

## ***Primer on streetlights on the Duke Energy network***

Duke has 3 monthly rates for public street lighting:

- **Existing pole** – this rate applies to all Duke-owned (mostly wooden poles) that exist at the time the streetlight is added. The majority of these also support the electric distribution network. It includes electricity and pole maintenance/replacement. Fixtures have their own costs.
- **New pole with overhead service** – this rate applies to a new light in a new location if it has overhead service. Could be wood or decorative (to the extent that decorative poles have overhead service, which is unusual)
- **New pole with underground service** – this rate applies to any pole with underground service, most commonly decorative poles.

Anything other than a cobra style light attached to a wooden pole carries a decorative adder in addition to the monthly fees detailed above.

These rates are influenced by the light source and wattage of fixture. The monthly fee charged is electricity plus pole & fixture amortization. This way, Duke replaces fixtures and or poles when deteriorated without cost to the customer.

The decorative adder fee is applied to any lights deemed decorative by Duke. The decorative aspect may be the pole (not wooden) or the fixture. This fee is either paid out at installation or is added to the monthly bill at 1%.

As underground power has become a more consistent requirement, a wider variety of fixture types are available and in use in subdivisions.

Most developers enter 3-year or 10-year contracts for streetlights and then assign them to the Homeowners Association. The town has never accepted the decorative adder costs, so newer neighborhoods have retained streetlight responsibility. To date, the town has accepted dedication of standard fixtures on wooden poles that do not have decorative charges at the time of street dedication in new neighborhoods. Some developers have paid out the decorative charges to facilitate the conversion of the fixtures to the town. Some have not, leaving the Homeowners Associations with large bills and dissatisfaction with the town's policy.

Duke requires a letter from the town requesting a cost estimate to convert any lighting to public. The account number must be provided. They will field check the number of fixtures against the contract and provide the buy-out estimate. There is no credit for being mid-contract on decorative adder fees.

The decorative adder is 1% of that buy-out cost. This monthly fee continues on future contracts unless or until the buy-out amount is paid. As this fee is 1%, it would take one hundred years to pay off otherwise, and therefore, it is recurring.

Here is a summary of the various neighborhoods:

- Cornwallis Hills – wooden poles, so town accepted streetlights
- Kenion Grove – decorative poles, HOA retains responsibility
- Beckett's Ridge – decorative, but served by is served by Piedmont
- Waterstone Estates – decorative, developer apparently paid out the decorative fee

- Corbin Creek Woods - decorative, developer apparently paid out the decorative fee
- Waterstone Terraces, Crescent Magnolia, & Forest Ridge are trying to have the town accept the lights, but the developer is no longer involved in the HOA to negotiate the decorative fee.
- Elfin's Pond HOA seems satisfied to retain streetlight responsibility.
- Fiori Hill has private streets, so streetlights would not come to the town.
- Corbinton Commons, Harmony, and Collins Ridge – all still pending as streets have not been dedicated.

For context:

The town has about 780 streetlights and area lights in the Duke system. The monthly electric bill is just over \$7,000. In round figures, the town spends \$84,000 on street and area lighting. Holiday lighting is billed separately.

The cobra fixtures in Waterstone cost \$21.67 a month per fixture for the electricity and maintenance. The decorative fee is \$7.40 a month per fixture. Roughly one quarter of the monthly bill is the decorative cost. There are 27 fixtures in Waterstone Terraces.

The fixtures in Crescent Magnolia look very similar to the Waterstone fixture, but on shorter poles, lower wattage and different light source. The monthly fees are \$19.49 and \$6.15. Still, roughly one quarter of the monthly bill for the decorative cost. There are 12 fixtures in Crescent Magnolia.

The town has not regulated the lighting installed with developments, so there is a mixture of fixture types. Some neighborhood lights are more decorative and provide little to no lighting for the street.

#### **The question:**

Neighborhoods are now questioning the equity and fairness of the town not accepting their decorative streetlights. The questions are coming from the HOAs who had no role in selecting the decorative fixtures. Some of these fixtures are also not providing a public benefit as they do not light the street.

The town is now aware that there is a way to remove the decorative adder cost, but it is not cheap. The simple way is to arrange it with the developer when lights are first installed. If not arranged at the outset, the buy-out cost cannot be calculated in-house, it has to be quoted by Duke and only after they come out to check that the number and type of fixtures is accurate.

#### **Does the town board stand by its previous policy of not accepting decorative streetlights?**

##### **Consequences of "yes"**

- Our documents need to be rewritten to reflect that we accept streetlights without a monthly decorative adder fee to be more accurate and reflective of actual practice.
- Now that we are aware of these Duke policies, we can work to ensure developers plan to make the buy-out at turnover. We have never regulated street lighting choices in new development.
- While the decorative fee has been paid out in a few cases, we do not fully understand the consequences of accepting decorative fixtures and poles. There are likely extra maintenance and management tasks and costs associated with these lights that we won't fully comprehend until the fixtures are more than 5-10 years old and begin to fail. Staff cannot predict with certainty what a "yes" answer truly means to costs and staffing.
- Whether the town accepts lighting that does not light the street also needs to be clarified.

### Consequences of “no”

- We need a new policy, as suggested above, to specify what the town standard is and what the town will accept.
- We need clear direction on whether there are options for neighborhoods where the developer does NOT make the buy-out payment:
  - accept only cobra fixtures on wood poles (something less than current)
    - impact – we accept only what we have traditionally accepted. We have accepted a few neighborhoods with non-wood poles. This creates an inconsistency.
  - accept lights without a decorative adder (current)
    - impact – we only accept lights where the developer or HOA buys-out the decorative cost and we accept the unknown additional responsibilities of decorative fixtures and poles.
  - offer some sort of cost share with neighborhoods to remove the decorative adder
    - impact – this adds to the town’s operating costs with no clear benefit.
  - accept the decorative adder costs forever
    - impact – this adds to the town’s operating costs with no clear benefit.

### If “yes,” exactly how do we want to structure the policy?

Option 1: Accept only the cobra light of the type we specified to Duke during the LED conversion when attached to a wooden pole.

- This helps with consistency and equity, but we have already accepted a few neighborhoods that have non-wood poles, creating inconsistency.
- This option would likely severely limit the new lights the town has to accept as developers want the decorative poles.
- New homeowners would likely not appreciate this option.

Option 2: Accept only the cobra light of the type we specified to Duke during the LED conversion.

- This helps with consistency and equity.
- Staff feel the intent of town being responsible for street lighting is related to safety. Streets lit to a minimum standard are safer for both drivers and pedestrians.
- The intent is not decorative or to provide pedestrian level lighting along sidewalks. Developers will retain the option to pursue other lighting types (if we want that available), but it will be at their cost. The likelihood of that being pursued once the town establishes a minimum lighting level for the roadway is limited.

Option 3: Accept any fixture located in the public right of way.

- New homeowners would likely appreciate this option.
- This option likely lowers HOA dues as lighting is a significant part of dues.
- This option has the town accepting lights that may not provide for public safety.
- This option increases the town’s responsibility and will lead to the need for staff expansion.

It is likely any decision will create an inconsistency somewhere. There are more options than the three offered above. Some photos of the various fixtures and neighborhoods are attached.

**Staff recommend Option 2**, when it can be done without the town paying the decorative cost. Current neighborhoods have the options to buy-out the contract and transfer the lighting contract to the town OR keep paying for the lighting contracts. New developments have two additional options: install wood poles or have the developer make the buy-out.

### Traditional streetlights on wooden poles



West Tryon Street – part of recent LED conversion



Cornwallis Hills – fixtures have not been converted to LED yet

The majority of streetlights the town pays for are of these types. Fixtures attached to wooden poles providing light to the roadway.

### Cobra lights used in Waterstone, Corbin Creek Woods, and others



Corbin Creek Woods  
The town has accepted these after developer buy-out.



Waterstone Estates  
These are a variation of cobra fixtures that aren't exactly the same as the Terraces. The town has accepted these after developer buy-out.





Waterstone Terraces – HOA seeking dedication  
Buy-out has not been paid and the developer is no longer involved in the HOA.



Crescent Magnolia – HOA seeking dedication  
Has a combination of yard lighting (lanterns) and streetlights. the developer is no longer involved in the HOA.

These fixtures light the street and are generally on taller poles (20-25 feet).

### Lantern style fixtures – used in Kenion Grove and Forest Ridge



Kenion Grove – HOA maintained



Forest Ridge – HOA seeking dedication

Note the low fixture height. A very limited amount of light from these fixtures reaches the street to benefit the driving public. Many residents appreciate the lower fixture height and lower ambient light level in the neighborhood. These are not truly streetlights as little if any light hits the street. These are pedestrian decorative lights.