

# **Wake Electric Membership Cooperative**



## **Line Extension Plan**

**Rev. 18**

**Effective Date: June 1<sup>st</sup> 2016**

\*Any changes to this document requires board approval.

Approved by Wake Electric Board of Directors: May 23<sup>rd</sup>, 2016

## I. PURPOSE

This line extension plan is applicable to distribution line extensions for residential and commercial services and was created to provide a set of standards to the line extension practices of Wake Electric Membership Cooperative (Wake EMC).

## II. DEFINITIONS

### A. ATYPICAL INSTALLATIONS

#### 1. Atypical Construction

*Atypical Construction* costs are incurred when physical obstacles or adverse conditions preclude either the use of Wake EMC standard construction methods or excessive labor is necessary to install the Wake EMC's facilities to serve a member. Atypical Construction includes, but is not limited to, the following conditions: When Wake EMC construction standards cannot be used because of land composition or excessive labor is required to complete the installation; special equipment and materials are needed for stream crossing structures or concrete structures; explosives are required; abrupt changes in final grade levels exceed a slope ratio of one when measured within three feet of the trench; special permitting is required to comply with State or Local requirements; when it is necessary to install or replace underground facilities under existing streets, sidewalks, patios, decks or other structures.

#### 2. Atypical Design

*Atypical Design* costs are incurred when the member requests facilities or construction methods that exceed the company's standard engineering design practices and/or the standard design for normal service for a specific member.

### B. CONSTRUCTION COST

The *Construction Cost* is Wake EMC's estimated installed cost for construction for all necessary facilities to the point(s) of delivery, including the cost of materials, labor, metering, transportation, stores, tax, engineering and general expenses.

*\*Construction Cost shall also include the removal costs minus the salvage value, if any, of the facilities.*

### C. PERMANENT SERVICE

A *Permanent Service* member must have year-round electric service needs for more than a 12-month continuous period.

D. NON-PERMANENT OR SEASONAL SERVICE

A *Non-Permanent or Seasonal Service* member is any residential or nonresidential member whose electric service needs are for less than a 12-month continuous period and the facilities installed by Wake EMC to serve the member shall not be needed to serve other members in the near future. Members requesting electric service to vehicles or structures designed or used to provide mobility and/or non-permanent living accommodations (including, but not limited to, boats, campers, motor homes and recreational vehicles) shall also be classified as Non-Permanent Service member. A Non-Permanent Service is not attached to a permanent foundation and is not connected to permanent water and sewer facilities.

E. TEMPORARY SERVICE

A *Temporary Service* member is a service whose needs are normally for less than a 12-month continuous period and whose need is for use in the construction of buildings or other establishments which will receive, upon completion, permanent electric service from Wake EMC.

F. NORMAL POINT OF DELIVERY

The *Normal Point of Delivery* for overhead service to residential members is typically on the outside wall of the end of the building **nearest** to the source of Wake EMC facilities entering the member's premises. For underground electric service to residential members, the Normal Point of Delivery is typically the point on the side of the structure **nearest the source** of the Cooperative's facilities.

G. PUBLIC ROAD

A *Public Road* is a street or roadway that has been dedicated and accepted for unrestricted public use by the applicable state county, or city agency, except that a Public Road does not include controlled access roads (such as interstate highways), or other roads, highways, streets or parkway areas otherwise restricted for access or development purposes.

H. DEPARTMENT OF TRANSPORTATION (DOT) RIGHT-OF-WAY (ROW)

*Right-of-way (ROW)* refers to a strip of land which is used as a transportation corridor. The land is acquired as an easement or in fee, either by agreement or condemnation. It may also refer to temporary rights needed to construct a transportation facility.

I. REAL ESTATE DEVELOPMENT

A *Real Estate Development* is a residential subdivision, commercial park, industrial park, mobile home park, apartment complex, planned area development, mixed-use or other

similar type development consisting of four or more contiguous lots recorded with the appropriate county registry where permanent electric service will be provided to four or more members.

J. QUALIFYING METER

A *Qualifying Meter* uses, at least, an average of 500 kilowatt-hours (kWh) per month and is a new meter on a parcel—it is not a replacement for a previous meter on the same parcel. Wake EMC reserves the right to verify the member's load estimate after service begins and can rescind any *revenue credit* if proposed load was falsely misrepresented in order to receive subsidies.

*\*For 2013, the average monthly usage per residential account was 1,227.98 kWh. Wake EMC believes a 500 kWh minimum usage is a liberal estimate for the Qualifying Meter. Data provided by the Key Ratio Trend Analysis calculated from our year-end Form 7 report.*

K. RESIDENTIAL REVENUE CREDIT

A *Residential Revenue Credit* is a way of reducing a portion of the member's initial capital investment for a new service by allowing Wake EMC to hedge the credit on the future revenue generated from that permanent service. Wake EMC provides up to a \$2,000 revenue credit to each new *Qualifying Meter*. Wake EMC continually reviews the Revenue Credit amount and will update when the data supports a change.

*\*The \$2,000 revenue credit can be applied once towards the cost of primary line extensions to serve any Qualifying Meter on a recorded residential parcel. Once a revenue credit has been applied to an account (and used for construction) it cannot be applied again, unless an **additional** Qualifying Meter is added on the same parcel. There are no refunds for unused revenue credits and they are non-transferable.*

*\*\*If a home/mobile home/structure is replaced, moved or destroyed in any manner on said parcel, a revenue credit cannot be applied to any of the construction costs for re-connection to the home/mobile home/structure. Full construction cost is the responsibility of the member. A Revenue Credit is only applied one time per Qualifying Meter per recorded parcel.*

*\*\*\* If infrastructure is in place to feed a service a Revenue Credit is NOT applied if member requests to change configuration of line. The full cost is applied.*

## L. COMMERCIAL REVENUE CREDIT

A *Commercial Revenue Credit* will be determined based on the load requirements of a specific site and can be credited \$2,000 per 1,000 kWh of monthly usage.

## III. EXTENSION OF SERVICE

Wake EMC will assume financial responsibility to install facilities to the member's property line for *Qualifying Meters* but within reasonable limits. If the proposed overhead line will travel along a public road or NC Department of Transportation (DOT) right-of-way (ROW), Wake EMC will cover this portion of the ***Construction Cost to provide single-phase power to a new member with a Qualifying Meter. If the proposed overhead primary line does not run parallel to a public road or NC DOT ROW or is not a Qualifying Meter*** the member will cover the *Construction Cost* to establish facilities to the site. After the primary line has been extended to the property line all *Construction Cost* associated with any additional primary line extension will be applied to the member's account. If this is a new *Qualifying Meter*, a *Revenue Credit* can be applied to the overall charges accrued to get power to the meterbase.

### A. SINGLE-PHASE SERVICE TO INDIVIDUAL MEMBER

#### 1. Extensions Involving Only Secondary Service

Overhead: Wake EMC will construct, own and maintain the overhead service facilities necessary to provide service from an overhead secondary source to the qualifying member-requested meter with one service lift-pole except NON-PERMANENT SERVICE (see III.A.3. below) or TEMPORARY SERVICE Customers (see III.D. below) at Wake EMC's expense; member will be responsible for any atypical installation costs as determined by Wake EMC and will be required to pay installation (labor) costs for any additional lift-pole(s) required. Any significant cost for Right-of-Way clearing may be passed to the member (see IV. General, A. Right-of-Way).

Underground: Wake EMC will construct, own and maintain the underground service facilities necessary to provide service from an overhead or underground secondary source to the qualifying member-requested meter except NON-PERMANENT SERVICE (see III.A.3. below) or TEMPORARY SERVICE members (see III.D. below) for a fee of \$175 (includes riser) up to the first 150 feet—any additional underground cable required will be billed at Wake EMC's approved rate. The member will be responsible for any atypical installation costs as determined by Wake EMC. If a service requires more than 10 foot of hand digging (5 foot by transformer and 5 foot by meterbase) then an atypical construction charge shall be applied at the current Wake EMC rate schedule.

*\*Any Right-of-Way clearing for a security light only will require the member to clear or Wake EMC will do for cost to member.*

*\*\*For any service that will not use an average of 500 kWh a month the member will pay Construction Cost of overhead or underground service.*

*\*\*NOTE: If the member would like to relocate the existing secondary service for their convenience, to accommodate a new or moved structure, or convert existing overhead service to underground it will be the member's responsibility to cover the full CONSTRUCTION COST.*

2. Extensions Involving Primary Distribution Facilities

Wake EMC will construct, own and maintain all primary distribution facilities necessary to extend single-phase electric service to the delivery point as described below. Wake EMC will provide the secondary service portion of such line extension, if any, in accordance with III.A.1 (above).

For the primary portion of a single-phase overhead or underground line extension to all member-requested facilities, except *Non-Permanent Service* (see III.A.3. below) or *Temporary Service members* (see III.D. below), the member shall pay the amount (if any) by which the *Construction Cost* exceeds the *Revenue Credit* (see II.K. above) plus any *Atypical Installation* costs as determined by Wake EMC. The *Construction Cost* for residential members shall exclude the cost of single-phase overhead primary distribution line extensions along public road ROW. Any residential primary extension along a private road will be applied to the *Construction Cost* and the member's responsibility. **The distribution transformer will ONLY be excluded from the *Construction Cost* for a NEW qualifying meter.**

*\*Note: When it is necessary to relocate the primary distribution facilities serving any member-requested facilities for the member's convenience, the member shall pay the full CONSTRUCTION COST.*

3. Extensions for Non-permanent Service

Wake EMC shall construct, own, and maintain the facilities necessary to provide electricity for a Non-permanent service. The member is responsible for the associated construction cost for the extension.

B. THREE-PHASE SERVICE TO INDIVIDUAL MEMBER

1. Extensions Involving Only Secondary Service

Follow rule III. A 1. Single-Phase Service to Individual Member. Member will pay for any *Atypical Installation* costs determined by Wake EMC.

2. Extensions Involving Primary Distribution Facilities

Wake EMC will construct, own, and maintain all primary and secondary distribution facilities necessary to extend three-phase service to the delivery point as provided below:

For an overhead or underground three-phase extension to all member-requested facilities the member shall pay for any *Atypical Installation* cost as determined by the company, plus

the *Construction Cost* of primary and secondary facilities minus the *Revenue Credit* (see II.K or L. above). **The distribution transformer will ONLY be excluded from the *Construction Cost* for a NEW qualifying meter.**

C. NON-PERMANENT OR SEASONAL SERVICE

For electric service that is required for less than 12 months out of the year, the member will pay full installation cost and removal cost minus any salvage value. A *Revenue Credit* is NOT applied to this type of service.

D. TEMPORARY SERVICE

Overhead temporary service is any single-phase, 120/240 volt, service requiring a service drop of no more than 125 feet and without the installation of any company-owned poles. If a lift-pole and additional wire is used it will be applied to the *Construction Cost* of *Permanent Service*, but if the lift-pole is not used for *Permanent Service* then the member will pay for cost to install and remove the lift-pole.

For underground single-phase 120/240 volt service, Wake EMC will deliver service with member provided wire (20' of wire required and temp pole must be within 5' of transformer). For all other types of *Construction Service*, the member shall pay the total installed cost plus removal cost minus salvage value of the facilities installed to provide the *Construction Service*. If a padmount transformer is used for underground temporary service and is not need for the permanent service then member pays the full *Construction Cost*.

E. NEW REAL ESTATE DEVELOPMENTS

1. Residential Developments

At the developer's request, Wake EMC will construct, own, and maintain overhead and/or underground distribution facilities to provide a basic distribution system, normally 120/240 volt single-phase service or as determined by Wake EMC, within the *Real Estate Development* in which it is determined that individual lots will be sold or leased. **The developer requesting the basic distribution system shall pay any amount by which the *Construction Cost* exceeds the estimated *Revenue Credit* from the development, plus any estimated *Atypical Installation* costs as determined by the Company.** The developer will receive up to a \$2,000 residential revenue credit per lot in the development that will eventually require permanent service to EACH lot. There are no refunds for any unused revenue credits and they are non-transferable.

2. Nonresidential Developments and Planned Area Developments

At the developer's request, Wake EMC will construct, own, and maintain overhead and/or underground distribution facilities to provide a basic distribution system within the *Real Estate Development* in which it is determined that individual lots will be sold or leased. The developer requesting the basic distribution system shall pay any amount by which the *Construction Cost* exceeds the estimated *Revenue Credit* from the development,

plus any estimated *Atypical Installation* costs as determined by the company. The *Revenue Credit* will be determined by Wake EMC based on load requirements submitted by the developer.

3. General Requirements by Developer

In advance of any design work by Wake EMC, the developer of a *Real Estate Development* shall be responsible for providing to Wake EMC an estimate of electrical loads within the development and a surveyor's recorded plat plan with premise addresses for each lot in a timely manner. In the case of a mobile home park or multi-family project, the plot plan shall indicate the location of each structure within the development. The developer recognizes and acknowledges that Wake EMC will rely upon such information in sizing and installing the facilities necessary to serve the development.

In order to ensure a timely installation of Wake EMC facilities in a new development, Wake EMC will require the developer to provide a project schedule to the designing engineer that clearly describes a timeline and an expectation of when Wake EMC facilities can be installed. Wake EMC relies on a contract crew to install said facilities and crew schedules have very little room for margin. If the development schedule changes for any reason then it is the sole responsibility of the developer to notify Wake EMC designers. Wake EMC will do its best to accommodate a change in schedule but cannot guarantee immediate crew availability.

Road crossings- In order to avoid any damages to installed infrastructure Wake EMC will require the developer to install all road or pavement crossing conduit as designed by Wake EMC. Wake EMC will provide and deliver the necessary conduit, a map of crossing locations, and depth requirements for the crossings to the developer for them to install. If the crossings are not installed to Wake EMC standards then Wake EMC will bore the crossings and pass the full cost on to the developer.

All conditions of service must also be met as listed in ***Wake Electric Membership Corporation Service Rules and Regulations, section 200***

*\*Note: When Wake EMC existing facilities within a Real Estate Development must be rearranged and/or abandoned due to any current or future actions of the original owner or developer, or any subsequent owner(s) or developer(s) within the development, the party requesting the changes shall pay: 1) the Construction Cost of relocating the facilities, plus 2) the installed cost plus removal cost less salvage value for any facilities removed or abandoned.*

F. CONVERSIONS OF ADEQUATE OVERHEAD TO UNDERGROUND SERVICE

The conversion of existing adequate overhead distribution facilities to underground distribution facilities is governed by the provisions of this section and is listed in the *Wake Electric Membership Corporation Service Rules and Regulations, section 208*.

1. Residential Members

When the member requests Wake EMC to replace an existing single-phase overhead primary and/or secondary line with underground, the member shall pay all of the *Construction Cost*.

2. Other Individual Members

When the member requests the company to replace an existing overhead connection with underground facilities and such change is not the result of an increase in the customer's electrical requirement that would have necessitated replacing the overhead facilities, the member shall pay the full *Construction Cost*. If the electrical requirement necessitates replacing the overhead facilities serving the member then the member will pay the difference from replacing with underground versus overhead.

\*Note: For installations not otherwise covered by other sections of this plan or rate schedules, Wake EMC will determine eligibility.

G. RETIREMENT OF INACTIVE SERVICES

If a member requests that an inactive service or light be retired on their property then Wake EMC will accommodate the request at no charge as long as the existing ROW is not critical to providing access or service to any adjacent properties. However, if the member should request in the future new service in the location of the retired service then the member will be responsible for the full *Construction Cost* of the new service or light.

IV. GENERAL

A. RIGHT-OF-WAY (ROW)

The member will furnish, without cost to Wake EMC, all necessary easements and Right-of-Way for the supply of electric service to the member. All Right-of-Way must be graded to within six (6) inches of final grade before installation as listed in *Wake Electric Membership Corporation Service Rules and Regulations, section 201 C*.

**Underground Service:** The member shall be responsible for the initial clearing to final grade; it must be free of stumps and other obstructions, before any underground electric service is installed.

**Overhead Service:** When it is necessary to clear the right-of-way on the member's property to provide overhead electric service, Wake EMC will cover the clearing cost within reason, and the member shall be responsible for the removal of all debris resulting from such clearing. If the clearing costs is excessive, Wake EMC can require the member to pay a portion of the clearing cost. This includes a request for a new light service.

When Right-of-Way clearing is needed for any primary extension Wake EMC shall provide such service if the member agrees to pay Wake EMC for any and all estimated clearing costs. Any tree debris removal and/or disposal costs would be additional or the member's responsibility.

All significant Right-of-Way clearing cost will be confirmed by Wake EMC Right-Of-Way Supervisor for accuracy.

## B. TYPE OF FACILITIES

Wake EMC shall have the right to install an overhead or underground distribution system at its option. However, if the member or developer requests, or a city ordinance or other legal restriction requires that such lines be placed underground rather than overhead, the member or developer shall pay for all costs associated with such service pursuant to this plan.

Wake EMC, in its sole discretion, shall design the most efficient and cost-effective system to meet the member's needs based on sound engineering practices for resiliency and reliability. Wake EMC will rely upon information provided by the member or developer and shall base the Company's cost calculations on this information for normal service.

Normally, Wake EMC does not install overhead facilities in areas served (or contracted to be served) by an underground distribution system. However, where adverse conditions exist which would cause excessive costs to Wake EMC if underground facilities were installed then overhead facilities may be utilized as needed to avoid such excessive costs. Should the member or local ordinance require the installation of underground facilities, the member shall pay the normal charges for underground service plus any atypical construction cost.

Wake EMC shall provide electric service, either overhead or underground, at a single point of delivery at one of Wake EMC's standard voltages. The type and location of these facilities shall be in accordance with sound engineering practices as determined by Wake EMC engineers and any information provided by the member.

C. OBSTRUCTIONS

The member, developer or other party requesting Wake EMC's distribution facilities to be installed shall remove all obstructions from the route along which Wake EMC facilities are to be installed and provide continuing access to Wake EMC for operation, maintenance or replacement of these facilities. Wake EMC shall not be responsible for any damage to shrubs, trees, grass or any other foliage or property caused by Wake EMC equipment during installation, maintenance or replacement of the facilities. The member shall be responsible for all such items, and for reseeded or re-sodding the trench cover where required. In addition, Wake EMC shall not be responsible for the repair or replacement of facilities on the member's premises damaged during the installation of Wake EMC facilities, unless, prior to Wake EMC construction, the member clearly identified the location of such facilities.

D. MEMBER REQUESTED RELOCATION OR IMPROVEMENTS

If a member requests Wake EMC to change the current configuration of the electric line, secondary or primary, on their property then the member will be responsible for all associated *Construction Costs* with the relocation.

If a maintenance issue is discovered, e.g. rotten pole, on overhead facilities on a member's property and the member would like a very minor change to the existing configuration, then Wake EMC will accommodate the request as long as the minor changes meet the following criteria:

1. New placement of overhead pole does not require re-engineering of upstream or downstream poles.
2. Does not create any NESC violation
3. Facilities are NOT converted to underground

*\*NOTE: IF NEEDED, Pole maintenance is created on a SEPARATE maintenance service order for just that location. Any other changes will be the responsibility of the member.*

E. NATIONAL ELECTRIC SAFETY CODE (NESC) VIOLATIONS CREATED BY MEMBER'S ACTIONS

If at any time Wake EMC believes that a NESC violation was created as a direct result of a member's action, regardless of when the action occurred, Wake EMC will re-engineer the facilities to bring the violation into NESC compliance and will charge the full *Construction Cost* to the member's account.

If the member has any questions or refuses to pay for the costs to bring the violation in to compliance then a meeting can be arranged with a Department Manager where Wake EMC has the right to request the County inspection of the structure causing the violation.

## V. TAXES

To the above charges will be added any applicable taxes for contributions in aid of construction and any applicable Sales Tax.

### **New Construction Rates:**

\*Credits only apply to New Construction and the proposed meter must use a minimum of 500 kWh per month. No electric fences, well pumps, barns, etc. shall receive a revenue credit if projected monthly usage is less than 500 kWh. These rates are only for *New Construction*. See *Wake Electric Membership Corporation Service Rules and Regulations, Appendix 2 for additional schedule of charges*.

Description	Rate
*OH Primary Extension	Full cost minus Revenue Credit for qualifying meter
*OH secondary service only	Free with one lift-pole. Installation will be charged for each additional lift-pole.
*Overhead Three-Phase Primary Line Extensions	See System Engineer
*UG Service Cable up to 150'. <b>This is only for New Construction and includes secondary riser.</b>	<b>\$175.00</b>
*UG Service Cable, Excess Footage	Wake EMC Schedule of Charges
*UG Primary Extensions	Full cost minus Revenue Credit for qualifying meter
*UG Subdivision Primary Cable	No cost up to maximum investment limit of \$2,000 per lot. Any additional cost will be billed to the developer.
*UG Three-Phase Line Extension	See System Engineer
Set Up Charge UG Security/Street Light	\$50.00 Trip
UG Service Splice, up to 25'. After 25' full cost for trenching and cable.	\$350.00

