City of Seattle
Seattle City Light Department

DEPARTMENT POLICY & PROCEDURE

Subject	Number
	DPP 500 P III-422
	Effective
FINAL CONNECTION COSTS FOR CONTRACTOR-INSTALLED SERVICES	
	Supersedes
	February 17, 2006
Approved by Jorge Carrasco	

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1.0 Purpose

To define service installation responsibilities; and establish charges for final connection costs incurred by the Department for temporary services, permanent services or enlarged services installed by qualified electrical contractors.

2.0 Organization Affected

2.1 Account Executives

2.2 Finance Division

2.3 Electrical Services Divisions, North and South

2.4 Customer Engineering Units, North and South

2.5 Technical Metering

2.6 Distribution Design Units, North and South

2.7 Distribution Engineering Division

3.0 References

3.1 Seattle City Ordinance 123178, the Rate Ordinance and as the same may be amended or superseded.

3.2 "Requirements for Electric Service Connection" manual adopted, January 26, 2007 and as the same may be amended or superseded.

3.3 Seattle Municipal Code, Chapter 30.2, the Administrative Code.

3.4 Revised Code of Washington (RCW 35.22 640) Public Works or Improvements - Electrical Distribution and Generating Systems--customer may contract with qualified electrical contractor. Effective July 24, 1983.

3.5 Electrical Contractor Licensing, Chapter 19.28, Revised Code of Washington (RCW), as amended.

3.6 I.B.E.W., Local 77, Article 2:3.6 - Working Agreement.

4.0 Definitions

4.1 Additional Service. An electrical service connected to a customer's premises, in addition to an existing, previously installed service.

4.2 Ampacity. Current carrying capacity measured in ampered.

4.3 Amperes. The unit of measure of electric current.

4.4 Basic Charge. A charge levied to recover costs of making final connection to energize, and disconnection to de-energize, customers' temporary secondary services, where costs have been estimated for specific types of services and connection points.

4.5 Component-Cost Charge. The charge for any given permanent or enlarged service installation that is comprised of the costs of the work segments which apply to that service.

4.6 Department. The Seattle City Light Department.

4.7 Distribution System. Department-owned and -operated facilities and equipment in public rights-of-way and easement areas.

4.8 Enlarged Service. An increase in the electrical load-carrying capacity of a customer's service. Service to sites that exceed the ampacity limits specified in the "Requirements for Electric Service Connection" manual will be considered to be enlarged if load additions necessitate work by the Department.

4.9 Final Connection Costs. Charges to customers for costs incurred by the Department for making the final connection to the Department's distribution system, energizing the customer's service for those customers who contract with a qualified electrical contractor to install the customer's temporary, permanent, or enlarged services.

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4.10 Handhole. A permanently installed protective enclosure (usually below grade), which is used for gaining access to electrical conductors for the purpose of pulling, splicing, or terminating.

4.11 Near-side Service. Service where the Department's distribution system is located on the same side of a public street, thoroughfare, or right-of-way as the customer's premises.

4.12 Network Area. An area with high-density loads serviced by an underground distribution system (Reference: "Requirements for Electric Service Connection").

4.13 New Service. The following shall be considered a new service installation:

4.13.1 An electrical service connected to a customer's premises where there is no existing service installed by the Department.

4.13.2 Where there is an existing service to the customer's premises and the moving or modification of the point of delivery necessitates work by the Department. Included are conversions from overhead to underground or underground to overhead.

4.14 Permanent Service. The customer's permanent service panel and interface equipment energized by the Department on a permanent basis.

4.15 Primary Circuit of Current Transformers. The circuitry connecting the current transformer primary winding to the line and load sides of the secondary service conductors.

4.16 Qualified Contractor. An electrical contractor who is licensed under Chapter 19.28 RCW.

4.17 Secondary Circuit of Current Transformers. The circuitry connecting the current transformer secondary winding to the meter base (socket) terminals.

4.18 Service Connection Point. The point at which the Department's service conductors are connected to a customer's electrical wiring system.

4.19 Service Rating.

4.19.1 The service rating shall be determined by the maximum nameplate rating of the main service disconnect, but not less than the nameplate rating of the main service panel.

4.19.2 In the absence of a single, main service disconnect, the service rating shall be the nameplate rating of the main service bus or the rating of the main busing in the service entrance panel, whichever applies.

4.19.3 In buildings where multiple services are connected from one service drop or service lateral, the service rating for the building shall be the aggregate of the individual service ratings as determined by §4.19.1 or §4.19.2 above.

4.20 Standards. Construction and Material Standards of the Department.

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4.21 Standby. A Department employee assigned to protect Department equipment and assure system integrity. This employee will advise the contractor of the potential hazards of working in the vicinity of the Department's energized equipment, but has no responsibility for the safety of the contractor's employees.

4.22 Temporary Service. The customer's temporary service panel and interface equipment energized by the Department on a temporary basis.

4.23 Vault. An approved chamber for the Department's transformers and associated equipment.

5.0 Policy

5.1 The Department shall charge customers employing private electrical contractors to install temporary, permanent, or enlarged services for the final connection costs incurred by the Department in energizing the services.

5.2 A customer requesting a temporary service, permanent service, or enlarged service may, with the written approval of the Department, contract with a qualified electrical contractor who is licensed under Chapter 19.28 RCW to install material or equipment in lieu of having the Department perform the installation.

5.2.1 A copy of the contractor's license verifying the contractor's name, address, and active license number with the State shall be provided to the Department by the customer prior to receiving approval from the Department.

5.2.2 In the event the Department denies the customer's request to utilize a private electrical contractor for the installation work, the Department shall provide the customer with written reasons for such denial.

A decision on who will install the service must be made early so the responsible party can place orders for long-procurement-time material. In the absence of a written and signed General Service Application and Contract (91-L) indicating who will install the electrical service, the Department has the option of submitting to the customer a written notice specifying a time limit (usually 30 days) within which the customer may submit a written request to the Department to have a private contractor install the service. If the customer has not submitted a written request within the time frame specified, the Department will assume responsibility for installing the service and the customer shall be assessed the applicable installation charge, in accordance with DPP 500 P III-417, Installation/ Removal Charges.

5.3 The customer shall be required to provide and install all equipment and material that is required by the Department for installation between the customer's service connection point and the Department's distribution system. A list of materials, Material Standards, and Construction Guidelines will be sent to the customer with the final connection cost estimate. The only exceptions to this requirement will be that the Department will provide 5-kV, 15-kV, and/or 28-kV cable for the contractor to install when such cable is unobtainable by the contractor as

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determined by the Department; and the Department will provide fire detection system control boxes where it deems them necessary.

5.3.1 Customer provision and installation of only selected components of the service will not be allowed.

5.4 All electrical service equipment and material installed for each permanent or enlarged service by a contractor between the customer's service connection point and the Department's distribution system, in accordance with this policy, shall become the property of the Department upon connection to the Department's distribution system, and shall be maintained by the Department after the conclusion of the five-year customer responsibility period (see §6.1.4).

5.5 The Department shall make the final connection to the distribution system, energizing the customer's service, in all cases. This includes those secondary services where the final connection will be made at the weatherhead, terminal box, vault/handhole, pole, or alley can.

5.6 In installations where the only electrical work to be done is inside the customer's premises and on the customer's side of the service connection point, the Department will not require such work to be done by a qualified contractor, if this does not conflict with other applicable regulations.

5.7 Payment of the Department's connection costs for temporary, permanent, or enlarged service installations is required before the Department will make the final connection to energize the service.

5.8 Charges for final connections and disconnections to energize and de-energize customer temporary services shall include all labor costs of installation and removal and material costs incurred by the Department, including poles, wires (primary and secondary), excavation, backfill and restoration conduits, structures, engineering, and other material; and the labor costs of installing and removing transformers, network protectors, and meters. Charges shall not be assessed for additions to the Utility's distribution system, which shall later be used to provide permanent service.

5.8.1 Basic charges shall be assessed for final connection and disconnection costs incurred for energizing and de-energizing overhead or underground temporary services, as outlined in Schedule 101 of this DPP.

5.8.2 For final connections and disconnections of temporary services where basic charges are not established under §5.8.1, charges shall be assessed on the basis of the estimated time and material where the cost estimate is $35,000.00 or less (Non-Network), $75,000.00 or less (Network). An advance payment of 20 percent of the engineer’s estimate will be required before the Department’s service design engineers and/or installation crews begin work. All fees (100 percent of the estimate) must be paid before service can be approved for connection, unless a prior agreement has been reached to assess on a firm bid price. Estimates are good for 120 days from the date of the original estimate.

5.8.3 For final connections and disconnections of temporary services where basic charges are not established under §5.8.1, actual time and material charges shall be assessed where the

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cost estimate is greater than $35,000.00 (Non-Network), $75,000.00 (Network), will be required before the Department's service design engineers and/or installation crews begin work. All fees (100 percent of the estimate) must be paid before service can be approved for connection, unless a prior agreement has been reached to assess on a firm bid price. Estimates are good for 120 days from the date of the original estimate.

5.9 Charges for final connections energizing permanent services shall include all labor and material costs incurred by the Department between the primary or secondary tap (whichever is applicable) to the Utility's distribution system and the service connection point, excluding the labor and material costs of setting transformers and network protectors and the material costs of the Utility's meters.

5.9.1 Component-cost charges, as outlined in Schedule 100 of this DPP, shall be made for final connections energizing permanent services that do not require either a padmount or vault transformer, in accordance with the "Requirements for Electric Service Connection."

5.9.2 Charges for final connection costs incurred by the Department in energizing permanent services shall be based on the estimated time and material costs, where component-cost charges are not established under §5.9.1 and where the total estimated costs are $35,000.00 or less (Non-Network), $75,000.00 or less (Network). Estimates are good for 120 days from the date of the original estimate.

5.9.3 Actual time and material charges shall be made for final connection costs incurred by the Department in energizing permanent services, where component-cost charges are not established under §5.9.1 and where the estimated cost is in excess of $35,000.00 (Non-Network), $75,000 (Network). An advance payment of 20 percent of the engineer's estimate will be required before the Department's service design engineers and/or installation crews begin work. All fees (100 percent of the estimate) must be paid before service can be approved for connection, unless prior agreement has been reached to assess on a firm bid price. Estimates are good for 120 days from the date of the original estimate.

5.9.4 Any change(s) that cumulatively amount to 15% of the engineer's original estimate will be tracked and documented. These changes can be due to either a request/installation by the contractor or field conditions.

5.9.5 If the total amount of the change(s) brings the overall estimated cost in excess of $35,000.00 (Non Network) and $75,000.00 (Network); the customer will then be required to pay actual time and material charges. An advance payment of 20 percent of the engineer's estimate will be required before the Department's service design engineers and/or installation crews begin work. All fees (100 percent of the estimate) must be paid before service can be approved for connection.

5.10 The customer/contractor shall be solely responsible for any damages resulting from the contractor's installation of any temporary service, permanent service, or enlarged service, and the Department shall be immune from any tortious conduct actions relating to that installation.

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5.11 In the event a contractor fails to complete a service installation when contracted to do so by a customer, the Department may complete the installation, if requested to do so by the customer, and bill the customer for the actual time and material costs expended.

5.12 Existing franchise agreements between King County and the Department for construction work in the public right-of-way hold the Department responsible for all such work performed under Department-obtained permits. Under such liability provisions, the Department cannot allow contractors to perform street crossings or other construction in the right-of-way in county areas under Department-obtained permits.

5.12.1 If the Department approves a customer's request to employ a contractor to install a service which involves a street crossing or other work in the public right-of-way, the contractor shall obtain the right-of-way use permit, both inside and outside the City limits.

6.0 Responsibilities

6.1 The customer shall be responsible for:

6.1.1 Obtaining the electrical permit for sites both inside and outside the City limits.

6.1.2 The following: When the customer's contractor obtains a permit to perform public right-of-way construction work, the contractor shall be responsible for the cost of the construction permit, inspection fee, meeting requirements for excavation, backfill, and surface restoration for the requested construction, and administrative costs assessed by the permit-issuing authority; and any bonding requirements of the Department and the permit-issuing authority. An inspection, safety standby, and review charges, if applicable, will be assessed in addition to those charged by other inspecting authorities.

6.1.3 Meeting the Department's specifications as to location, quality, performance, and rating, in accordance with Construction Guidelines and Material Standards and "Requirements for Electric Service Connection," for all underground structures and electrical equipment and material installed by the contractor between the customer's service connection point and the Department's distribution system.

6.1.4 The costs of maintenance, replacement, and/or repair of any contractor-provided and -installed equipment and material that requires maintenance or fails within five years after the service installation is energized by the Department. The Department may, at its discretion, maintain, replace, and/or repair contractor-provided and -installed equipment and material that requires maintenance or fails within this five-year period and bill the customer for time and material expenses incurred. Primary cable provided by the Department that has been accepted and installed by the customer's contractor that fails at a splice or other termination within five years after the service installation has been energized, shall also be the customer's responsibility for repair or replacement.

6.1.5 Determining and requesting in writing to the electrical service consultant the length(s) of 5-kV, 15-kV or 28-kV cable needed and obtaining it from the Department, when it has

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been determined to be unobtainable from normal sources. The Department will include in the final connection costs billed to the customer, the loaded cost of such cable provided. The Department will not accept return of cable that has been cut to customer requested lengths.

6.2 Finance Division shall be responsible for:

6.2.1 Preparing billings for final connection charges.

6.2.2 Accepting payment of charges for final service connections, and notifying the Account Executives Office, Customer Engineering, and Engineering Services Division (as needed for network jobs) when required payments are received.

6.2.3 Processing refunds of final connection charges to customers who do not complete service work and are not provided a service connection, or where actual costs are less than billed estimated costs on jobs initially estimated at greater than $35,000.00 (Non-Network), $75,000.00 (Network).

6.2.4 Cancelling billings for final connection charges upon notification by the Account Executives Office, or Customer Engineering that corresponding service orders have been cancelled.

6.2.5 Providing the Distribution Engineering or Distribution Design Units, and the North and South Electrical Services Divisions (for non-network jobs) with copies of cost ledger sheets showing charges against work order numbers for time and material jobs within 60 days of notification of job completion.

6.2.6 Reviewing and revising, annually, Schedules 100 and 101.

6.2.7 Developing a Department Operating Instruction (DOI) for charging and billing costs to customers, keeping records of payments received by customer class, and related internal procedures and revising, as required, in January of each year.

6.2.8 Notifying the Account Executives Office, or Customer Engineering.

6.3 Energy Delivery Engineering shall be responsible for:

6.3.1 Preparing estimates in conjunction with Distribution Design for those jobs requiring an estimate. Primary services in the Network area may require up to six weeks.

6.3.2 Determining which costs shall be chargeable or nonchargeable to time and material jobs.

6.3.3 Assigning work order numbers to time and material jobs.

6.3.4 Forwarding billing memos to Cost Accounting and copies of estimates and corresponding service orders to the Account Services Division, upon completion of estimates, within ten days of receipt of service orders.

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6.3.5 Reviewing estimates every 120 days, as may be necessary, during the period beginning with the date the original estimate is made until the job is completed and revising and reissuing new estimates as required.

6.3.6 Reviewing charges for time and material jobs and making adjustments, as required, prior to final billing; forwarding adjusted charges to the Finance Division.

6.3.7 Providing explanation to the Electric Service Engineering or Customer Engineering, if requested, of differences between original estimates and time and material costs when the difference exceeds plus or minus 10 percent of the estimate.

6.3.8 Developing a Department Operating Instruction (DOI) for preparing cost estimates for time and material jobs and related internal procedures.

6.3.9 Preparing, maintaining, and updating a Construction Guidelines and a Material Standards catalog of all material and equipment the Department requires contractors to furnish and install between the customer's service connection point and the Department's distribution system.

6.3.10 Inspecting and reviewing contractor-installed equipment and material between the customer's service connection point and the Department's distribution system, as appropriate for the Engineering Services Division to assure contractor compliance with Department specifications, standards, and requirements for service. Inspection of certain components of some installations may be relegated to other divisions within the Department.

6.3.11 Preparing engineering drawings and instructions to show work to be done by the customer.

6.3.12 Providing information to the Material Control Unit on new or replacement materials and equipment meeting Department standards that contractors may provide and install.

6.3.13 Determining whether or not a customer and/or his/her electrical contractor has made a diligent effort to obtain the required 5-kV, 15-kV or 28-kV cable from normal sources, and whether or not the required cable can be ordered in conjunction with the Department's cable order, before making the decision that the Department will provide the primary cable for a specific service installation.

6.3.14 Notifying the Electric Service Representative or Electric Service Engineers that the cable is or is not available to the Department's customer.

6.4 Energy Delivery Operations shall be responsible for:

6.4.1 Reviewing and approving estimated labor hours on all jobs to be billed on the basis of time and material.

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6.4.2 Providing information to the Energy Delivery Engineering necessary for explaining differences between actual costs and estimates.

6.4.3 Developing a Department Operating Instruction (DOI) or other internal procedures for Electrical Service and Construction Units personnel to ensure accuracy in charging material and labor hours to jobs.

6.4.4 Inspecting and reviewing, when requested by the Energy Delivery Engineering, contractor-installed equipment and material between the customer's service connection point and the Department's distribution system, as appropriate for the Energy Delivery Engineering, to assure compliance with Department specifications, standards, and requirements for service.

6.4.5 Breaking into and making conduit entry into vaults containing energized equipment; and grouting around conduits.

6.5 Technical Metering shall be responsible for:

6.5.1 Installing current transformers and making all current transformer secondary circuit connections. Providing and installing meters and associated metering equipment, and testing the operation of metering equipment and metering circuits.

6.5.2 Reviewing and approving estimated labor hours on all jobs to be billed on the basis of time and material.

6.5.3 Providing information to the Energy Delivery Engineering necessary for explaining differences between actual costs and estimates.

6.5.4 Developing a Department Operating Instruction (DOI) or other internal procedures for Operations Division personnel to ensure accuracy in charging material and labor hours to jobs.

6.5.5 Inspecting and reviewing, when requested by the Energy Delivery Engineering, contractor-installed equipment and material between the customer's service connection point and the Department's distribution system, as appropriate for the Operations Division, to assure compliance with Department specifications, standards, and requirements for service.

6.6 Material Control Unit, Finance Division, shall be responsible for:

6.6.1 Providing information to the Energy Delivery Engineering necessary for explaining differences between actual costs and estimates.

6.6.2 Issuing a 5-kV, 15-kV or 28-kV cable in lengths as specified by the customer's contractor when it has been determines that the Department will provide such primary cable.

6.7 The Electric Service Engineering and Customer Engineering shall be responsible for:

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6.7.1 Preparing service orders for final connections to new and enlarged services and forwarding them to the. Energy Delivery Engineering or Energy Delivery Operations.

6.7.2 Preparing billing request for each service order written and forwarding the requests to Cost Accounting, or the Engineering Services Division or Distribution Design Units, as appropriate.

6.7.3 Notifying Cost Accounting and Engineers of any cancelled service orders.

6.7.4 Informing customers of charges and presenting estimates for time and material jobs.

6.7.5 Reviewing explanations of differences between estimates and actual time and material charges prepared by the Energy Delivery Engineering, and recommending appropriate corrections.

6.7.6 Inspecting and reviewing contractor-installed metering equipment, material and current transformer primary circuit connections, and contractor-installed equipment and material between the customer's service connection point and the Department's distribution system, as appropriate, for the Electric Service Engineering or Customer Engineering to assure compliance with Department specifications, standards, and requirement for service, prior to authorizing final connection to energize the customer's service.

6.7.7 Assuring completion of the electrical permit process and approving services for connection upon receipt of payment for final connection charges.

6.7.8 Assuring that a valid utilities permit for construction in the public right-of-way has been issued by the proper authority.

6.7.9 Collecting any delinquent payments and notifying Cost Accounting that delinquent payments have been collected.

6.7.10 Notifying the customer in writing of the availability of materials from the Department.

7.0 Procedure

7.1 Network Area - Division of Labor and Material

7.1.1 Single-vault installations - including both spot network and system network configurations.

7.1.1.1 Customer work shall include:

7.1.1.1.1 Providing and installing conduit from the vault on the customer's property to the Department's distribution system.

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7.1.1.1.2 Providing and installing all primary and secondary cable and connectors.

7.1.1.1.3 Making cable connections to the Department's collector bus, transformers, and network protectors in the vault on the customer's property.

7.1.1.1.4 Installing a fire detection system. Control box will be provided by the Department, and the cost will be billed to the customer.

7.1.1.1.5 Performing all other work in the vault on the customer's property except within network protectors and their control lighting, fire control cabinet, and any meter devices to be installed on Department equipment.

7.1.1.1.6 Performing high-potential testing using the Department's approved test equipment and procedures, and under observation by Department personnel, of all primary cable installed; excluding any hi-pot testing of primary cable from any substation termination. The customer's contractor will be charged for the labor hours required for this service.

7.1.1.1.7 Providing the Department with proper phasing of the primary cable.

7.1.1.2 Department work shall include:

7.1.1.2.1 Providing and installing transformers and network protectors in the vault on the customer's property.

7.1.1.2.2 Making final primary and secondary connections to the Department's distribution system energizing the customer's service.

7.1.1.2.3 Providing standby service for the contractor whenever he/she must work on or in an energized Department facility.

7.1.1.2.4 Providing fire detection system control box for contractor mounting and grounding where required.

7.1.1.2.5 Conducting operational and electrical test on all contractor-installed equipment, except as provided in §7.1.1.1.6.

7.1.1.2.6 Providing and installing current transformers and making all current transformer primary and secondary-circuit connections. Inspecting all metering equipment and connections. Providing and installing meters, and testing operation of meters and metering circuits.

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7.1.1.2.7 Inspection of customer work to ensure that all contractor-installed equipment and material between the customer's service connection point and the Department's distribution system meets all Department standards, specifications, and engineering drawings.

7.1.1.2.8 Specific procedures defining work responsibilities will be identified in Department Operating Instructions (DOI).

7.1.1.2.9 Providing 5-kV, 15-kV or 28-kV cable to the customer's contractor in specified lengths when it has been determined that such cable is unobtainable by the contractor.

7.1.2 Multiple-Vault Installations

7.1.2.1 Customer work shall include:

7.1.2.1.1 Providing and installing primary switches in the primary switch vault or room on the customer's property.

7.1.2.1.2 Providing and installing all primary conduit and cable between the primary switch vault or room and transformer vaults on the customer's property.

7.1.2.1.3 Providing and installing primary conduit and cable between the primary switch vault or room and the Department-designated distribution system vault.

7.1.2.1.4 Making cable connections to primary switches and to the Department collector bus, transformers, IWCB, and network protectors in the vaults on the customer's property, except those connections that will energize primary equipment.

7.1.2.1.5 Providing all meter enclosures, junction boxes and any other enclosures, secondary conduit and cable as specified by the Department for metering purposes.

7.1.2.1.6 Providing the Department with proper phasing of the primary cable.

7.1.2.1.7 Installing fire detection systems. Control boxes will be provided by the Department, and the cost will be billed to the customer.

7.1.2.1.8 Performing all other work in vaults on customer's property except within network protectors and their control lighting, fire control cabinet, and any meter devices to be installed on Department equipment.

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7.1.2.1.9 Performing high-potential testing using Department-approved test equipment and procedures, and under observation by Department personnel, of all primary cable installed; excluding any hi-pot testing of primary cable from any substation termination. The customer's contractor will be charged for the labor hours required for this service.

7.1.2.1.10 If it has been determined that 5-kV, 15-kV or 28-kV cable is unobtainable by the customer's contractor, and that the Department will provide such cable, the contractor shall pick up such cable in the lengths specified at the South Service Center.

7.1.2.2 Department work shall include:

7.1.2.2.1 Providing and installing transformers and network protectors in vaults on the customer's property.

7.1.2.2.2 Making final primary connections to the Department distribution system energizing the customer's service.

7.1.2.2.3 Providing standby service for contractor whenever the contractor must perform work in energized Department facilities.

7.1.2.2.4 Providing fire detection system control boxes for contractor mounting and grounding where required.

7.1.2.2.5 Conducting operational and electrical tests on all contractor-installed equipment, except as provided in §7.1.2.1.9.

7.1.2.2.6 Providing and installing current transformers and making all current transformer primary and secondary-circuit connections. Inspecting all metering equipment and connections. Providing and installing meters and testing operation of meters and metering circuits.

7.1.2.2.7 Inspection of customer work to ensure that all contractor-installed equipment and material between the customer's service connection point and the Department's distribution system meet all Department standards, specifications, and engineering drawings.

7.1.2.2.8 Specific procedures defining work responsibilities will be identified in Department Operating Instructions (DOI).

7.1.2.2.9 Providing 5-kV, 15-kV or 28-kV cable to the customer's contractor in specified lengths when it has been determined that such cable is unobtainable by the contractor.

7.1.3 Secondary Service Installations

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7.1.3.1 Customer work shall include

7.1.3.1.1 Providing and installing all conduit and conductors on alley walls to, but not into, the Department-designated alley can.

7.1.3.1.2 For underground services, providing and installing conduit and conductors to the Department-designated underground facility.

7.1.3.2 Department work shall include:

7.1.3.2.1 Providing standby service for the contractor whenever the contractor must perform work in an energized Department facility.

7.1.3.2.2 Making final secondary conductor connections to the Department distribution system at alley can or in the underground facility energizing the customer's service.

7.1.3.2.3 For services rated over 225 amperes, providing and installing current transformers and making all current transformer primary- and secondary-circuit connections. Inspecting all metering equipment and connections. Providing and installing meters and testing operation of meters and metering circuits.

7.1.3.2.4 Specific procedures defining work responsibilities will be identified in Department Operating Instructions (DOI).

7.2 Non-Network Areas - Division of Labor and Material

7.2.1 Underground Residential Distribution or Underground Primary Off-Pole Service Installations.

7.2.1.1 Customer work shall include:

7.2.1.1.1 Providing and installing all underground service facilities, (handholes, vaults, conduit) on the customer's property, and those in the public right-of-way for which the contractor has obtained a construction permit.

7.2.1.1.2 Providing and installing all primary cable, including conduit and cable required up the Department-designated terminal pole. If it has been determined that 5-kV, 15-kV or 28 kV cable is unobtainable by the customer's contractor, and that the Department will provide such cable, the contractor shall pick up such cable in the lengths specified at the South Service Center.

7.2.1.1.3 Making up primary cable terminators on the pole. Do not connect.

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7.2.1.1.4 Making all primary and secondary cable connections to Department transformers in customer vaults or on customer pads.

7.2.1.1.5 Providing and installing primary junction boxes (J-boxes) in underground structures as required by the Department. Providing and installing load-break elbows on cable ends to be used for switching purposes at J-boxes. Providing an X ray of each load-break elbow, dead-break elbow, or premolded splice to the Department for inspection and approval prior to its installation. After installation, providing a radiographic film of each device for inspection and approval.

7.2.1.1.6 Performing high-potential testing, under observation by Department personnel, of all primary cables and terminations installed. The customer's contractor will be charged for the labor hours required for this service.

7.2.1.2 Department work shall include:

7.2.1.2.1 Providing and installing transformers in vaults or on pads.

7.2.1.2.2 Providing and installing cutouts, lightning arrestors, and fuses as required on pole, and making final connections to the Department's distribution system energizing the customer's service.

7.2.1.2.3 For services over 225 amperes, providing and installing current transformers and making all current transformer primary and secondary-circuit connections. Inspecting all metering equipment and connections. Providing and installing meters and testing operation of meters and metering circuits.

7.2.1.2.4 Inspecting customer work to ensure that all contractor-installed equipment and material between the customer's service connection point and the Department's distribution system meets all Department standards, specifications, and engineering drawings.

7.2.1.2.5 Specific procedures defining work responsibilities will be identified in Department Operating Instructions (DOI).

7.2.1.2.6 Providing 5-kV, 15-kV or 28-kV cable to the customer's contractor in specified lengths when it has been determined that such cable is unobtainable by the contractor.

7.2.2 Secondary Service Installations - Overhead or Underground Off Pole.

7.2.2.1 Customer work shall include:

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7.2.2.1.1 Providing and installing any service (nondistribution) handholes and conduit that may be required on the customer's property, and any in the public right-of-way for which the contractor has obtained a construction permit from the appropriate permit-issuing authority.

7.2.2.1.2 Providing and installing all underground secondary cable, including conduit and cable required up the terminal pole, and all overhead service conductors.

7.2.2.2 Department work shall include:

7.2.2.2.1 Making final connections to the Department's distribution system.

7.2.2.2.2 For services over 225 amperes, providing and installing current transformers and making all current transformer primary and secondary-circuit connections.

7.2.2.2.3 Inspecting all metering equipment and connections. Providing and installing meters and testing operation of meters and metering circuits.

7.2.2.2.4 Specific procedures defining work responsibilities will be identified in Departmental Operating Instructions (DOI).

8.0 Appendix

8.1 Distribution: Posted online at http://sclweb.light.ci.seattle.wa.us/dpp/

8.2 Final connection charge schedule:

Schedule Number

100 Final Connection Costs for Permanent or Enlarged Services Installed by Contractors
101 Final Connection Costs for Temporary Services for Construction Installed by Contractors

9.0 Revision History

Version	Date	Changes Made	Revised By
1.0	10-18-10	Revised to update text.	Jackie Kirn

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