



October 2016

Inaccessible  
Electrical Facilities

Phase 2 – Primary Lines  
(Lower Keys)

## Executive Summary

### Florida Public Service Commission

In 2006, following the 2004 and 2005 hurricane seasons that were damaging to electrical systems throughout Florida, the Florida Public Service Commission (FPSC) passed Order #25-06.0342 which "requires the cost-effective strengthening of critical electric infrastructure to increase the ability of transmission and distribution facilities to withstand extreme weather conditions, and reduce restoration costs and outage times to end-use customers associated with extreme weather conditions."

The PSC also adopted a companion Order 25-6.0341 which states "in order to facilitate safe and efficient access for installation and maintenance, to the extent feasible, and cost-effective, electric distribution facilities shall be placed adjacent to a public road, normally in front of the customers' premises."

### Keys Energy Services' Response

As a result of PSC Order#25-06.0342, Keys Energy Services (KEYS) has undertaken a multi-year program to respond to the PSC Order which has included testing all poles, replacing all poles identified as deficient, changing our construction standards, and fortifying infrastructure designated as critical (feeder to hospital). Additionally, in order to comply with Order 25-6.0341, KEYS Staff has developed a plan to address facilities that are in inaccessible locations in order to comply with PSC orders and to further have a strong, reliable system. KEYS Utility Board members participated in a workshop on the subject on August 23, 2011 in order to better understand the scope of the project and the impacts on customers. Based on input from the Utility Board and continued analysis, KEYS Staff has determined that inaccessible facilities should be divided into two categories – those that support primary lines and those that support secondary lines. KEYS is near completion of primary lines in Key West and would like to commence the primary locations in the Lower Keys.

### Program Description

Phase II will address inaccessible facilities that support primary lines in the Lower Keys and will be addressed over a 24-month period starting in 2016. In total, approximately 110 primary and 13 tap poles will be installed, and this will affect up to 120 customer meters. KEYS' Engineering Department will complete all design work and it is anticipated that all construction work will be completed by outside contractors. The total cost for constructing the new lines and removing the old lines is estimated at \$1.1 million.

KEYS' Engineering Department will work closely with the affected customers to help them identify a solution. KEYS (or a contractor to be determined) will either set a customer pole, which the customer will assume ownership of, so the customer can continue to use the existing meter center/riser or KEYS will reimburse the customer up to \$2,100, including Monroe County permit fee for the costs associated with hiring an electrician to modify the meter center/riser (relocate or extend) so it can receive power from the new lines. The rebate for condominium/apartment buildings will be based on the number of meters; (for example if four meters, then KEYS will pay  $4 \times \$2,100 = \$8,400$ ). This cost estimate for all riser relocations is estimated to be \$252,000.

### Coordination

KEYS will work closely with Monroe County throughout the project on a variety of issues including customer coordination, tree trimming, and street lights. Additionally, KEYS will work with AT&T and Comcast and urge these telecommunications companies to move expediently.

KEYS' Engineering Field Representatives will meet with each customer to help establish a solution that best meets the customer's and KEYS' needs.

## Customer Assistance

In order to meet the Florida Public Service Commission Storm Hardening Orders – and specifically Order #25-06.0341 which states, “in order to facilitate safe and efficient access for installation and maintenance, to extent feasible and cost-effective, electric distribution facilities shall be placed adjacent to a public road, normally in front of the customer’s premises,” KEYS developed the Inaccessible Facility Project – Phase II. The project specifically works to relocate inaccessible primary facilities to public roads. KEYS’ goal is to not only construct accessible facilities, but also to remove the old, inaccessible facilities as soon as possible so that KEYS does not have the continuing maintenance costs and so that customers do not have unsightly facilities. Please note, this last initiative is dependent upon the telecommunication companies removing their services.

In Phase II, a total of 110 poles in the easements affecting 120 customers will ultimately be removed and replaced with 123 new poles installed along public roadways. As a result of the facilities being moved to the public road, customers may need to relocate their risers and meter centers to accommodate the move. Recognizing that this relocation may create a financial burden on KEYS customers, KEYS developed a plan to minimize this burden on customers.

### \*Option 1 – Customer-Owned Pole

For customers who do not wish to incur any costs, KEYS crews will set a customer pole so that the service drop can utilize the existing riser/meter center. The responsibility of setting the pole and transferring service to the pole will be KEYS responsibility (customer will be required to provide underground clearance for KEYS to set the pole). The customer will be required to assume ownership of this pole. If there is any damage to this pole in the future, for example: normal wear and tear or hurricane damage, it will be the customer’s full responsibility to replace, repair or remove the pole.

### \*Option 2 – Modify Riser/Meter Center (Riser Extension)

For customers who prefer to avoid having a pole set on their property (and the ongoing responsibility of said pole), KEYS will provide a rebate per riser on the electrical work required to move the riser/meter center. Customers will be required to provide KEYS with three quotes from licensed electricians, and in turn KEYS will provide a rebate to the customer in the amount of the lowest quote. The customer can select whichever licensed electrician they wish, but the rebate will be based upon the lowest quote provided up to but not exceeding \$2,100 including Monroe County permit fees. The rebate will be issued to the customer in a check at the time KEYS is provided final inspection by the County. In order to qualify for the rebate, work must be completed by a licensed electrician. KEYS will not provide rebates for work done as an owner/builder.

Within six months after the customer has met with KEYS’ Field Representative to discuss possible solutions, the customer should decide between Option 1 or Option 2. If the customer has not signed an agreement to take ownership of their new customer pole or has not had an electrician complete the work, KEYS reserves the right to disconnect service until customer takes action.

\*Modify Riser is the preferred option as it will avoid future pole maintenance by the customer and will be aesthetically more pleasing.

#### Service Fee Waiver

Typically, KEYS charges customers an after-hours fee when a service disconnect is performed. This is typically done at the customer's or the electrician's request when they are performing an upgrade of the customer-owned wire or meter center for connects/disconnects that are specifically related to this project. The Utility Board has authorized Staff to waive these fees.

#### Collaboration with Customer

The Engineering Field Representatives will meet with each affected customer in order to identify the customer's needs and to customize a design solution that best meets the customer's and KEYS' needs. This plan anticipates that Engineering Field Representatives may have to meet with customers during the evenings or weekends. All design alternatives within NEC & NESC requirements will be considered to make the process as simple and inexpensive as possible for customers. The Engineering Field Representatives will provide each customer with a meter location form indicating a recommended solution that the customer can then provide to their electrician. Additionally, the Engineering Field Representatives will meet with the customer and electrician upon request.

#### Lower Keys Primary Easement Locations (primary wire)

Balido Terrace, Stock Island  
Prado Circle, Big Coppitt Key  
Caribe St, Sugarloaf Key  
Sandy Circle, Big Pine Key  
Chapman Ln/5<sup>th</sup> Ave, Big Pine Key  
Hibiscus/Coconut Hwy, Big Pine Key  
Poincianna Rd, Big Pine Key  
Bittersweet, Big Pine Key  
Warner St, Big Pine Key

## Monroe County Coordination

In order for the inaccessible facilities project to succeed, KEYS will need to have a high level of support and coordination with Monroe County which include:

- Meet with Monroe County electrical inspector for clarification.
- Coordinate closely with Monroe County to minimize customer financial impacts (ongoing).
- Work with Monroe County in respect to customer complaints on public right-of-ways as a result of the proposed pole location/design.
- Minimize tree trimming impacts on public right-of-ways.
- Work with Monroe County on street light adjustments due to new pole lines in right-of-ways.
- Work with Monroe County to encourage telecommunication companies to expedite relocating of their facilities.

## Monroe County Coordination Customer Riser and NEC Code Compliance

The following is the program that Monroe County and KEYS approved:

### NEC Code Clarifications

#### Riser Extensions:

- Monroe County will allow riser upgrades to five feet above the roof line – vehicle access only.
- Riser conduit to be 2.5 rigid
- No guy required
- Will allow 3' vertical clearance over flat roof for "drip loop"

### Riser Clarifications

#### Electrical upgrades required beyond riser relocations:

- No Customer panel upgrade needed if no additional KW load is added

#### Permits, Inspections and Fees:

- Contractor must be licensed in Monroe County
- Permit fees are applicable to customer; however, this is reimbursable as part of KEYS rebates.

Section 1. Monroe County supports the Utility Board in its efforts to fortify the electrical system with storm hardened poles and with replacing facilities that are located near inaccessible locations to locations adjacent to public roads.

Section 2. Monroe County supports KEYS' program to construct primary lines along public roads. Such program requires that affected property owners to either modify/extend their riser/meter center or accept ownership of a tap pole, and provides rebates to offset the cost customers may incur hiring a licensed electrician.

Section 3. Monroe County will not waive the cost of permitting the electrical work associated with specifically relocating or extending risers and meter centers as a result of this project.

Section 4. Monroe County supports an approach by their electrical inspectors that allows for:

- Requiring customer or his/her designee to follow normal permitting process for all work associated with this project.
- Not requiring customers to upgrade their electrical panels (or anything past the meter on the condition that no load is added).
- Replacing risers located in the rear of the property up to five feet above the roof line on the condition that this type of location meets the three foot clearance above the entire roof that NESC requires for service drops.
- Utilizing a vertical three foot drip loop clearance on the condition that this type of solution meets the three foot clearance above the entire roof that NESC requires.

## Telecommunications Coordination

KEYS will coordinate closely with AT&T and Comcast, and in doing so plans to:

- Meet with AT&T and Comcast to present our plan overview in an effort for them to budget and plan accordingly.
- Encourage AT&T and Comcast to transfer their facilities in a timely manner to reduce customer complaints, and keep Monroe County informed of the project so that they can encourage the telecommunication companies to affect timely transfers from public right-of-ways.