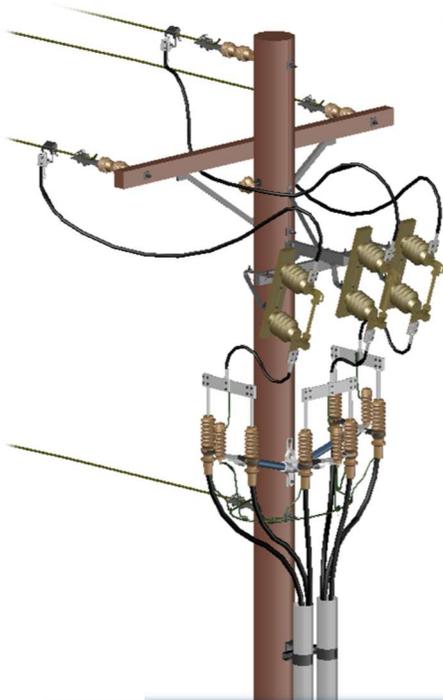


Large Electric Service Handbook



500kW
&
Larger

Revision: July 2018



Grant County
PUBLIC UTILITY DISTRICT

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This handbook documents Grant County Public Utility District (District) requirements for new or expanding facilities. Use this handbook only as a guide. It should not be interpreted to conflict with regulations of the *authority having jurisdiction*.

How to contact the District

To initiate a request for new service or to ask a question about an existing service, call our Large Customer Care department at:

Phone: (509) 766-2534 or **Email:** LargeCustomerCare@gcpud.org

Getting Started

The process is categorized in three different sections.

- New Service Request (Chapter 2)
- Plan of Service (Chapter 3)
- Agreements to Construction (Chapter 4)

Chapter 5 is filled with additional information that might not be mentioned or part of the new service options.

Rate schedules

The basis for Large Customer rates are on a balance between electric service requirements and cost of service. The District has adopted the following rate schedules to establish charges for service according to Customer classification.

Related rate schedules

Schedule 7 – Large General Service (500kW – 5,000kW)

Schedule 14 – Industrial Service (5,000kW – 15,000kW)

Schedule 15 – Large Industrial Service (15,000kW and above)

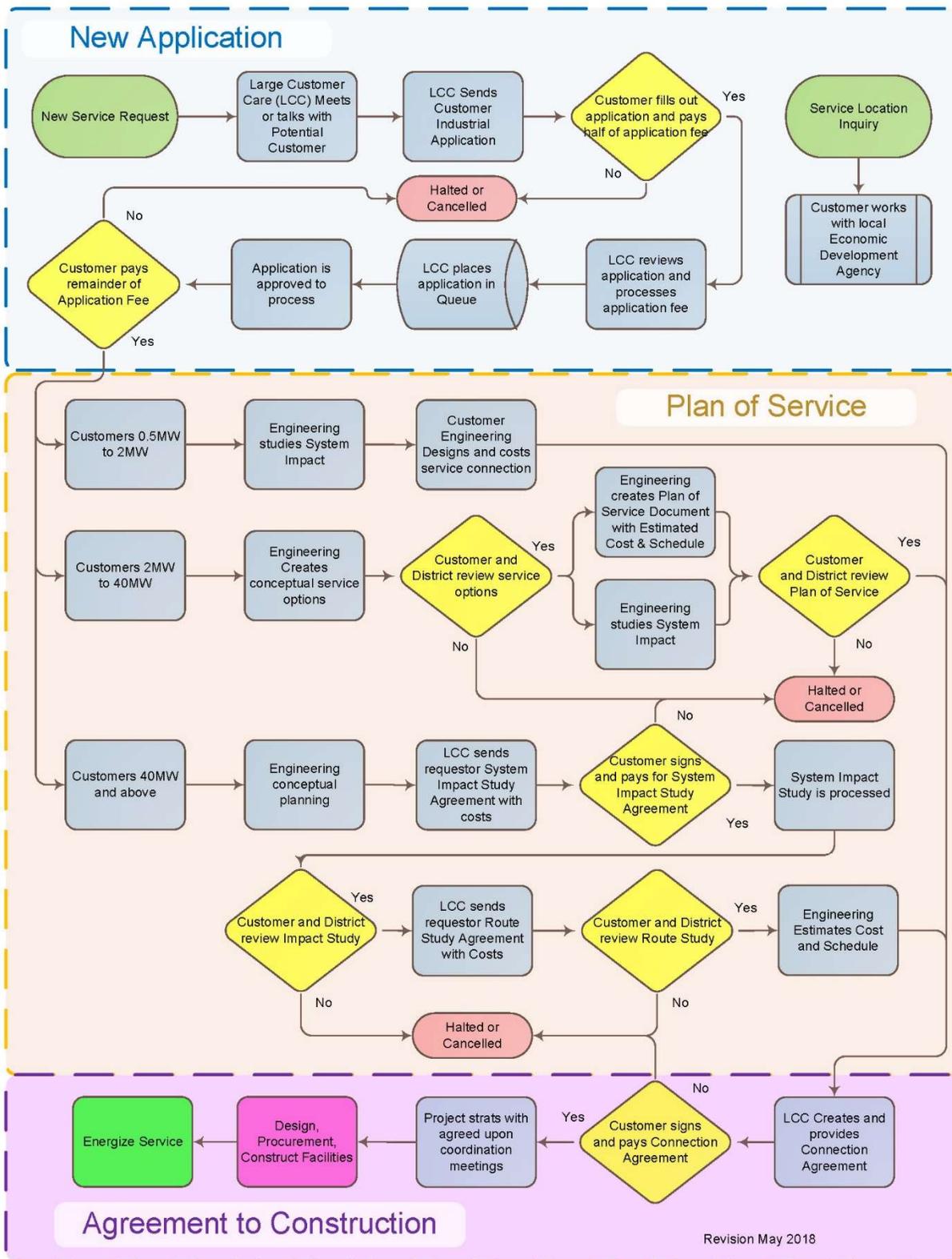
Schedule 16 – Agriculture Food Processing Service (5,000kW – 15,000kW)

Schedule 85 – Agriculture Food Processing Boiler Service

Schedule 94 – New Large Load

New Service Process Map

Below is a chart mapping the District's process for a new service requests.





**Know what's below.
Call before you dig.**

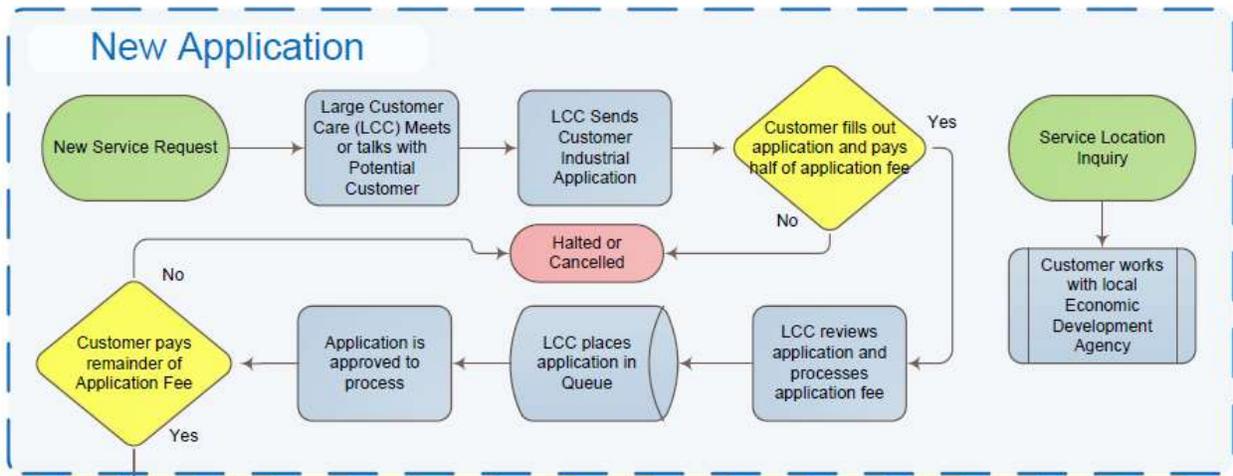


Getting Started

The District will make best efforts to accommodate new or expanded service requests. Service requests may take longer based on resources and priorities.

What we need from you, the Customer:

- ✓ Contact the District’s Large Customer Care department
- ✓ Meet with District to discuss proposed service and site options
- ✓ General Information about service request
- ✓ Complete application after site is selected
- ✓ Pay the Application Fee (See Appendix D)



General Information Needed

Basic information from the Customer will help the District in planning and conceptual design of electrical service.

General information provided by the Customer:

- Possible site locations
- Load size for site, initial and long term
- Service voltage
- Estimated time of energizing and planned phases

- Redundant service
- Backup systems (Generators)
- Any large motors above 100hp
- Application Fee

General information provided by the District:

- General Queue
- Evolving Industry
- Power Factor
- Power Quality
- Metering
- Protection
- Fiber Communication

Site Locations

The District has Transmission line limits in many areas of the County. A Customer wanting immediate service should choose a site location where main Transmission lines are available. Local Economic Development agencies will assist in best site location.

NOTE: The District’s electric system capacity is subject to change. Capacity offtake is contingent upon Customer keeping to the schedule identified in the Plan of Service and Connection Agreement (CA).

Real Property Obligations

The District requires real property rights to access any of its equipment.

Customers may be required, at the discretion of the District, to provide property for District infrastructure. Requirements vary and are dependent upon Customer location and system configuration.

Real property for substation/infrastructure purposes will be conveyed to Public Utility District No. 2 of Grant County, a municipal corporation in fee simple estate by Statutory Warranty Deed free and clear of all easements, covenants, conditions, restriction, and reservations, apparent or of public record, except those agreed to in writing by the District. If necessary electrical and telecommunication lines with appurtenant facilities and ingress/egress to substation property will be conveyed to the District by easement in perpetuity.

Load size

The District requires the Customer to provide both initial and long-term peak load size. The District will coordinate with Customer on service plans and growth options. This information are to develop a Plan of Service to meet the Customer’s power needs.

Service Voltage

The District provides three levels of service voltage at demarcation point: Secondary, Distribution, and Transmission. Please see Appendix C for service voltage options.

Transmission Level Connection

The District will provide transmission level connection for Customers desiring to build, own, and operate a substation. District has two voltage levels of 115kV and 230kV.

Estimated time to Energize

The District does not guarantee to energize by a specific date. The District will make best efforts to meet or exceed requested schedule. The District may provide Bridge Power options until permanent power is complete for an additional cost.

Redundant service

The District offers provision for redundant electrical service.

Redundant Levels

The District can provide three main levels of redundancy.

1. Distribution level consists of dual feeders with dedicated breakers from a substation transformer to the Customer with transitioning of loads. This level provides for 2MW to 20MW of redundant capacity.
2. Substation level consists of dual substation transformers with dual feeders, with one feeder source coming from transformer A and the second feeder source coming from transformer B to the Customer with transitioning of loads. This level provides for 5MW to 40MW of redundant capacity.
3. Transmission level consists of redundant transmission line from two main sources going to a substation, either looped or radial configuration.

Electrical Backup Systems

The District allows for both closed and open transition operation of backup generation. Customer must meet the following guidelines for backup transition.

1. A separate isolation switch in a metal clad cubicle installed by Customer, outside of the main switchgear building, for each feeder breaker lineup. The purpose of this switch is to give a visible open isolation point for the District. Customer switchgear can be used as an isolation switch with the prior approval of the District.
2. District personnel are allowed access to the isolation switch at all times in order to operate the switch and place clearance tags. Only authorized personnel from Customer and the District shall be allowed access to the switchgear isolation

switch positions once clearance procedures are completed (see Chapter 5).

3. Required backup of electrical interlock. The District recommends *Open Transition* backup of an electrical interlock between Customer main breaker and Grant PUD feeder breaker. The District will allow *Closed Transition* only if the following conditions are met:
 - a. Customer's feeder breaker has a protection and synchronization scheme that only allows the main breaker to close when the incoming 13.2 kV feeder from District's substation is energized.
 - b. Closed transition/soft loading is the only method of load pick up/transfer.
4. Feeders from two substation lineups may not go to the same location in Customer's facility, unless the Customer provides a solution that adapts to differing voltage levels.
5. Customer shall give all protection one line drawings, synchronization and relay settings, and any additional scheme documentation to the District for review and approval.

Motor loads

Customers are responsible for providing and maintaining code-approved protective devices. These devices are required to protect motors against overloading, short circuits, ground faults, low voltage, phase reversal, and loss of phase (single phasing) of three-phase motors.

Customers adding motor loads of 100 HP or larger will need to notify, coordinate and acquire pre-approval from the District. The District has the right to inspect and test motor for voltage and harmonic impacts. Customer must mitigate impacts.

The District may require Customer to install reduced-voltage starting equipment in cases where across the line starting would result in excessive or undesirable voltage disturbances on the District system.

The District may specify and require a particular type of reduced-voltage starting equipment. In some cases, certain types of loads may not be permitted or District may require certain loads be disconnected from the District's system to prevent undue voltage disturbances that degrades electrical service.

Application Fee

Customers are responsible for payment of Application Fee per Appendix D of requested MW load. The District requires a minimum of half of the Application Fee with application form to place request into a queue mentioned in below paragraphs. The Customer must pay the remaining payment of the Application Fee before application is processed. District will notify 20 days in advance to the customer their application is ready to process.

District requires all Application Fees for 2MW and below pay full amount upfront.

The time it takes to process, an application is dependent on District resources. The District will select applications every quarter to process.

General Queue

The District will place applications in the general application queue unless it's an Evolving Industry mentioned in below paragraph. The processing of applications are in a first in first out (FIFO) scenario. The District may see fit to cluster certain applications within the queue with the first inline application of other applications in same area to provide cost and resource efficiencies. Selection of applications for processing will be quarterly by the District. The District will notify the customer their application is ready for processing and the Customer will have 15 days to pay application fee. See: Application Fee Table.

Evolving Industry

Application received by an Evolving Industry (EI) Customer will be place in the EI queue not the general application queue. Customers located in the EI queue will not move forward for processing until all general queue applications are cleared. The processing of EI applications are in a first in first out (FIFO) scenario. The EI application will treated similar to the General Queue described on the above paragraph.

Power factor

The District recommends Customers design and operate facilities to maintain a minimum of ninety seven percent (97%) leading or lagging power factor. A power factor of less than 95% will cost Customer more.

Power quality

The District recommends that Customers install protective equipment to filter or suppress voltage and current abnormalities to prevent damage to electronic equipment or other voltage sensitive equipment. The District shall not be responsible for damages to equipment from such fluctuations.

The District operates the electrical system within the voltage limits set forth by ANSI standards. It endeavors to deliver energy at voltages within five percent (5%) plus or minus of nominal voltages. It is the Customer's responsibility to provide protection against the overall voltage drop from the Demarcation to the Customer's facility.

Customer systems shall have a design and operate to deliver no more than four percent (4%) voltage flicker at the point of demarcation. Harmonic limits vary depending on location and electric system characteristics. Consult the District for details.

Metering

Revenue metering is the responsibility of the District. The metering location is generally located at the point of demarcation. Additional information located in Chapter 3 under **Demarcation**.

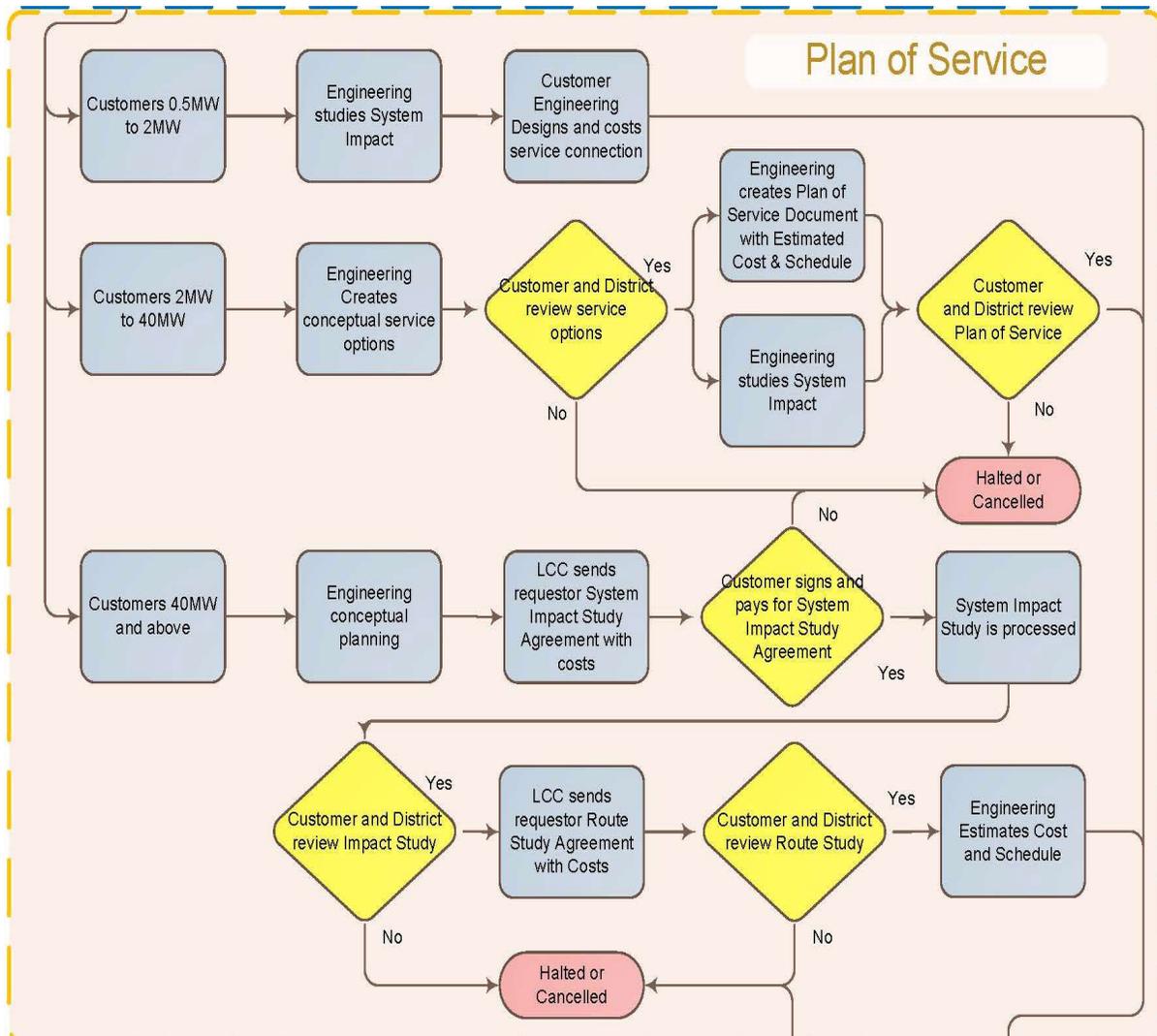
The District may provide a two-wire or three-wire metering output (KYZ) pulse for load monitoring equipment. Cost to the Customer will be determined at time of design. The District will not guarantee the reliability or accuracy of these pulses for billing comparisons.

Protection

The District provides all necessary protection from service feeder to demarcation. The District will provide fault current data up to demarcation and any necessary protection coordination information. Customer is required to provide protection devices after the service demarcation to their facilities. The District may request Customer provide additional protection coordination information and/or generation backup settings.

Fiber Optic Communication

Fiber optic communication is available throughout Grant County except in some rural areas. The District is not a retail service provider. For fiber information, please contact Grant Fiber at (509) 754-6632.



Getting Started

What we need from you, the Customer:

- ✓ Drawing and site information
- ✓ Coordination with District
- ✓ Monthly ramp schedule for four years and with any added estimates or conceptual documents beyond the four years.

What the District will do:

- ✓ Create a Plan of Service
- ✓ Share the Plan of Service with Customer
- ✓ Coordinate with Customer

Plan of Service

The District will create a Plan of Service document including:

- SERVICE - Configurations of different service options including distribution, substation and transmission serving the substation.
- RISK – Will note general risks to the project of cost or schedule.
- COSTS – District will provide estimated costs for the project and final calculated costs at creation of agreements.
- SCHEDULE - Estimated milestone schedule of project based from signing of agreements to energization.
- BRIDGE POWER – The District may provide temporary or acceleration options.

Service

The District feeders and demarcations are based on facility and location of site. Service feeders are designed and built to NESC standards by the District.

District provided Demarcation types:

- Primary Overhead (OH): This demarcation provides an overhead primary CT meter base located on a power pole with an additional pole and a disconnect switch for Customer connection. This solution is mainly for loads with overhead Customer lines connection at 13.2kV. See Appendix B, Diagram B-1
- Primary Underground: This demarcation provides a primary CT meter base located in a pad-mount cabinet. This solution is mainly for loads below 10MW at 13.2kV. See Appendix B, Diagram B-2
- Switch Gear Bay: The District provides a Switch Gear with a feeder bay disconnect for Customer connection. The CT metering is at the Substation feeder pedestal. This solution is mainly for loads above 8 to 10 MW with Customer located away from the substation at 13.2kV. See Appendix B, Diagram B-3
- Customer Switch Gear: Switch Gear is provided by the Customer with District-owned cable ran into the gear. The CT metering is at the Substation feeder pedestal. This solution is mainly for loads above 10 MW with Customer located away from the substation at 13.2kV. See Appendix B, Diagram B-4

- Transformer: Under 2MW, the District can provide facilities with secondary service like 480V/277V. See Appendix B, Diagram B-5

Typical service scope is based on a MW differentiator for facility infrastructure and demarcation of service:

- 0.5 MW to 2MW – Secondary Service
- 2MW to 10MW – Primary Service (13,200V), from Distribution Line
- 10MW to 20MW – Primary Service from Substation breaker
- 20MW and up – Primary Service from multiple Substation breakers
- 10MW and up – Transmission service at either 115,000V or 230,000V

Risk

The District will assess service options to identify possible risks to the project schedule and costs. The risks will be documented in the Plan of Service.

The District may also request the Customer install guard posts around equipment for protection. For example: near heavy traffic areas.

Costs

Customers proposing to add new peak load must contribute to the District's transmission, substation, and distribution systems by paying a connection cost. The connection cost includes but is not limited to the following calculated costs of:

- distribution construction and engineering
- substation will be based on load requirements
- bridge power, if requested
- any associated transmission for the requested service
- additional special facilities

(Calculated costs will include construction, engineering and overheads)

The Customer will be required to sign a Connection Agreement. Should the Customer cancel the project within 45 days of the effective date on the Connection Agreement (CA), the connection cost will be refunded – minus District costs/expenses incurred or committed to the project to the date of receipt of official notice.

Bridge power

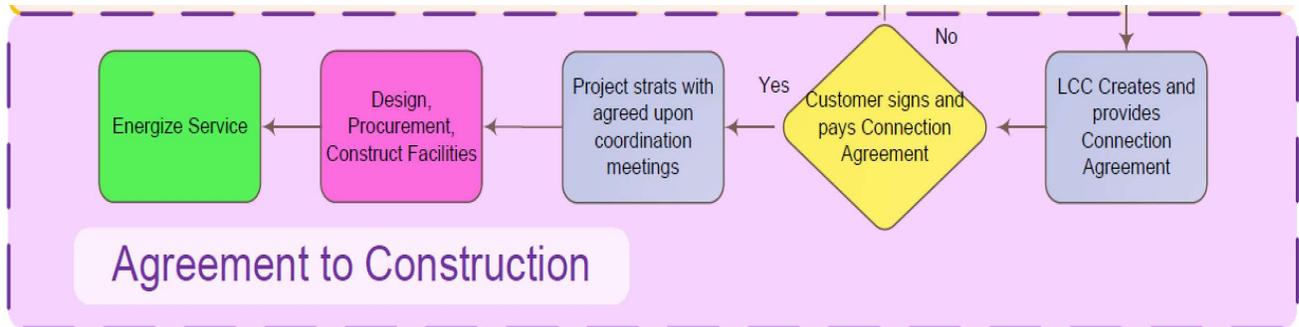
Bridge power is an interim electrical service provided until permanent power is complete and is not for construction purposes. Dismantle of the Bridge power will be after agreed-upon permanent service date. Bridge power options include:

- Temporary 13,200 volt feeder nearby Distribution source
- The District may provide temporary use of a mobile substation to serve Customer loads pending changes to the District substations and other facilities. Mobile substation use is limited to the following conditions:
 - The Customer load must be served from a substation that is physically able to house the mobile substation and is of sufficient size for the construction of the new facilities.
 - Customer must pay in advance all costs related to moving the mobile substation to and from the Customer.
 - Customer will pay additional District's operation and maintenance costs incurred because of placing the mobile substation for the sole use of the Customer. The District will determine this charge and adjust it as required to offset costs.
 - The right of the District to de-energize and remove the mobile substation at any time the District, in its sole discretion, decides that such action is necessary to protect its interests.
 - Customer agrees to maintain a load on the mobile substation at or below the load determined by the District. The District may allow full use or reduced loads, at its discretion, to avoid overloading the mobile substation. The maximum load allowed may vary with the season and the location of the load.
 - The District will allow use of its mobile substation on a "first-come-first-served" basis, when all of the District's requirements, including entering into a mobile substation agreement, are met.
 - Use of the mobile substation on a temporary basis is restricted to the time it takes to provide permanent facilities to meet the Customer load. After six months, the District will inspect the condition of the mobile unit and may remove it from service if conditions warrant.
- Agreed upon service by both the District and Customer

Existing Rate Schedule Transitions

Existing Customers must notify the District of any alterations or improvements to load service. Large Customer Care department will determine the appropriate rate schedule based on the Customer's load. Customers need to inform the District of any loads planned above their current usage. For example, if Customer were at 1MW moving up to 5MW, the Customer would be required to take delivery at 13,200V and pay additional costs for Connection.

Customers who have facilities and equipment beyond the 13,200V demarcation that are District owned, the Customer will take ownership of all existing services that is altered. Ownership of facilities comprises of all maintenance or replacement authority to the Customer, the Customer must purchase facilities from the District. District facilities are built to NESC standards, and Customer is responsible to meet their own standards.



Getting Started

The District will provide agreements for planning, design and construction for the plan service.

What we need from you, Customer:

- ✓ Contact the Large Customer Care department
- ✓ Complete and submit payment of the “Connection Agreement (CA)”
- ✓ Complete the “Service Connection Agreement” if construction service is requested
- ✓ Coordinate regular meetings

What the District will do:

- ✓ Create service Connection Agreement document
- ✓ Coordinate regular meetings
- ✓ Provide design, procure, and construct of project

Connection Agreement (CA)

Connection Agreement will consist of:

- Site location of project
- Any recitals for project
- Obligation of parties
- Delay or termination of agreement
- Venue and Attorney Fees
- Notifications
- Authorities/Warranties and representations
- Signatures
- Exhibits of project

The Customer is responsible to ensure the project complies with all federal, state or local codes that may apply. The customer should address all codes and requirements related to a project before construction begins. Once the service equipment is installed, the State of Washington Labor and Industries requires that the installation pass an electrical inspection *prior* to being energized by the District.

Construction service

Construction service is an electrical service used for construction purposes. Construction service shall not exceed one year in duration without prior approval from the District. The District, at Customer's expense, will provide all primary (13,200 or 12,470 volt) infrastructure for the construction services listed in Appendix C- Services Voltages up to 2MW. District will allow construction services larger than 2MW with certain provisions at the discretion of the District.

The Customer is responsible to provide all real property rights required for the construction service.

All secondary equipment and its inspection are the responsibility of the Customer. Construction services will not be energized until they pass Washington State Labor and Industries inspection. The District will provide one construction service and voltage per Customer unless otherwise approved by the District.

Outage Requests

The request for Outage

- ✓ Contact the District’s Dispatch at (509)754-5001
- ✓ Outage Requests require notice of minimum of 72 hours
- ✓ Customer supply any additional drawings or information for safety of switching.

Outage requests require a 72 Hour advance notice to Dispatch; failure to notify could result in outage extension. The Customer provides the below information:

- ✓ Name of Contact and alternant who will be present at the outage and cell number.
- ✓ Location number of the nearest District device or breaker source if available
- ✓ Date and time to start outage
- ✓ Date and time to re-energize

The District will provide a safety tag labeled “Do Not Operate” at the point of separation to provide visual confirmation that service has been de-energized. For additional information, please see Appendix E - DO NOT OPERATE TAG PROCEDURE.

Under Frequency

The District is required by NERC to drop loads if an under frequency or under voltage event happens on the Electrical Grid. All industrial load breakers will have under frequency relaying installed and added to load shedding scheme for NERC compliance.

Conservation

For Customer conservation initiatives contact our Energy Services Department (509) 766-2512. Information is also located on District website www.grantpud.org.

A

Glossary of Terms

Approval — Acceptable to the authority having jurisdiction.

ANSI — American National Standards Institute

Associated equipment — As related to metering equipment: such as the current transformers, CT wiring and test switches.

Authority having jurisdiction — The qualified representative of a city, county or state who has been authorized by governmental agencies to inspect.

Bridge Power — Temporary service power until permanent service can be constructed and energized.

Capacity — The allowable power that can flow through a facility.

Call Before You Dig number, 811 — National one call underground utility locating service.

Clearance — A set distance between two objects.

Conduit — A listed or approved wire way with a smooth interior surface. Conduit may vary in size or schedule (wall thickness), depending on its usage, in accordance with codes and the District specifications.

Construction service — An electrical service providing power to a Customer on a temporary basis during construction of a project.

Current transformer (CT) mounting base — CT mounting base required for commercial CT metered services.

Current transformers (CT) — A device used to measure the current flow of services 200 amps or greater.

Customer - Any individual, group, partnership, corporation, firm or government agency who has applied for electric service from the District or is receiving benefit of service of the District.

Demarcation — A change of ownership.

DO NOT OPERATE Tag — A Point of Separation (POS) Tag that the circuit, line, or equipment is being worked on and under no circumstances shall anyone operate the device prior to the proper release of the Tag.

Enclosure — A sealable cabinet designed for surface or flush mounting, and provided with a frame, mat or trim in which doors or removable covers are hung.

Evolving Industry — An industry whose primary business involves emerging technology, non-traditional business models, or participation in highly speculative or volatile industries.

Onsite Facilities — Any electrical systems located after the demarcation, generally on Customer premise, ex. Conduit, vaults wire, switchgears, transformers and associated equipment.

Grant PUD — The District

Guard post — A bollard or post designed to protect the electrical facility or meter installation from vehicular traffic.

Industrial — Customer designation of type of load that produces and supplies merchandise within rate schedules 7, 14, 15 and 16.

Joint use — A group of utilities that share space on a utility pole or trench.

kV — Kilo Volts

Metering — An equipment associated with measuring electrical energy typically for billing purposes.

MW — Mega Watts

NERC — North American Electric Reliability Corporation, Governmental agency for regulatory control of North American Grid.

NESC — National Electric Safety Code

Neutral — The grounded conductor in a single-phase, three-wire, or three-phase, four-wire system. The service conductor that is at zero potential to ground.

Offtake — A specific amount of electrical power delivered to a Customer site.

OH — Overhead power line

Plan of Service — A document that layouts service option for both permanent, redundant and bridge options. The document will in tale description of the service options, risk to the project, and estimated costs.

Point of Separation (POS) — An established boundary between the District’s transmission and distribution system and connected generation plants or Customer-owned facilities.

Protection Coordination — Established scheme for power system between the Customer and District that deals with protection of facilities from faults and then isolation from the rest of the electrical system.

Secondary service — The lower voltage, after transformation, used to supply the Customer with electrical energy.

Temporary service — An electrical service providing power to a Customer on a temporary basis.

Transformer — Equipment used to reduce (step down) primary voltage to the secondary service required to supply the Customer.

Voltage transformers (PT) — A device used to reduce primary voltage to 120 volts. PTs are installed in conjunction with a CT rated meter.

B

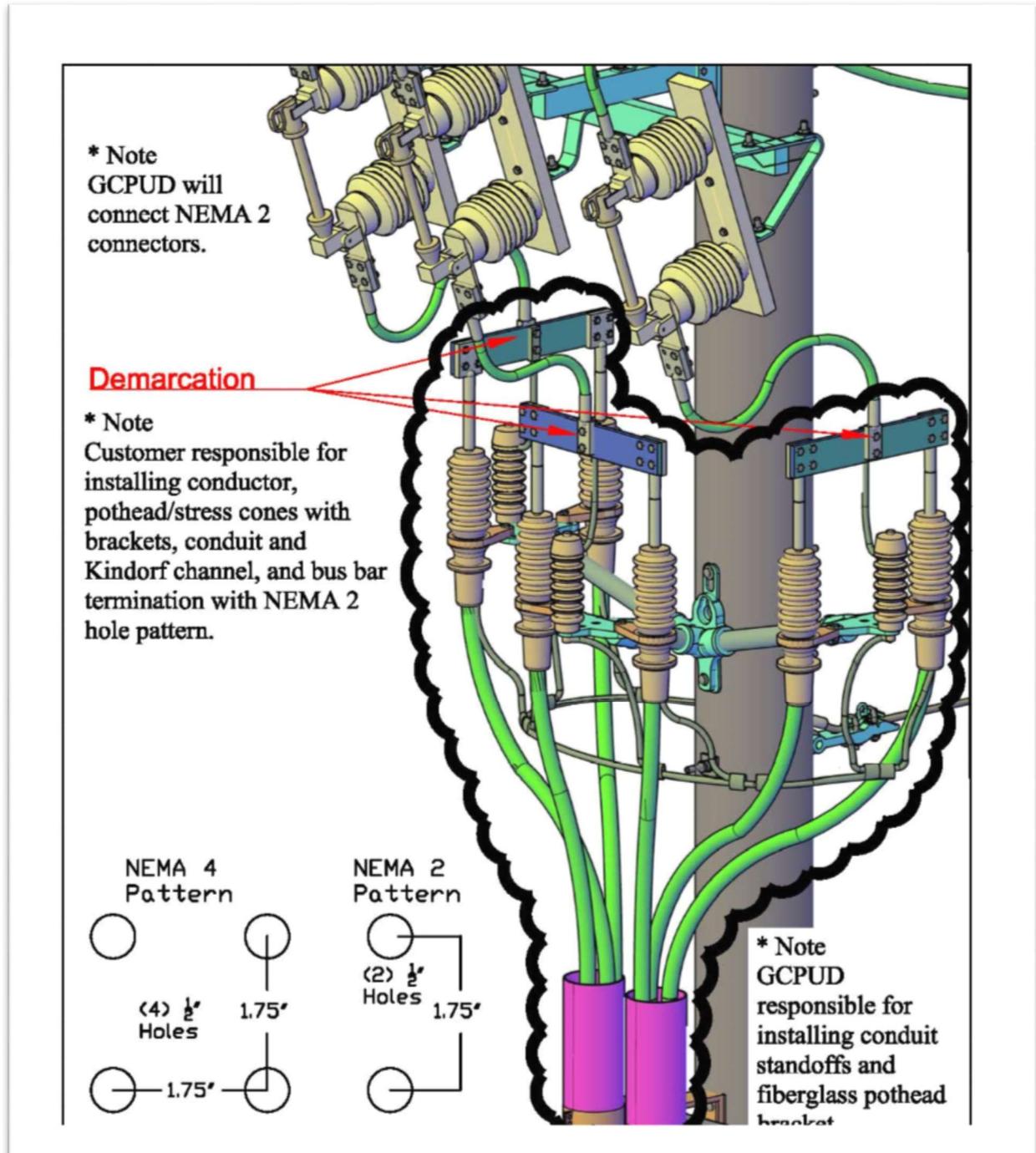


Diagram B-1

ENCLOSURE, PRIMARY METERING, PADMOUNT, SWITCHED



GENERAL: Padmount outdoor 3 phase primary metering switching enclosure for commercial or industrial applications.

SPECIFICATIONS: Primary metering cabinet shall be manufactured per District Specification 16361.8, *15kV 600 Ampere Padmounted, Compartmental-type Metering Cabinet*.
The cabinet shall have 600 amp bushings for both the line side and load side. The cabinet shall have a switch capable of 600 amp full load break vacuum interrupting on the line side. The switch on the load side shall be gang-operated.

DISTRICT SUPPLIED & INSTALLED:
Meter socket, meter, wiring harness, CTs, and PTs.
See 59101210 for meter socket cabinet, 69123011 for CT, 69291119 for PT, and 69281602 for the fused PT

PURCHASING: UOM: Each
Include stock page and District specifications with each purchase request and contract.

STOCK NUMBER	DIMENSIONS (INCHES)			AMPS	APPROVED MANUFACTURERS & CATALOG NUMBERS
	LENGTH	WIDTH	HEIGHT		SCOTT ENGINEERING
22044397	90	104	64	600	160164

Rev. 11-13-17 DH "First Edition."

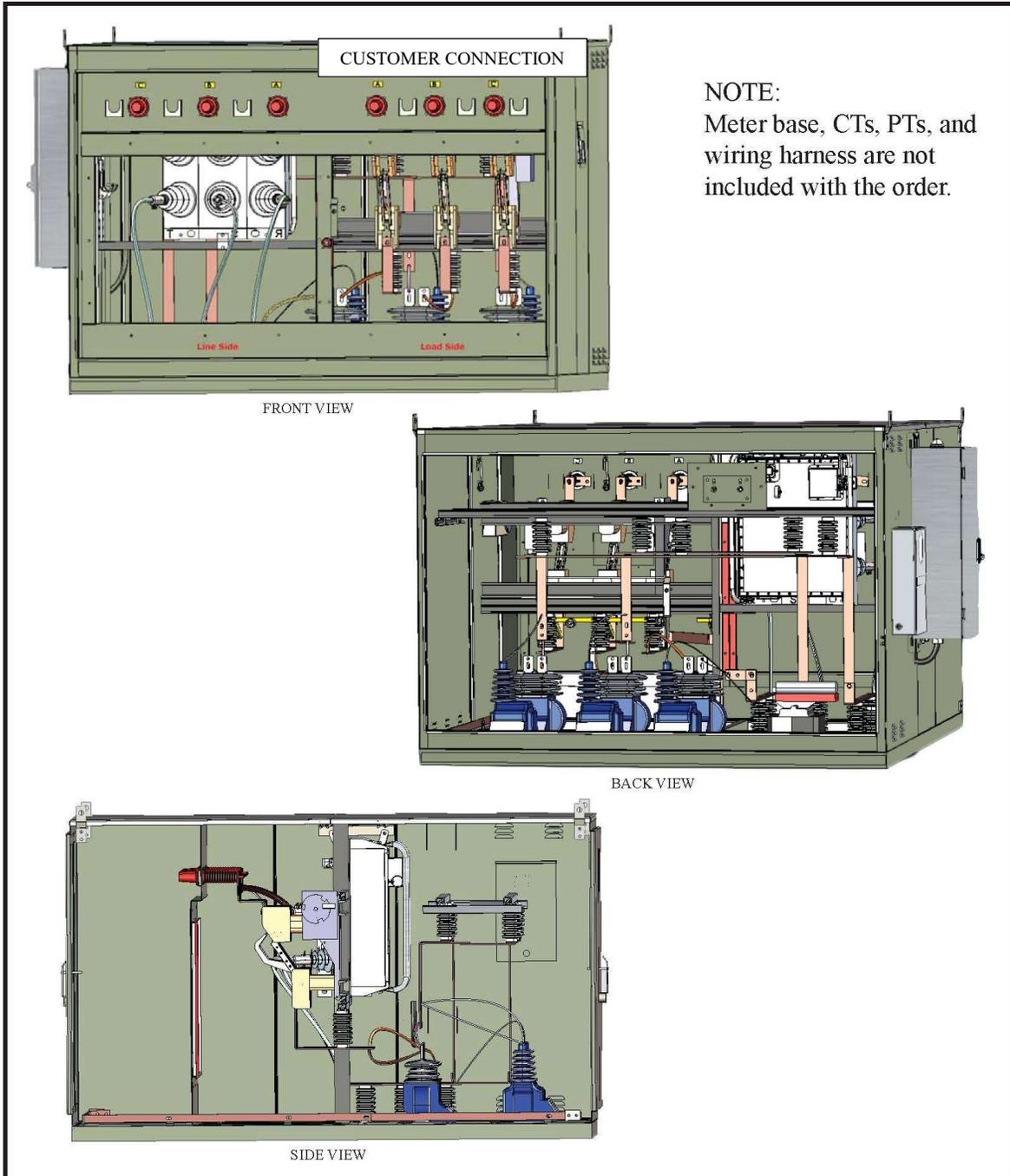
PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY	Date	10/17/17	ENCLOSURE, PRIMARY METERING, PADMOUNT, SWITCHED	ASSEMBLY UNIT		Yes	
	Rev #	1					
	Designer	DH		TDSI	TTNI	TMDI	TSDI
	Standards Engineer <small>Rudy Perez</small>			22044397			

Path: S:\Data\Standard\Stock Catalog\22044397.indd

Page 1 of 2

Diagram B-2a

ENCLOSURE, PRIMARY METERING, PADMOUNT, SWITCHED



NOTE:
Meter base, CTs, PTs, and wiring harness are not included with the order.

PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY	Date	10/17/17	ENCLOSURE, PRIMARY METERING, PADMOUNT, SWITCHED		ASSEMBLY UNIT		Yes	
	Rev #	1						
	Designer	DH			TDSI	TTNI	TMNI	TSNI
	Standards Engineer Rudy Perez				22044397			

Path: S:\Data\Standard\Stock Catalog\22044397.indd

Page 2 of 2

Diagram B-2b

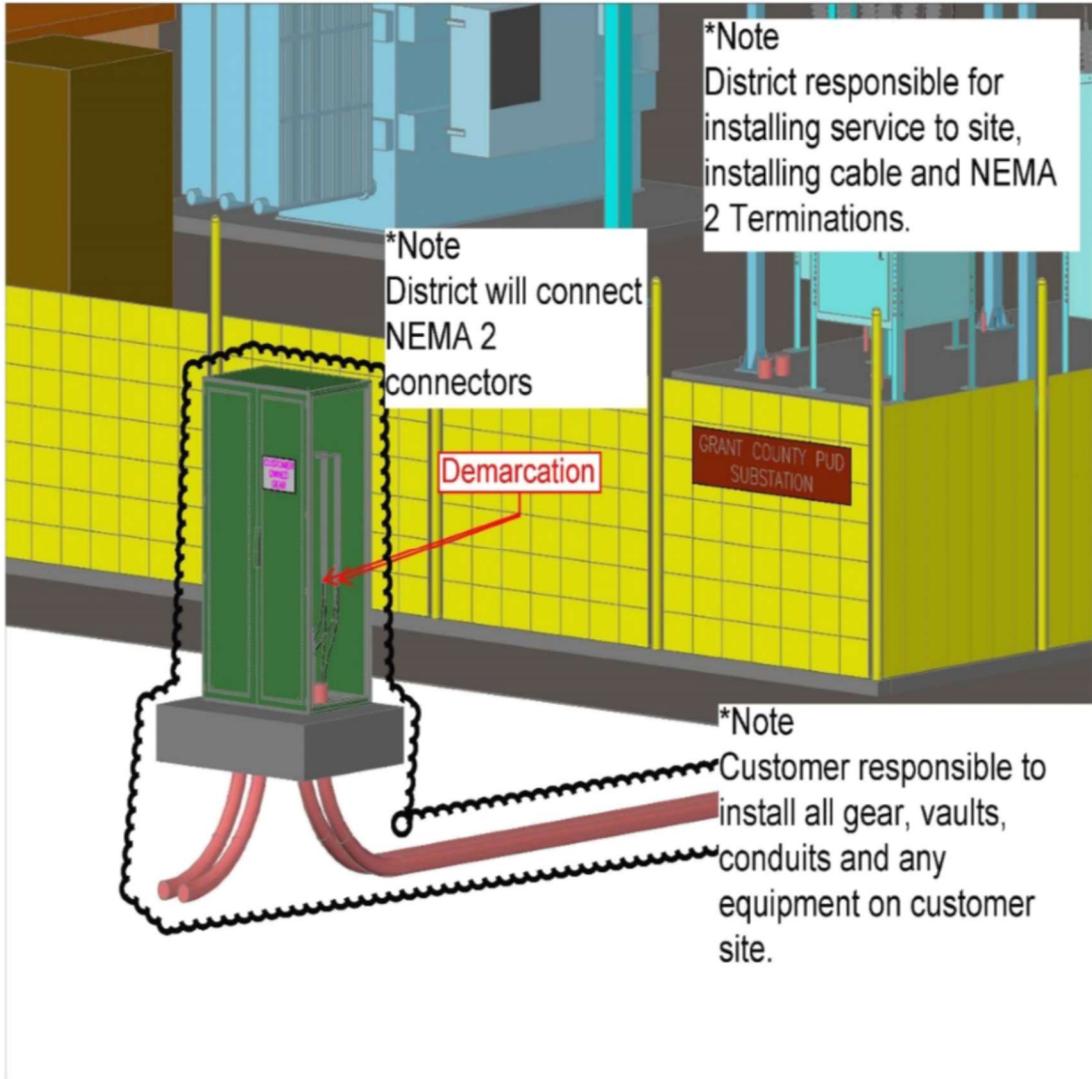


Diagram B-3

TRANSFORMER, PAD MOUNT, T-TYPE, 3 PHASE, 480/277



Typical 3 Phase transformer shown closed, see specifications for configurations of the bushings and equipment.

GENERAL: Three Phase, 480 / 277 V, WYE-WYE, pad mount, compartment type, distribution transformer.

SPECIFICATIONS: The transformer shall be constructed per the District Technical Specification #16321.3C, S:\Data\STANDARD\Specifications\District Specs. The transformer shall be loop-feed, oil-immersed, self-cooling, dead front, with separable insulated high voltage bushings, bay-o-net fusing, low voltage spade terminals, and tamper resistant, locking cabinet.

LABELS: The manufacturer shall not install warning labels and kVA ratings on the cabinet doors. The District shall install these labels. The manufacturer shall install all other labels as required. See specifications.

RATING: 13200 GRD.Y / 7620 V Primary
480 Y/ 277 V Secondary
60 Hz
65° C rise (with or without taps)

PURCHASING: All quote requests must include the stock page and the referenced District specification. APPROVED MANUFACTURERS ARE LISTED IN THE SPECIFICATION 16321.3C

STOCK NUMBER	kVA	TAPS	STOCK NUMBER	kVA	TAPS
69513304	DO NOT REORDER		69513350	500	NO
69513307	75	NO	69513375	750	NO
69513311	DO NOT REORDER		69513380	1000	YES
69513315	150	NO	69513381	1500	YES
69513322	DO NOT REORDER		69513382	2000	YES
69513330	300	NO	69513383	2500	YES

Rev. 01-19-16 SMW "69513304, 69513311, 69513322 Changed to Do Not Reorder"
Rev. 06-17-11 MHS "Removed stencils/labels from cabinet, added Y-Y designation."
Rev. 01-26-10 DH "Changed 69513182 & 69513183 to 69513382 & 69513383 respectively to coordinate with numbering system."
Rev. 10-09-09 MHS "Moved approved manufacturers to specifications."

PUBLIC UTILITY DISTRICT #2 OF GRANT COUNTY	Date	12/28/88	TRANSFORMER, PAD MOUNT, T-TYPE, 3 PHASE, 480/277	ASSEMBLY UNIT		Yes	
	Rev #	10					
	Designer	SB		TDSI	TTNG	TMNI	TSNI
	Standards Engineer	AL SELVA		69513304			

Diagram B-4

Service Voltage Table

Service Type	Service Level	Service Configuration	Voltage
Permanent	Transmission	Three-Phase	115,000 Volt, 3-wire Delta 230,000 Volt 3-wire Delta
Permanent	Distribution	Three-phase	13,200 Volt, 4-wire, Wye (Not available in the Grand Coulee area) 12,470 Volt, 4-wire, Wye (Available only in the Grand Coulee area)
Permanent	Secondary	Three-phase Padmount (Underground) Service	480/277 Volt, 4-wire, Wye
Construction*	Secondary	Three-phase Padmount (Underground) Service	208/120 Volt, 4-wire, Wye 480/277 Volt, 4-wire, Wye

* District only provides one voltage level.

FEE TABLE

Appendix

D**Application Fee**

New Demand Load Request	Fee
0.5 MW to 2 MW	\$2,500
Up to 10 MW	\$6,500
Up to 20 MW	\$15,000
Up to 40 MW	\$52,000
Over 40 MW *	\$21,000

Note:

*Over 40 MW will require different process with study and route agreements with associated costs.

Site location change from application will require a new application and fee.

If Customer changes scope of application, they may be subjected to an additional fee.

Should Customer change request after application fee they may be subjected to an additional fee.

E

DO NOT OPERATE TAG PROCEDURES FOR CUSTOMER-OWNED FACILITIES**PURPOSE AND GENERAL REQUIREMENTS**

- 8.1 In recognition that District tagging and clearance procedures are distinctly different from those used for Customer-owned facilities, the jurisdictional boundary between the District and Customer equipment shall be defined by identifying the boundary and jurisdiction of the Point of Separation (POS) devices. The typical POS device on an industrial service circuit is the last disconnect device in the circuit owned by the District. This section shall specify the Do Not Operate Tag procedures involving those POS devices.
- 8.2 The Do Not Operate Tag, colored red/white with black letters, is used in connection with Do Not Operate orders and is placed on POS devices. The Do Not Operate Tag is shown in Attachment B, page 29.
- 8.3 If actual work is required on the POS itself, a temporary POS shall be mutually agreed to by the Dispatcher and the Customer. The temporary POS will be documented on the Hotline/Clearance Request form and the Dispatcher's log.
- 8.4 Field crews shall install lock(s) in conjunction with Do Not Operate Tags on all devices equipped with lockable energy isolation mechanisms.

RESPONSIBILITY AND AUTHORITY

- 8.5. The Dispatcher shall have jurisdiction and is assigned tagging authority for the POS and all line side equipment. The Customer shall have jurisdiction and is assigned tagging authority for all equipment on the Customer-owned side of the POS. The Customer shall not place a Customer-owned tag on the POS device without first obtaining approval from the Dispatcher.
- 8.6. The Customer requesting the Do Not Operate Tag shall be responsible for identifying to the Dispatcher the person authorized to perform work on behalf of the Customer and providing contact information. The designated person will be the primary point of contact with the Dispatcher and shall be responsible for accepting and releasing the Do Not Operate Tag for the work being performed. The designated person shall be reachable by the Dispatcher at all times.
- 8.7. Only the Dispatcher shall authorize the installation of a tag at the POS. The tag shall be issued to the Customer's designated employee authorized to perform switching on the Customer-owned equipment.
- 8.8. When necessary, to provide a Customer a Do Not Operate Tag on the Customer side of a POS that includes the POS, the Customer will use their own clearance and tagging procedures and will install a Customer tag in addition to the District tag. Upon completion of the work, the Customer shall release their Clearance and remove their tag. The Customer may then release the District Do Not Operate Tag issued to the Customer. Under no circumstances is a Customer tag allowed to be installed or to remain without a properly-authorized

District Do Not Operate Tag at the POS.

- 8.9. All switching and tagging on POS devices owned by the District shall only be performed by a District Switchman.

REQUESTING A CUSTOMER DO NOT OPERATE TAG

- 8.10. When the Customer wishes to obtain a visible open at one or more of the boundary devices to enable work to be performed within their jurisdiction, the Customer shall do so by requesting from the Dispatcher a Do Not Operate Tag for the POS device. This shall normally be requested at least 72 hours in advance of the requested operation. The Dispatcher shall fill the Hotline / Clearance Request form for the work to be performed. Under the “Reason for outage or switching” section, the Dispatcher shall specify “Do Not Operate Tag Only.”

PLACING A CUSTOMER DO NOT OPERATE TAG

- 8.11. Once approved, the Dispatcher shall coordinate and direct the switching to create the visible opening(s) as specified in the request. The Switchman creating the visible opening(s) shall do the following at the direction of the Dispatcher;
- a. Open, verify open, disable and tag the POS device with a Do Not Operate Tag
 - b. The “For” section of the tag shall read: “Do Not Operate Tag for [name of the Customer authorized person]”
- 8.12. The Customer’s authorized person shall maintain a copy of the tag including the tag number and all required information on the tag. Once the switching is completed and the completion verified between the Dispatcher and the Customer’s authorized person, the Dispatcher shall order the tag placed on the POS device.
- 8.13. The Dispatcher shall complete a Do Not Operate Tag for the POS device to be tagged. The Dispatch tag shall be posted on the appropriate dispatch center map.
- 8.14. The Dispatcher shall log the Do Not Operate Tag in the Dispatcher log, specifying it to be a “Do Not Operate Tag for Customer at disconnect XX-XXX”.
- 8.15. After the Dispatcher determines that the Do Not Operate Tag is in place for the POS, the Dispatcher may issue the Do Not Operate Order and communicate this to the Customer.

RELEASING A CUSTOMER DO NOT OPERATE TAG

- 8.16. The Customer’s authorized person shall take the following actions prior to releasing a Do Not Operate Tag:
- 8.16.1 Communicate to the Dispatcher that work is complete and all Customer-directed personnel are clear of all equipment.
 - 8.16.2 Ensure all Customer-installed grounds have been removed,
 - 8.16.3 District Clearance Holder(s), if any, shall ensure all internal Clearances associated with the tag have been released and the corresponding tag(s) removed,
 - 8.16.4 Confirm that the POS device(s) are in a safe operating condition with only the Do Not Operate Tag still

attached

- 8.17. The Customer's authorized person shall release their Do Not Operate Tag to the Dispatcher. When releasing the tag, the Customer's authorized person shall state that all personnel are clear of the equipment and all grounds have been removed.
- 8.18. The Dispatcher shall note the release in the operator log, together with any condition that may affect operation of the affected equipment. The Dispatcher may then coordinate and direct the switching of the POS device(s) as appropriate.
- 8.19. Upon release of the Do Not Operate Tag, the Dispatcher shall order equipment tags be removed by a District Switchman. Do Not Operate Tags removed from equipment shall be provided to the Switchman supervisor to be reviewed and discarded once the tag has been released.



Stock #58684730

Attachment B