

Underground Utilities Q&A

June 20, 2016

This vote of the Palm Beach Shores property owners will determine if the Town should pursue a project to place our overhead utility lines underground. Here is a summary of the project to help you decide.

QUESTION: Are there any benefits to going underground?

ANSWER: There are generally 4 benefits:

1. **Reliability.** The likelihood of losing power in a storm will be dramatically reduced. Keep in mind that we are directly connected to the Riviera Beach power plant across Lake Worth by an underwater cable. If we put our lines underground, we would be as well protected from storm related outages as any town in Florida. Also, short outages and power bumps should happen much less often. In the 3 years since Jupiter Inlet Colony put their lines underground, they have had only one power outage which lasted less than 3 minutes.
2. **Safety:** We have already had multiple transformer fires in our residents' backyards this year. These fires were caused by wind driven palm fronds damaging the transformers. Keeping the foliage away from the above ground lines is almost impossible and the resulting difficulty creates a dangerous situation. In addition, downed overhead lines can cause fires and block access for emergency vehicles. This is not a problem if the lines are underground.
3. **Aesthetics:** The Town will look better. Our backyards will be more natural. Our streets and inlet walkway will be more beautiful. The green transformer boxes will blend into the landscape more than the light poles do.
4. **Potential for Improved Communications:** Comcast and AT&T should take this opportunity to incorporate new fiber optic technology capable of delivering faster, more reliable internet, TV and phone services.

QUESTION: Are there downsides to going underground?

ANSWER:

1. It is a construction project so obviously there will be some noise and inconvenience while work is occurring near your residence. Although every effort will be made to minimize it, there may be disruption of structures and landscaping that will need to be repaired.
2. There will be a cost, both financially and in terms of staff resources to ensure success
3. While underground facilities are not as susceptible to wind and debris-blown damage, they are more susceptible to water intrusion and local flood damage. Town wide system failure, while less likely, might take longer to repair. Overhead facility damage is easier to locate than underground but when underground cables fail, service to the affected customers can typically be restored by switching around the problem thereby restoring service during the repairs. Replacing the failed cable would be done at a later date and may take longer to complete but would not interrupt your service.
4. The Town will not be debt free and will have a set payment obligation for 10-15 years.

5. There will be service disruptions during the process when the connection to your property is switched over to the new underground system, typically less than four hours. We will make every effort to communicate these to you ahead of time.
6. We will have to be careful during future construction projects that the underground conduits are not damaged.

QUESTION: Why are we deciding on undergrounding our utilities now?

ANSWER: The state of Florida has mandated that all power distribution systems must be hardened against storm damage. Palm Beach Shores is on FPL's list for this year and they plan to harden our above ground system. We can't stay the way we are. We either go underground or we get a hardened system

QUESTION: Why can't we wait until The Season when we are all back in town to decide this important question?

ANSWER: FPL will begin to move forward on the Town's hardening program now unless we show significant progress towards an underground project. If we wait until October or January for the vote, we will miss our window of opportunity to decide the question for ourselves.

QUESTION: Why don't we let them harden our above ground system?

ANSWER: We can do that. The benefit is that it will be "free" to us. There are downsides though. FPL will harden the main lines along Inlet, Ocean, Lake and Atlantic. They will use significantly larger concrete poles, wider and taller than the concrete poles already there. The equipment on the top will also be larger to withstand strong winds. They will place larger, stronger wooden poles behind the houses as necessary. The process of replacing those wooden poles may disrupt foliage and structures within their easement in your backyard. The town will have a significantly different look than we do now.

QUESTION: Is there somewhere that I can see the look of a hardened pole and underground system?

ANSWER: There are hardened poles on Park Avenue just outside of our town limits, between Blue Heron Blvd and Beach Road. They have an orange dot on them. Jupiter Inlet Colony is the best place to see the way our town would look with an underground system. (see photos next page)



Park Ave



Jupiter Inlet Colony

QUESTION: Is FPL opposed to underground service?

ANSWER: No, more than one-third of the neighborhood power lines in FPL's system are underground but overhead service is their standard construction because it is the most cost-effective design for them to install and maintain.

QUESTION: Are there other towns putting their electrical service underground?

ANSWER: Yes, many Florida communities including some located on barrier islands. The list includes Daytona Beach, Fort Lauderdale, Gulfstream, Hollywood, Jupiter, Jupiter Island, Jupiter Inlet Colony, Longboat Key, Miami Beach, Naples, Palm Beach, Pompano, Sewell's Point and Winter Park.

QUESTION: Why don't we just go underground along the avenues and leave the poles behind the houses to eliminate the hardened concrete poles?

ANSWER: We asked FPL about this. We wouldn't really lose the poles on the Avenues because there has to be a pole at the intersection between the underground and aboveground wiring. We wouldn't get any of the benefits and still have to pay for undergrounding a large part of town.

QUESTION: Will there be any poles in town if we go underground?

ANSWER: Generally, at the end of the project, every electric, cable and phone wire will be buried and every pole will be taken away, on the Avenues and from between the houses. There may be a pole at each location where the underground transitions back to overhead at the northern town limits.

QUESTION: How about AT&T and Comcast? Will there be a benefit to undergrounding their services?

ANSWER: The same benefits of improved reliability and aesthetics apply to burying the cable lines. There is the likelihood of an additional benefit. In Jupiter Inlet Colony, when they buried their utility lines, the two cable companies took the opportunity to upgrade all of their facilities for faster, more reliable services. While we can't promise this result, we would work to make the same upgrades in our town.

QUESTION: If we go underground, could we still lose power?

ANSWER: We could, but the chances of it happening will be dramatically reduced.

As we said before, our town is very lucky to be connected by underwater cable to the newly updated FPL gas power plant across Lake Worth in Riviera Beach. It is a Category 4 storm rated facility and as long as it is operating they would be sending us power.

Should the island be covered for an extended period of time by a storm surge during a major event, some transformers may fail and would need to be repaired once the water had receded. The transformers that we would use are all made of stainless steel. Their switches are airtight to protect the inner workings from both water and salt intrusion. They are built specifically for our marine environment. They are built to withstand rain and flooding. They will also be on a looped system so that power can be diverted (and restored to homes) around a damaged transformer or cable while it is being repaired.

QUESTION: Where would the main power lines and transformers be located?

ANSWER: FPL would relocate all lines to town's 10 foot strip along the streets. Front easements are required for all new installations as it allows for quicker access for repairs. Each transformer would serve 4-6 single family homes. Larger buildings, such as the condominiums would have their own transformers.

QUESTION: How will the construction be conducted?

ANSWER: All utility lines would be inside underground conduit. They intend to use directional boring to place the conduit underground. This would mean they could install cable and conduit under driveways and foliage with little or no disturbance. We hope to be able to place the green transformer boxes on the corners and in the parkway at the crosswalks but some may straddle the property lines between two houses. The smaller cable pedestals will be placed in the same locations. They should not be located directly in front of your house. Property owners will be able to landscape around them (within reasonable guidelines) to minimize their appearance.

QUESTION: This sounds like a big project for our town to manage.

ANSWER: It is a complex project. That is why we would hire an engineering firm, Brannon & Gillespie, to be the supervising engineers on the project. Danny Brannon previously worked at FPL as their undergrounding supervisor. He successfully guided Jupiter Inlet Colony through their underground project. He is the established guru on the subject and would provide the guidance we need to take on this work with confidence.

QUESTION: Who owns and maintains the system when it is completed?

ANSWER: In accordance with our franchise agreement, FPL would have ownership and maintenance of the system. The expected lifetime of a system like this is 30 years. It would be up to FPL to update and replace the system at that time or from time to time as necessary.

QUESTION: How does the power get connected to my house?

ANSWER: We plan to include bringing the power, cable and phone lines to the side of your home and make the connections. All expenses would be included in the town's plan and funding.

QUESTION: How will we connect the condominiums, apartments and commercial buildings?

ANSWER: The main power supply will be brought to the building and connected to their facilities where FPL has provided the service wires. For buildings with customer owner service wires, the plan and funding will take care of connecting the customer's service wires to the new underground system.

QUESTION: How long will this project take to complete?

ANSWER: Our engineers, Brannon & Gillespie, tell us that it would take about 3-4 years. (see yearly phases on next page)

- Year 1: Planning the project – Town wide survey is completed, FPL designs the new system, we bid out the construction and finalize the funding.
- Year 2: Move the electric lines underground. This would be the year of construction while we bury the conduit and attach the electric to your homes. We would be on the new FPL underground system at the end of this year.
- Years 3-4: Get the cable lines buried. We hear that AT&T and Comcast are much slower in doing their part but they get there eventually. The poles will be removed after all three services are moved underground.

QUESTION: OK, so how much is this going to cost?

ANSWER: Brannon & Gillespie, our engineers, have produced a detailed feasibility study for the town. This 18-page, easy to read study, is available on the town’s website if you would like to read it. This includes a base cost estimate of \$4.3 million dollars plus \$871,807 in contingency and is broken down as follows:

Construction Costs	\$3,901,442
Ancillary Costs *	<u>\$467,595</u>
Subtotal	\$4,368,837
Contingency	<u>\$871,807</u>
Not To Exceed:	\$5,240,844

*Survey, Legal, Engineering, Management, Landscape restoration, etc.

QUESTION: Is FPL contributing anything?

ANSWER: Yes, the expense estimate above includes a 25% credit and additional smaller credits towards the cost of the project. FPL also provides a credit equal to the estimated cost to install a new overhead system. FPL typically ends up paying around 40% of the cost to underground their facilities. Because of these credits, it will never be cheaper to do this project than right now, before FPL invests in hardening our overhead system.

QUESTION: How will the Town pay the \$4.3 – \$5.2 million?

ANSWER: The specifics are still open for discussion by the residents and Commission. But we do have a proposal for consideration. We would take a 10-15 year bank loan or general obligation bond. Interest rates are still low and we have been quoted a rate of 3-3.5%. For a 15 year loan, this would translate to approximately a \$360,000 - \$450,000 annual obligation to the town depending on the final interest rate and the project cost.

QUESTION: How would we pay back the loan?

ANSWER: The proposal is for the Town to build the loan payments into our operating budget and fund it through a combination of the following:

- 1) a utility consumption tax
- 2) cost savings elsewhere

3) a partial assessment, and/or

4) a slightly higher millage rate. Millage is your town property tax rate, currently 6.35 for each \$1,000 of assessed value. Raising our millage from 6.35 to 7.35 would give us an additional half million dollars/year.

Any use of property tax millage revenues to guarantee loan repayment would require a referendum vote.

QUESTION: What is a utility consumption tax?

ANSWER: Many towns use this as a way to fund capital projects like this one. It is a percentage added to your electric, water and/or gas bill. So if the utility consumption tax rate was 10% (the maximum allowed by law) and your water bill was \$100, your total bill would be \$110 -- \$100 to the water company and \$10 to the town.

A 6% utility tax is currently in place to be used to fund Town infrastructure improvements such as this one, road resurfacing, etc. The first 250 kwh on your monthly electric bill is currently not included in the calculation and therefore is not taxed.

QUESTION: What are the benefits to using a utility consumption tax?

ANSWER: Since we are upgrading our electric, cable and phone service, having a tax on its usage seems appropriate. The amount you pay would reflect how much you use the system. If you are a snowbird and only here a few months each year, you would likely pay less than a full year resident. The other benefit is that everyone would pay including commercial properties, renters and time shares based on their use of the system.

QUESTION: Why wouldn't we pay back the loan through an assessment the way we did with the sanitary sewer project?

ANSWER: The Commission may decide to use an assessment for part or full payment of the loan. The Commission is committed to finding the fairest method to finance re-payment of the loan. Using an assessment is complicated by a number of factors. For instance, how do we balance the payments between houses, condominiums and commercial properties fairly? How do we consider the properties that already have put their wires underground as mandated by our code? The Commission would have a number of resident workshops before deciding on using an assessment or a particular assessment formula.

QUESTION: Are there grants or any state funding for these types of projects?

ANSWER: We will investigate these options as part of our funding discussions. Initial investigations have not uncovered any such funding support but we will do a more thorough search at the appropriate time.

QUESTION: So what's next?

ANSWER: If you, the property owners, vote now to approve to move ahead with the project planning, the next steps are:

1) We will get FPL started on the design and implementation plan.

- 2) We would officially hire Brannon & Gillespie as supervising engineers through the planning and execution of the project.
- 3) We would start serious investigation of financing options and issue an RFP (Request for Proposal) to local banks for the loan or bond.
- 4) If necessary, we would schedule a voter referendum on using millage property taxes to guarantee loan payment.
- 5) We will come back to you in 6-8 months with all of these details.

QUESTION: How will you keep us informed?

ANSWER: We will have a full communications plan in place including email updates, town hall meetings, dedicated web page and written updates as appropriate. We will establish methods for residents to bring up issues and questions for speedy resolution. We will all be in this together and so we want your ideas and assistance to make the project go as smoothly as possible.

**Please weigh the issues and benefits carefully
as you decide how you will vote on this very important question.**