

BOARD OF LIGHT AND POWER GRAND HAVEN, MICHIGAN

SUBJECT: **Distribution System Extensions**

POLICY: **Distribution System Extensions**

PROCEDURE:

I. General:

- A. Subject to the conditions herein provided the Board of Light and Power (BLP) will upon application for electric service make an overhead, underground, or combination overhead and underground extension of the BLP's existing electric distribution system.

Available Voltages

Voltages listed below are not available at all locations. The BLP must be consulted regarding their availability at any particular location.

Voltage	Availability
Single Phase— 120/240 Volts	UG OH
Three Phase— 120/208 Volts Wye	UG OH
Three Phase— 120/240 Volts 4 Wire Delta	OH
Three Phase— 240 Volts Delta	OH
Three Phase— 277/480 Volts Wye	UG
Three Phase— 480 Volts Delta	OH

Service at Primary Distribution System Voltages

Voltages listed below are not available at all locations:

2400 Volts Delta Three Phase
7620/13200 Volts Wye Three Phase

- B. The BLP must be consulted in each case relative to service availability and load limits.
 - 1. The BLP will own, maintain, and after conferring with the customer (if appropriate) specify the location of all of its distribution facilities, except as otherwise expressly provided herein. No ownership rights therein shall pass to any owner, developer, or customer by reason of any contribution in aid of construction required hereunder.
 - 2. When application is made for electric service which requires the extension of the BLP's existing distribution system, the BLP will make such extensions when the

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- estimated annual revenue, probable stability of the load and prospective load growth reasonably warrant the capital expenditure required. In all other cases, a contribution in aid of construction will be required as specified below. If it is determined by the BLP that a portion of the proposed extension located within public streets and/or easements can be used to provide electric service to other existing or future customers, or for system reinforcement, the BLP may elect to construct that portion of the extension in the public streets and/or easements at its own expense.
3. Prior to the installation of any distribution system the owner, developer, or customer who is to make a contribution in aid of construction may at the BLP's discretion, be required to enter into a written agreement with the BLP generally describing the proposed distribution system and setting forth the respective conditions of the parties in regard thereto. Each proposed system shall be a separate and distinct unit and any extension thereof shall, if desired by the BLP, be made the subject of a separate written agreement.
 4. Prior to the installation of any distribution system the owner, developer, or customer shall be required to furnish, at no expense to the BLP, right of ways, properly recorded easements, and tree trimming and removal permits in a form and manner satisfactory to the BLP, granting "rights of way" suitable for the installation, operation and maintenance, and periodic brushing of the distribution system including any street lighting cables and transformers as designed by the BLP for present and future service.
 5. In the event the required easements and permits are not provided by the applicant for such an extension and the BLP on that account, elects to construct all or any part thereof along public highways or other private property, then the BLP shall require the applicant to pay the added construction expense occasioned by the use of such highways or other private property plus any expense encountered in acquiring permits and easements on other private property when necessary to provide service to the applicant.
 6. In the event the owner, developer, or customer requires existing BLP easements to be modified or released, it will be at the discretion of the BLP to determine the modifications as to form and prepare the necessary instrument through its legal counsel. The owner, developer, or customer will be responsible to pay the all legal expenses associated with the easement change.
 7. All overhead distribution line extensions constructed on private property shall be routinely brushed by the BLP or a contractor of the BLP in order to maintain reliable electric service to the customer

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8. Joint trench and burying of utility lines shall be with telephone or TV cable companies only. In the event it is decided in original design or pre-construction meetings, to joint bury telephone and/or TV with power, the cost shall be divided equally to each utility and billed directly to each company by the contractor installing the buried lines. If the three utilities are in the same trench, the cost is split one-third to each and other equipment such as setting transformer bases, pedestals, or cabinets shall be billed on a unit price in addition to the trenching cost.

C. Electric Facility Relocations:

1. At the request of a customer or developer and if feasible the BLP will relocate its electric and associated facilities in accordance with applicable or obtainable easement provisions.
2. Prior to any relocation of existing electric facilities the customer or developer may be required to make a deposit for contribution in aid of construction based on the estimated cost of the relocation to reimburse the BLP for all relocation costs including material, labor, the cost of excavating and repairing streets, walks, parking lots, driveways, repairing lawns, replacing shrubs, flowers, etc., and any right of way costs as per this rule together with the cost of any necessary modifications to the BLP's electric distribution system affected by the relocation, less the salvage value of any portion of the electric facilities removed.
3. Unless otherwise stated, the location of the service attachment to a building or structure shall be specified by the BLP and shall be located so that the BLP's service wires meet or exceed all clearance requirements of the National Electrical Code, National Electrical Safety Code and other applicable local codes.
4. Should it become necessary, for any cause beyond the BLP's control, to change the location of the point of attachment of the service conductors, the entire cost of any changes shall be the responsibility of the customer or requesting party.
5. Any poles, wires or other equipment required beyond the customer's point of attachment shall be furnished, installed and maintained by the customer. The BLP's responsibility (other than the meter or metering devices as required) ends at the point of attachment.
6. The service entrance conductors shall be furnished, installed and maintained by the customer in accordance with the National Electrical Code or other applicable local codes and shall conform to the BLP's specifications.
7. Primary extensions to BLP owned transformer installations or primary service conductors to customer owned facilities will be installed, owned and maintained by the BLP. Charges, if any, will be determined in accordance with all applicable

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provisions set forth in these rules. Where the customer requests that the BLP utilize equipment which differs from that normally specified, purchased and installed, the BLP may elect to provide such nonstandard equipment with the customer paying for the additional cost, if any, and including inventorying said equipment for backup purposes.

8. Where, in the BLP's judgment, practical difficulties exist such as frost or wet conditions, rock within the excavation surface, etc., or where deviations from the BLP's approved construction standards and/or established distribution system design is necessary, the BLP may require that the customer pay for the additional cost resulting therefrom.
9. It will be the responsibility of the owner, developer or customer to provide locations of any existing privately owned underground facilities such as lawn sprinkler systems, field drainage systems, septic tanks, customer owned electric lines, etc. If privately owned facilities are not properly located, the BLP does not assume responsibility for any damage to these facilities.

D. Single Phase Residential Overhead Extensions:

1. The provision of this rule shall be applicable and limited to single phase service for one family and two family dwellings. All other services shall be classified as commercial and industrial.
2. Electric distribution systems for all new subdivisions will comply with local governmental ordinances and/or determinations. Likewise, where a new subdivision is located adjacent to an existing overhead distribution system, underground service will generally be provided from these overhead facilities unless the local governmental authority allows or approves the use of individual overhead service connections.
3. For each permanent year-round dwelling the BLP will provide at no charge a single phase line extension from a main line distribution feeder excluding service drop for a distance of up to 600 feet, of which no more than 200 feet is a lateral extension on the customer's private property. All main distribution feeder extensions must be along public road right of ways. For each permanent, seasonal type dwelling the BLP will provide at no charge a 200 foot extension from a main line distribution feeder excluding service drop.
4. Line extensions in excess of the above footage will require a deposit for contribution in aid of construction for all excess footage under normal conditions. This deposit is intended to cover the estimated cost of the customer's portion of the extension and will be applied against the actual cost of the line extension less any BLP allowances as described above. Excess deposits will be refunded to the customer; likewise, any

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deficit deposits will be billed to the customer payable in 30 days upon issuance of the bill. It will be the responsibility of the customer to provide all permits, properly recorded easements, adequate right-of-way and/or brushing to clear said right-of-way.

E. Commercial and Industrial Single and Three Phase Extensions:

1. The BLP will construct distribution line extensions at its own expense to serve commercial and industrial customers when the cost of such extensions does not exceed a total of three (3) times the estimated annual revenue to be received from the customer to be immediately served when the line extension is completed.
2. Commercial and industrial customers may have the required distribution line extension constructed by depositing with the BLP, in advance, the excess of the estimated cost of such extension over the allowance as prescribed above.
3. The BLP will refund to the depositor the amount (if any) by which the actual three year revenue from the extension exceeds the original three year estimate of revenue. Refundable deposits made with the BLP under this rule will be subject to refund without interest for a five-year period which begins the month after the line extension is completed. The BLP shall thereafter have no further obligation to refund any remaining portion of line extension deposits.
4. Each extension shall be a separate, distinct unit and any further extension therefrom shall have no effect upon the agreements under which existing extensions were constructed.
5. Refunds cannot exceed the refundable portion of the deposit.
6. Estimated construction costs shall exclude transformers, services, and meters.

F. Residential Underground Extensions:

1. For the purposes of this paragraph, the customer is defined as the person who makes the arrangements with the BLP for installation of the service.

2. Original Installations:

a. In Platted Subdivisions:

The owner, contractor, or developer of residential subdivisions shall be required to make a nonrefundable contribution in aid of construction to the BLP to cover the estimated difference in cost between overhead and direct burial underground facilities. Such contribution shall be computed per schedule of fees, charges and contributions. Such computed contribution shall include the total subdivision as platted even though part of the subdivision remains undeveloped.

b. Outside Subdivisions:

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The customer shall be required to make a nonrefundable contribution to the BLP to cover the estimated total difference in cost between overhead and direct burial underground facilities for all underground facilities required to serve the customer.

3. Installation of Underground Service Connections:
 - a. The customer shall be required to make a nonrefundable contribution in aid of construction to the BLP to cover the additional cost resulting from the installation of an underground service connection. Such contribution shall be computed per the schedule of fees, charges and contributions from a point directly below the customer's meter to the underground pedestal or connection box ordinarily located at the front or rear property line. If the customer is to be serviced from an overhead pole instead of an underground system, there will be an added charge per the schedule of fees, charges, and contributions for the pole riser.
 - b. The customer will be required to provide a 2" rigid conduit riser from the meter socket to 12-18" below grade with bushings at each end, and the service must otherwise meet the BLP's minimum requirements.
4. The owner, developer or customer may be required to provide rough grading to within 3 inches of finish grade. Any subsequent relocation of BLP facilities required on account of a change in grade shall be done at the owner's, developer's, or customer's expense.
5. Multi-tenant residential apartment complexes where more than two meters are required shall be considered a commercial extension. The owner, developer, or contractor shall supply all entrance service equipment which shall include main panels, disconnect switches, and multiple meter socket service equipment.
6. The owner, developer, or contractor of multi-tenant residential apartment complexes shall be responsible to determine the addressing and apartment number to reference the appropriate meter socket position for the corresponding apartment. The owner, developer, or contractor shall be responsible for determining and numbering the meter socket or meter position in a multiple gang socket arrangement to the proper apartment. The BLP assumes no responsibility for inappropriate or mistaken meter installations applied to the wrong apartment based on information provided by the owner, developer, or contractor. In case of incorrect identification costs resulting therefrom including but not limited to, the cost of discovery, investigation, necessary repairs and usage prior to discovery shall be paid by the property owner.

G. Commercial Underground Extensions:

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1. For all commercial construction requesting underground service, the BLP will provide either single phase 120/240 volt service; three phase 120/208 volt four (4) wire grounded wye, or 277/480 volt four (4) wire grounded wye secondary connections. The BLP will not offer three (3) wire ungrounded delta connected transformation for commercial customers. Customers can obtain three wire ungrounded service by installing their own transformation at their 277/480 volt switchgear. In no case shall the BLP provide ungrounded secondary transformation.
 - a. The BLP requires that developers of commercial facilities submit site and electrical plans to the BLP as far ahead of the construction start date as possible. The electrical information shall include main panel or switchgear size, number and size of secondary conductors, connected load and anticipated demands.
 - b. The BLP reserves the right to size the transformation based on utility experience of like establishments and loads. If for any reason the customer demands transformation greater than that engineered by the BLP, the customer shall be required to pay the difference in cost between the proposed transformation and the installed transformation including losses if the load factor is less than 50%.
 - c. The developer will install conduit per BLP specifications from the transformer pad to the termination point on the riser pole or padmounted primary junction cabinet. In installations where conduit runs are in excess of 600 feet or contain an excess number of bends, the BLP may also require the developer to install pull boxes to aid in the installation of the primary conductors. The developer is to place a string in the conduit to facilitate the installation of the BLP's primary conductors. The developer will provide a concrete transformer pad per BLP specifications. Transformer pad specifications will be provided to the developer once the transformer has been ordered from the manufacturer.
 - d. The developer will provide metering conduit per BLP specifications from the metering compartment of the switchgear or from the secondary compartment of the transformer to a point on the exterior of the building for metering purposes. Details on metering can be obtained from the Technical Services Department of the BLP.
 - e. The developer is responsible for the installation of all secondary conductors from the transformer to the main panel. The developer shall leave five (5) feet of conductor length above the finished grade of the transformer pad for terminations. The BLP will make all termination inside the transformer including primary, secondary and metering conductors if so installed.
2. General Secondary Voltage Service – URD Policy:

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- a. Distribution Systems – (Developments): The developer or customer shall be required to make a nonrefundable contribution in aid of construction to the BLP to cover the estimated difference in cost between overhead and direct burial underground facilities. Such contribution shall be computed per the schedule of fees, charges and contributions.
 - b. Service Connection – (To Overhead System:) The customer shall install wiring in rigid conduit with a weather head from the meter box to and up the BLP riser pole to within 12-18” below the BLP’s secondary wires.
 - c. Service Connections – (To URD System): The customer shall install wiring in rigid conduit from the meter location to the BLP’s point of service; e.g. Transformer, junction box or manhole.
 - d. Padmount Transformer – For installation of a three phase padmount transformer, the developer or customer, or owner shall be required to make a nonrefundable contribution per the schedule of fees, charges and contributions.
3. Primary Voltage Service – URD Policy:
- a. The customer shall bring primary URD wire to the BLP’s tap box metering module, or up a riser pole with suitable terminators. The URD wire can be either direct buried or in conduit.
 - b. The customer shall provide his own three phase disconnect means and will provide his own fusing and protection.
 - c. If connecting to an underground system, at the BLP’s option, the customer may incorporate his disconnect means and/or fusing at the BLP’s tap box or metering module.
 - d. If connecting to an overhead system, the customer will provide his own riser pole, arrestors, disconnects, fusing and terminators. At the BLP’s option, the customer may be allowed to use the BLP’s distribution pole as a riser pole for his terminations.
4. Transformer and Switchgear Installations
- a. The BLP reserves the right to maintain clear access to BLP-owned transformation equipment and switchgear.
 - i. There shall be no confining walls, structures, overhead enclosures, shrubbery, or landscaping installed by the property owner that shall limit access by BLP personnel and service vehicles. A minimum clearance of five feet shall be maintained around all padmount transformers, translosures and switchgear installations.

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- ii. BLP personnel will be reasonably careful in operation, maintenance, removal and replacement of BLP-owned equipment; however, it will be at the owner's expense and responsibility for moving inappropriate structures, shrubbery and landscaping and its replacement thereof, if the customer-owned structures interfere with access or service by BLP personnel and service vehicles.

H. Conversions of Existing Overhead Distribution Systems and Associated Service Connections:

1. At the request of any customer(s), the BLP will, if feasible, convert any existing overhead distribution system and associated overhead service connections including any provisions for street light to underground distribution facilities.
 - a. For any such conversion, the customer(s) shall be required to make a nonrefundable contribution in aid of construction, to reimburse the BLP for the depreciated cost of the existing overhead facilities plus the cost of removal less the salvage value thereof plus the estimated difference in cost between new underground and new overhead facilities including the cost of breaking and repairing street, walks, parking lots, driveways, etc., and the cost of repairing lawns and replacing shrubs, flowers, sod, etc.
 - b. Any additional cost resulting from internal rewiring made necessary by the conversion of an overhead service connection to an underground service connection shall be borne by the customer.

I. Underground Winter Condition Charge:

1. During the period of December 15 through March 15 inclusive, the charge for all UG electric service systems may be increased per trench foot dependent upon site and weather conditions. This charge is in addition to the normal charge for the particular underground system, as per the schedule of fees, charges and contributions.

Adopted By The Board Of Light & Power On August 23, 2001

Effective September 1, 2001

BOARD OF LIGHT AND POWER
DISTRIBUTION SYSTEM EXTENSIONS
SCHEDULE OF FEES, CHARGES AND CONTRIBUTIONS

ITEM	SECTION	DESCRIPTION
Electric Facilities Relocations	B.1.a	Deposit for contribution in aid of construction based on the estimated cost of relocation
Overhead Single Phase Residential Extensions	C.1.b	For all footage above what the BLP will provide according to the current Line Extension Policy.
Overhead Commercial and Industrial Single Phase and Three Phase Extensions	D.1	No charge if the cost of the extension does not exceed three times the estimated annual revenue. Otherwise, the excess of the cost of such extension over the allowance as prescribed above.
Residential Platted Underground Subdivisions	E.1.a	Deposit for contribution in aid of construction of \$3.50 per trench ft., single phase. \$7.50 per ft. three phase.
Residential Underground Extensions Outside Subdivisions	E.1.b	Deposit in aid of construction of \$3.50 per trench ft. single phase. \$7.50 per trench ft. three phase.
Residential Underground Service Connections	E.2.a	Deposit for contribution in aid of construction of \$4.00 per trench ft. Riser fee of \$60 if served from overhead. A deduct \$2.00 per trench ft. will apply if customer provides the trench or trenching.
Commercial Underground Extensions	F.2.a	Deposit for contribution in aid of construction of \$3.50 per trench ft. single phase. \$7.50 per ft. three phase.
Three Phase Padmount Transformer Installation	F.2.d	Deposit for contribution in aid of construction of \$8.00 per kVA of transformer capacity.
Winter Construction Charge	H.1	Additional trench charge \$4.00 per ft.