp has agreed to perform certain work required to complete the Project according to the terms set forth herein; and
- G. WHEREAS, the Parties further agree to negotiate and execute a Transmission Interconnection Agreement for West Logan point of interconnection on or before the completion of the Project.

NOW THEREFORE, the Parties enter into this Agreement with the understanding that each mutually benefits from this Agreement. The parties further agree to the following:

#### 1. TERM & TERMINATION

The term of this Agreement shall commence on the \_\_\_\_\_ day of \_\_\_\_\_, 2010, subject to another date being designated by the Federal Energy Regulatory Commission ("Commission"), ("Effective Date") and shall terminate upon the later of ninety (90) days following the completion of construction of the Project or December 31, 2010.

#### 2. SCOPE AND PERFORMANCE OF WORK:

- a. Project Description and Scope. The Project shall consist of the construction of a line tap of Company's Bridgerland-Green Canyon 138 kV line with two (2) motor operated air break switches and a new Company substation, located adjacent to Customer's new West Logan Substation, consisting of a 138 kV circuit breaker and associated disconnect switches, electrical equipment/materials, relaying, communication equipment, and control building (the "Project Facilities").
- b. Company Responsibilities. Company agrees to engineer, procure, and install the Project Facilities as depicted in the attached one-line diagram (Exhibit A), and outlined in the attached Scope of Work (Exhibit B).
- c. Customer Responsibilities. Customer agrees to engineer, procure, and install its new West Logan Substation, including interchange metering, and complete the Project Facilities for Company as required and outlined in the attached Scope of Work (Exhibit B).

#### 3. OWNERSHIP/RESPONSIBILITY FOR COSTS:

Ownership of the Project Facilities shall be as follows: Upon completion of the new point of interconnection, Company shall own the Project Facilities. Customer shall own its new West Logan Substation located adjacent to Company's new point of interconnection substation.

Customer shall be responsible for all costs to design and construct the Project Facilities and its West Logan Substation.

The estimated cost for Company's Scope of Work is \$1,260,600 which includes \$1,028,100 for Direct Assigned Facilities costs and \$232,500 for Network Upgrade Facilities Costs. Direct Assigned Facilities costs are those costs associated with the installation of those facilities between the Point of

Interconnection and the Point of Change of Ownership and Network Upgrade Facilities costs are those cost associated with the installation of facilities on Company's transmission system side of the Point of Interconnection as shown on Accordingly, in consideration of the work to be performed by Exhibit A. Company, Customer agrees to pay the estimated cost of one million two hundred sixty thousand six hundred dollars (\$1,260,600) in three payments as follows: \$250,000 within thirty (30) days after execution of agreement; \$800,000 thirty (30) days prior to procurement of materials; and \$210,600 thirty (30) days prior to the commencement of construction of Company's scope of work. Specific date for the payments for procurement and construction shall be determined during the preparation of the Project Schedule pursuant to Section 4 of this Agreement. Company reserves the right to stop all work on Company's Scope of Work in the event that Customer does not provide a required payment in accordance with the Project Schedule. Customer shall reimburse Company for the actual cost to complete the work. Company shall seek written approval from the Customer for actual cost that will exceed the estimated cost by more than ten percent (10%). Following completion of the Project, Company and Customer shall calculate their actual costs for both Direct Assigned and Network Upgrade Facilities each completed. Actual costs shall include all direct costs plus applicable overheads. The Parties will forward a copy of their calculation of their actual cost to each other within one hundred twenty (120) days after completion The actual cost for all Network Upgrades of construction for final accounting. will be a credit to the Customer in the final accounting of actual costs. Following the Parties final accounting, Company will either invoice Customer for additional amount owed or refund Customer amount overpaid.

Company and Customer shall keep accurate and complete accounting records of the costs for their respective scopes of work in support of all cost billings and claims in accordance with generally accepted accounting principles. Company or Customer, or their audit representative, shall have the right at any reasonable time or times to examine, audit, and copy the records, vouchers, and their source documents which relate to any claim or compensation other than pricing elements, if any, which are fixed in amount by this Agreement. Such documents shall be available for examination, audit, and copying for three (3) years after the completion or termination of this Agreement.

#### 4. PROJECT SCHEDULE:

It is estimated that the upgrades required to interconnect and deliver power at the new point of interconnection could be completed within 10 months of the execution of this Agreement. A detailed schedule will be developed jointly between Company and Customer for the completion of the Customer built Project Facilities during the detailed design phase of this project, including progress payment dates, which will commence upon execution of the Agreement and

receipt of Customer's initial \$250,000 payment for the estimated cost of Company's scope of work pursuant to Section 3 above.

#### 5. OPERATION AND MAINTENANCE:

The Parties agree that operation and maintenance of the Project Facilities shall be as described and set forth in a future agreement between the Parties. The Parties agree to work diligently and in good faith to negotiate and execute such agreement on or before the completion of construction of the Project.

#### 6. STANDARD OF WORK:

All work performed pursuant to this Agreement by either Party or their agents shall be performed in a good and workmanlike manner in accordance with Good Utility Practice and with any and all prudent and applicable safety and reliability standards. As used in this Agreement, Good Utility Practice shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

#### 7. CHANGES:

The Parties may at any time in writing mutually agreed to by both Parties require changes and/or additions within the general scope of this Agreement or any amendment hereto, direct the omission of, or variation in Work, or alter the schedule. If such direction results in a material change in the amount or character of the Work, an equitable adjustment in estimated costs and other such provisions of this Agreement as may be affected, shall be made and this Agreement shall be modified in writing accordingly.

No change shall be binding upon the Parties until a change order is executed by each Party which EXPRESSLY STATES THAT IT CONSTITUTES A CHANGE ORDER TO THIS AGREEMENT. THE ISSUANCE OF INFORMATION, ADVICE, APPROVALS, OR INSTRUCTIONS VERBALLY OR BY AN EXCHANGE OF E-MAIL OR IN ANY OTHER MANNER SHORT OF A WRITING EXECUTED BY BOTH PARTIES SHALL NOT CONSTITUTE AN AUTHORIZED CHANGE ORDER PURSUANT TO THIS PROVISION.

#### 8. INSPECTION:

Logan may, at its discretion, inspect Company construction work in progress upon reasonable notice and with supervision by Company.

Company will inspect all Customer provided construction for the Project at Customer's expense. Customer will provide company with a reasonable schedule of construction to allow inspection coordination. Customer will provide testing results to Company as specified in the technical specifications.

#### 9. TESTING:

Before the new facilities required for the Project are energized, such new facilities shall be tested by Company to ensure their safe and reliable operation in accordance with Good Utility Practice, all applicable Federal Energy Regulatory Commission, North American Electric Reliability Corporation and Western Electricity Coordinating Council criteria and requirements, and all applicable federal, state, and local law, regulations, and requirements. If testing indicates that modifications are required, Customer shall bear the cost of all such modifications in accordance with the cost allocation in Section 3 above, except to the extent that any such modifications are required as a result of Company's or its agent's or its subcontractors' negligence, willful misconduct, or failure to comply with Good Utility Practice.

#### 10. ACCESS:

Company shall grant Customer and their designees reasonable escorted access to the Project Facilities consistent with such access rights as are established in prior agreements between the Parties, <u>provided</u> that Customer provides Company with reasonable notice and complies with Company's safety and security rules.

#### 11. GOVERNING LAW:

Enforcement or interpretation of this Agreement shall be in the state court of the State of Utah, and all parties hereby submit to the jurisdiction of said court for the stated purpose. Furthermore, this Agreement shall be governed by and construed in accordance with the laws of the State of Utah.

#### 12. NO PARTNERSHIP:

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### 13. NON-ASSIGNABILITY:

Neither this Agreement, nor any part thereof, may be assigned, without the express written consent of the other Party which consent will not be unreasonably withheld. Any attempt to assign this Agreement will be deemed voidable.

#### 14. PROVISIONAL REMEDIES:

Either party may seek provisional legal remedies, if in such party's judgment such action is necessary to avoid irreparable damage or preserve the status quo.

#### 15. ENTIRE CONTRACT:

This Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof and there are no oral or written understandings, representations or commitments of any kind, express or implied, which are not expressly set forth herein.

#### 16. NOTICES:

Any correspondence regarding this work shall be directed to the appropriate party as shown below:

#### Logan:

Jeffrey White, Director Logan City Light and Power

-950 West-600 North -> 233 North Main

Logan, Utah 84321 Phone: (453) 716-9744 Fax: (453) 716-9701

e-mail: jwhite@loganutah.org

#### PacifiCorp:

Director, Transmission Services PacifiCorp 825 NE Multnomah Street, Suite 1600 Portland, OR 97232 Phone (503) 813-6712 Fax (503) 813-6893

## 17. BILLING AND PAYMENT:

Billings and payments shall be sent to the addresses set out below:

Customer:

Logan City Light and Power

Attention:

Jeffrey White

Address:

950 West 600 North - 233 North Main

Logan, Utah 84321

Fax No.:

(453) 716-9701

e-mail:

jwhite@loganutah.org

PacifiCorp:

PacifiCorp Transmission

Attention:

Central Cashiers 1033 N.E. 6<sup>th</sup> Avenue

Portland Oregon 97232

## 18. INDEMNIFICATION:

Each Party ("Indemnifying Party") agrees to protect, defend, indemnify and hold harmless the Other Party, its officers, employees and agents (collectively the "Indemnified Party") against and from any and all liability, suits, loss, damage, claims, actions, costs and expenses of any nature, including court costs and attorney's fees, a rising out of injury to or death of the Indemnifying Party or its subcontractors of any tier, their employees, agents or guests, or any other person or persons, or any and all destruction, loss or damage to property arising in any way in connection with, or related to, the Indemnifying Party's performance of any Work or any of its obligations under the Agreement, except as to injury to persons or damage to property caused by the negligence of the Indemnified Party.

The indemnification obligations set forth herein shall not be limited by amounts or types of damages, compensation or benefits payable by or for the Indemnifying Party, contractors, subcontractors, sub-subcontractors, material suppliers or any person or entity for which any of them may be liable, under workers compensation acts, or any disability or employee benefit acts, in the event claims are asserted against persons or entities indemnified under this Paragraph 18 by an employee of the Indemnifying Party, a contractor, a subcontractor, a subcontract or, a material supplier, anyone directly or indirectly employed by any of them or anyone (or for whose acts they may be liable.)

Moreover, at the request of the Indemnified Party, the Indemnifying Party shall defend any action, claim or suit asserting a claim that might be covered by this indemnity. The Indemnifying Party shall pay all costs and expenses that may be incurred by the Indemnified Party in enforcing this indemnity and defense agreement, including attorney's fees actually paid by the Indemnified Party.

## 19. LIMITATION OF LIABILITY:

Except as otherwise expressly provided in this Agreement, each Party's liability to the other Party for any loss, cost, claim, injury, damage, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as specifically authorized by this Agreement.

#### 20. FORCE MAJEURE:

A Party shall not be subject to any liability or damages for inability to meet its obligations under this Agreement to the extent that such failure shall be due to causes beyond the control of the Party, including, but not limited to the following: (a) the operation and effect of any new or modified rules, regulations and orders promulgated by the Federal Energy Regulatory Commission, any applicable state public utility commission, any municipality, or any governmental agency of the United States, or subdivision thereof (so long as the claiming party has not applied for or assisted in the application for, and has opposed where and to the extent reasonable, such government action); (b) restraining order, injunction or similar decree of any court; (c) any Force Majeure event.

Force Majeure shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

Provided, the Party claiming Force Majeure shall make every reasonable attempt to remedy the cause thereof as diligently and expeditiously as possible. Except for the obligation to pay amounts owed when due, time periods for performance obligations of either Party herein shall be extended for the period during which Force Majeure was in effect.

#### 21. SUCCESSORS:

This Agreement will be binding upon the Parties and will inure to the benefit of their successors.

#### 22. SEVERABILITY:

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

### 23. MULTIPLE COUNTERPARTS:

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

## 24. CONTRACTORS AND SUBCONTRACTORS:

Nothing in this Agreement shall prevent Company from utilizing the services of any third party contractor or subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that Company shall require its third party contractor and subcontractor to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such third party contractor and subcontractor.

#### 25. NO THIRD-PARTY BENEFICIARIES:

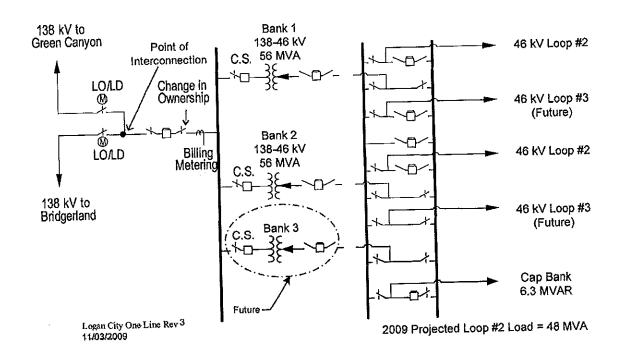
This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

IN WITNESS WHEREOF, the Parties hereto have entered into this Agreement effective as of the day and year first herein above written.

PACIFICORP	LOGAN CITY LIGHTAND POWER
Signature Signature	Signature
Kenneth Houston Printed Name of Signator	JEFF WHITE Printed Name of Signator
Director Transmission Title of Signator	DIRECTOR Title of Signator
Sept. 16,2010	9-10-2010 Date

## Exhibit A One-Line Diagram

## Proposed New "West Logan Substation" 138/46 kV Substation #7



#### Exhibit B Scope of Work

The following outlines the design, procurement, installation, testing and ownership of equipment for new interconnection of Customer's West Logan Substation with the Company's 138-kV Bridgerland- Green Canyon transmission line.

## Company's Substation

The Company's substation is to be located adjacent to the Customer's new The facility is to be completely enclosed within a interconnection substation. chain link fence that is to contain one 24' double wide gate. The fence height is to be 8' which is made up of 7' of fabric and 1' of barbed wire. The yard is to be laid out with room to allow maintenance vehicles to access the control house and the equipment. The Customer's ground mat and Company's ground mats are to be tied together. Unless a grounding study dictates otherwise, the minimum size for the ground conductor is 4/0 CU. A/C power is to be supplied by the Customer. Through the detailed design phase the preferred method will need to be determined regarding Loop Opening or Line Dropping (or both) devices for the two substation line switches. A draft responsibility matrix has been developed and attached at the end of this Scope of Work and will be confirmed among customer and company during the design phase to verify that all components are addressed.

The major substation equipment identified is as follows:

- One (1) 138-kV, 2000 Amp Circuit Breaker
- Two (2) 138-kV, 2000 Amp, TPST, Vertical Break, Motor Operated Switch and equipped with grounding blades (may need to add LO or LD device)
- Two (2) 138-kV, 2000 Amp, TPST, Vertical Break, Manually Operated Switch
- One (1) 125 Volt, 100 AH Battery System Using EnerSys 3CC-5 & a 2-step Seismic Zone 4 Battery Rack
- One (1) 130 VDC, 120 VAC, 60 Hz., 16 Amp Wall Mounted Battery Charger
- Three (3) 98-kV MCOV Surge Arresters
- Three (3) 138-kV CCVT's

One (1) - 13' x 19' Control Building

## CUSTOMER WILL BE RESPONSIBLE FOR

Customer shall provide property for Company's substation through either fee ownership or a perpetual easement in a format acceptable to Company and recorded in the name of the Company for the land upon which the Company's equipment will be located.

Customer shall provide labor, equipment, materials, pre-commissioning per attached matrix, to construct Company's substation subject to Company's design and technical specifications.

Customer shall provide property, access roads, landscape, rough grading, fence, ground grid, finsh gravel/grading and provide misc. materials such as insulators, bus, conduits, cables etc. per company standards.

Customer shall assist in commissioning and correct any deficiencies that occur.

Customer shall provide station service for Company's substation.

Customer shall provide warranty of work performed.

## COMPANY WILL BE RESPONSIBLE FOR

The Company will be responsible for the design, procurement of major materials, inspection, witness testing, commissioning, fiber communications and terminations, and ownership of a new 138-kV interconnection substation to connect Customer's new West Logan Substation to Company's Bridgerland-Green Canyon 138-kV line. This interconnection substation will consist of one 138-kV circuit breaker, associated switches, electrical equipment and materials, relaying, SCADA, communications facilities.

## Customer's Substation

The Customer will be responsible for the procurement, installation and ownership of a 138-kV / 46-kV substation that will tie into the Company's substation at the tap point of the Bridgerland-Green Canyon 138-kV transmission line.

## Company's Transmission Line

## COMPANY WILL BE RESPONSIBLE FOR

Company will design transmission loop into Company's substation of Company's Bridgerland-Green Canyon 138 kV transmission line. Company will procure transmission materials for transmission line work. Company will design and perform all work pertaining to bringing fiber optic cable into Company's substation from existing transmission line. Customer will be responsible to provide and install fiber optic conduit

pathway or get-away to facilitate Company's fiber optic cable route as detailed in final design.

## CUSTOMER WILL BE RESPONSIBLE FOR

Customer shall perform construction to loop 138kV line into substation. Customer shall be required to coordinate all outages with Company and per outage process.

## **Protection and Control Requirements**

Adding the interconnection substation and tap to Customer's substation to the Bridgerland-Green Canyon line will convert the line from a two terminal to a three terminal line. Customer's transmission system will be a third source feeding potential Bridgerland-Green Canyon line faults. The Bridgerland-Green Canyon line utilizes a permissive under-reach transfer trip (POTT) pilot line relaying system. This pilot line relaying system uses the optical fiber cable on the line as the communication media. With the addition of the interconnection substation similar relays as are at Green Canyon substation will be installed at the interconnection substation to operate for faults on the Bridgerland-Green Canyon line. This new set of relays will communicate over the optical fiber cable to the relays at both Bridgerland and Green Canyon. The existing relay systems at Bridgerland and Green Canyon substations will need to be modified to accommodate the three terminal line configuration. These modifications are relatively minor involving optical fiber jumper and relay setting changes.

Since the Company's substation will be adjacent to the Customer's substation the ground mat of the two facilities will be tied together. By tying the ground mats together it makes it possible to use a bus differential relay system to detect faults on the 138-kV intertie between the two systems. The bus differential relay system will be located in the Company's substation. The Customer will need to provide the output of current transformers from each of the transformers to be fed into the bus differential relays. The bus differential relay will trip the Customer's circuit switchers as will as the breaker in the Company's substation.

The 138-kV breaker at the Company's substation will be equipped with a breaker failure relay which will transfer trip the remote terminals, over the fiber optic cables, for a failure of that breaker to interrupt a line fault.

Local and remote control of the motor operated air break switches will be installed in the Company's substation. An automatic sectionalizing control scheme will be installed for these switches.

## COMPANY WILL BE RESPONSIBLE FOR

Company will design, purchase, checkout, and test protection and control facilities for the Company's interconnection substation.

## CUSTOMER WILL BE RESPONSIBLE FOR

Customer will install protection and control equipment, cable, and conduit. Customer will test and checkout facilities prior to company checkout and test.

## GREEN CANYON SUBSTATION

The following outlines the design, procurement, installation, testing and ownership of equipment for Company's Green Canyon Substation.

## COMPANY WILL BE RESPONSIBLE FOR

The Company will be responsible for the design, procurement, installation and ownership of the three-terminal scheme that is to replace the existing relays.

## **BRIDGERLAND SUBSTATION**

The following outlines the design, procurement, installation, testing and ownership of equipment for Company's Bridgerland Substation.

## COMPANY WILL BE RESPONSIBLE FOR

The Company will be responsible for the design, procurement, installation and ownership of the three-terminal scheme that is to replace the existing relays.

## INTERCHANGE METERING

The following outlines the design, procurement, installation, testing and ownership of equipment required for the metering.

The interchange metering will be located inside the Customer's substation. The primary metering design package will include three combined 138-kV The metering design will include current/voltage instrument transformers. disconnect facilities to remove the instrument transformers without interrupting the load. The metering will include a 12 inch panel with two revenue meters. The primary meter will be used for standard transmission accounting and retail sales via the MV-90 translation system. The primary meter will also provide all SCADA MW, MVAR, MWH data. The second meter will serve as a backup to the primary meter. Both the primary and backup meters will require a dial-up phone line.

## CUSTOMER WILL BE RESPONSIBLE FOR

Customer will design, procure and install own and maintain metering structure, instrument transformers, primary and back-up metering, and communications equipment required for the new point of delivery per Company standards and clearances.

#### **COMMUNICATIONS**

The following outlines the design, procurement, installation, testing and ownership of equipment for Company's communications equipment.

There is existing fiber on the Bridgerland-Green Canyon line. Company will drop the OPGW fiber from the Bridgerland-Green Canyon line into the interconnection substation control building and back out to the line. At the interconnection substation, DMX explore will be installed with Multiplex equipment for the SCADA Telementary and meter dial up equipment. SEL 2830 fiber modems are required for each protection circuit over the fiber to Customer, Green Canyon and Bridgerland. SEL 2830 fiber modems are also required at Customer's substation, Green Canyon and Bridgerland (the other end of the lines). A telemetry circuit to Goshen Substation is required. Additional communication channel cards are required at Bridgerland, Cutler, Goshen and SOCC to bring the data into the dispatch center.

A remote terminal unit (RTU) will also be installed at the Company's interconnection substation. This RTU besides providing control and indication of the 138-kV breaker and motor operated switches at the substation will also provide the following metering information from the Customer's interchange metering:

#### Analogs:

- Interchange MW
- Interchange MVAR

#### Accumulator Pulses:

• Interchange metering kWH

The interchange real power MW will need to be telemetered to the Company's Energy Control Center in Salt Lake City independent of the analog signal supplied to the RTU.

#### COMPANY WILL BE RESPONSIBLE FOR

The Company will be responsible for the design, procurement, installation and ownership of the required equipment to connect the interconnection substation to Company's existing communications system with fiber. Telemetry and meter dialup equipment will be required for each protection circuit over the fiber to Customer's Green Canyon and Bridgerland substations. Additional communication channel cards are required at other communications sites to bring the data into the dispatch center.

RESPONSIBILITY MATRIX ON FOLLOWING PAGE:

Logan City-New Interconnection	<b></b>					
Draft worksheet						
4/21/2009		<b>D</b> 110	•	1	1	
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Logan City Sub	Materials	Labor	Offier	IVIALEI IAIS	Labor	Onler
Denomb						Х
Property Access road			-	X	X	^_
Landscape				x	X	
Clearing/grubbing			<del> </del>	X	X	<del></del>
Rough grading				X	X	
Fence				X	X	
Ground grid			<del> </del>	X	X	<u>-</u>
Finish gravel/grading	<del> </del>			X	$\frac{\hat{x}}{x}$	
Timan grayergrading			-			
Circuit breaker	- x				×	
CCVTs	$+\frac{\alpha}{x}$		····	_	X	
Switches	<del>                                     </del>			1	x	
Structures	$+\hat{x}$			1	X	
Insulators, bus, misc	<del> </del>			х	$\frac{\hat{x}}{x}$	
Conduits, cables etc			<u> </u>	x	X	l
Protection & Control	×			1	X	
Control Building	$\frac{1}{x}$			1	X	
Communications: Fiber, SCADA, terminations	X	Х	ļ · · · · ·	1	<del></del>	
Station service, including backup				Х	X	
Responsible for materials once received						Х
	1					
	1					
Metering structure- 138kV(Logan Substation)				X	X	
Metering switches-138kV				Х	X	
Metering CT/VT/meter/panel-138kV		•		X	X	
Inspection/Witness testing		X	-			
		<u>· · ·</u>				
			<del></del>	<u> </u>		
Transmission line	1 x				Х	
Line outage coordination per RMP standards	1					Х
			-			
Engineering, drawings, specifications		Х		†		
Construction inspection		X				
Project Management		Χ		1		
Pre-commissioning per RMP matrix				<b></b>	X	
Commissioning/testing		Х		1		Х
Warranty, as-builts, documentation				1		X
Maintenance/replacement costs						X
Green Canyon	X	X				
Bridgerland	Х	X				
SCC Communications	×	X				
Goshen Communications	Х	X				
Note: Logan City is responsible for all costs, All L	ogan City pro	vided mate	eriais will be	new and pe	er Pacificor	specs.