



April 16, 2025

Re: 2400 E Atlantic Ave Pompano Beach, FL

Florida Power and Light Response Letter

The following letter of response is submitted by Florida Power and Light 's Project Engineer II for this service area:

Good morning,

FPL's tariff documentation allows for customers to request that overhead facilities be converted underground at their expense under certain criteria. Namely – we only permit conversions that are the lesser of 1000 ft or 2 blocks long in length. This requirement can be found in section 13.a of our online [Tariffs Sheet No. 9.722](#)

In the past FPL used to allow small conversion – namely for highway construction – spanning short amounts of distance and we found that this adds multiple new failure points to the cable run that became troublesome. It would require the installation of two new switches with bypass jumpers which have a higher failure rate than contiguous cable spans and conflict with our smart grid's automatic switching as they would require manual switching to re-feed an outage section. This can essentially turn a brown out that a customer may experience into an extended power outage. This issue is avoidable in purely underground or purely overhead systems as the infrastructure exists for smart communication in both, but the pole location where the cable spans go from overhead to underground do not currently have smart device switches available to us.

The benefits that undergrounding a cable span see are also not observed in short segments – it, in fact, makes the span susceptible to underground failures that can now travel to the overhead pole line while still being at risk of overhead issues – such as car crashes, lightning strikes or sever weather related events. The poles that remain or that will need to be installed to underground this section will still see these overhead risks while the new underground span will see the risk of dig-ins [when a construction team hits underground cables], wear and tear from cyclic compressive loading and sink holes. Infrastructure exists to prevent these faults from traveling upstream on our lateral sections – that is, we fuse them – however our feeder sections are fused at our substations so that when new developments come in, they can be added in a timely matter. FPL does employ smart fuse switches which detect fault current on our lines and open to prevent outages for our feeder sections, but for them to operate smoothly they need to be installed in areas where they can coordinate seamlessly with similar switches on other sections. As stated earlier – the transition pole locations from overhead to underground cannot house these smart switches.

Additionally, our outage response team is comprised of two separate professions – those that work on overhead lines [linemen] and those that work on underground lines [splicers]. During troubleshooting, it is not always immediately apparent what causes a fault/outage and by introducing a short dip you now introduce the need for both professionals to be available and present to trouble shoot issues rather than one. The additional switches added at the conversion

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point from overhead to underground lines will also add time to the restoration process. Our crews are required to receive a switching order from our dispatch center whenever a switch is to be actuated. By increasing the number of manual switches on our system, this increases the time required for review and coordination between our teams when troubleshooting an outage. This is not to say that manual switches do not have a place in our grid – they are very important for sectionalizing as is used for maintenance, restoring downed wires and other applications; however, the introduction of manual switches at this location will serve only to isolate the underground cable span to fix any faults that may occur underground. An issue that wouldn't require a switch if the section was not to be converted. By requiring a longer length for conversion requests, FPL can mitigate the number of manual switches in our grid that service this purpose.

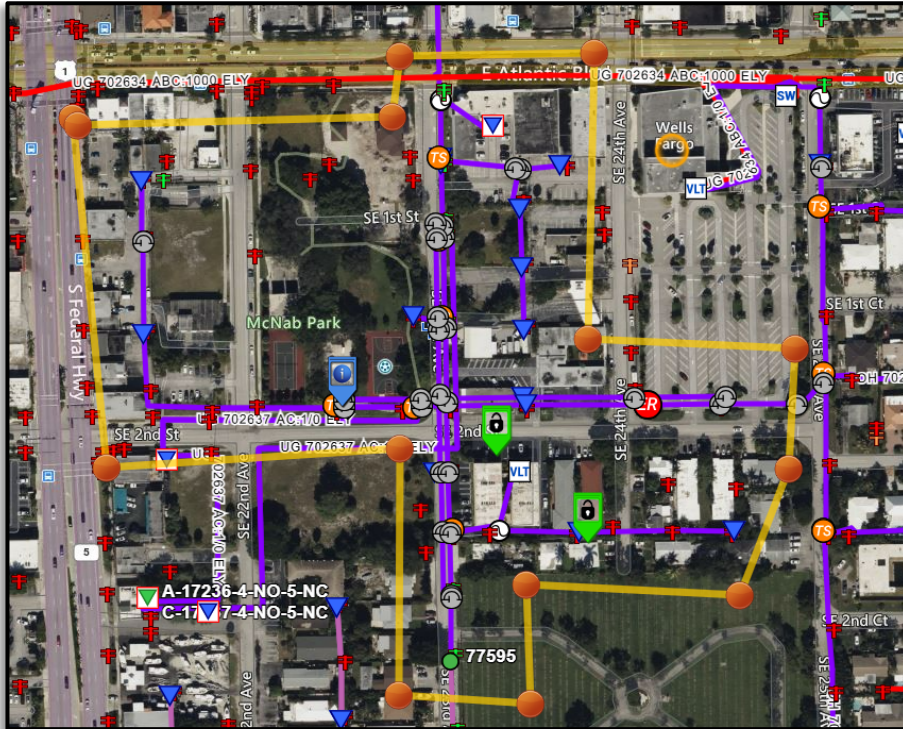
It's for this reason that we require either 2 blocks or 1000 feet of cable to be undergrounded at any given time at a minimum – as we have determined this is a reasonable sized run such that the underground section sees the benefits of being underground without introducing more risks/issues to trouble shooting and performance. These requirements have been negotiated with public service commission and is what we are allowed to require at a state level.

Regarding the east side of the property:

In this situation I would typically provide you an estimate and the requirements for if you did want to move forward with the conversion, however in conversation with my area manager and engineering team the scope for this requirement to be beneficial instead of harmful to the grid far exceeds the 1000 foot requirement [specifically if you are to include the east overhead lines]. To include the overhead lines to the east of the property the scope would need to span everything from E Atlantic Blvd to SE 7th St with all the lines between SE 25th Ave and SE 28th Ave. Your team will also need to confirm the consent of every property owner in that area to the conversion and provide easements for the underground facilities to be installed. Based on our conversation from the site I do not believe this span is directly on the property border so below I will not address it here.

Regarding the south side of the property:

Additionally, while the 1000 foot or 2 block requirement is what we are required to offer for consideration, I would like to point out that the existing facilities on the south of the property heading east along SE 2nd St would likely see a net negative impact on the strength of the grid if converted in the event it is limited to this constraint. I highly doubt that our area management team would approve us from an engineering side to perform the conversion unless it encompasses everything on our feeder 702637 that is south of E Atlantic Blvd between S Federal Hwy and SE 25th Ave as this area is fairly congested with a lot of Automatic Lateral Switches [ALS]. To be clear, ALS are a technology that further works to isolate a fault on our lines by first trying to troubleshoot the fault before opening the fuse. An underground equivalent is currently in the testing phase with our product engineering department, but as it stands now, they are not available for implementation in the field. I cannot say with full confidence that, even with the area outlined in the attached image, the area planning team will be agreeable for this reason.



Regarding the streetlight poles along SE 24th Ave:

This circuit may be undergrounded from SE 2nd St north to its termination point around Lat/Long: 26.231090, -80.100024 – however, it will require coordination from the account owner that is currently paying for the streetlights. It is possible that account owner will incur a charge or change to their billing rate, however I am not an expert on streetlighting accounts so I may be incorrect. From my understanding of our conversation these streetlights may be removed as part of your project and replaced with either customer/municipality owned streetlights or a new FPL SL service. Please let me know if this is the case and I can direct you to the proper department or assist if it is within my scope.

*Devindra Ramdeen
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