



**AGENDA**  
**CITY OF LAKE WORTH BEACH**  
**ELECTRIC UTILITY CITY COMMISSION MEETING**  
**CITY HALL COMMISSION CHAMBER**  
**TUESDAY, NOVEMBER 30, 2021 - 6:00 PM**

**ROLL CALL:**

**PLEDGE OF ALLEGIANCE:** led by Commissioner Kimberly Stokes

**AGENDA - Additions / Deletions / Reordering:**

**PRESENTATIONS:** (there is no public comment on Presentation items)

- A. [Community Solar Presentation by Katie Chiles Ottenweller](#)
- B. [An Industry Perspective on Community Solar presented by Brion Fitzgerald and Eric Misbach of NexAmp](#)

**PUBLIC PARTICIPATION OF NON-AGENDAED ITEMS AND CONSENT AGENDA:**

**APPROVAL OF MINUTES:**

- A. [October 26, 2021](#)

**UNFINISHED BUSINESS:**

- A. [Change in the Convenience Fee model to include all customer payments made using the Paymentus Payment Portal](#)
- B. [Establishing new Electric Utility Rates and Charges to be Effective on either January 1, 2022 or April 1, 2022](#)

**NEW BUSINESS:**

- A. [Eighth Amendment to the Professional Services Agreement with Vantage Services Consulting LLC](#)
- B. [Task Order No. 10 with E.C. Fennell, PA., for Distribution System Planning services for the 6th Avenue Substation Circuits and Southeast Quadrant of the City's Electrical Service Area](#)
- C. [Agreement for Call Center Support Services with ENCO Utility Services, LLC](#)
- D. [Second Amendment to Agreement with G&W Electric Company for the purchase of 38kV Reclosers](#)
- E. [Second Amendment to Agreement with ABB Inc. for the purchase of magnetically actuated 38kV vacuum circuit breakers](#)
- F. [Agreement with Trench Limited for the purchase of 138kV Coupling Capacitor Voltage Transformers](#)

## **ADJOURNMENT:**

The City Commission has adopted Rules of Decorum for Citizen Participation (See Resolution No. 25-2021). The Rules of Decorum are posted within the City Hall Chambers, City Hall Conference Room, posted online at: <https://lakeworthbeachfl.gov/government/virtual-meetings/>, and available through the City Clerk's office. Compliance with the Rules of Decorum is expected and appreciated.

If a person decides to appeal any decision made by the board, agency or commission with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. (F.S. 286.0105)

# Community Solar

**Katie Chiles Ottenweller**  
**Southeast Director**  
[katie@votesolar.org](mailto:katie@votesolar.org)

**November 2021**



**VOTE SOLAR**

# Energy

U.S. Utility Solar PPA Prices versus Average Natural Gas Prices, ¢/MWh



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## Levelized Cost of Energy Comparison—Unsubsidized Analysis

Selected renewable energy generation technologies are cost-competitive with conventional generation technologies under certain circumstances

Renewable Energy

Conventional



Source: Lazard

# Americans Want Solar. **Overwhelmingly.**



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- » **89%** of Americans favor expanding solar as an energy source  
*(2018) [Pew Research Center](#)*
- » Strong bipartisan support for increased use of solar
- » **71%** of Americans support increasing reliance on renewable energy  
*(2018) [Pew Research Center](#)*
- » Interest in community solar soars from **14% to 47%** when people learn about it  
*(2016) [SEPA Report](#)*



VOTE SOLAR

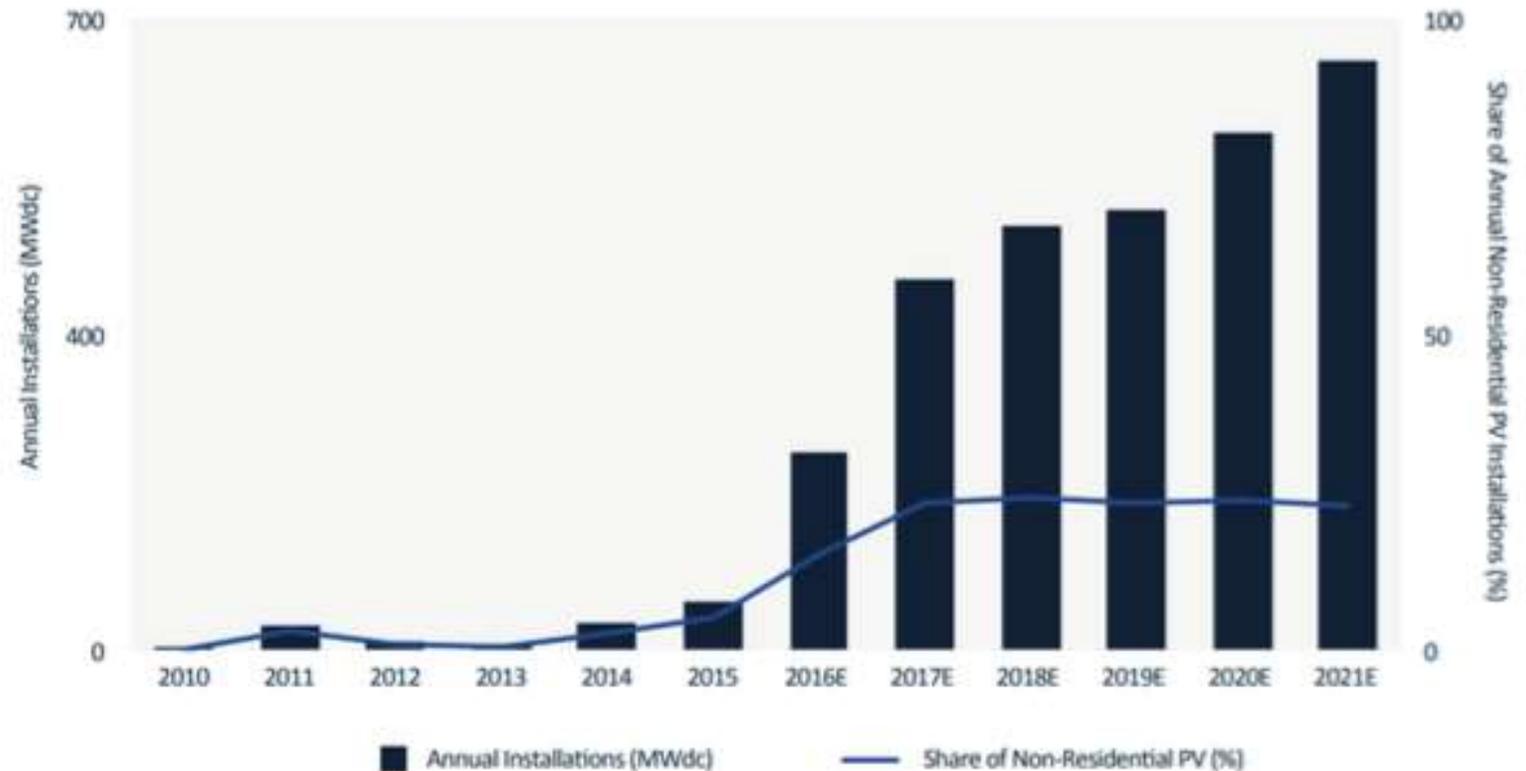
# U.S. Community Solar Nears 1 GW of Total Capacity Operating Nationwide

## Cumulative U.S. Community Solar Installed Capacity

U.S. community solar is growing at a quicker pace than the overall U.S. solar deployments

Driven in large part by policy commitments in Minnesota and Massachusetts, new deployments of community solar have grown at a rapid pace, achieving a five-year compound annual growth rate of 53% (vs. 26% for all solar).

Still, community solar represents less than 2% of all operating U.S. solar to date. As we explore further, most barriers to community solar stem from program design and market maturity rather than the inherent model.



Source: GTM Research Wood Mackenzie



VOTE SOLAR

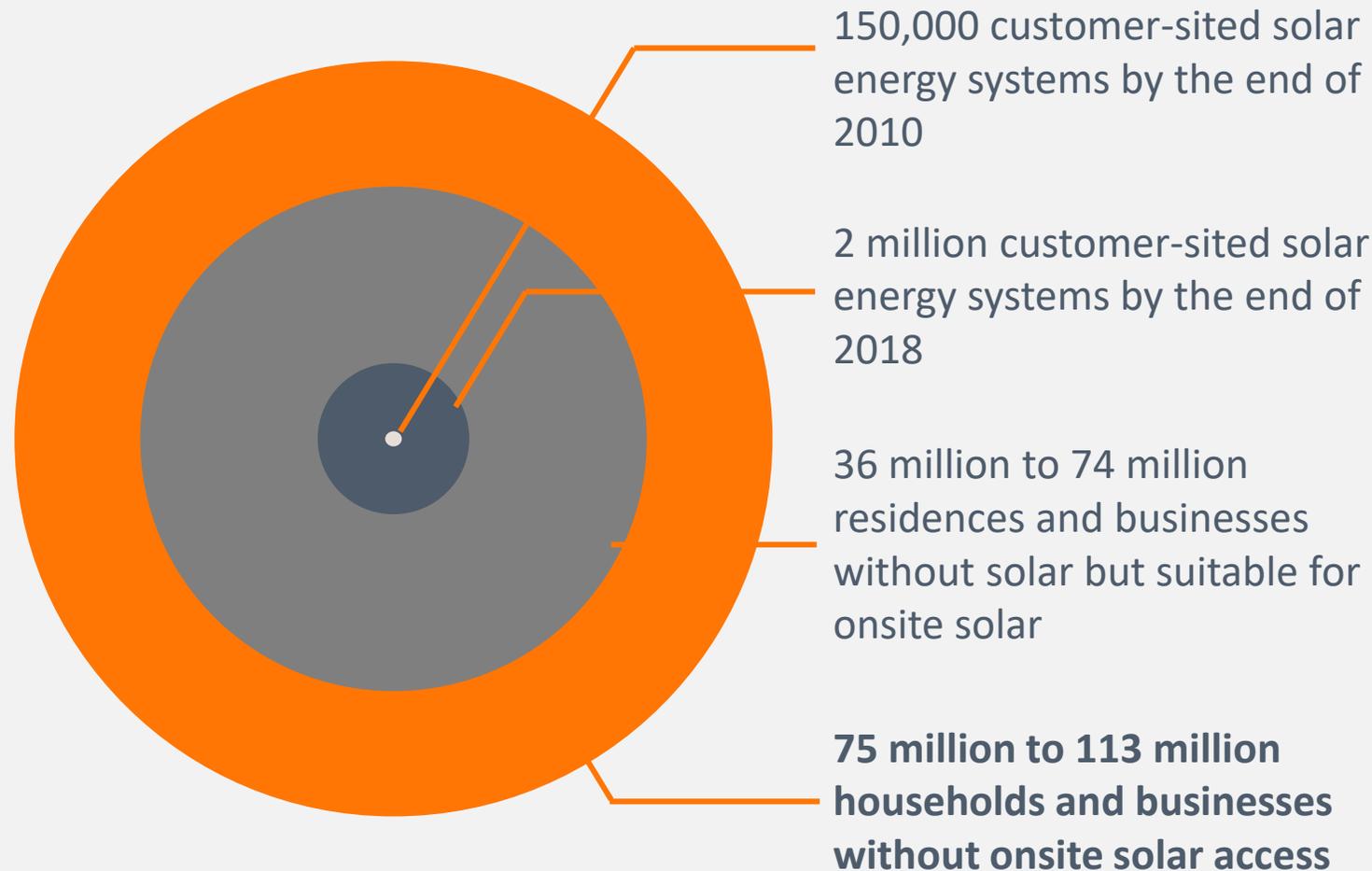
# Ownership Options

- » **Third-party owned:** A developer owns a project and allows participation on a voluntary basis. Third-party owned projects are typically only allowed in states that have created a statewide community solar program.
- » **Utility-owned:** A utility owns a community solar project and allows participation on a voluntary basis. Utilities are able to create their own community solar program on a voluntary basis, or can be required to do-so through a statewide community solar program.
- » **Community-owned:** In a community-owned solar projects, individuals, nonprofits, and other community-based organizations can come together to own a community-solar facility.



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# But Access to On-Site Solar is Limited





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# The Solution: **Community Solar**

**What is community solar?** Community solar refers to local solar arrays shared by individual community members, who receive credits on their electricity bills for their portion of the power produced.





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# Community Solar 101





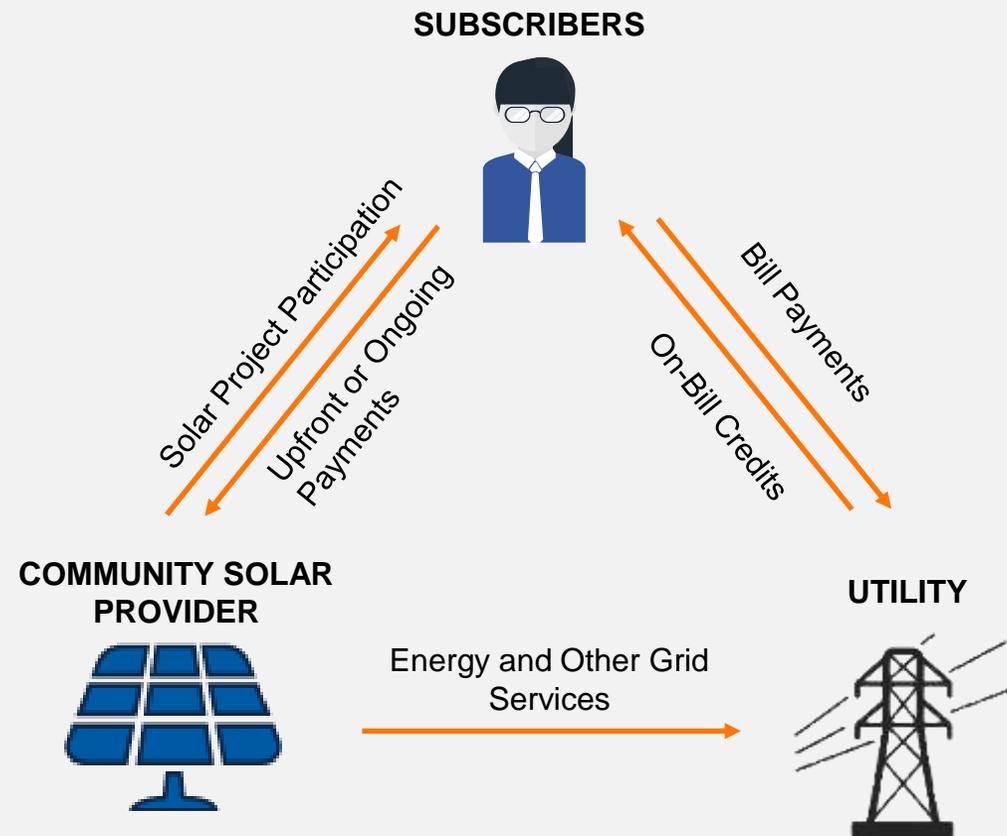
VOTE SOLAR

# Defining Community Solar

Over the years, many projects have been labeled community solar, but we define community solar as a solar project with multiple subscribers that receive on bill benefits directly attributable to the community solar project.

- Subscribers receive a credit on their electric bill for their share in a community solar
- Subscribers must be tied to a specific solar project

## The Typical Community Solar Model



# Community Solar Guiding Principles



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- » Develop new solar assets
- » Expand consumer access
- » Offer tangible economic benefits
- » Put consumers first
- » Promote fair market competition
- » Complement existing programs





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# How do community solar customers pay for their clean energy?

Participants can subscribe to a portion of a local community solar facility and get a share of the electricity that system produces. There are generally two ways to sign up:

1. **Upfront per-panel payment:** This model allows participants to pay a one-time fee for panels that make up part of a larger solar project. In exchange, participants receive all of the electricity produced by their panels (or share) and see that as a credit on their normal electricity bill.
2. **Ongoing “pay-as-you-go” subscription payment:** This model eliminates the upfront cost to going solar. It allows individuals to pay a lower price for the electricity they receive from a community solar facility. The end result is a percent-reduction in a customer's monthly electricity expenditures.

The “pay as you go” subscription option is becoming the dominant model, and as community solar continues to scale, the product offerings are becoming more and more user friendly -- with the goal of becoming as easy as ordering a product on Amazon, or purchasing Netflix or Direct TV.



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# Community Solar Subscribers Value a Breadth of Financial and Non-Financial Benefits

Average Score to “Rate the Importance of the Following Attributes to You / Customer Constituencies You Work With”—All Subscriber Segments



## From a survey of over two dozen community solar operators and subscriber organizations, we find that: Community solar economics are important...

- » Subscribers overwhelmingly chose community solar due to financial options and benefits:
  - > Over 60% of responses ranked “tangible economic savings” as the most important factor of a community solar subscription
  - > The second and third most important factors were, respectively, a predictable cost of electricity and compelling finance options (e.g., zero-down leases and pay-as-you-go models)

## ...but non-financial benefits need to be included

- > Simplicity is the highest rated non-financial benefit identified, referencing an easy-to-subscribe and intuitive process to procure solar energy
- > Subscribers also care about *who* is administering the program, meaning trust is important. But that can mean local organizations, private developers or a local utility, depending on the party.
- > While subscribers may not universally value economic co-benefits highly (e.g., workforce development), other stakeholders, such as community leaders, policymakers and regulators, will.

Source: GTM Research Wood Mackenzie



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# Why is Community Solar a Preferred Option?



A homeowner may be restricted from installing solar by their homeowners association



The roof may be too shaded or will need re-roofing in the next few years



Some commercial buildings have equipment on the roof, obstructing an installation



The customer is not eligible for standard financing solutions



Renters may be prohibited from installing solar on the property



Drives private investment into a state



Creates local, well-paying solar jobs



Creates new local property tax revenues



The size, type, or orientation of the roof may be improper for on-site solar



A homeowner or business is concerned about maintaining their rooftop system



A homeowner is planning to move in the near to mid-future



An affordable housing property owner cannot provide on-site solar energy to multiple individually-metered tenants



Multi-tenant dwellings or businesses may not own their rooftop



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# Why Choose Community Solar?

## Customer Benefits

- » **Equal Access:** Gives ALL consumers equal access to solar energy, regardless of housing type or income level.
- » **Tangible Economic Savings:** Customers should save money on their electric utility bill, and receive stable energy bills and predictable energy prices
- » **Hassle free clean energy:** Customers can sign up to participate in a community solar project without having to worry about on-site contractors, permits, or maintenance.
- » **Flexibility:** Community solar allows customers to move within the utility territory and still retain their participation in the community solar project, making it an easy, portable energy solution.



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# Why Choose Community Solar?

## Socio-Economic Benefits

- » **New investments:** Economic development strategy that spurs new development and impacts local economies.
- » **Job creation:** Local workers gain new employment opportunities and in some cases, job training.
- » **Economies of scale:** Larger projects provide a lower cost per watt than other types of solar projects.
- » **Energy burden:** Low-income families, households of color, multifamily and renting households spend a much larger percentage of their income on energy bills than the average family.
- » **Community engagement and ownership:** Community involvement, ownership and participation in local solar

# Why Choose Community Solar?

## Grid and Environmental Benefits

- » **Environmental goals:** Community solar allows multiple people to benefit from clean energy, helping to expedite the transition away from fossil fuel.
- » **Local and Resilient Grid Resource:** community solar is clean and reliable resource located directly within communities, with opportunities to pair with community storage solutions

# Community Solar: BARC Electric Cooperative



**16,000,000 kWhs**  
**180 Homes / 25 Businesses**  
**11,000 Metric Tons of CO2 Avoided**



## **BARC Electric Cooperative Community Solar**

**\$1.3 million project**

**550 kilowatts**

**3 acres**

**20 Years**

[www.barcelectric.com](http://www.barcelectric.com)

Subscribe up to 25% of your energy needs

Fix a quarter of your electric bill for the next 20 years for just \$1 per block more than you pay today. For the average BARC customer, that is just \$5 more per month.

By subscribing you are also supporting future growth. A portion of the revenue from every subscription will be set aside for project expansion.

# Resources



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- » **Interstate Renewable Energy Council Guiding Principles:**
  - > <http://www.irecusa.org/publications/guiding-principles-for-shared-renewable-energy-programs/>
- » **Coalition for Community Solar Access Resource and Policy Decision Matrix:**
  - > <http://www.communitysolaraccess.org/wp-content/uploads/2016/03/CCSA-Policy-Decision-Matrix-Final-11-15-2016.pdf>
- » **Low Income Solar Policy Guide, Community Solar**
  - > <http://www.lowincomesolar.org/practices/community-solar/>
- » **Shared Renewables HQ**
  - > <http://www.sharedrenewables.org/>

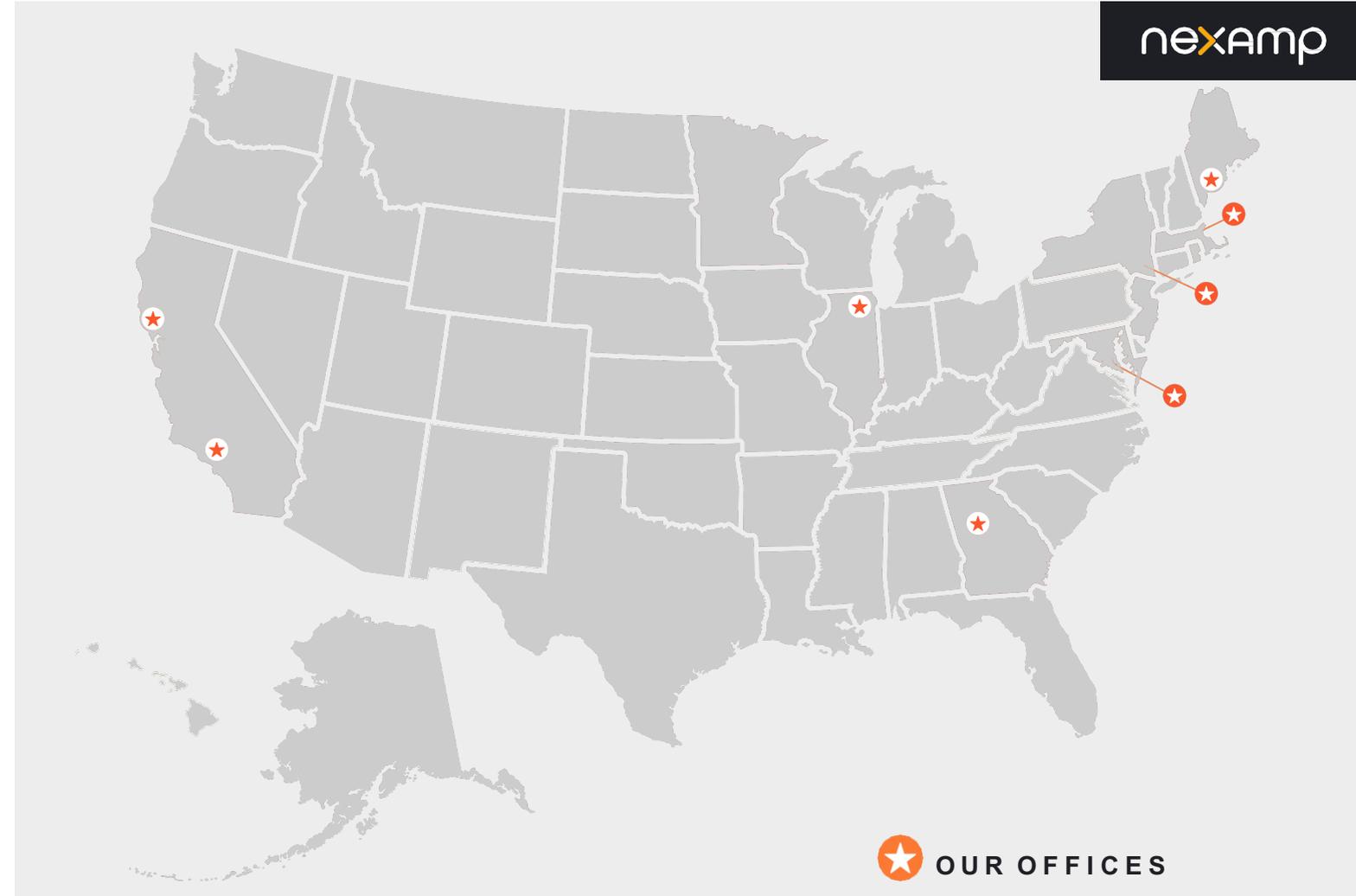
Revolutionizing the  
future of clean energy.

We're making decarbonization easy  
and accessible for generations to come.



- GET TO KNOW US 03
- OUR MISSION 04
- PROCCSS 05
- COMMUNITY SOLAR 07
- BILLING 11
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## | Get To Know Us

**Nexamp is harnessing positive power and funneling it back into communities across the country, maximizing our social and environmental impact daily.**

- National company headquartered in Boston
- Vertically integrated solar energy and storage company
- Develop, manage, and maintain community solar farms nationally
- Lead with inclusivity and equity



OUR  
MISSION

## Experienced Problem Solvers

Will Thomas and Dan Leary returned from active duty in the Middle East with a plan to alleviate America's dependency on foreign resources.

- Founded Nexamp in 2007, with now over 300 employees
- Provide a range of residential and commercial energy solutions
- Ensure equity, accessibility, and transparency through vertically integrated model

# The Nexamp Way

We are a vertically integrated organization that manages each phase of the project to ensure total awareness and understanding.

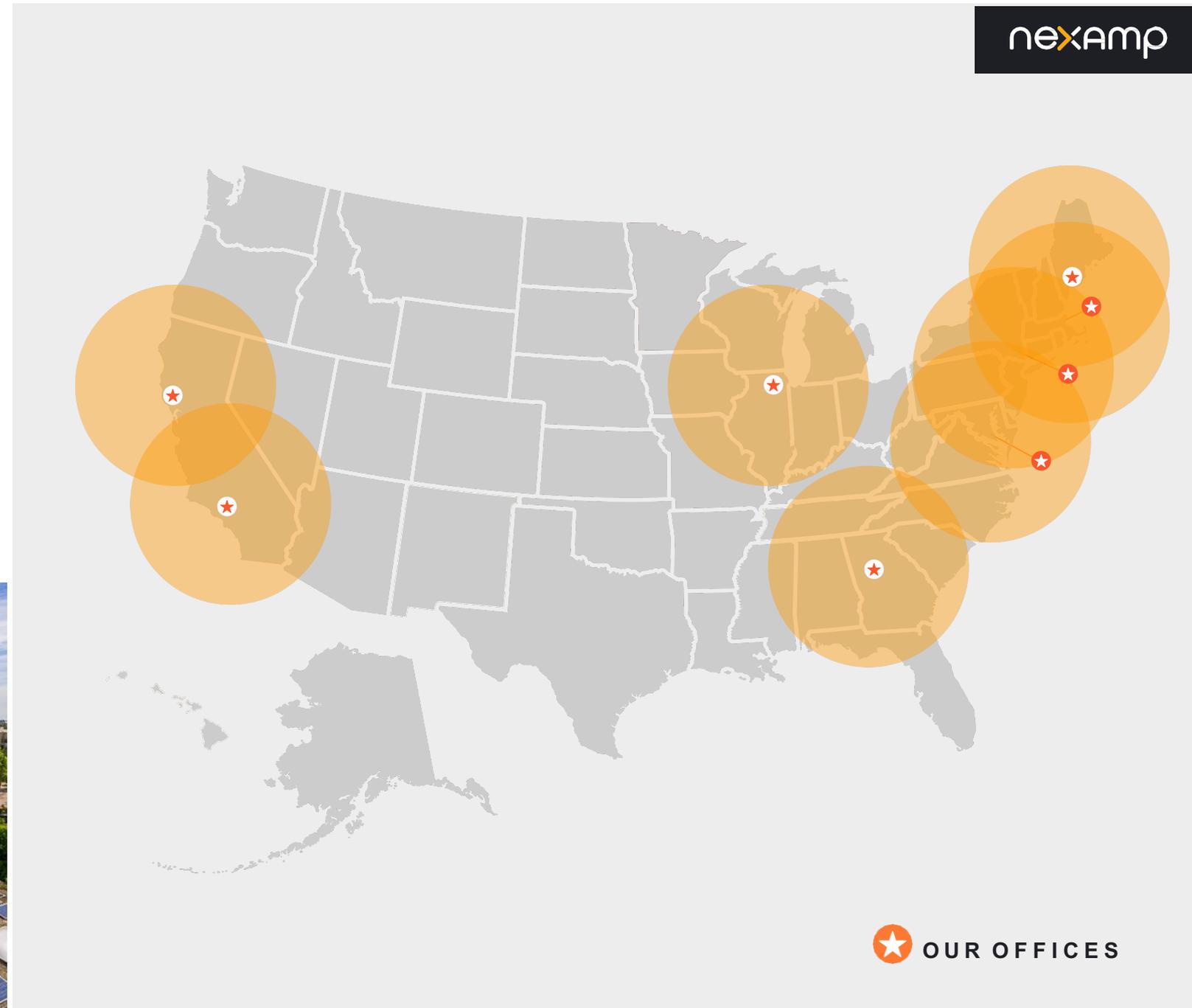
- Operations
- Maintenance
- Finance
- Distribution
- Storage



# Dedicated Developers

We take pride in catering to everyone. Whether you'd like to turn your rooftop into revenue or land into a reliable source of power, Nexamp makes it easy.

- Individual landowners
- Renters
- Municipalities
- Commercial buildings



# Community Solar Farms

We're lowering barriers and unlocking clean energy for communities across the country. We believe that access to clean energy is a right, not a privilege, and are committed to making solar power flexible and accessible to all.

- ✓ No rooftop panels
- ✓ No upfront cost
- ✓ No credit checks
- ✓ No long-term contracts
- ✓ No need to own your home
- ✓ Savings for everyone



## Building trust, one review at a time.

Thousands of Nexamp community solar customers are supporting solar in their local communities. We make it easy for anyone to tap into clean energy, and we want to share that opportunity with communities and businesses across the country, no matter their background.

Nexamp believes that everyone should have access to clean energy.

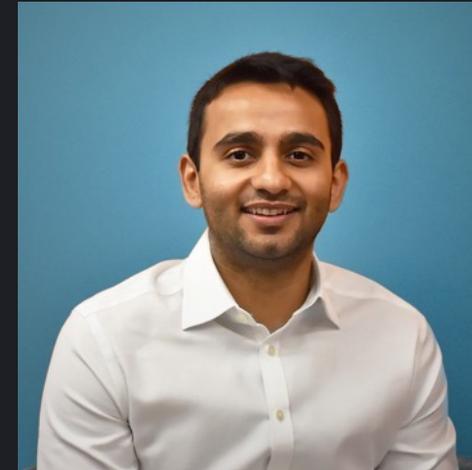
“

Hear what our customers have to say about us.



ALDO & ELAINE

*“The sign up was easy.  
The flexibility is fantastic.”*



RYAN - GIRI HOTELS

*“We really love working with Nexamp because [it] really is a win-win scenario and that's what we look for in a company..”*



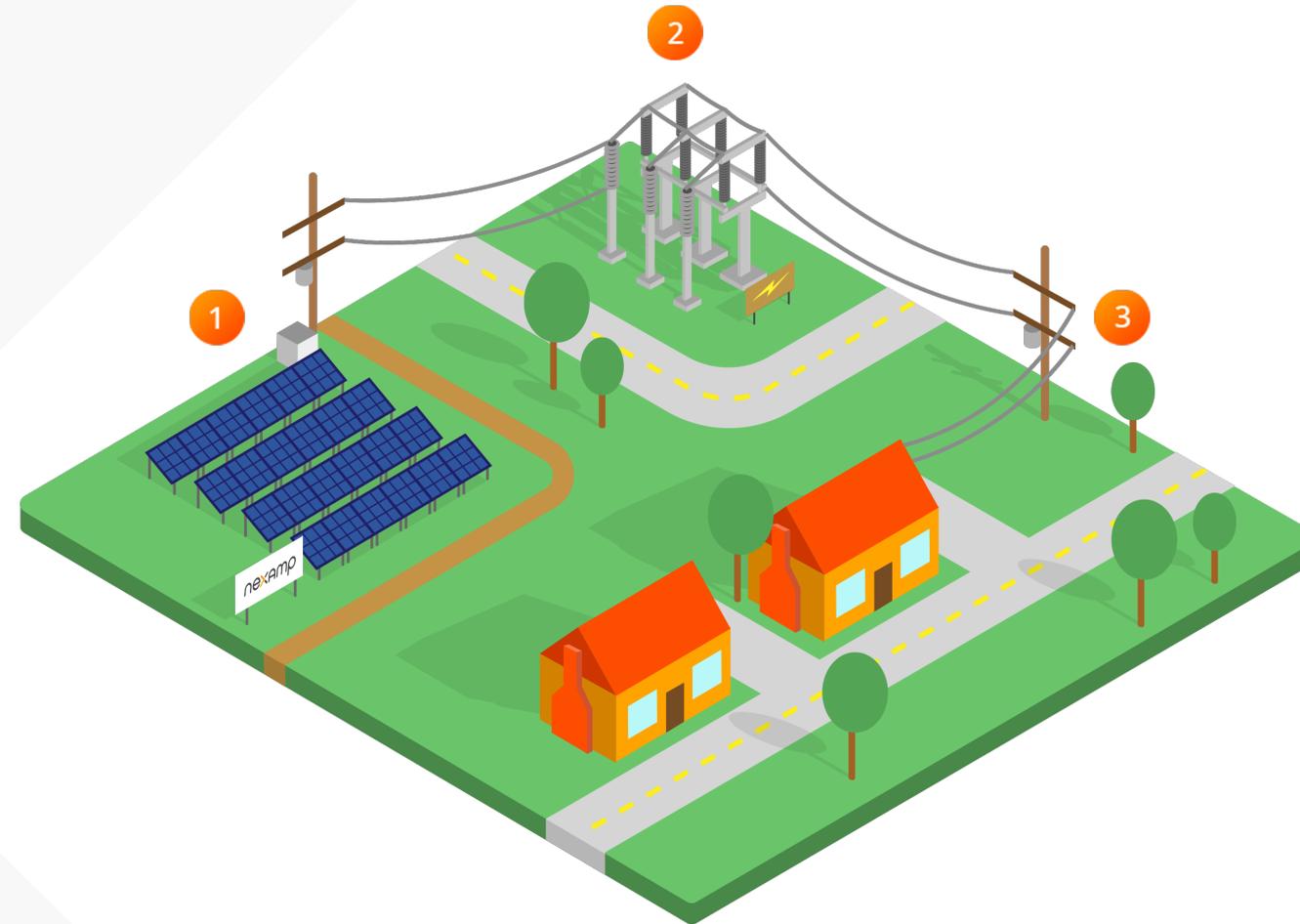
DAN & MARILYN

*“There's no maintenance for us. We don't have to worry about anything.”*



## How it Works

We get solar from 93 million miles away. If you're eligible, we make it easy to get it from a solar farm near you.



1 You and your neighbors subscribe to a share of one of our solar farms in your state.

2 The solar farm feeds clean power into your community's electric grid while earning energy credits for you.

3 You purchase these energy credits at a discount, reducing your electricity costs,



## That's it. Easy, right?

No catch. No hidden fees. Just a smart way to reduce your electric bills and do right by your home and community.

# Your Power Bill + Nexamp Bill

Your current bill

<b>Delivery Charges</b>	
Customer Charge (Flat Fee).....	\$8
Distribution & Various Charges (per kWh).....	\$60
<b>Supply Charges</b>	
Standard Service & Transmission Charges (per kWh).....	\$40
<b>Total Electric Charges</b> .....	<b>\$108</b>

Your utility bill with Nexamp

<b>Delivery Charges</b>	
Customer Charge (Flat Fee).....	\$8
Distribution & Various Charges (per kWh).....	\$60
<b>Supply Charges</b>	
Standard Service & Transmission Charges (per kWh).....	\$40
<b>Solar Credits</b> .....	<b>-\$100</b>
<b>Total Electric Charges</b> .....	<b>\$8</b>

+

Your new Nexamp bill

<b>Solar Credits</b> .....	<b>\$100</b>
10% Discount.....	<b>-\$10</b>
<b>Total Due</b> .....	<b>\$90</b>
<b>SAVE 10%!</b>	

# Sample Nexamp Invoice

Nexamp, Inc.  
101 Summer Street  
2nd Floor  
Boston, MA 02110

## Invoice

#NBS100  
08/16/2017

Current Invoice Total: \$67.02	Previous Account Balance: \$0.00	Total Account Balance: \$67.02
--------------------------------	----------------------------------	--------------------------------

**Bill To:**  
Jane Doe  
123 Street Rd  
Salisbury, MD 21804

**TOTAL DUE**  
\$67.02

**DUE DATE**  
09/16/2017

Utility	Production Period	Utility Account Info	Solar Energy Credit	Discount on Solar Credits	Amount Due
Delmarva Power	6/5/2017 to 7/5/2017	04033-12345 44 Address Lane Salisbury, MD	\$74.47	10%	\$67.02

**Current Invoice Total**     **\$67.02**

**\$305**  
Value of Credits Purchased to Date

**10%**  
Savings Rate

**\$295**  
Savings to Date

**10,000 lb**  
CO<sub>2</sub> Emissions Saved

**155**  
Equivalent Trees Planted

**PAY ONLINE:** visit [www.nexamp.com/login](http://www.nexamp.com/login)     **MAIL A CHECK:** 101 Summer St 2nd Floor, Boston MA 02110

**QUESTIONS ABOUT YOUR BILL?** contact [ar@nexamp.com](mailto:ar@nexamp.com)

**FAQs**

**I have no credits on my utility bill. What do I do?**  
If there are credits missing from your utility bill, your utility bill was likely generated before the utility was able to transfer the credits. Customers have two options: 1) check your online utility account to confirm that the credits have been transferred to your account and applied to your balance or 2) wait for your next utility bill to confirm the transfer of credits. Please feel free to hold off on paying your Nexamp invoice until you have confirmed the transfer of credits to your account - we do not want our customers paying for credits they have not seen!

**Does this change my relationship with the utility?**  
Not at all; the utility delivers electricity to your home as usual, and will continue to service all equipment and resolve all power outages. Nexamp will handle all communication with your utility regarding your enrollment in community solar. If there are any remaining charges after the Nexamp credits are applied to your utility bill, you are responsible for paying that amount to the utility.

**When is it important to contact Nexamp?**  
If at any point you intend to move or change the details of your utility account, we need to hear from you as soon as possible! We have minimal visibility into your utility account, and therefore we rely on the customer to inform us of any impending changes that might disrupt your crediting service.

# Community Approved

We're a long-term partner that's focused on making your community stronger.

- Solar Power World **Top Solar Contractors 9 Years Running**
- Transparent ally in every phase
- Pursuing opportunities in low-and-moderate communities
- Friendly with local utilities



Land is acquired and assessed



Construction of solar farm begins



Our engineers plan for the optimal solar farm design



Constant updates given to customers during construction



Project is connected to the grid



Customers begin to see benefits, with added environmental benefits such as our solar grazing program

# Asset Management



We provide resiliency to the grid and can optimize the performance of your solar facilities. Our goal is to increase efficiency and cut costs for commercial customers.

- Involved in every phase
- Provide energy insights
- Offering a long-term partnership

## Building trust, one project at a time.

We have been meeting the demand for more clean energy for close to two decades, achieving growth across all business units.

“

Hear what our customers have to say about us.



OFFTAKER

*“Community solar at this scale allows Walmart to play a direct role in spurring economic development in the communities we serve and reinforces our goal to spark collective climate action.”*

*Mark Vanderhelm*

*Vice President, Energy and Facilities Management at Walmart”*

# Corporate Energy Solutions

From local governments and colleges to the world's largest retailers, Nexamp makes the process of reducing energy costs and achieving sustainability objectives easy for commercial users of all sizes

“

*...The opportunity to participate in the Nexamp community solar program fits perfectly with our long-term sustainability goals as an organization. By offsetting more of our energy consumption with clean energy, we are expanding our Green Initiative and making even more of an impact.”*

*-Gary Kuchyt, Manager of Energy & Sustainability, Big Y*





## The Team

Every day we strive to be fair and inclusive, embracing diversity at every turn. It's our mission to be the change we wish to see in the greater renewable energy space.

- 200% employee growth in the last 3 years
- 80% diversity at C-Suite level
- Named Boston Business Journal Best Places to Work
- Trust Pilot Excellent, BBB A+ rating
- Solar Power World: Top Solar Developer

# Achieving growth across all business units.

Community Solar  
a growing customer base of:

# 40,000+



# 12.5%

average annual savings  
per community solar customer

# 1,700+

acres of solar farms



# 350

gigawatt hours

being produced on all  
Nexamp farms

OUR  
COMMITMENTS

## Our commitment to our environment and introducing sustainable practices has no boundaries.

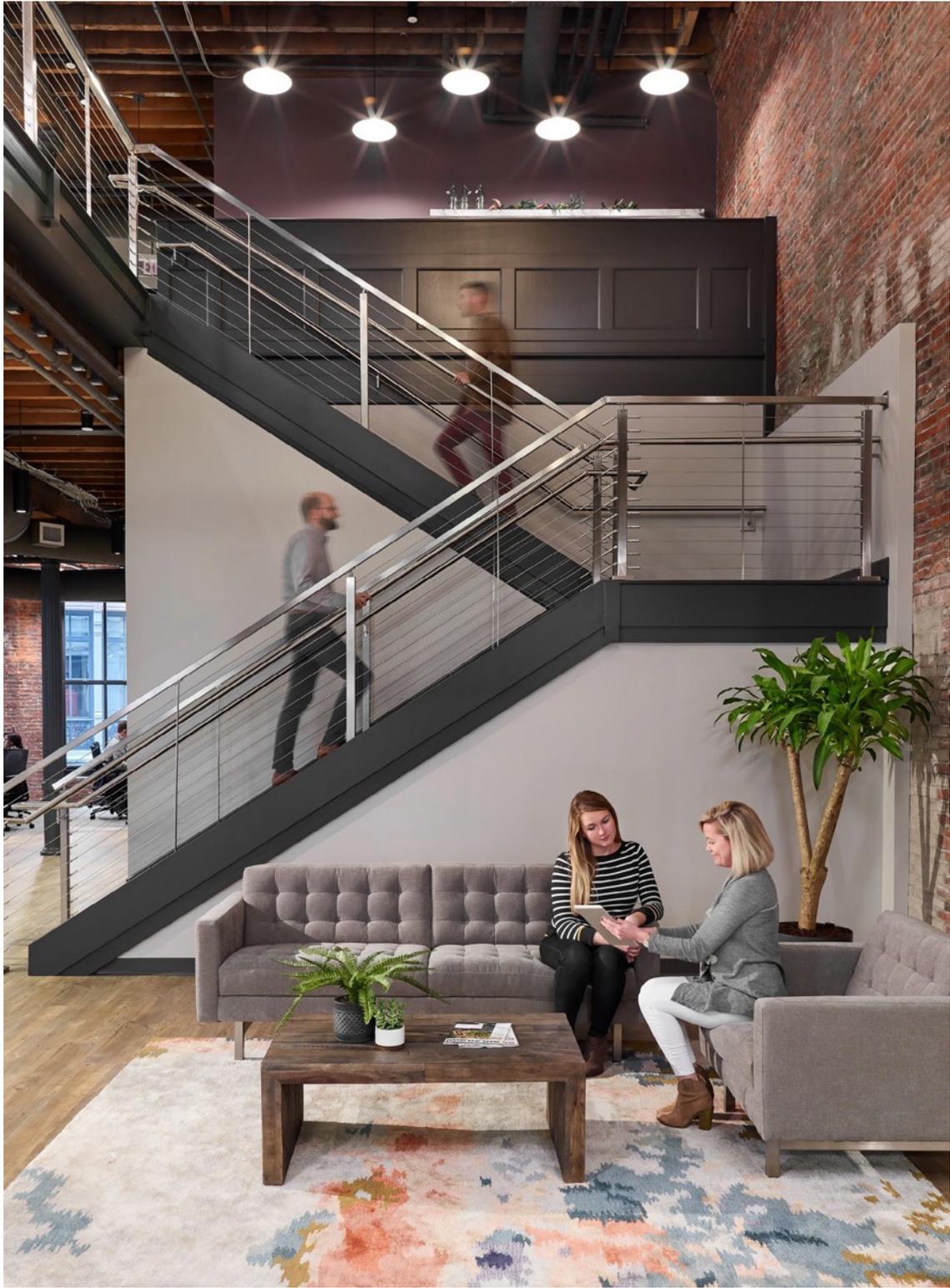
### We are committed to:

- Offering sheep grazing on 28 of our projects to progressively improve the land by fostering a lower emissions impact on clean energy maintenance.
- Featuring 10+ sites that are National Wildlife Habitats
- Being carbon neutral by 2022, with our supply chain carbon neutral by 2030.
- Recycling all solar panels as they are decommissioned by 2022.
- Transitioning our entire fleet to all electric by 2025.
- Piloting programs to deliver zero construction waste to landfills in the near future.
- Delivering on sustainable land use while following local, state and federal requirements.
- Ensuring safe conditions, ethical treatment and fair labor practices throughout our business and global supply chain.
- Creating partnership opportunities for education and technical experience in our host communities.
- Native pollinator vegetation on select sites.









nexAmp

**MINUTES  
CITY OF LAKE WORTH BEACH  
ELECTRIC UTILITY CITY COMMISSION MEETING  
CITY HALL COMMISSION CHAMBER  
TUESDAY, OCTOBER 26, 2021 - 6:00 PM**

The meeting was called to order by Mayor Resch on the above date at 6:10 PM in the City Commission Chamber located at City Hall, 7 North Dixie Highway, Lake Worth Beach, Florida.

**ROLL CALL:** (0:09) Present were Mayor Betty Resch; Vice Mayor Herman Robinson and Commissioners Christopher McVoy and Kimberly Stokes. Also present were Interim City Manager Juan Ruiz, City Attorney Christy L. Goddeau and City Clerk Melissa Ann Coyne. Commissioner Sarah Malega was absent.

**PLEDGE OF ALLEGIANCE:** (0:34) led by Commissioner Kimberly Stokes.

**AGENDA - Additions/Deletions/Reordering:** (0:54)

New Business D, First Amendment to Task Order No. 9 with E.C. Fennell, PA., for additional engineering design services for 6th Avenue Substation PB&Z Package, was added to the agenda. New Business A, Resolution No. 74-2021 – establishing the new Electric Utility Rates and Charges effective April 1, 2022 was deleted from the agenda.

**Action:** Motion made by Commissioner McVoy and seconded by Commissioner Stokes to approve the agenda as amended.

**Vote:** Voice vote showed: AYES: Mayor Resch, Vice Mayor Robinson and Commissioners McVoy and Stokes. NAYS: None. ABSENT: Commissioner Malega.

**PUBLIC PARTICIPATION OF NON-AGENDAED ITEMS AND CONSENT AGENDA:**

**APPROVAL OF MINUTES:** (19:42)

**Action:** Motion made by Vice Mayor Robinson and seconded by Commissioner Stokes to approve the following minutes:

A. September 28, 2021

**Vote:** Voice vote showed: AYES: Mayor Resch, Vice Mayor Robinson and Commissioners McVoy and Stokes. NAYS: None. ABSENT: Commissioner Malega.

**CONSENT AGENDA:** (public comment allowed during Public Participation of Non-Agendaed items)

There were no Consent Agenda items on the agenda.

**PUBLIC HEARINGS:**

There were no Public Hearings on the agenda.

**UNFINISHED BUSINESS:**

There were no Unfinished Business items on the agenda.

**NEW BUSINESS:**

- A. (deleted) Resolution No. 74-2021 – establishing the new Electric Utility Rates and Charges effective April 1, 2022 (2:21)

City Attorney Goddeau did not read the resolution.

RESOLUTION NO. 74-2021 OF THE CITY OF LAKE WORTH BEACH, FLORIDA, PROVIDING FOR RATES, FEES AND CHARGES, AND REGULATIONS FOR ALL ELECTRICITY SOLD BY THE CITY OF LAKE WORTH BEACH, FLORIDA FOR USE OF ELECTRIC LIGHT AND POWER SYSTEM; REPEALING ALL RESOLUTIONS IN CONFLICT HERewith; PROVIDING FOR SEVERABILITY; PROVIDING AN EFFECTIVE DATE

- B. (public comments were read, then the item was tabled) Resolution No. 75-2021 -- establishing an In Community Solar Program (35:30)

City Attorney Goddeau did not read the resolution.

RESOLUTION NO. 75-2021 OF THE CITY OF LAKE WORTH BEACH, FLORIDA, DIRECTING ITS MUNICIPALLY OWNED UTILITY TO IMPLEMENT AN “IN COMMUNITY SOLAR PROGRAM”; AND PROVIDING FOR AN EFFECTIVE DATE

**Action:** Consensus for Commissioner McVoy to bring a presentation on Community Solar Programs to the next Electric Utility Commission Meeting on November 30, 2021.

**Action:** Motion made by Commissioner Stokes and seconded by Vice Mayor Robinson to table Resolution No. 75-2021 -- establishing an In Community Solar Program to the next Electric Utility Commission Meeting on November 30, 2021.

**Vote:** Voice vote showed: AYES: Mayor Resch, Vice Mayor Robinson and Commissioner Stokes. NAYS: Commissioner McVoy. ABSENT: Commissioner Malega.

- C. Resolution No. 76-2021 -- requesting development of an energy conservation and energy efficiency program (41:33)

City Attorney Goddeau did not read the resolution.

RESOLUTION NO. 76-2021 OF THE CITY OF LAKE WORTH BEACH, FLORIDA, DIRECTING ITS ELECTRIC UTILITY ADVISORY BOARD TO DEVELOP AN ENERGY CONSERVATION PROGRAM FOR ITS ELECTRIC UTILITY; AND PROVIDING FOR AN EFFECTIVE DATE

**Action:** Motion made by Commissioner McVoy and seconded by Commissioner Stokes to approve

Resolution No. 76-2021 -- requesting development of an energy conservation and energy efficiency program.

**Vote:** Voice vote showed: AYES: Mayor Resch, Vice Mayor Robinson and Commissioners McVoy and Stokes. NAYS: None. ABSENT: Commissioner Malega.

D. (added) First Amendment to Task Order No. 9 with E.C. Fennell, PA., for additional engineering design services for 6th Avenue Substation PB&Z Package (1:14:17)

**Action:** Motion made by Commissioner McVoy and seconded by Vice Mayor Robinson to approve the First Amendment to Task Order No. 9 with E.C. Fennell, PA., for additional engineering design services for 6th Avenue Substation PB&Z Package.

**Vote:** Voice vote showed: AYES: Mayor Resch, Vice Mayor Robinson and Commissioners McVoy and Stokes. NAYS: None. ABSENT: Commissioner Malega.

**ADJOURNMENT:** (1:15:03)

**Action:** Motion made by Vice Mayor Robinson and seconded by Commissioner McVoy to adjourn the meeting at 7:25 PM.

**Vote:** Voice vote showed: AYES: Mayor Resch, Vice Mayor Robinson and Commissioners McVoy and Stokes. NAYS: None. ABSENT: Commissioner Malega.

\_\_\_\_\_  
Betty Resch, Mayor

ATTEST:

\_\_\_\_\_  
Melissa Ann Coyne, City Clerk

Minutes Approved: November 30, 2021

Item time stamps refer to the recording of the meeting which is available on YouTube.

# EXECUTIVE BRIEF

## ELECTRIC UTILITY MEETING

**AGENDA DATE:** November 30, 2021

**TITLE:**

Change in the Convenience Fee model to include all customer payments made using the Paymentus Payment Portal

**SUMMARY:**

On June 29th, 2021, Amendment #2 to the contract with Paymentus Corporation was approved by the City Commission in order to change the responsibility for payment of fees from an Absorbed Fee Model (under which fees are paid by the City) to a Convenience Fee Model (under which fees are paid by the customer). The staff report provided to the City Commission omitted listing all payment methods (types) that would incur a convenience fee and instead listed only credit and debit cards even though Amendment #2 to the contract did specify under Schedule "A" that all payment methods (types) would be affected.

**BACKGROUND AND JUSTIFICATION:**

The City's Utility Customer Service department utilizes Paymentus Corporation ("Paymentus") for processing of electronic bill payments for City utility services under a Master Services Agreement previously negotiated and dated September 4th, 2018. Services provided by the City and paid for in this manner by Customers include utility services such as electric, water, sewer, and incidental refuse charges.

On June 29th, 2021 Amendment #2 to the contract with Paymentus Corporation was approved changing the fee structure from an Absorbed Fee Model to a Convenience Fee Model (the "Amendment"). Under the previous Absorbed Fee model, the City absorbs the transaction fees incurred when City's utility customer pay their utility bills online using the Paymentus Online Payment Portal. Under the approved Amendment, a convenience fee of \$3.75 per \$500.00 transaction will be charged by Paymentus directly to the customer when making a payment using any of the payment methods found on the portal including but not limited to Credit Card, Debit Card, E-Check, PayPal, Amazon Pay, Venmo and all other future offerings introduced by the vendor. A Convenience Fee model is used by other local electric and gas utilities as well as Palm Beach County.

Customers still have options to pay their Lake Worth Beach utility bills without incurring the convenience fee such as: mailing a check; using night depository drop box for check or money orders; or by enrolling in City's ACH Auto Draft. In addition, customers who enroll in ACH Auto Draft and elect paperless billing are eligible to receive a one-time \$25.00 credit on their utility bill.

And customers desirous of paying with cash are still be able to do so at any CVS, 7-Eleven, Family Dollar, and soon Walmart retail locations nationwide for a fee of \$1.99 per \$1,000 transaction.

**MOTION:**

Move to approve/disapprove the change in the Convenience Fee model to include all customer payments made using the Paymentus Payment Portal.

**ATTACHMENT(S):**

Fiscal Impact Analysis - N/A

Payment Method Analysis

Payment Staff Report June 29,2021

Second Amendment

Master Service Agreement

Period Start: 2021-08-01  
 Period End: 2021-08-31

# Paymentus

Payment Method	# Count of Transactions	% of Count	\$ Amount of Transactions	% of Amount	Absorbed Fee Price	Absorbed Fee Charges
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CREDIT/DEBIT CARDS:						
Debit Card - VISA	7582	41%	\$1,653,036	36%	\$1.68	\$12,738
Credit Card - VISA	2960	16%	\$752,889	16%	\$1.68	\$4,973
Debit Card - MasterCard	1777	10%	\$371,024	8%	\$1.68	\$2,985
Credit Card - MasterCard	1153	6%	\$324,452	7%	\$1.68	\$1,937
<b>Sub-Total Credit/Debit Cards:</b>	<b>13,472</b>	<b>73%</b>	<b>\$3,101,401</b>	<b>67%</b>		<b>\$22,633</b>

E-Check (Electronic Checking/Savings):						
E-Check - Checking Account	4340	24%	\$1,406,099	30%	\$0.45	\$1,953
E-Check - Savings Account	46	0%	\$7,105	0%	\$0.45	\$21
<b>Sub-Total E-Check:</b>	<b>4,386</b>	<b>24%</b>	<b>\$1,413,204</b>	<b>30%</b>		<b>\$1,974</b>

Advanced Payment Methods:						
PayPal Credit	349	2%	\$90,497	2%	\$1.68	\$586
Credit Card - Discover	164	1%	\$29,571	1%	\$1.68	\$276
Amazon Pay	40	0%	\$10,153	0%	\$1.68	\$67
Venmo	20	0%	\$4,832	0%	\$1.68	\$34
PayPal Credit	20	0%	\$4,493	0%	\$1.68	\$34
<b>Sub-Total Advanced Payment Methods:</b>	<b>593</b>	<b>3%</b>	<b>\$139,547</b>	<b>3%</b>		<b>\$996</b>

<b>SUB-TOTAL:</b>	<b>18,451</b>	<b>100%</b>	<b>\$4,654,152</b>	<b>100%</b>		<b>\$25,603</b>
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Reward Credit Cards (1126**)			\$485,622	2.65 %		\$12,869
<b>SUB-TOTAL (including Reward Card Charges):</b>	<b>18,451</b>		<b>\$5,139,774</b>			<b>\$38,472</b>

Chargebacks / Returns	66		-\$28,490		\$5.95	\$393
<b>GRAND TOTAL INVOICE:</b>						<b>\$38,865</b>

**\*\*NOTE: 1126 Reward Cards are already included in the Credit Card Total Count above**

# EXECUTIVE BRIEF ELECTRIC UTILITY MEETING

**AGENDA DATE:** June 29, 2021

**TITLE:**

Payment of Credit and Debit Card Fees associated with customer payment of utility bills

**SUMMARY:**

Amendment #2 to contract with Paymentus Corporation to change responsibility for payment of credit card and debit card fees from an Absorbed Fee Model (under which fees are paid by the City) to a Convenience Fee Model (under which fees are paid by the customer).

**BACKGROUND AND JUSTIFICATION:**

The City's Utility Customer Service department utilizes Paymentus Corporation ("Paymentus") for processing of electronic bill payments for City utility services under a Master Services Agreement previously negotiated and dated September 4th, 2018. Services provided by the City and paid for in this manner by Customers include utility services such as electric, water, sewer, and incidental refuse charges.

The City is considering amending the current agreement with Paymentus to change from an Absorbed Fee Model to a Convenience Fee Model (the "Amendment"). Under the current Absorbed Fee model, the City absorbs the transaction fees incurred when City's utility customer pay their utility bills using a credit or debit card. Under the proposed Amendment, a nominal convenience fee of \$3.75 per \$500.00 transaction will be charged by Paymentus directly to the customer when paying by credit or debit card. By comparison, customer's paying with cash pay a convenience fee of \$1.99 per transaction. Under the proposed model the City will not collect the convenience fee, rather the fee will be collected directly by Paymentus from the customer at the time of the transaction and the full amount of the customer's payment towards their utility bill will be deposited into the City's bank account nightly.

The expense to the City under the current policy of absorbing credit card fees is increasing steadily as rewards cards grow in popularity. Currently the City is absorbing the credit and debit card fees for all utility bill payments at an estimated cost to the City of approximately \$456,000 for FY2021. These fees are subsequently allocated to the City's utility departments as an operating expense, thereby placing upward pressure on rates for all City utilities customers. After surveying other municipalities in the state of Florida, it was found that approximately 75% of the municipalities surveyed utilize a Convenience Fee model when customers choose to pay their utility bill with a credit or debit card, as do investor owned electric and natural gas utilities, Palm Beach County, and other Lake Worth Beach City departments for their respective services.

Under the proposed Convenience Fee model all credit and debit cards would be accepted. Under our current Absorbed fee model the City has restricted the use of credit cards to disallow certain card(s) which charge exorbitant transaction fees.

If the Amendment is approved City, Staff and Paymentus will coordinate efforts to implement the conversion to a Convenience Fee model. It is anticipated that the conversion will be effective for the new fiscal year beginning October 1, 2021.

**MOTION:**

Move to approve/disapprove payment of Credit and Debit Card Fees associated with customer payment of utility bills.

**ATTACHMENT(S):**

Fiscal Impact Analysis - N/A  
Amendment No.2

**AMENDMENT NO. 2**  
**TO MASTER SERVICES AGREEMENT EFFECTIVE SEPTEMBER 4, 2018**

This Amendment No. 2 (“Amendment No. 2”) amends the Master Services Agreement effective as of September 4, 2018 (“Effective Date”) which was modified by Amending Agreement 1 dated November 20, 2018 (collectively the “Agreement”) between City of Lake Worth Beach (“Client”) with a principal place of business located 7 North Dixie Highway, Lake Worth Beach, FL 33460 and Paymentus Corporation, a State of Delaware Corporation with a principal place of business at 13024 Ballantyne Corporate Parkway, Suite 400, Charlotte, North Carolina 28277 (“Paymentus”). Customer and Paymentus are also referred to as “Party” and collectively as the “Parties.” This Amendment No. 2 is effective at the time of the last to sign of the Parties.

**STATEMENT OF PURPOSE**

Customer and Paymentus entered into the Agreement for electronic bill payment services;

The Parties currently desire to amend the Agreement to replace Schedule A of the Master Services Agreement to change the fee model from an Absorbed Fee Model (“Customer Pay”) to a Convenience Fee Model (“User Pay”).

**AGREEMENT**

In consideration of mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Customer and Paymentus agree as follows:

1. **Amendment.** The Agreement is hereby amended as of the Effective Date of this Amendment No. 2 as follows:

1.1 The existing Schedule A (Paymentus Service Fee Schedule) of the Agreement is replaced in its entirety with the new Schedule A attached.

2. **Miscellaneous:**

2.1 This Amendment No. 2 is binding and inures to the benefit of the Parties and their respective successors and assigns.

2.2 All other terms and conditions of the Agreement not modified by this Amendment No. 2 remain in full force and effect.

2.3 This Amendment No. 2 may be executed in two or more counterparts, each of which shall be deemed to be an original, but all of which shall constitute one and the same instrument.

3. SCRUTINIZED COMPANIES:

**IN WITNESS WHEREOF**, the Parties hereto have caused this Amendment No. 2 to be executed by their duly authorized representatives.

**CITY OF LAKE WORTH BEACH**

By: Betty Resch  
Printed Name: Betty Resch  
Title: Mayor  
Date: 8/26/2021

**PAYMENTUS CORPORATION**

By: David Shapiro  
Printed Name: David Shapiro  
Title: SVP  
Date: August 4, 2021



**ATTEST:**

By: Melissa Ann Coyne CMC  
Melissa Ann Coyne, City Clerk

**APPROVED AS TO FORM AND LEGAL SUFFICIENCY:**

By: Christy Goddeau  
Glen J. Torcivia, City Attorney

**APPROVED FOR FINANCIAL SUFFICIENCY**

By: Bruce Miller  
Bruce T. Miller, Financial Services Director

# Paymentus

## SCHEDULE A – PAYMENTUS FEE SCHEDULE TO THE MASTER SERVICES AGREEMENT BETWEEN [CLIENT] AND PAYMENTUS

The Services will initially consist of those indicated by a check box on the following table. The Paymentus Fee will be as specified below, and will be paid by the Client, unless designated as a User paid fee.

Check to Select the Channel	Channels	Advanced Services	Payment Methods & Channels	Paymentus Fee	Check if User Paid Fee
<input checked="" type="checkbox"/>	Instant Payment Network™	Ebill Presentment and Customer Engagement	All payment channels and methods offered under IPN such as PayPal, Venmo, PayPal Credit, Amazon Pay	\$3.75	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Utility Direct Payments (Web, IVR, Recurring)	Ebill Presentment and Customer Engagement	Credit, Debit, e-Check/ACH	\$3.75	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Utility Direct Payments (Agent Assisted)	Ebill Presentment and Customer Engagement	Credit, Debit	\$1.68	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Utility Direct Payments (Agent Assisted)	Ebill Presentment and Customer Engagement	e-Check/ACH	\$0.65	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Utility Direct Payments (Agent Assisted-Non-Qualified)	Ebill Presentment and Customer Engagement	Credit, Debit	2.65%	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Non-Utility (Web, IVR, Recurring, Agent Assisted)	Ebill Presentment and Customer Engagement	Credit, Debit, e-Check/ACH	2.65%	<input checked="" type="checkbox"/>

**Note:** Average Bill Amount: \$189.00. Maximum Amount per Utility Payment is \$500.00. Multiple payments may be made. Maximum Amount per Non-Utility payment is \$900.00. Chargebacks and returned checks will be billed at \$5.95 per item.

## MASTER SERVICES AGREEMENT

Client:	City of Lake Worth
Client Address:	414 Lake Avenue Lake Worth, FL 33460
Contact for Notices to Client:	Franco Bellitto, Customer Service Manager
Estimated Yearly Bills / Invoices:	324,000

This Master Services Agreement (“Master Agreement”) is entered into as of the Effective Date below, by and between the Client (“Client”) identified above and **Paymentus Corporation**, a Delaware Corporation (“Paymentus”).

WHEREAS Paymentus provides electronic bill payment services to utilities, municipalities, insurance and other businesses; and

**WHEREAS** the City of Lewisville, Texas, competitively solicited electronic bill payment options services under Solicitation No. 17.06-A; and

WHEREAS the City of Lewisville, Texas, awarded Solicitation No. 17.06-A to Paymentus, which submitted a proposal in response to said Solicitation; and

WHEREAS the Client desires to piggy-back Solicitation No. 17.06-A; and,

**WHEREAS** Paymentus desires to provide and the Client desires to receive those certain services under the terms and conditions set forth in this Agreement.

**NOW, THEREFORE**, in consideration of the mutual covenants hereinafter set forth, the receipt and sufficiency of which are hereby acknowledged, the parties, intending to be legally bound, hereby covenant and agree as follows. This Agreement consists of this signature page, General Terms and Conditions, and the attachments (“**Attachments**”) with schedules (“**Schedules**”) listed below:

**Schedule A:** Paymentus Service Fee Schedule

**Schedule B:** Paymentus Service Fee Schedule, Enterprise Communications Manager (Optional)

**Schedule C:** Paymentus Provisioning of Counter Payment Hardware (Optional)

**Schedule D:** Paymentus E-Bill Presentment (Optional)

**Schedule E:** PayNearMe Integrated Services

**Schedule F:** Paymentus Provisioning of Additional Software from Superion (Optional)

This Agreement represents the entire understanding between the parties hereto with respect to its subject matter and supersedes all other written or oral agreements heretofore made by or on behalf of Paymentus or Client with respect to the subject matter hereof and may be changed only by agreements in writing signed by the authorized representatives of the parties.

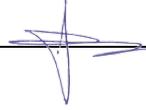
**IN WITNESS WHEREOF**, the parties have caused this Agreement to be executed by their duly authorized representatives.

# Paymentus

Client: CITY OF LAKE WORTH, FLORIDA

Paymentus:

By: \_\_\_\_\_

By:  \_\_\_\_\_

Name: \_\_\_\_\_

Name: Jerry Portocalis

Title: \_\_\_\_\_

Title: Senior Vice President

Date: \_\_\_\_\_

Date: September 4, 2018

Attest:

By: \_\_\_\_\_

Deborah M. Andrea, City Clerk

Approved as to form and legal sufficiency:

By: \_\_\_\_\_

Glen J. Torcivia, City Attorney

## GENERAL TERMS AND CONDITIONS

### 1 **Definitions:**

For the purposes of this Agreement, the following terms and words shall have the meaning ascribed to them, unless the context clearly indicates otherwise.

1.1 **“Agreement”** or **“Contract”** shall refer to this Agreement, as amended from time to time, which shall constitute an authorization for the term of this contract for Paymentus to be the exclusive provider of services, stated herein, to the Client

1.2 **“User”** shall mean the users of the Client's services

1.3 **“Effective Date”** shall be the last date upon which the parties signed this Agreement. The Agreement will not be effective against any party until the said date

1.4 **“Launch Date”** shall be the date on which Client launches this service to the Users

1.5 **“Payment”** shall mean Users to make payments for Client's identified utility services or Client's identified utility bills

1.6 **“Payment Amount”** shall mean the bill amount User wants to pay to the Client.

1.7 **“Non-consumer Cards”** shall mean credit cards which are issued for business use. These high-cost cards may include corporate cards, purchase cards, business cards, travel and entertainment cards.

1.8 **“Services”** shall only include the performance of the Services outlined in section 2 of this Agreement

1.9 **“Paymentus Authorized Processor”** shall mean a Paymentus authorized merchant account provider and payment processing gateway

1.10 **“Average Bill Amount”** shall mean the total amount of Payments collected through Paymentus system in a given month divided by the number of the Payments for the same month.

### 2 **Description of Services to be performed**

#### 2.1 **Scope of Services**

Master Services Agreement – Absorbed  
Confidential & Proprietary

Paymentus shall provide Users the opportunity to make Payments by Visa, MasterCard, Discover, E-check and other payment methods as deemed necessary by Paymentus. Payments may be made by Interactive Telephone Voice Response System (“IVR”) or secure Internet interface provided at the Paymentus Corporation's web site or other websites part of Paymentus' Instant Payment Network (“WebSites”), collectively referred to as the (“System” or “Platform”).

#### 2.2 **Professionalism**

Paymentus shall perform in a professional manner all Services required to be performed under this Agreement.

### 3 **Compensation**

#### 3.1 **No Cost Installation**

Paymentus will charge no fees related to the initial setup and personalization of its standard service for both Web and IVR interfaces.

#### 3.2 **Paymentus Service Fee**

For each payment, Paymentus will charge a Paymentus Service Fee as per Schedule A (hereinafter called “Paymentus Service Fee”).

For each payment, the Paymentus Service Fee collected will be used to pay the corresponding Credit Card transaction fees or transaction fees associated with Debit Cards or eChecks (hereinafter called “Transaction Fees”) except for the return items (eCheck returns or Credit/Debit Card chargebacks).

A schedule of Paymentus Service Fee is attached hereto as Schedule A. The Paymentus Service Fee is based on the Average Bill Amount, current payment method mix (credit vs debit vs e-check) and on the assumption that the total number of payments and the total Payment Amount collected each month from the use of non-consumer cards shall be under 5% of the total per month (“Fee Assumptions”). Client shall be billed an additional Paymentus Service Fees based on the rate of 3.5% of the Payment Amount for any excess amount if the Fee Assumptions vary by more than 5%. Paymentus can amend this schedule upon thirty (30) days' prior written notice to

# Paymentus

the Client, if such change is required due to changes in the Visa and MasterCard regulations or changes in Credit Card fees or changes in the Average Bill Amount or changes in Fee Assumptions.

## **4 Payment Processing**

### **4.1 Integration with Client's Billing System**

At no cost to Client, Paymentus will develop one (1) file format interface with Client's billing system using Client's existing text file format currently used to post payments to Client's billing system. Client will be responsible to provide Paymentus with the one file format specification and will fully cooperate with Paymentus during the development of the said interface. If Client chooses to create an automated file integration process to download the posting file, due to Paymentus security requirements, Client will use Paymentus specified integration process. Paymentus platform is an independent full service fully hosted platform per PCI-DSS requirements for a fully hosted solution. As such, Paymentus platform does and can function independent of any billing system integration. A payment posting file can be emailed or downloaded from Paymentus Agent Dashboard. If Client chooses to have Paymentus platform integrated with its billing system, Paymentus offers two options:

(i) Paymentus standard integration specification that Client can use to integrate its billing systems with Paymentus platform ("Standard Integration"); (or)

(ii) Paymentus to either customize or configure its platform to integrate with Client using file specification or APIs supported by Client's billing system ("Client Specific Integration")

If Client chooses Standard Integration, Paymentus agrees to fully cooperate with Client and provide its specification to Client. Paymentus also agrees to participate in meetings with Client's software vendor to provide any information or clarifications needed to understand Standard Integration. Time is of the essence and Paymentus agrees to provide all integration/interface specifications within 30 days from the Effective Date. Client will take commercially reasonable steps to develop the integration within 60 days from the date on which Client has received all integration specifications from Paymentus. Parties agree that if Client does not cooperate fully, it can lead to Paymentus being unable to perform its duties to deliver the integration in time.

If Client chooses Client Specific Integration, Paymentus agrees to develop such integration at no cost to Client, provided however, Client agrees to fully cooperate with Paymentus and cause its software vendors to fully cooperate with Paymentus. Client agrees to provide all specification required for Client specific integration. Client further agrees to participate in testing with Paymentus and if needed, cause its billing software vendors to participate in testing. Time is of the essence and Client agrees to provide or make available all integration/interface specifications within 30 days from the Effective Date. Paymentus will take commercially reasonable steps to develop the integration within 60 days from the date on which Paymentus has received all the integration specifications from Client or its vendors. Parties agree that if Client does not cooperate fully or is unable to cause its software vendors to cooperate fully with Paymentus, it can lead to Paymentus being unable to perform its duties to deliver the integration in time.

Based on Client's use of Paymentus platform and respective modules selected under this Agreement, Paymentus will require the following integration points:

1. For one-time Payment Module:
  - a. Customer Information – Text File or Real-time
  - b. Payment Posting – Text File or Real-time
2. For Recurring Payment Module
  - a. Text File
3. For E-billing Module
  - a. Billing Data - Text File or Real-time link to billing data
4. For Outbound Notification
  - a. Audience File – Text File for customer engagement messages

Each of these can be based on Standard Integration or Client Specific Integration.

### **4.2 PCI Compliance**

For PCI Compliance, Client has two options for using Paymentus platform:

- (i) Paymentus Fully Hosted Solution; or
- (ii) Any other configuration

To substantially reduce or eliminate any PCI compliance risks and to render all Client systems out of scope from PCI compliance requirements, Client agrees to use Paymentus' fully hosted service where Paymentus uses its own platform to capture Payments and to manage the entire (end to end) user experience from all channels for Payment

# Paymentus

acceptance: Web, Mobile, IVR, POS devices (per Paymentus recommended setup), recurring payments, Ebill Presentment (“Paymentus Fully Hosted Solution”). If Client chooses any other integration such as third party web pages integrated with Paymentus APIs, third party gateway pages, or its own IVR systems or POS solution not recommended by Paymentus, or a cashiering module from third party, Client expressly agrees that Client shall not be exempt from PCI requirements and shall be liable for any data breaches occurring on its own systems as Client’s recognizes that Client systems are participating in the transactions and are in scope for PCI compliance. Under such circumstances, Paymentus shall not be responsible for any PCI obligations outside of Paymentus own platform and Paymentus expressly disclaims any PCI or security obligations related to Client systems or any third party systems that participate in the payment transactions that are outside of Paymentus Platform.

Paymentus highly recommends that Client uses Paymentus Fully Hosted Solution to substantially reduce its PCI compliance and data breach risks.

If Client chooses to use any other option other than Paymentus Fully Hosted Solution, Client agrees and warrants that Client shall remain PCI compliant throughout the term of this Agreement. For clarity, just because Client uses PCI compliant applications such as its billing software, it does not eliminate the need for Client to be PCI compliant. Per PCI requirements, if a party’s systems participate in processing, or accepting or storing card transactions, such party is required to be PCI compliant as the systems are in scope.

#### 4.3 **Explicit User Confirmation**

Paymentus shall confirm the dollar amount of all Payments to be charged to a Card and electronically obtain the User approval of such charges prior to initiating Card authorizations transaction. Paymentus will provide User with electronic confirmation of all transactions.

#### 4.4 **Merchant Account**

Paymentus will arrange for the Client to have a merchant account with the Paymentus Authorized Processor for processing and settlement of the credit card transactions.

#### 4.5 **Card Authorization**

For authorization purposes, Paymentus will electronically transmit all Card transactions to the appropriate card associations in real time as the transactions occur.

#### 4.6 **Settlement**

Paymentus together with its authorized Card processor shall forward the payment transactions to the appropriate card organizations for settlement directly to the Client’s depository bank account previously designated by the Client (hereinafter the “Client Bank Account”).

Paymentus will debit the Paymentus Service Fees from Client’s account on a monthly basis. Paymentus together with Paymentus Authorized Processor will continuously review its settlement and direct debit processes for its simplicity and efficiencies. Client and Paymentus agree to fully cooperate with each other if Paymentus were to change its settlement and invoicing processes.

### 5 **General Conditions of Services**

#### 5.1 **Service Reports**

Paymentus shall provide Client with reports summarizing use of the Services by Users for a given reporting period.

#### 5.2 **User Adoption Communication by Client**

Client will make Paymentus’ Services available to its residential and commercial Clients by different means of Client communication including a) through bills, invoices and other notices; b) by providing IVR and Web payment details on the Client’s website including a “Pay Now” or similar link on a mutually agreed prominent place on the web site; c) through Client’s general IVR/Phone system; and d) other channels deemed appropriate by the Client.

Paymentus shall provide Client with logos, graphics and other marketing materials for Client’s use in its communications with its users regarding the Services and/or Paymentus.

Both parties agree that Paymentus will be presented as a payment method option. Client will communicate Paymentus option to its end residential and commercial Clients wherever Client usually communicates its other payment methods.

## 5.3 Independent Contractor

Client and Paymentus agree and understand that the relationship between both parties is that of an independent contractor.

## 5.4 Client's Responsibilities

In order for Paymentus to provide Services outlined in this Agreement, the Client shall co-operate with Paymentus by:

- (i) Client will enter into all applicable merchant Card or cash management agreements.
- (ii) For the duration of this Agreement, Client will keep a bill payment link connecting to Paymentus System at a prominent and mutually agreed location on the Client website. The phone number for the IVR payment will also be added to the web site. Client will also add the IVR payment option as part of the Client's general phone system.
- (iii) User Adoption marketing as described in 5.2.
- (iv) Within 30 days of the merchant account setup, Client will launch the service to the Users.
- (v) For the purpose of providing Client a posting file for posting to Client's billing system, Client will provide the file format specification currently used to post its payments to the billing system. Client will fully cooperate with Paymentus and provide the information required to integrate with Client's billing system.

## 6 Governing Laws and Venue

This Agreement shall be governed by the laws of the state of Palm Beach County, Florida and any and all legal disputes shall be subject to venue in Palm Beach County, Florida.

## 7 Communications

### 7.1 Authorized Representative

Each party shall designate an individual to act as a representative for the respective party, with the authority to transmit instructions and receive information. The parties may from time to time designate other individuals or change the individuals.

### 7.2 Notices

All notices of any type hereunder shall be in writing and shall be given by Certified Mail or by a

national courier or by hand delivery to an individual

# Paymentus

authorized to receive mail for the below listed individuals, all to the following individuals at the following locations:

## **To Client**

C/O: City Manager  
Address: City of Lake Worth  
7 N. Dixie Highway  
Lake Worth, FL 33460  
Email:

## **To Paymentus**

C/O: President and CEO  
Address: 13024 Ballantyne Corporate Place  
Suite 450  
Charlotte, NC 28277  
Email: [ceo@paymentus.com](mailto:ceo@paymentus.com)

Notices shall be declared to have been given or received on the date the notice is physically received if given by hand delivery, or if notices given by US Post, then notice shall be deemed to have been given upon on date said notice was deposited in the mail addressed in the manner set forth above. Any party hereto by giving notice in the manner set forth herein may unilaterally change the name of the person to whom notice is to be given or the address at which the notice is to be received.

### **7.3 Interpretation**

It is the intent of the parties that no portion of this Agreement shall be interpreted more harshly against either of the parties as the drafter.

### **7.4 Amendment of Agreement**

Modifications or changes in this Agreement must be in writing and executed by the parties bound to this Agreement.

### **7.5 Severability**

If a word, sentence or paragraph herein shall be declared illegal, unenforceable, or unconstitutional, the said word, sentence or paragraph shall be severed from this Agreement, and this Agreement shall be read as if said word, sentence or paragraph did not exist.

### **7.6 Attorney's Fees**

Should any litigation arise concerning this Agreement between the parties hereto, the parties agree to bear their own costs and attorney's fees.

# Paymentus

## 7.7 Confidentiality

Except as provided herein or under applicable law, Client will not disclose to any third party or use for any purpose inconsistent with this Agreement any confidential or proprietary non-public information it obtains during the term of this Agreement about Paymentus' business, operations, financial condition, technology, systems, no-how, products, services, suppliers, Clients, marketing data, plans, and models, and personnel. Paymentus will not disclose to any third party or use for any purpose inconsistent with this Agreement any confidential User information it receives in connection with its performance of the services.

## 7.8 Intellectual Property

In order that the Client may promote the Services and Paymentus' role in providing the Services, Paymentus grants to Client a revocable, non-exclusive, royalty-free, license to use Paymentus' logo and other service marks (the "Paymentus Marks") for such purpose only. Client does not have any right, title, license or interest, express or implied in and to any object code, software, hardware, trademarks, service mark, trade name, formula, system, know-how, telephone number, telephone line, domain name, URL, copyright image, text, script (including, without limitation, any script used by Paymentus on the IVR or the WebSite) or other intellectual property right of Paymentus ("Paymentus Intellectual Property"). All Paymentus Marks, Paymentus Intellectual Property, and the System and all rights therein (other than rights expressly granted herein) and goodwill pertain thereto belong exclusively to Paymentus.

## 7.9 Force Majeure

Paymentus will be excused from performing the Services as contemplated by this Agreement to the extent its performance is delayed, impaired or rendered impossible by acts of God or other events that are beyond Paymentus' reasonable control and without its fault or judgment, including without limitation, natural disasters, war, terrorist acts, riots, acts of a governmental entity (in a sovereign or contractual capacity), fire, storms, quarantine restrictions, floods, explosions, labor strikes, labor walk-outs, extra-ordinary losses utilities (including telecommunications services), external computer "hacker" attacks, and/or delays of common carrier.

## 7.10 Time of the Essence

Paymentus and Client acknowledge and agree that time is of the essence for the completion of

the Services to be performed and each parties respective obligations under this Agreement.

## 8 Indemnification

### 8.1 Paymentus Indemnification and Hold Harmless

Paymentus agrees to the fullest extent permitted by law, to indemnify and hold harmless the Client and its governing officials, agents, employees, and attorneys (collectively, the "Client Indemnitees") from and against all liabilities, demands, losses, damages, costs or expenses (including reasonable attorney's fees and costs), incurred by any Client Indemnitee as a result or arising out of (i) the willful misconduct or negligence of Paymentus in performing the Services or (ii) a material breach by Paymentus of its covenants.

### 8.2 Client Indemnification and Hold Harmless

Subject to and without waiving Client's right to sovereign immunity under Florida law and subject to the limits of the limited waiver of sovereign immunity set forth in section 768.28, Florida Statutes, Client agrees to the fullest extent permitted by law, to indemnify and hold harmless Paymentus, its affiliates, officers, directors, stockholders, agents, employees, and representatives, (collectively, the "Paymentus Indemnitees") from and against all liabilities, demands, losses, damages, costs or expenses (including without limitation reasonable attorney's fees and expenses) incurred by any Paymentus Indemnitee as a result or arising out of (i) the negligence of Client related to the Services. Nothing herein shall be construed as the Client's consent to be sued by a third party or as a waiver of the Client's right to sovereign immunity. Nothing herein shall be interpreted to or confer any benefit on a third party.

### 8.3 Warranty Disclaimer

Except as expressly set forth in this Agreement, Paymentus disclaims all other representations or warranties, express or implied, made to the Client or any other person, including without limitation, any warranties regarding quality, suitability, merchantability, fitness, for a particular purpose or otherwise of any services or any good provided incidental to the Services provided under this Agreement.

### 8.4 Limitation of Liability

Notwithstanding the foregoing, the parties

# Paymentus

agree that neither party shall be liable to the other for any lost profits, lost savings or other special, indirect or consequential damages, even if the party has been advised of or could have foreseen the possibility of such damages. Paymentus' total liability for damages for any and all actions associated with this Agreement or the Services shall in no event exceed the specific dollar amount of the Paymentus Service Fee paid to Paymentus.

## **9 Term and Termination**

### **9.1 Term**

The term of this Agreement shall commence on the effective date of this Agreement and continue for a period of 5 (five) years ("Initial Term") from the Launch Date. Services under this Agreement shall begin within 30 days of the merchant account setup.

At the end of the Initial Term, this Agreement may be renewed for successive three (3) year periods by written agreement of the Client and Paymentus. Each renewal term shall be subject to the termination provision set forth herein. The Client's City Manager may exercise any renewal term on behalf of the Client. Notwithstanding the foregoing, if Paymentus were to process any Payment beyond the Initial Term or any subsequent, it would be deemed under a renewal term of three (3) years.

### **9.2 Material Breach**

A material breach of this Agreement shall be cured within 60 (sixty) days ("Cure Period") after a party notifies the other of such breach. In the event, such material breach has not been cured within the Cure Period, the non-breaching party can terminate this Agreement by providing the other party with a 30 (thirty) days' notice.

### **9.3 Upon Termination**

Upon termination of this Agreement, the parties agree to cooperate with one another to ensure that all Payments are accounted for and all refundable transactions have been completed. Upon termination, Paymentus shall cease all Services being provided hereunder unless otherwise directed by the Client in writing.

## **10 Miscellaneous**

**10.1** Paymentus shall provide proof of insurance coverage as required hereunder. Such insurance policy(s) shall be issued by the United States Treasury or insurance carriers approved and authorized to do business in the State of Florida, and who must have a rating of no less than "excellent" by A.M. Best or as mutually agreed upon by the Client and Paymentus. All such insurance policies may not be modified or terminated without the express written authorization of the Client.

### **Type of Coverage and Amount of Coverage**

Commercial general liability: \$1,000,000 per occurrence and \$2,000,000 annual aggregate for products/completed operations, contractual, insurance broad form property, Independent Consultant, personal injury.

Worker's Compensation at the applicable statutory limits.

If any services are to be provided in-person at the Client's facilities, the commercial general liability will name the Client as an additional insured on a primary and non-contributory basis for the performance of all work/services and completed work/services. Proof of all insurance coverage shall be furnished to the Client by way of an endorsement to same or certificate of insurance. The certificates shall clearly indicate that Paymentus has obtained insurance of the type, amount, and classification as required for strict compliance with this section. Failure to comply with the foregoing requirements shall not relieve Paymentus of its liability and obligations under this Agreement.

10.2 Paymentus represents and warrants that it has

# Paymentus

and will continue to maintain all licenses and approvals required to conduct its business in the State of Florida, and that it will at all times conduct its business activities in a reputable manner and in conformance with all applicable laws. Proof of such licenses and approvals shall be submitted to the Client upon request.

10.3 As provided in Sections 287.132-133, Florida Statutes, as amended from time to time, by entering into this Agreement, Paymentus certifies that it, its affiliates, suppliers, subcontractors and any other contractors who will perform hereunder, have not been placed on the convicted vender list maintained by the State of Florida Department of Management Services within the thirty-six (36) months immediately preceding the date hereof.

10.4 In accordance with Palm Beach County ordinance number 2011-009, this Agreement shall be subject to investigation and/or audit by the Palm Beach County Inspector General. Paymentus should review Palm Beach County ordinance number 2011-009 in order to be aware of its rights and/or obligations under such ordinance and as applicable.

10.5 Public Records: Paymentus shall comply with Florida's Public Records Act, Chapter 119, Florida Statutes (the "Public Records Act"), and, if determined to be acting on behalf of the Client as provided under section 119.011(2), Florida Statutes, specifically agrees to:

a. Keep and maintain public records required by the Client to perform the services.

b. Upon request from the Client's custodian of public records or designee, provide the Client with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.

c. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the Contract Documents following completion of the Contract Documents if the Paymentus does not transfer the records to the Client.

d. Upon completion of this Agreement, transfer, at no cost, to the Client all public records in possession of Paymentus or keep and maintain public records required by the Client to perform the service. If Paymentus transfers all public records to the Client upon completion of the Contract Documents, Paymentus shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If Paymentus keeps and maintains public records upon completion of the Contract Documents, Paymentus shall meet all

Master Services Agreement – Absorbed  
Confidential & Proprietary

applicable requirements for retaining public records. All records stored electronically must be provided to the Client, upon request from the Client's custodian of public records or designee, in a format that is compatible with the information technology systems of the Client.

**IF PAYMENTUS HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE PAYMENTUS'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THE CONTRACT DOCUMENTS, PLEASE CONTACT THE CUSTODIAN OF PUBLIC RECORDS OR DESIGNEE AT THE CITY OF LAKE WORTH, ATTN: DEBBIE ANDREA, AT (561) 586-1662, DANDREA@LAKEWORTH.ORG, 7 N. DIXIE HIGHWAY, LAKE WORTH, FL 33460.**

10.6 Paymentus will defend or settle at its expense a claim or suit brought by a third party against the Client arising out of a claim asserting that the work, services, repair, materials or other deliverables ("deliverables" hereafter) provided by Paymentus under this Agreement infringes any U.S. copyright or any U.S. patent or misappropriates a trade secret. Paymentus will indemnify and hold harmless the Client against and from damages, costs, and reasonable attorneys' fees, if any and at all levels of trial and appeal or mediation or arbitration, finally awarded in such suit or the amount of the settlement thereof; provided that (i) Paymentus is promptly notified in writing of such claim or suit, (ii) Paymentus will have the sole control of the defense and settlement thereof, and (iii) Client furnishes Paymentus, on reasonable request, information available to Client for such defense. The Client will not admit any such claim without prior consent of Paymentus.

a. In the event of a claim of infringement, Paymentus shall, at its option:

1. procure for Client the right to continue using the deliverables provided under this Agreement; or

2. replace or modify the deliverables so that the same becomes non-infringing but substantially equivalent in functionality and performance.

3. If neither of the above actions is reasonably feasible, Paymentus will refund to Client the fee actually paid by Client under this Agreement (as amortized on a straight-line basis over the time in which the Client was able to use the deliverables.

b. Paymentus will have no obligation

# Paymentus

under this section for infringement if and to the extent that such claim arises from:

1. modification of the deliverables other than by Paymentus or by its recommendation; or
2. combination of the deliverables with products other than those supplied by Paymentus;
3. the alleged infringement or misappropriation relates to such modification or combination; and/or
4. the specifications or written direction of the Client directs Paymentus to construct, fabricate or otherwise provide the infringing deliverables, design, apparatus or, article, with Paymentus's products, services, or work product.

c. Paymentus will also not have any indemnification obligation with respect to a claim: (i) if it has provided Client with reasonable changes that would have avoided the problem and the reasonable changes are not fully implemented by Client within a reasonable time or (ii) arising out use of the deliverables not in accordance with this Agreement.

d. Paymentus's obligation to indemnify, defend and hold harmless shall remain in effect and shall be binding upon Paymentus whether such injury or damage shall accrue, or may be discovered, before or after termination or expiration of this Agreement.

# Paymentus

## Schedule A – Paymentus Service Fee Schedule

### Utility Payments

Paymentus Service Fee charged to the Client will be based on the following model:

Absorbed Fee Model	
1. Utility Payments	
Absorbed Model	
Average Bill Amount: \$189.00	
Paymentus Service Fee per qualified utility rate transaction	
• Credit/Debit Card	\$1.68
• ACH/ eCheck	\$0.45
Paymentus Service Fee per non-qualified payments	
• AMEX & Non-Qualified Card	2.65%
2. Non Utility Payments	
Paymentus Service Fee per transaction	
• Credit/Debit Card	2.75%
• ACH/ eCheck	\$0.65

Note: Maximum Amount per Payment is \$1,500.00. Multiple payments can be made.  
Chargebacks and returned checks will be billed at \$9.95 per item  
Paymentus may apply different limits per transactions for user adoption or to mitigate risks.

# Paymentus

## Schedule B: Paymentus Service Fee Schedule, Enterprise Communications Manager (Optional)

Paymentus Enterprise Communications Manager consists of Paymentus' pre-recorded, digitally rendered messages for payments reminders and service outage alerts. Automated messages can be sent to your customers through the Paymentus platform by automated phone and SMS (Short Message Service - Text Messaging). There is no charge to the Customer for the infrastructure enabling these services.

<b>ECM FEE STRUCTURE</b>	
<b>For Paymentus standard campaign messages</b>	
Up to 3,500 Messages Per Month	<b>No Charge</b>
In Excess of Allotted Messages per Month	
	\$0.10 per IVR and SMS message
	\$0.05 per Email message

# Paymentus

## Schedule C: Paymentus Provisioning of Counter Payment Hardware (Optional)

(Works with Superior Cash Receipts or with Paymentus Agent Dashboard for USB-attached encrypted card readers, factory- loaded with Paymentus firmware)

CARD SWIPE DEVICES	
SecureMag™ Encrypted Card Swipe Device*	
• QTY: Up to 8	\$0.00 ea.
• Additional Devices:	\$225.00 ea.
• Setup & Configuration	Devices will arrive at client site pre-configured and "ready for use"
• Shipping & Handling	Fee Waived

# Paymentus

## Schedule D: Paymentus E-Bill Presentment (Optional)

Paymentus Service Fee charged to the Customer will be based on one of the following table:

Service Type	Paymentus Service Fee
1. PDF E-Bill Design and development	\$5,000 <b>Fee Waived</b>
2. Hosting Fee	\$600 per month <b>Fee Waived</b>

Notes:

1. Paymentus will offer Electronic Bill Presentment and Payment (EBPP) to users through the Paymentus Customer Dashboard web portal, to be provided to the customer.
2. Paymentus will invoice monthly for the hosting fee (**waived**).

# Paymentus

## Schedule E: PayNearMe Integrated Services (Optional)

Remote location PayNearMe payments integrated with Paymentus processing

<b>PayNearMe-Paymentus Integrated Solution</b>	
<b>Billers Pay Fee Model</b>	
<input type="checkbox"/> Remote Location Payment Fee	\$1.99 ea.
<input type="checkbox"/> PrePay	\$1.49 ea.

# Paymentus

## Schedule F: Paymentus Provisioning of Additional Software from Superior (Optional)

<b>Superior Web Enablement Software</b>	
<b>For Real Time Integration with Paymentus Channels</b>	
<input type="checkbox"/> Web Enablement (one-time purchase) <i>Client to purchase and to be reimbursed by Paymentus</i>	\$3,250.00
<input type="checkbox"/> Annual Maintenance <i>Purchasable by Client</i>	\$520.00

# EXECUTIVE BRIEF

## ELECTRIC UTILITY MEETING

**AGENDA DATE:** November 30, 2021

**TITLE:**

Establishing new Electric Utility Rates and Charges to be Effective on either January 1, 2022 or April 1, 2022

**SUMMARY:**

Proposed electric utility rate increases for all customer categories to reflect increases in operating costs, base energy costs, fuel, and purchased power costs.

**BACKGROUND AND JUSTIFICATION:**

Since 2014, City's electric utility reduced electric rates three times under the direction of the City Commission to achieve rate parity with the neighboring investor owned utility for the benchmark 1,000 kWhr/month customer. The last of the three electric rate decreases was implemented in February, 2018, with rates remaining unchanged since then. Today the City's electric utility's residential bills rank among the lowest in the state of Florida, most recent public data ranks our electric utility 8th out of 32 municipal utilities, and well below the statewide municipal utility average, and with actual bills for a benchmark 1,000 kWhr/month customer ~0.5% lower than the neighboring utility.

The electric utility has been able to operate without rate increases for three and a half years due to significant cost cutting efforts by Staff. These include implementing operating cost controls, renegotiated energy and capacity contracts, and refinancing of outstanding debt. Over the past four years the electric utility has also identified and brought in additional revenues from renegotiated pole attachment agreements and settlements for prior unauthorized attachments, customer growth, as well as bringing in new revenues from underutilized natural gas pipeline capacity assets. The electric utility's improved financial position has allowed it to embark on a robust series of projects aimed at improving reliability for its customers, referred to as System Hardening and Reliability Improvement Program (SHRIP).

In 2020, the City contracted with Leidos, a leading rates-consulting firm, to conduct a comprehensive Cost of Service Study and recommend adjustments to electric utility rates, where deemed advisable, to assure adequacy of revenues to cover increased costs going forward. The electric utility is currently operating under Resolution 69-2021 which continued previously set Electric Utility Rates and Charges for FY2022 without changes from FY2021 amounts.

On September 28, 2021, following budget workshops and detailed financial modeling by Stantec, the Electric Utility department Staff and Leidos' Staff presented the findings of the Cost of Service Study and suggested rate changes to the City Commission for discussion and questions. The City Commission informally agreed with the suggested rates by consensus, with an accompanying request that the rates proposal be brought forward for formal approval at the October 26, 2021 City Commission meeting with an effective date of April 1, 2022.

Resolution 74-2021 was submitted for consideration at the City Commission meeting on October 26, 2021 with proposed new Electric Utility Rates and Charges effective April 1, 2022, as

previously requested. At the October 26, 2021 meeting the City Commission requested that the matter be deferred to the November 30, 2021 meeting. In recognition of significantly increased natural gas prices beyond what was anticipated during the FY2022 budget process, Staff has reviewed the suggested rate increases yet again. Staff currently anticipates that increased natural gas prices will lead to wholesale power costs ~\$2.3 million higher than budget.

Natural gas is the fuel source for approximately 53% of electric utility’s wholesale energy purchases, and while not the majority of the utility’s fuel source for electric generation, the utility’s cost of wholesale power does track with natural gas prices. The balance of the utility’s energy supply portfolio is nuclear (38%), coal (8%) and solar (0.75%). The actual percentages are approximate and vary slightly year to year depending on generating unit dispatch costs and outages.

Beginning in late 2023, into 2024 and beyond, the electric utility’s supply portfolio will change for the better with the addition of significant amounts of solar energy derived from existing purchase agreements with the Florida Municipal Power Agency (FMPA) Solar Projects for 36.55 Megawatts (MW). City’s contract with FMPA for solar energy, combined with the planned retirement of the utility’s source of coal energy, and the displacement of supplemental energy from natural gas sources, will yield significant reductions in CO2 emissions associated with the production of electricity to serve City’s electric utility customers. A concomitant benefit of City’s contract with FMPA for solar energy is a further reduction in City’s exposure to fluctuations in natural gas prices, in essence a hedge against rising fuel prices.

At this time however, and in order to keep up with increases in operating costs, base energy costs, fuel, and purchased power costs Staff has proposed various alternatives for rate increases. In order to minimize the impact of rising fuel costs Staff has structured four potential options for consideration which spread the fuel cost recovery period over an eighteen to twenty-one-month period, using either Jan. 1, 2022 or April 1, 2022 as the effective date. Staff’s proposals are also designed to yield residential customer bills for the benchmark 1,000 kWh/month residential customer that will remain below that of the local investor owned utility.

Staff is also proposing increases to streetlighting charges of 5.0% to 6.9% due to changed costs such as debt service and lower bulb wattages associated with the replacement of the City’s streetlights to more energy efficient LED lighting in 2017. These changes were not previously reflected in rates.

There are four rate options for new Electric Utility Rates and Charges from which the Commission would select and approve one. The cases are summarized below at a high level, but are provided in detail in the backup material from Leidos, with Effective dates of January 1, 2022 or April 1, 2022

	Residential	Commercial	Residential 1,000 kWh
Case 1 - COS Apr 1, 2022	8.0%	5.0%	\$116.65
Case 2 - Even Apr 1, 2022	6.9%	6.9%	\$115.65
Case 3 - COS Jan 1, 2022	7.0%	4.0%	\$115.45
Case 4 - Even Jan 1, 2022	6.0%	6.0%	\$114.45

The existing Residential rate is \$107.99. The proposed Neighboring Utility rate will be \$119.37 in January 2022.

Staff will continue to monitor natural gas prices and purchased power costs monthly, and will advise the City Commission of the budget status regularly for it to determine what further adjustments (up or down) may be needed in its Power Cost Adjustment (PCA).

**MOTION:**

Move to approve/disapprove a request that Staff bring forward an Electric Utility Rates Resolution based on one of the four options (Case 1, Case 2, Case 3, or Case 4) establishing the new Electric Utility rates and charges, for a vote at the December 7, 2021 City Commission meeting.

**ATTACHMENT(S):**

Fiscal Impact Analysis - N/A

Davenport Ratings Presentation

Leidos Rates Presentation

Leidos Cost of Service Study (will be uploaded when finalized)

Existing Electric Utility Rates Resolution 69-2021

Proposed Rate Resolution

# City of Lake Worth Beach, Florida

## Ratings Discussion



November 18, 2021

# Credit Ratings



- To issue debt in the public market, an issuer needs to obtain a credit rating from at least one of the three national credit rating agencies – Fitch Ratings (“Fitch), Moody’s Investors Service (“Moody’s), and S&P Global (“S&P).
- A credit rating measures a local government’s willingness and ability to pay its debt on time and in full.
  - The rating is a measure of risk that potential investors use to decide whether or not to purchase a government’s bonds. The higher the rating, the lower the risk that a default will occur.
- The chart to the right provides an overview of the rating scales (investment grade only) from all three national rating agencies, with Aaa/AAA being the highest possible rating.
- The City of Lake Worth Beach currently has a general obligation rating of ‘A1’ from Moody’s and ‘AA-’ from S&P.

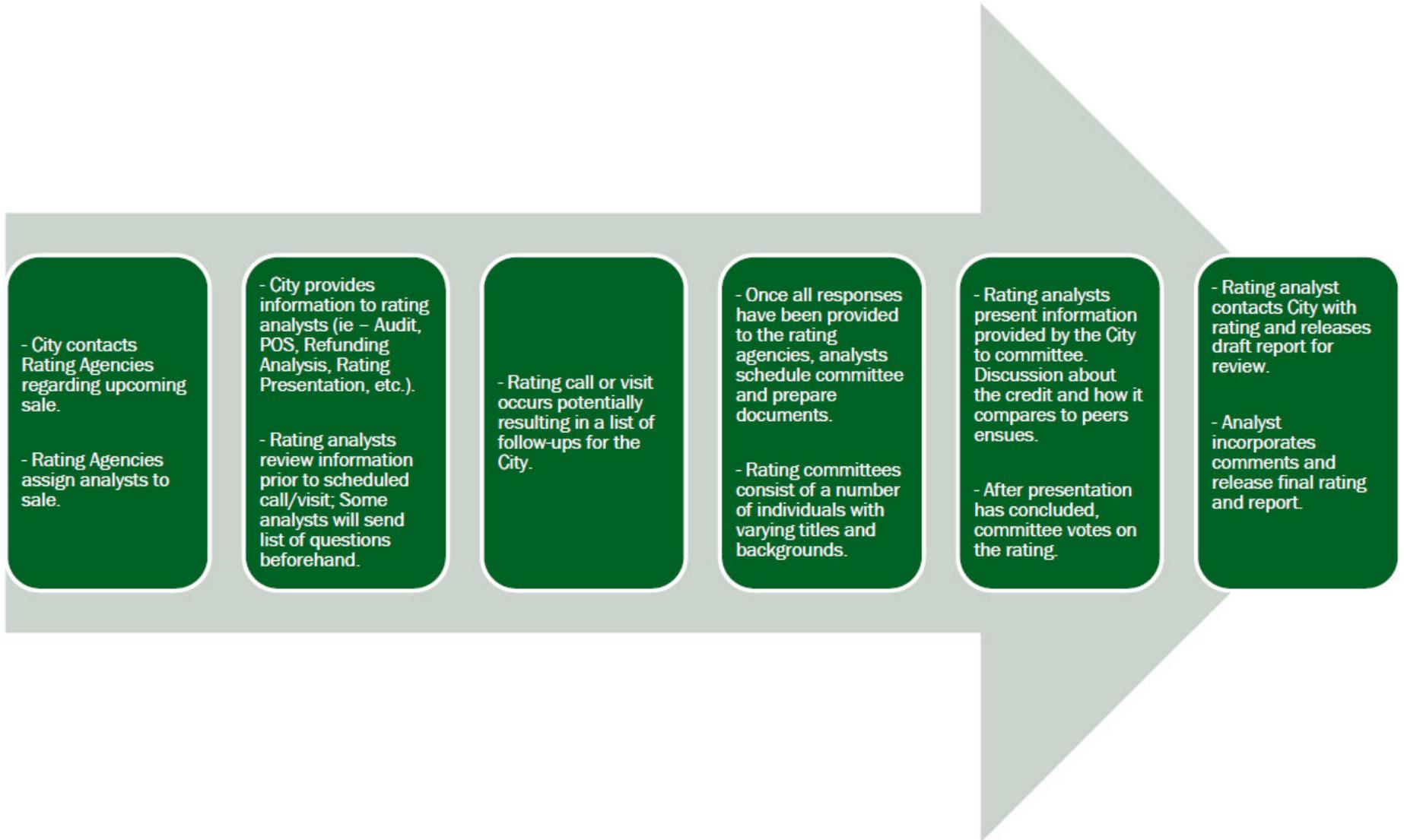
	Moody's	Standard & Poor's	Fitch	
<b>Top Tier "Highest Possible Rating"</b>	Aaa	AAA	AAA	
	Aa1	AA+	AA+	(Highest)
	Aa2	AA	AA	(Middle)
<b>2nd Tier "Very Strong"</b>	Aa3	AA-	AA-	(Lowest)
	A1	A+	A+	(Highest)
	A2	A	A	(Middle)
<b>3rd Tier "Strong"</b>	A3	A-	A-	(Lowest)
	Baa1	BBB+	BBB+	(Highest)
	Baa2	BBB	BBB	(Middle)
<b>4th Tier "Adequate Capacity to Repay"</b>	Baa3	BBB-	BBB-	(Lowest)
	Non Investment Grade			

# Importance of Ratings

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- Formal credit ratings have multiple benefits to issuers including, but not limited to:
  - Playing a primary role in determining what interest rate and terms the City achieves for any borrowings or refinancings, with a higher credit rating resulting in lower interest rates;
  - Acting as a signal to business community about governance, management, and financial health of the City, which can help drive economic development opportunities; and

# Credit Rating Process



# Approach to Credit Ratings

- Over the last few years, all three rating agencies have updated their rating methodologies.
- Moody's and S&P have focused on being more transparent in their ratings and established rating scorecards that are used to help determine a rating.
- Fitch's new criteria does not include a scorecard, but its primary focus is on budgetary flexibility.

**Moody's INVESTORS SERVICE**

**RATING METHODOLOGY US Local Government General Obligation Debt**

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**Analyst Contact**

SALE/TRADE/ISSUE: +1 415 774 9756  
 FINANCIAL: +1 415 774 9756  
 SALES/TRADE/ISSUE: +1 415 774 9756  
 FINANCIAL: +1 415 774 9756  
 SALES/TRADE/ISSUE: +1 415 774 9756  
 FINANCIAL: +1 415 774 9756

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**Criteria | Governments | U.S. Public Finance:**

## U.S. Local Governments General Obligation Ratings: Methodology And Assumptions

- Standard & Poor's Ratings Services is updating its methodology and assumptions for assigning issuer credit ratings (ICRs) and issue credit ratings based on general obligations (GO) pledges of local governments in the United States. This update follows our request for comment (RFC), "Request For Comment: U.S. Local Governments: Methodology And Assumptions," published on March 6, 2020. This update provides additional transparency and comparability to help market participants better understand our approach to assigning local government ratings. To enhance the forward-looking nature of these ratings, and to enable better comparisons between U.S. local governments' ratings, local government ratings in other sectors, and all other ratings. The "Principles of Credit Rating," published on Feb. 16, 2011, forms the basis of this criteria.
- For the ratings in scope, this criteria supersedes the following articles:
  - GO Debt, Oct. 12, 2009
  - Key General Obligation Issue Credit Ratings – Analysis Vs. History, April 2, 2009
  - Does Bigger Always Mean Better? Strong Up The Impact Of Size On Municipal Ratings, April 22, 2009
  - Location, Location, Location: What Does It Mean For My Community's Rating? April 22, 2009
- All capitalized terms are defined in the glossary, section X, paragraph 50-57.

### I. SCOPE OF THE CRITERIA

The criteria apply to all U.S. local government issuer credit ratings and issue ratings on GO bonds issued by municipal governments that are not special purpose districts. Examples of local government entities in the scope include cities, counties, towns, villages, townships, and boroughs, and municipalities in the events. Examples of special purpose districts excluded from the scope include school districts, library districts, park districts, and forest preserve districts, among others. The criteria also do not apply to U.S. states or territories but do apply to the territories of Columbia.

### II. SUMMARY OF CRITERIA UPDATE

The criteria use the same major elements as our criteria for rating local and regional governments outside the U.S. (see "Methodology For Rating International Local And Regional Governments," published Sept. 20, 2016). Specifically, the criteria assign ratings based on the assessment and scoring of seven key factors:

- Institutional framework
- Revenue mix
- Management
- Budgetary flexibility
- Budgetary performance

WWW.STANDARDANDPOOR.COM/RATINGSDIRECT SEPTEMBER 16, 2021 3

**FitchRatings** Public Finance Tax-Supported / U.S.A.

## U.S. Tax-Supported Rating Criteria Master Criteria

This criteria report outlines the methodology and assumptions for assigning issuer credit ratings (ICRs) and issue credit ratings based on general obligations (GO) pledges of local governments in the United States. This update follows our request for comment (RFC), "Request For Comment: U.S. Local Governments: Methodology And Assumptions," published on March 6, 2020. This update provides additional transparency and comparability to help market participants better understand our approach to assigning local government ratings. To enhance the forward-looking nature of these ratings, and to enable better comparisons between U.S. local governments' ratings, local government ratings in other sectors, and all other ratings. The "Principles of Credit Rating," published on Feb. 16, 2011, forms the basis of this criteria.

**Scope**

This report outlines the criteria that apply to the rating of debt issued by or on behalf of U.S. state and local governments. These governments issue debt using a wide variety of security structures. Section 1 of the report details the criteria used to determine the general credit quality of the entity responsible for meeting the debt. Section 2 addresses how Fitch determines ratings for specific security structures.

**Key Rating Drivers**

**Greater Risk Profile Drives:** The starting point for analysis of U.S. state and local government issues is an analysis of the core business structure of the issuer. The key drivers of their operation within the U.S. govern the strength of these fundamentals. Fitch expects most ratings in the sector to range from AA- to A+, all carrying high credit quality, although individual issuer ratings can be significantly below the sector due to specific issuer features or concerns.

**Revenue Analysis Establishes Foundation:** Issuer-specific analysis begins with consideration of the performance of, trends in, and prospects for the economic base. This is critical to understanding the overall risk profile and serves as the foundation for the key rating driver assessments that place the credit within and sometimes outside the expected rating range. When the nature of the economic base raises an issuer particularly susceptible to an unavoidable change in profile (e.g., industry concentration, sector volatility), the economy can be an additional negative rating factor.

**Few Key Factors Assessment:** Fitch has identified four key rating factors that play a significant role in driving the rating outcome for a given issuer in the context of the economic base – revenue framework, expenditure framework, liability burden and operating performance. The factors cover both the traditional framework, which assesses liability burden and operating performance, and performance within that framework. Fitch publishes specific rating category evaluations for each factor, with analysis focused on key trends and expectations.

**Rating Through the Cycle:** Fitch makes scenarios that consider how a government's revenues may be affected in a typical downturn and the options available to address the resulting budget gap. Rating category evaluations and ratings guidance recognize that an issuer's fiscal position will fluctuate through an economic cycle. This approach surveys the range of performance where a rating would be expected to remain stable and allows a better understanding of the potential for changes.

**Rating Ratings Reflect Profile:** Ratings are assigned to specific securities based on their legal structures and material characteristics from the general credit quality of the related government, which is expressed through an issuer's overall rating (ICR).

www.fitchratings.com April 16, 2021

# Moody's General Obligation Bond Methodology

- Moody's "US Local Government General Obligation Debt" methodology was last updated in September 2019 and focuses on the local government General Obligation security backed by either and unlimited or limited ad valorem taxing authority. The methodology and accompanying scorecard, outline four broad rating factors and their respective weights:
  - Economy/Tax Base (30%);
  - Finances (30%);
  - Management (20%); and
  - Debt (20%).
  
- These broad rating factors are then broken down into sub-factors, which hold their own respective weights.

Broad Rating Factors	Factor Weighting	Rating Subfactors	Subfactor Weighting
Economy/Tax Base	30%	Tax Base Size (Full Value)	10%
		Full Value Per Capita	10%
		Wealth (Median Family Income)	10%
Finances	30%	Fund Balance (% of Revenues)	10%
		Fund Balance Trend (5-Year Change)	5%
		Cash Balance (% of Revenues)	10%
		Cash Balance Trend (5-Year Change)	5%
Management	20%	Institutional Framework	10%
		Operating History	10%
Debt/Pensions	20%	Debt to Full Value	5%
		Debt to Revenue	5%
		Moody's Adjusted Net Pension Liability (3-Year Average) to Full Value	5%
		Moody's Adjusted Net Pension Liability (3-Year Average) to Revenue	5%



# Municipal Advisor Disclosure

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The enclosed information relates to an existing or potential municipal advisor engagement.

The U.S. Securities and Exchange Commission (the "SEC") has clarified that a broker, dealer or municipal securities dealer engaging in municipal advisory activities outside the scope of underwriting a particular issuance of municipal securities should be subject to municipal advisor registration. Davenport & Company LLC ("Davenport") has registered as a municipal advisor with the SEC. As a registered municipal advisor Davenport may provide advice to a municipal entity or obligated person. An obligated person is an entity other than a municipal entity, such as a not for profit corporation, that has commenced an application or negotiation with an entity to issue municipal securities on its behalf and for which it will provide support. If and when an issuer engages Davenport to provide financial advisory or consultant services with respect to the issuance of municipal securities, Davenport is obligated to evidence such a financial advisory relationship with a written agreement.

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Version 1.13.14 SO | JM

CITY OF LAKE WORTH BEACH, FLORIDA

# Electric Utility Cost of Service Study Update

**PRESENTED BY:** Craig Shepard, Project Manager

November 30, 2021



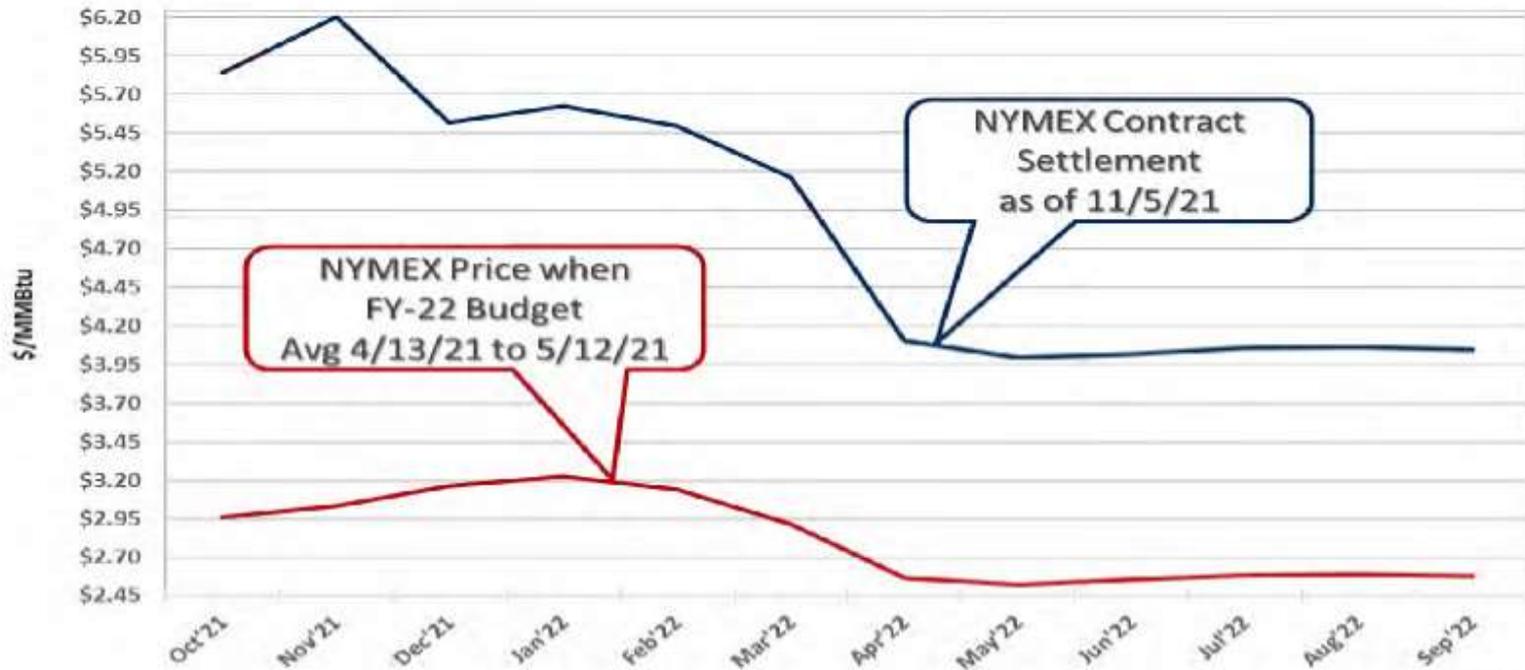
# Electric COS Study Update

- ▶ Update Projected Sales for FY 2022 and FY 2023
- ▶ Update Natural Gas Costs
- ▶ Update Projected Revenue Requirements for FY 2022 and FY 2023
- ▶ Revise Rates based on the COS Analysis
- ▶ Revise Rates to Meet Long Term Working Capital Goal
- ▶ Revise rates according to City policies, the Federal Energy Regulatory Commission, and the Florida Public Service Commission guidelines

# Natural Gas Prices

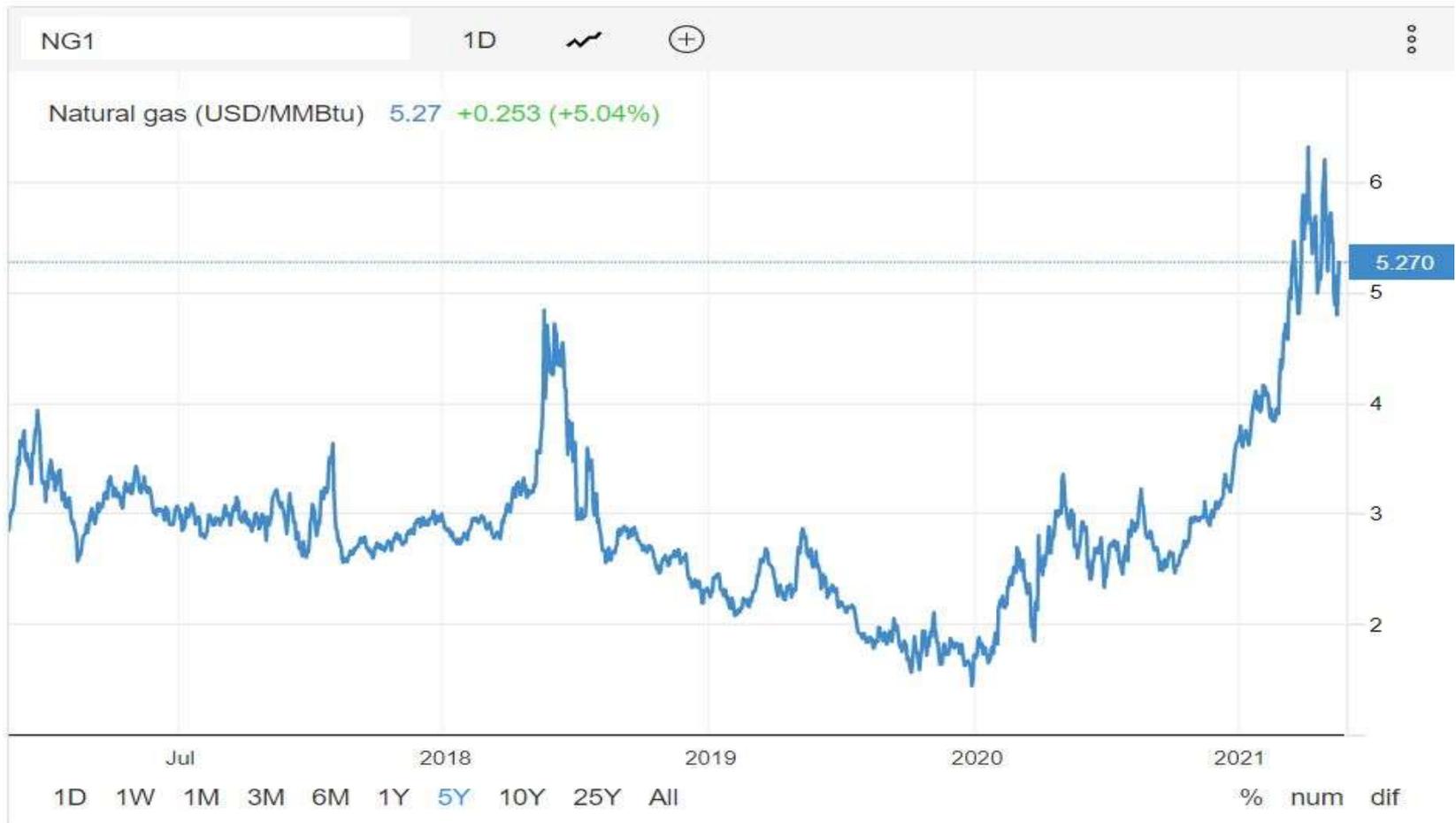
## FY 2022 NYMEX Contract \$2.02/MMBtu Above Budget

*NYMEX Natural Gas FY22 Settlement as of Nov. 5, 2021*



Source: FMPA

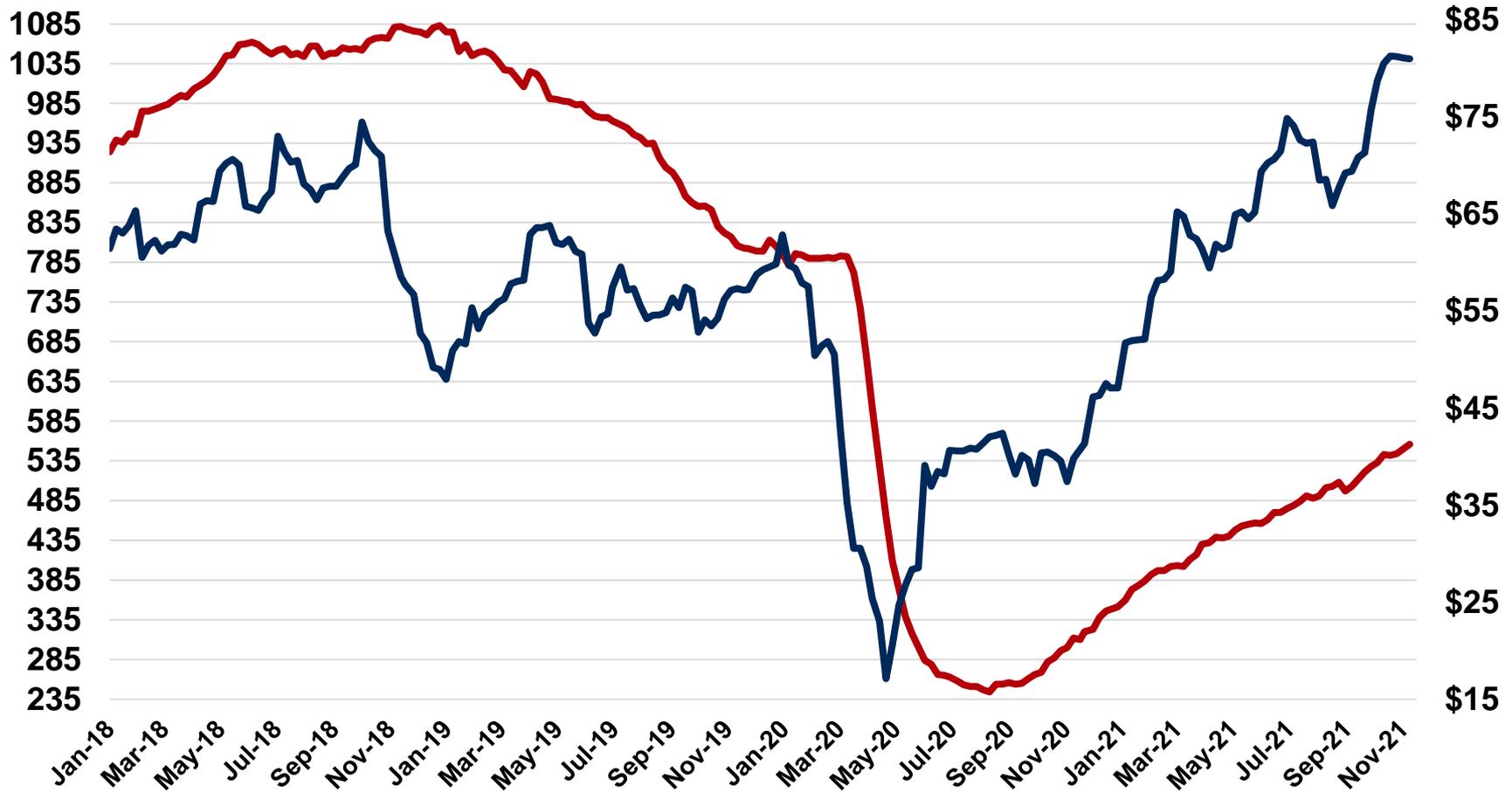
# Natural Gas Prices



Source:tradingeconomics.com as of 11-16-21

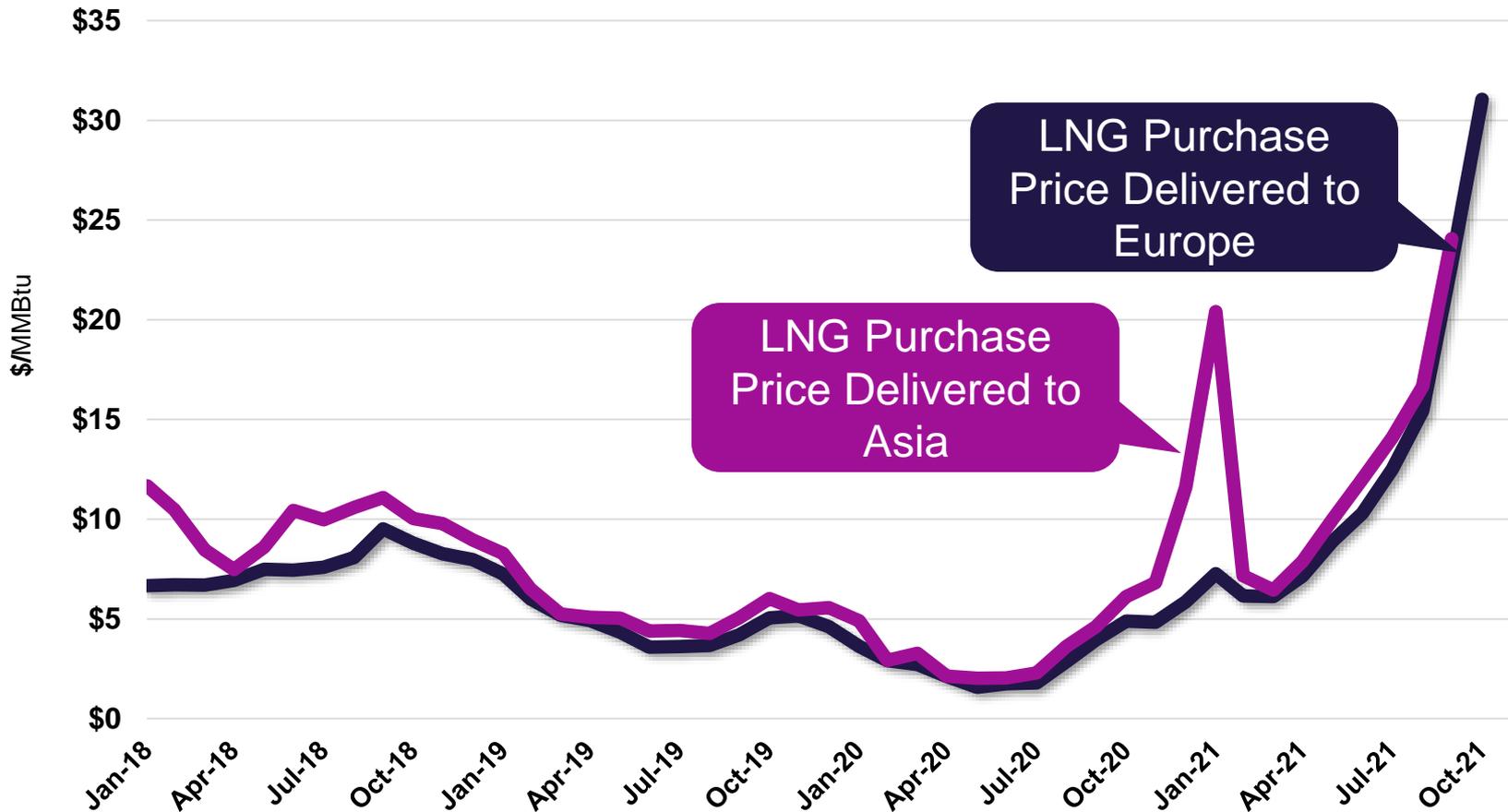
# Drilling Rig Count Increases, Oil Prices Move Higher

## Oil Prices Move into Low \$80 Range (as of Nov. 16)



Source:FMPA

# Significant Increase in Global LNG Demand – China, EU *Demand Driving Global Prices for LNG 600% Above U.S. Market*



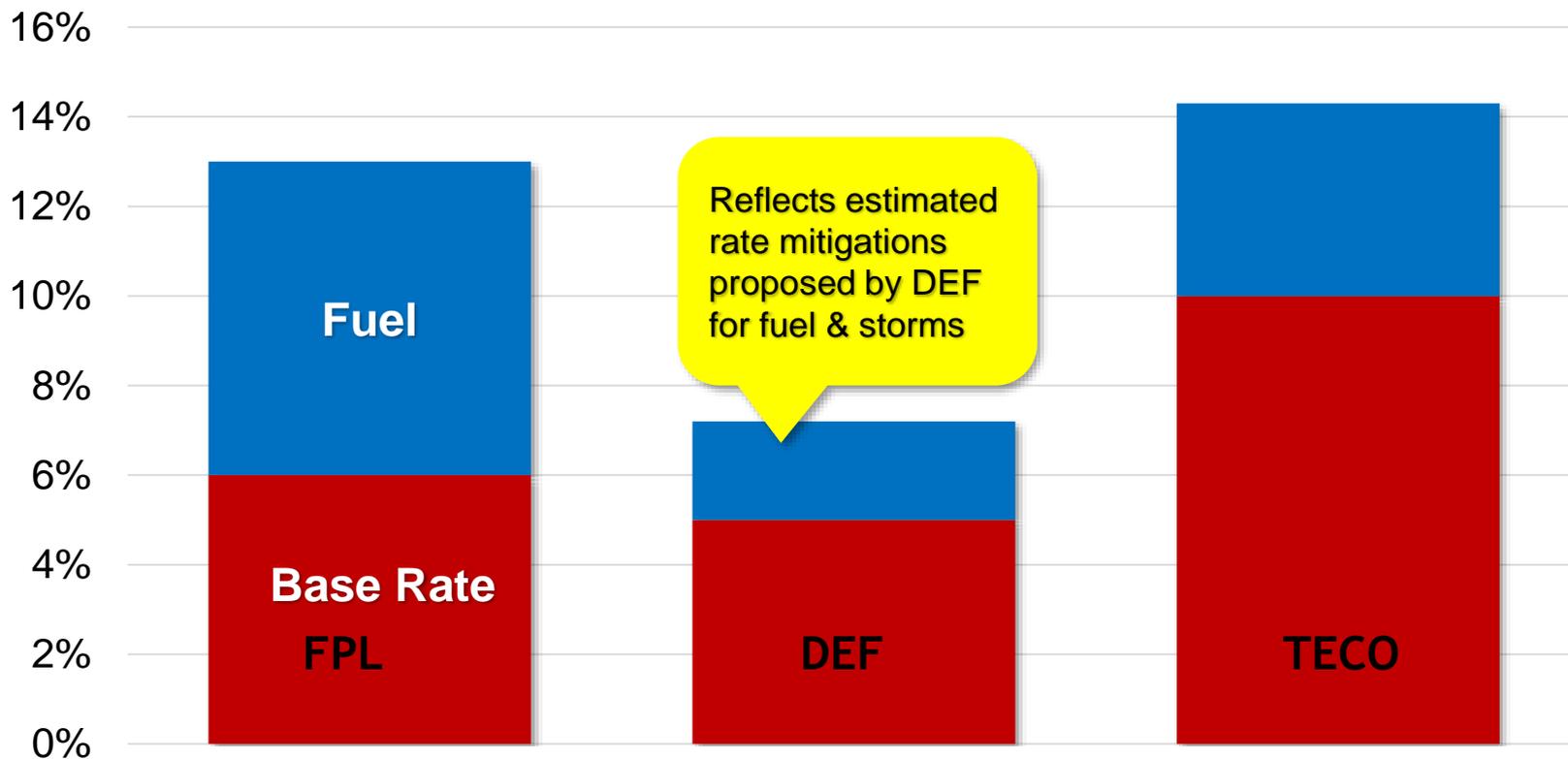
SOURCE: Ycharts for Europe

FRED Economic Data for Asia

# IOU Residential Rates Up ~11%\* on Average in January

*Several Municipals Considering Power Cost Adjustments as Well*

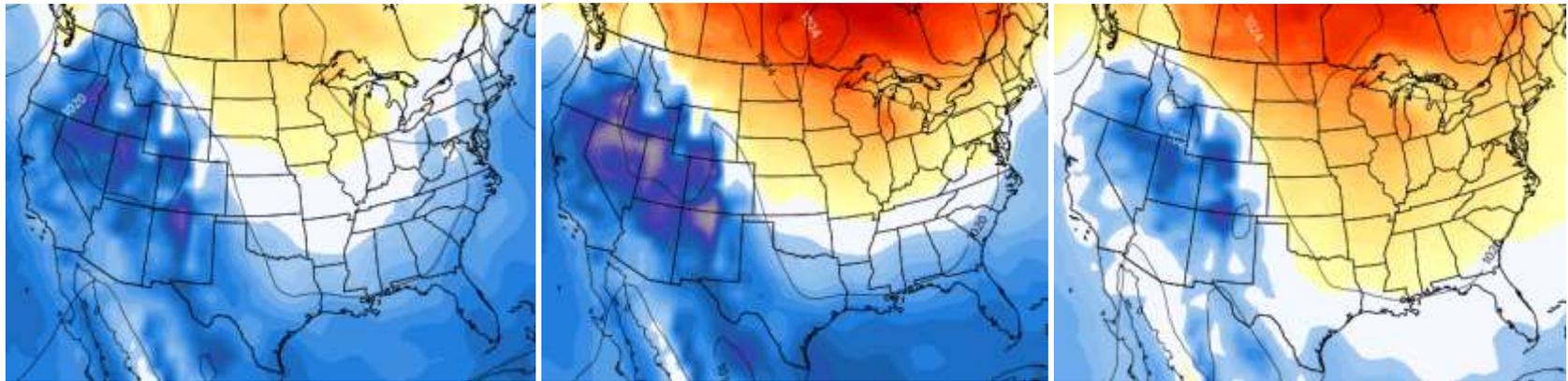
Estimated % Increase vs. Today, Effective January 2022



\*Based on publicly available estimates from utility sources for approved settlements. Average is a weighted average of sales Source:FMPA

# December to January Monthly Temperature Forecast

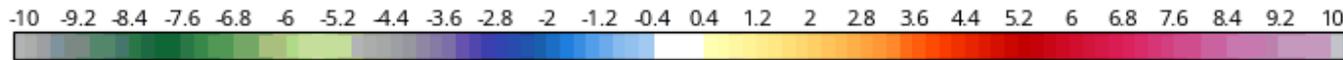
## *U.S. Heating Region Projected to be Warmer than Normal*



**December**

**January**

**February**



SOURCE: Weather Bell

# Rate Increase Alternatives

- ▶ Since September, Natural Gas Prices Have Increased Significantly
- ▶ Lake Worth Beach Is Less Sensitive to Natural Gas Price Increases Than Others
- ▶ Proposed Rates Recover Cost Increases over 18 Months (Effective April 2022) or 21 Months (Effective January 2022)
- ▶ Case 1: Move Toward Cost of Service, Effective April 2022
- ▶ Case 2: Even Increases by Rate Class, Effective April 2022
- ▶ Case 3: Move Toward Cost of Service, Effective January 2022
- ▶ Case 4: Even Increases by Rate Class, Effective January 2022

# Rate Increase Alternatives

	<u>Residential</u>	<u>Commercial</u>	<u>Residential</u> <u>1000 kWh</u>
Case 1 COS April 22	8.0%	5.0%	\$116.65
Case 2 Even April 22	6.9%	6.9%	\$115.65
Case 3 COS Jan 22	7.0%	4.0%	\$115.45
Case 4 Even Jan 22	6.0%	6.0%	\$114.45
Existing Residential Rate			\$107.99
Neighboring Utility Proposed Jan 22			\$119.37

# Residential Rates Case 1

			<u>Existing</u>	<u>Proposed 2022</u>
Customer Charge		(\$)	\$10.53	\$10.55
Energy Charge	First 1,000 kWh	(\$/kWh)	\$0.05148	\$0.07000
Energy Charge	Additional kWh	(\$/kWh)	\$0.07880	\$0.09000
PCA	First 1,000 kWh	(\$/kWh)	\$0.03578	\$0.03610
PCA	Additional kWh	(\$/kWh)	\$0.03900	\$0.04610
Capacity Charge	All kWh	(\$/kWh)	\$0.01020	-
Minimum Bill			\$31.40	\$35.00
Total for 1,000 kWh			\$107.99	\$116.65
Neighboring Utility 1,000 kWh			\$106.47	\$119.37

# Commercial Rates Case 1

		<u>Existing</u>	<u>Proposed 2022</u>
Customer Charge	(\$)	\$16.66	\$17.00
Energy Charge	All kWh (\$/kWh)	\$0.07040	\$0.08400
Power Cost Adjustment	(\$/kWh)	\$0.03578	\$0.03820
Capacity Charge	(\$/kWh)	\$0.01020	-
Minimum Bill - Single Phase		\$50.00	\$50.00
Minimum Bill - Poly Phase		\$50.00	\$100.00
Total for 1,500 kWh		\$191.23	\$200.30
Neighboring Utility 1,500 kWh		\$160.60	\$184.49

# Commercial Demand Rates Case 1

		<u>Existing</u>	<u>Proposed 2022</u>
Customer Charge	(\$)	\$120.00	\$130.00
Demand Charge	(\$/kW)	\$14.48	\$12.00
Energy Charge	All kWh (\$/kWh)	\$0.03550	\$0.04950
Power Cost Adjustment	(\$/kWh)	\$0.02890	\$0.03820
Capacity Charge	(\$/kWh)	\$0.01020	-
Total for 30 kW and 6,000 kWh		\$1,002.00	\$1,016.20
Neighboring Utility 30 kW 6,000 kWh		\$717.49	\$791.98

# Residential Rates Case 1

Usage (kWh)	Existing		Proposed		Difference	
	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
<b>500</b>	59.26	11.852	<b>63.60</b>	12.720	4.34	0.868
<b>600</b>	69.01	11.501	<b>74.21</b>	12.368	5.20	0.867
<b>700</b>	78.75	11.250	<b>84.82</b>	12.117	6.07	0.867
<b>800</b>	88.50	11.062	<b>95.43</b>	11.929	6.93	0.867
<b>900</b>	98.24	10.916	<b>106.04</b>	11.782	7.80	0.866
<b>1,000</b>	107.99	10.799	<b>116.65</b>	11.665	8.66	0.866
<b>1,100</b>	120.79	10.981	<b>130.26</b>	11.842	9.47	0.861
<b>1,200</b>	133.59	11.133	<b>143.87</b>	11.989	10.28	0.857
<b>1,300</b>	146.39	11.261	<b>157.48</b>	12.114	11.09	0.853
<b>1,400</b>	159.19	11.371	<b>171.09</b>	12.221	11.90	0.850
<b>1,500</b>	171.99	11.466	<b>184.70</b>	12.313	12.71	0.847
<b>2,000</b>	235.99	11.800	<b>252.75</b>	12.638	16.76	0.838
<b>2,500</b>	299.99	12.000	<b>320.80</b>	12.832	20.81	0.832
<b>3,000</b>	363.99	12.133	<b>388.85</b>	12.962	24.86	0.829
<b>4,000</b>	491.99	12.300	<b>524.95</b>	13.124	32.96	0.824
<b>5,000</b>	619.99	12.400	<b>661.05</b>	13.221	41.06	0.821

# Commercial Rates Case 1

Usage (kWh)	Existing		Proposed		Difference	
	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
<b>1,000</b>	133.04	13.304	<b>139.20</b>	13.920	6.16	0.616
<b>1,250</b>	162.14	12.971	<b>169.75</b>	13.580	7.62	0.609
<b>1,500</b>	191.23	12.749	<b>200.30</b>	13.353	9.07	0.605
<b>1,750</b>	220.33	12.590	<b>230.85</b>	13.191	10.53	0.601
<b>1,900</b>	237.78	12.515	<b>249.18</b>	13.115	11.40	0.600
<b>2,000</b>	249.42	12.471	<b>261.40</b>	13.070	11.98	0.599
<b>3,000</b>	365.80	12.193	<b>383.60</b>	12.787	17.80	0.593
<b>4,000</b>	482.18	12.055	<b>505.80</b>	12.645	23.62	0.590
<b>5,000</b>	598.56	11.971	<b>628.00</b>	12.560	29.44	0.589
<b>6,000</b>	714.94	11.916	<b>750.20</b>	12.503	35.26	0.588
<b>7,000</b>	831.32	11.876	<b>872.40</b>	12.463	41.08	0.587
<b>8,000</b>	947.70	11.846	<b>994.60</b>	12.433	46.90	0.586
<b>9,000</b>	1,064.08	11.823	<b>1,116.80</b>	12.409	52.72	0.586
<b>10,000</b>	1,180.46	11.805	<b>1,239.00</b>	12.390	58.54	0.585

# Commercial Demand Rates Case 1

Demand (kW)	Hours	Usage (kWh)	Existing		Proposed		Difference	
			Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
30	200	6,000	1,002.00	16.700	1,016.20	16.937	14.20	0.237
	300	9,000	1,225.80	13.620	1,279.30	14.214	53.50	0.594
	400	12,000	1,449.60	12.080	1,542.40	12.853	92.80	0.773
150	200	30,000	4,530.00	15.100	4,561.00	15.203	31.00	0.103
	300	45,000	5,649.00	12.553	5,876.50	13.059	227.50	0.506
	400	60,000	6,768.00	11.280	7,192.00	11.987	424.00	0.707
500	200	100,000	14,820.00	14.820	14,900.00	14.900	80.00	0.080
	300	150,000	18,550.00	12.367	19,285.00	12.857	735.00	0.490
	400	200,000	22,280.00	11.140	23,670.00	11.835	1,390.00	0.695

# Residential Rates Case 2

			<u>Existing</u>	<u>Proposed 2022</u>
Customer Charge		(\$)	\$10.53	\$10.55
Energy Charge	First 1,000 kWh	(\$/kWh)	\$0.05148	\$0.06900
Energy Charge	Additional kWh	(\$/kWh)	\$0.07880	\$0.08900
PCA	First 1,000 kWh	(\$/kWh)	\$0.03578	\$0.03610
PCA	Additional kWh	(\$/kWh)	\$0.03900	\$0.04610
Capacity Charge	All kWh	(\$/kWh)	\$0.01020	-
Minimum Bill			\$31.40	\$35.00
Total for 1,000 kWh			\$107.99	\$115.65
Neighboring Utility 1,000 kWh			\$106.47	\$119.37

# Commercial Rates Case 2

		<u>Existing</u>	<u>Proposed 2022</u>
Customer Charge	(\$)	\$16.66	\$17.00
Energy Charge	All kWh (\$/kWh)	\$0.07040	\$0.08700
Power Cost Adjustment	(\$/kWh)	\$0.03578	\$0.03820
Capacity Charge	(\$/kWh)	\$0.01020	-
Minimum Bill - Single Phase		\$50.00	\$50.00
Minimum Bill - Poly Phase		\$50.00	\$100.00
Total for 1,500 kWh		\$191.23	\$204.80
Neighboring Utility 1,500 kWh		\$160.60	\$184.49

# Commercial Demand Rates Case 2

		<u>Existing</u>	<u>Proposed 2022</u>
Customer Charge	(\$)	\$120.00	\$130.00
Demand Charge	(\$/kW)	\$14.48	\$12.00
Energy Charge	All kWh (\$/kWh)	\$0.03550	\$0.05200
Power Cost Adjustment	(\$/kWh)	\$0.02890	\$0.03820
Capacity Charge	(\$/kWh)	\$0.01020	-
Total for 30 kW and 6,000 kWh		\$1,002.00	\$1,031.20
Neighboring Utility 30 kW 6,000 kWh		\$717.49	\$791.98

# Residential Rates Case 2

Usage (kWh)	Existing		Proposed		Difference	
	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
<b>500</b>	59.26	11.852	<b>63.10</b>	12.620	3.84	0.768
<b>600</b>	69.01	11.501	<b>73.61</b>	12.268	4.60	0.767
<b>700</b>	78.75	11.250	<b>84.12</b>	12.017	5.37	0.767
<b>800</b>	88.50	11.062	<b>94.63</b>	11.829	6.13	0.766
<b>900</b>	98.24	10.916	<b>105.14</b>	11.682	6.90	0.766
<b>1,000</b>	107.99	10.799	<b>115.65</b>	11.565	7.66	0.766
<b>1,100</b>	120.79	10.981	<b>129.16</b>	11.742	8.37	0.761
<b>1,200</b>	133.59	11.133	<b>142.67</b>	11.889	9.08	0.757
<b>1,300</b>	146.39	11.261	<b>156.18</b>	12.014	9.79	0.753
<b>1,400</b>	159.19	11.371	<b>169.69</b>	12.121	10.50	0.750
<b>1,500</b>	171.99	11.466	<b>183.20</b>	12.213	11.21	0.747
<b>2,000</b>	235.99	11.800	<b>250.75</b>	12.538	14.76	0.738
<b>2,500</b>	299.99	12.000	<b>318.30</b>	12.732	18.31	0.732
<b>3,000</b>	363.99	12.133	<b>385.85</b>	12.862	21.86	0.729
<b>4,000</b>	491.99	12.300	<b>520.95</b>	13.024	28.96	0.724
<b>5,000</b>	619.99	12.400	<b>656.05</b>	13.121	36.06	0.721

# Commercial Rates Case 2

Usage (kWh)	Existing		Proposed		Difference	
	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
<b>1,000</b>	133.04	13.304	<b>142.20</b>	14.220	9.16	0.916
<b>1,250</b>	162.14	12.971	<b>173.50</b>	13.880	11.37	0.909
<b>1,500</b>	191.23	12.749	<b>204.80</b>	13.653	13.57	0.905
<b>1,750</b>	220.33	12.590	<b>236.10</b>	13.491	15.78	0.901
<b>1,900</b>	237.78	12.515	<b>254.88</b>	13.415	17.10	0.900
<b>2,000</b>	249.42	12.471	<b>267.40</b>	13.370	17.98	0.899
<b>3,000</b>	365.80	12.193	<b>392.60</b>	13.087	26.80	0.893
<b>4,000</b>	482.18	12.055	<b>517.80</b>	12.945	35.62	0.890
<b>5,000</b>	598.56	11.971	<b>643.00</b>	12.860	44.44	0.889
<b>6,000</b>	714.94	11.916	<b>768.20</b>	12.803	53.26	0.888
<b>7,000</b>	831.32	11.876	<b>893.40</b>	12.763	62.08	0.887
<b>8,000</b>	947.70	11.846	<b>1,018.60</b>	12.733	70.90	0.886
<b>9,000</b>	1,064.08	11.823	<b>1,143.80</b>	12.709	79.72	0.886
<b>10,000</b>	1,180.46	11.805	<b>1,269.00</b>	12.690	88.54	0.885

# Commercial Demand Rates Case 2

Demand (kW)	Hours	Usage (kWh)	Existing		Proposed		Difference	
			Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
<b>30</b>	<b>200</b>	<b>6,000</b>	1,002.00	16.700	<b>1,031.20</b>	17.187	29.20	0.487
	<b>300</b>	<b>9,000</b>	1,225.80	13.620	<b>1,301.80</b>	14.464	76.00	0.844
	<b>400</b>	<b>12,000</b>	1,449.60	12.080	<b>1,572.40</b>	13.103	122.80	1.023
<b>150</b>	<b>200</b>	<b>30,000</b>	4,530.00	15.100	<b>4,636.00</b>	15.453	106.00	0.353
	<b>300</b>	<b>45,000</b>	5,649.00	12.553	<b>5,989.00</b>	13.309	340.00	0.756
	<b>400</b>	<b>60,000</b>	6,768.00	11.280	<b>7,342.00</b>	12.237	574.00	0.957
<b>500</b>	<b>200</b>	<b>100,000</b>	14,820.00	14.820	<b>15,150.00</b>	15.150	330.00	0.330
	<b>300</b>	<b>150,000</b>	18,550.00	12.367	<b>19,660.00</b>	13.107	1,110.00	0.740
	<b>400</b>	<b>200,000</b>	22,280.00	11.140	<b>24,170.00</b>	12.085	1,890.00	0.945

# Residential Rates Case 3

			<u>Existing</u>	<u>Proposed 2022</u>
Customer Charge		(\$)	\$10.53	\$10.55
Energy Charge	First 1,000 kWh	(\$/kWh)	\$0.05148	\$0.07000
Energy Charge	Additional kWh	(\$/kWh)	\$0.07880	\$0.09000
PCA	First 1,000 kWh	(\$/kWh)	\$0.03578	\$0.03490
PCA	Additional kWh	(\$/kWh)	\$0.03900	\$0.04490
Capacity Charge	All kWh	(\$/kWh)	\$0.01020	-
Minimum Bill			\$31.40	\$35.00
Total for 1,000 kWh			\$107.99	\$115.45
Neighboring Utility 1,000 kWh			\$106.47	\$119.37

# Commercial Rates Case 3

		<u>Existing</u>	<u>Proposed 2022</u>
Customer Charge	(\$)	\$16.66	\$17.00
Energy Charge	All kWh (\$/kWh)	\$0.07040	\$0.08400
Power Cost Adjustment	(\$/kWh)	\$0.03578	\$0.03700
Capacity Charge	(\$/kWh)	\$0.01020	-
Minimum Bill - Single Phase		\$50.00	\$50.00
Minimum Bill - Poly Phase		\$50.00	\$100.00
Total for 1,500 kWh		\$191.23	\$198.50
Neighboring Utility 1,500 kWh		\$160.60	\$184.49

# Commercial Demand Rates Case 3

		<u>Existing</u>	<u>Proposed 2022</u>
Customer Charge	(\$)	\$120.00	\$130.00
Demand Charge	(\$/kW)	\$14.48	\$12.00
Energy Charge	All kWh (\$/kWh)	\$0.03550	\$0.04950
Power Cost Adjustment	(\$/kWh)	\$0.02890	\$0.03700
Capacity Charge	(\$/kWh)	\$0.01020	-
Total for 30 kW and 6,000 kWh		\$1,002.00	\$1,009.00
Neighboring Utility 30 kW 6,000 kWh		\$717.49	\$791.98

# Residential Rates Case 3

Usage (kWh)	Existing		Proposed		Difference	
	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
<b>500</b>	59.26	11.852	<b>63.00</b>	12.600	3.74	0.748
<b>600</b>	69.01	11.501	<b>73.49</b>	12.248	4.48	0.747
<b>700</b>	78.75	11.250	<b>83.98</b>	11.997	5.23	0.747
<b>800</b>	88.50	11.062	<b>94.47</b>	11.809	5.97	0.746
<b>900</b>	98.24	10.916	<b>104.96</b>	11.662	6.72	0.746
<b>1,000</b>	107.99	10.799	<b>115.45</b>	11.545	7.46	0.746
<b>1,100</b>	120.79	10.981	<b>128.94</b>	11.722	8.15	0.741
<b>1,200</b>	133.59	11.133	<b>142.43</b>	11.869	8.84	0.737
<b>1,300</b>	146.39	11.261	<b>155.92</b>	11.994	9.53	0.733
<b>1,400</b>	159.19	11.371	<b>169.41</b>	12.101	10.22	0.730
<b>1,500</b>	171.99	11.466	<b>182.90</b>	12.193	10.91	0.727
<b>2,000</b>	235.99	11.800	<b>250.35</b>	12.518	14.36	0.718
<b>2,500</b>	299.99	12.000	<b>317.80</b>	12.712	17.81	0.712
<b>3,000</b>	363.99	12.133	<b>385.25</b>	12.842	21.26	0.709
<b>4,000</b>	491.99	12.300	<b>520.15</b>	13.004	28.16	0.704
<b>5,000</b>	619.99	12.400	<b>655.05</b>	13.101	35.06	0.701

# Commercial Rates Case 3

Usage (kWh)	Existing		Proposed		Difference	
	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
<b>1,000</b>	133.04	13.304	<b>138.00</b>	13.800	4.96	0.496
<b>1,250</b>	162.14	12.971	<b>168.25</b>	13.460	6.12	0.489
<b>1,500</b>	191.23	12.749	<b>198.50</b>	13.233	7.27	0.485
<b>1,750</b>	220.33	12.590	<b>228.75</b>	13.071	8.43	0.481
<b>1,900</b>	237.78	12.515	<b>246.90</b>	12.995	9.12	0.480
<b>2,000</b>	249.42	12.471	<b>259.00</b>	12.950	9.58	0.479
<b>3,000</b>	365.80	12.193	<b>380.00</b>	12.667	14.20	0.473
<b>4,000</b>	482.18	12.055	<b>501.00</b>	12.525	18.82	0.470
<b>5,000</b>	598.56	11.971	<b>622.00</b>	12.440	23.44	0.469
<b>6,000</b>	714.94	11.916	<b>743.00</b>	12.383	28.06	0.468
<b>7,000</b>	831.32	11.876	<b>864.00</b>	12.343	32.68	0.467
<b>8,000</b>	947.70	11.846	<b>985.00</b>	12.313	37.30	0.466
<b>9,000</b>	1,064.08	11.823	<b>1,106.00</b>	12.289	41.92	0.466
<b>10,000</b>	1,180.46	11.805	<b>1,227.00</b>	12.270	46.54	0.465

# Commercial Demand Rates Case 3

Demand (kW)	Hours	Usage (kWh)	Existing		Proposed		Difference	
			Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
30	200	6,000	1,002.00	16.700	1,009.00	16.817	7.00	0.117
	300	9,000	1,225.80	13.620	1,268.50	14.094	42.70	0.474
	400	12,000	1,449.60	12.080	1,528.00	12.733	78.40	0.653
150	200	30,000	4,530.00	15.100	4,525.00	15.083	(5.00)	(0.017)
	300	45,000	5,649.00	12.553	5,822.50	12.939	173.50	0.386
	400	60,000	6,768.00	11.280	7,120.00	11.867	352.00	0.587
500	200	100,000	14,820.00	14.820	14,780.00	14.780	(40.00)	(0.040)
	300	150,000	18,550.00	12.367	19,105.00	12.737	555.00	0.370
	400	200,000	22,280.00	11.140	23,430.00	11.715	1,150.00	0.575

# Residential Rates Case 4

			<u>Existing</u>	<u>Proposed 2022</u>
Customer Charge		(\$)	\$10.53	\$10.55
Energy Charge	First 1,000 kWh	(\$/kWh)	\$0.05148	\$0.06900
Energy Charge	Additional kWh	(\$/kWh)	\$0.07880	\$0.08900
PCA	First 1,000 kWh	(\$/kWh)	\$0.03578	\$0.03490
PCA	Additional kWh	(\$/kWh)	\$0.03900	\$0.04490
Capacity Charge	All kWh	(\$/kWh)	\$0.01020	-
Minimum Bill			\$31.40	\$35.00
Total for 1,000 kWh			\$107.99	\$114.45
Neighboring Utility 1,000 kWh			\$106.47	\$119.37

# Commercial Rates Case 4

		<u>Existing</u>	<u>Proposed 2022</u>
Customer Charge	(\$)	\$16.66	\$17.00
Energy Charge	All kWh (\$/kWh)	\$0.07040	\$0.08700
Power Cost Adjustment	(\$/kWh)	\$0.03578	\$0.03700
Capacity Charge	(\$/kWh)	\$0.01020	-
Minimum Bill - Single Phase		\$50.00	\$50.00
Minimum Bill - Poly Phase		\$50.00	\$100.00
Total for 1,500 kWh		\$191.23	\$203.00
Neighboring Utility 1,500 kWh		\$160.60	\$184.49

# Commercial Demand Rates Case 4

		<u>Existing</u>	<u>Proposed 2022</u>
Customer Charge	(\$)	\$120.00	\$130.00
Demand Charge	(\$/kW)	\$14.48	\$12.00
Energy Charge	All kWh (\$/kWh)	\$0.03550	\$0.05200
Power Cost Adjustment	(\$/kWh)	\$0.02890	\$0.03700
Capacity Charge	(\$/kWh)	\$0.01020	-
Total for 30 kW and 6,000 kWh		\$1,002.00	\$1,024.00
Neighboring Utility 30 kW 6,000 kWh		\$717.49	\$791.98

# Residential Rates Case 4

Usage (kWh)	Existing		Proposed		Difference	
	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
<b>500</b>	59.26	11.852	<b>62.50</b>	12.500	3.24	0.648
<b>600</b>	69.01	11.501	<b>72.89</b>	12.148	3.88	0.647
<b>700</b>	78.75	11.250	<b>83.28</b>	11.897	4.53	0.647
<b>800</b>	88.50	11.062	<b>93.67</b>	11.709	5.17	0.647
<b>900</b>	98.24	10.916	<b>104.06</b>	11.562	5.82	0.646
<b>1,000</b>	107.99	10.799	<b>114.45</b>	11.445	6.46	0.646
<b>1,100</b>	120.79	10.981	<b>127.84</b>	11.622	7.05	0.641
<b>1,200</b>	133.59	11.133	<b>141.23</b>	11.769	7.64	0.637
<b>1,300</b>	146.39	11.261	<b>154.62</b>	11.894	8.23	0.633
<b>1,400</b>	159.19	11.371	<b>168.01</b>	12.001	8.82	0.630
<b>1,500</b>	171.99	11.466	<b>181.40</b>	12.093	9.41	0.627
<b>2,000</b>	235.99	11.800	<b>248.35</b>	12.418	12.36	0.618
<b>2,500</b>	299.99	12.000	<b>315.30</b>	12.612	15.31	0.612
<b>3,000</b>	363.99	12.133	<b>382.25</b>	12.742	18.26	0.609
<b>4,000</b>	491.99	12.300	<b>516.15</b>	12.904	24.16	0.604
<b>5,000</b>	619.99	12.400	<b>650.05</b>	13.001	30.06	0.601

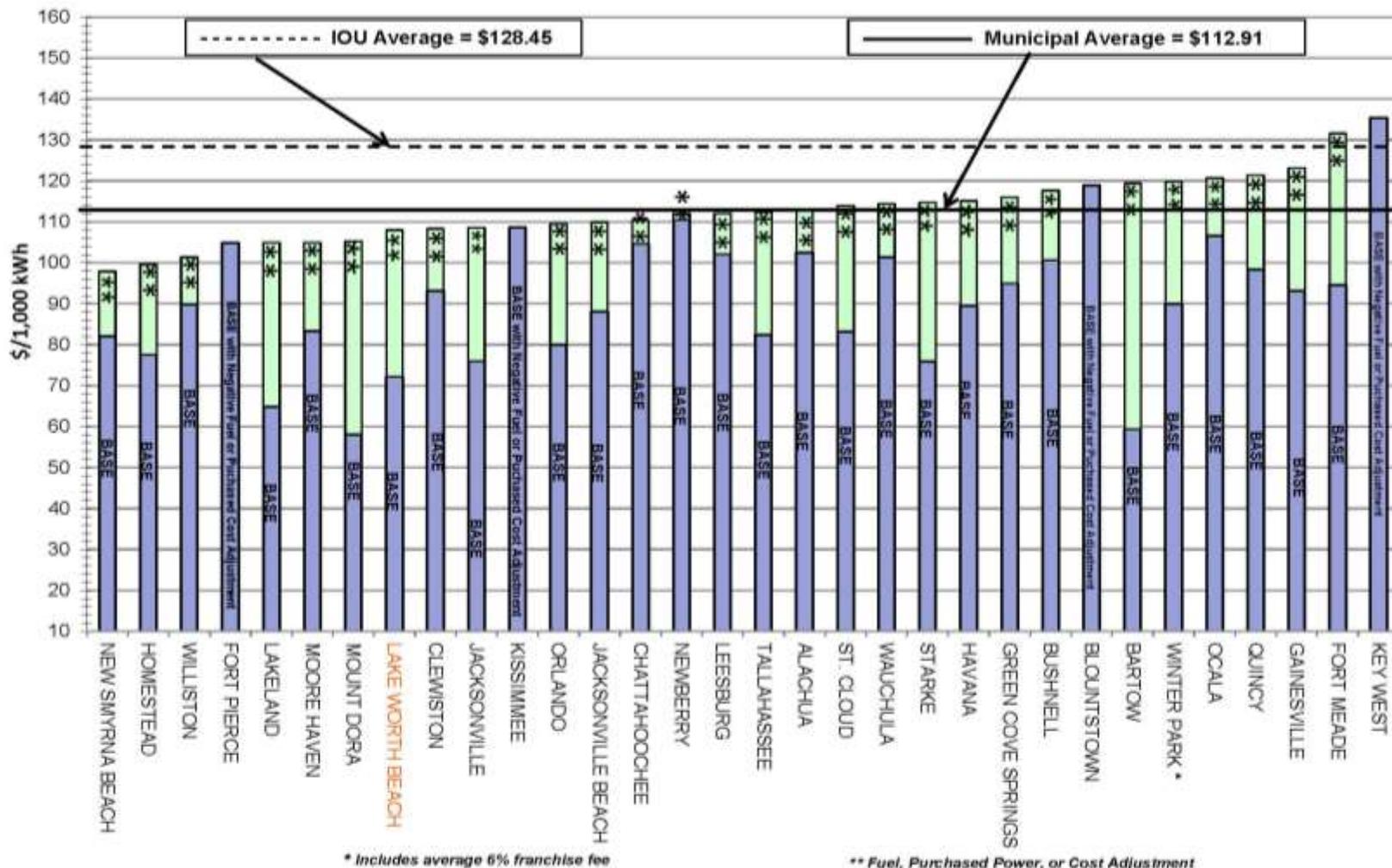
# Commercial Rates Case 4

Usage (kWh)	Existing		Proposed		Difference	
	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
<b>1,000</b>	133.04	13.304	<b>141.00</b>	14.100	7.96	0.796
<b>1,250</b>	162.14	12.971	<b>172.00</b>	13.760	9.87	0.789
<b>1,500</b>	191.23	12.749	<b>203.00</b>	13.533	11.77	0.785
<b>1,750</b>	220.33	12.590	<b>234.00</b>	13.371	13.68	0.781
<b>1,900</b>	237.78	12.515	<b>252.60</b>	13.295	14.82	0.780
<b>2,000</b>	249.42	12.471	<b>265.00</b>	13.250	15.58	0.779
<b>3,000</b>	365.80	12.193	<b>389.00</b>	12.967	23.20	0.773
<b>4,000</b>	482.18	12.055	<b>513.00</b>	12.825	30.82	0.770
<b>5,000</b>	598.56	11.971	<b>637.00</b>	12.740	38.44	0.769
<b>6,000</b>	714.94	11.916	<b>761.00</b>	12.683	46.06	0.768
<b>7,000</b>	831.32	11.876	<b>885.00</b>	12.643	53.68	0.767
<b>8,000</b>	947.70	11.846	<b>1,009.00</b>	12.613	61.30	0.766
<b>9,000</b>	1,064.08	11.823	<b>1,133.00</b>	12.589	68.92	0.766
<b>10,000</b>	1,180.46	11.805	<b>1,257.00</b>	12.570	76.54	0.765

# Commercial Demand Rates Case 4

Demand (kW)	Hours	Usage (kWh)	Existing		Proposed		Difference	
			Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
30	200	6,000	1,002.00	16.700	1,024.00	17.067	22.00	0.367
	300	9,000	1,225.80	13.620	1,291.00	14.344	65.20	0.724
	400	12,000	1,449.60	12.080	1,558.00	12.983	108.40	0.903
150	200	30,000	4,530.00	15.100	4,600.00	15.333	70.00	0.233
	300	45,000	5,649.00	12.553	5,935.00	13.189	286.00	0.636
	400	60,000	6,768.00	11.280	7,270.00	12.117	502.00	0.837
500	200	100,000	14,820.00	14.820	15,030.00	15.030	210.00	0.210
	300	150,000	18,550.00	12.367	19,480.00	12.987	930.00	0.620
	400	200,000	22,280.00	11.140	23,930.00	11.965	1,650.00	0.825

# Comparison of Residential Bills 1,000 kWh – September 2021



Compiled by: Florida Municipal Electric Association - [flpublicpower.com](http://flpublicpower.com)

# Recommendations

- ▶ Revise Rates to Reflect Current Costs
- ▶ Move Rates More Toward Cost of Service
- ▶ Increase Minimum Bills to Help Cover Fixed Costs
- ▶ Revise Purchased Cost Adjustment (PCA)
- ▶ Establish Rate Stabilization Fund
- ▶ Consider Economic Development Rider

# Questions / Comments

## POINTS OF CONTACT

**Craig R. Shepard**

**PRINCIPAL ANALYST / PROJECT MANAGER**

407.648.3538

12901 Science Drive

Orlando, FL 32826

[craig.r.shepard@leidos.com](mailto:craig.r.shepard@leidos.com)

**Selvin H. Dottin**

**QUALITY ASSURANCE / QUALITY CONTROL REVIEWER**

407.648.3534

12901 Science Drive

Orlando, FL 32826

[selvin.h.dottin@leidos.com](mailto:selvin.h.dottin@leidos.com)

Visit us at [energy.leidos.com](http://energy.leidos.com)

# Electric Cost of Service Study

City of Lake Worth Beach, Florida



November 2021



This report has been prepared for the use of the client for the specific purposes identified in the report. The conclusions, observations and recommendations contained herein attributed to Leidos constitute the opinions of Leidos. To the extent that statements, information and opinions provided by the client or others have been used in the preparation of this report, Leidos has relied upon the same to be accurate, and for which no assurances are intended and no representations or warranties are made. Leidos makes no certification and gives no assurances except as explicitly set forth in this report.

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November 17, 2021

The Honorable Mayor and City Commission  
City of Lake Worth Beach  
City Hall, 1900 2<sup>nd</sup> Avenue North  
Lake Worth Beach, Florida 33461

Subject: **Electric Cost of Service Study**

Honorable Mayor and Commissioners:

In keeping with the provisions of the professional services agreement between the City of Lake Worth Beach, Florida (the City) and Leidos Engineering, LLC, (the Consultant) and the direction provided by the City management and staff, the Electric Cost of Service Study (the Report) has been completed. The Report addresses the projected financial operations of the City's electric system (Electric System) for the fiscal years ending September 30, 2020 through 2024. We have summarized our assumptions and the results of our analyses and conclusions in this Report, which we hereby submit for your consideration. This Report summarizes the basis for the proposed rates for electric service that are necessary to meet the projected revenue requirements in the near future and which rates should recover such projected requirements from the customer classes generally in accordance with the direction provided by the City, the guidelines of the Florida Public Service Commission (the PSC) and the results of the allocated cost of service analyses.

In preparing the Electric Cost of Service Study, the Consultant relied upon historical and projected data for the development of operating revenues, operating expenses and capital requirements. Historical data were obtained from various monthly reports, the City's Comprehensive Annual Financial Reports, actual customer billing records, and analyses and discussions with members of the City management and staff. Projected data were, in part, derived from the Electric System's current forecast of demand and energy requirements, the Electric System Operating Budget for Fiscal Year 2020 (the Budget), and detailed information and data compiled and provided by members of the City management and staff.

The projected costs and revenues used in this Report are for the fiscal years ending September 30, 2020 through 2024, and have been developed using the City's Budget as a basis for the projected costs. Such costs and revenues, as initially reflected in the Budget, were adjusted for known or anticipated changes, including recent increases in natural gas costs.

**Leidos Engineering, LLC**

1000 Legion Place, Suite 1100 | Orlando, FL 32801 | tel: 407.422.4911 | fax: 407.648.8382 | [leidos.com/engineering](http://leidos.com/engineering)

## SUMMARY OF FINDINGS

### ADEQUACY OF EXISTING RATES

The various adjustments, assumptions and considerations are discussed in Section 2 regarding the projected number of customers, sales, and in Section 3 regarding the projected revenues and expenditures. In the fiscal years ending September 30, 2020 through 2024, the revenue requirements proposed herein include Operation and Maintenance expenses, a transfer to the City's General Fund, capital improvement expenditures, the payment of principal and interest on outstanding indebtedness, and an allowance for contingencies and reserves. Based on the foregoing, the Electric System revenue requirements for fiscal years ending September 30, 2020 through 2024 and the projected revenues, assuming the existing rates, are summarized on the following table:

Description	Projected				
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Net Revenue Requirements	\$58,158,995	\$58,300,746	\$64,422,550	\$62,237,218	\$61,950,862
Total Existing Rate Revenue	58,558,995	58,931,674	59,307,414	59,686,250	60,068,214
Surplus/(Deficiency)	\$400,000	\$630,927	(\$5,115,136)	(\$2,550,968)	(\$1,882,649)
Percent of Base and Fuel Revenue	0.8%	1.2%	-10.0%	-5.0%	-3.6%

As shown above, the existing rates produce revenues that are slightly greater than the projected revenue requirements in the fiscal years ending September 30, 2020 and 2021 and under recover the projected revenue requirements in the fiscal years ending September 30, 2022 through 2024.

Based on the analyses in this Report, the proposed rates represent a realignment of costs allocated among the residential and commercial classes. It is projected that the proposed rates will help to meet the projected revenue requirements for the fiscal year ending September 30, 2022. For certain analyses, the “Test Year” has been identified as the fiscal year ending September 30, 2020.

### COST OF SERVICE RESULTS

The Test Year revenue requirements were allocated to the customer classes based on a cost of service model that functionalizes costs among production, transmission, distribution and customer costs, and classifies costs according to demand related or energy related costs. Production (purchased power) demand related costs were allocated based on the contribution of each class to the average 12 month coincident peak demands and distribution demand related costs were allocated based on the contribution of each class to the annual system peak demand. Section 4 shows the development of allocation factors and Section 5 shows the results of the cost of service analysis.

The results of the cost of service analysis and target adjustments for the fiscal year ending September 30, 2022 are summarized as follows:

Customer Class	Fiscal Year 2022		
	Total Existing Revenue	Target Adjustments	
	(\$000)	(\$000)	(%) [1]
Residential	\$36,200	\$2,896	8.0%
Commercial	16,151	\$808	5.0%
Commercial Demand	6,162	\$308	5.0%
Lighting	700	\$35	5.0%
<b>Total System</b>	<b>\$59,213</b>	<b>\$4,047</b>	<b>6.8%</b>

[1] Percent of existing base rates and PCA revenues.

#### RATE DESIGN

The proposed electric rates shown in Section 6 reflect, to the extent permitted, (i) the lowest possible price consistent with the projected revenue requirements, (ii) the discouragement of wasteful, unnecessary use of service, (iii) the policies of the City, and (iv) the cost of service methodologies recommended by the Florida Public Service Commission (the PSC).

The principal effects of adopting the rates proposed herein would be:

- Rate structures and levels, in general, will be based, in part, on allocated cost of service techniques.
- Fuel and purchased power costs will continue to be shown in a separate charge, the Purchased Power Cost Adjustment (PCA).
- The proposed rates will help to meet the projected revenue requirements for the fiscal year ending September 30, 2022.

#### RATE COMPARISONS

To assist the City in its evaluation and consideration of proposed rate adjustments, included in Table No. 7-1 are comparisons of typical monthly bills for the major rate classifications at various levels of usage. Typical bills calculated under the proposed rates have been compared with bills calculated under the existing rates. In addition, typical monthly bills calculated under the Electric System’s existing and proposed rates have been compared with those calculated under the rates of other Florida investor-owned and municipal electric utilities in Table No. 7-2 for the billing month of January 2021.

When reviewing the comparisons of typical bills, it must be recognized that a substantial portion of the electric bill is comprised of fuel and purchased energy costs. For electric utilities other than the Electric System, the bill comparisons shown reflect fuel costs that were estimated in early 2021 and may not reflect actual current market prices for gas, oil and purchased energy.

As shown on Table No. 7-1, typical residential customers' bills under the proposed rates are approximately 8 percent higher than the existing rates, and typical commercial customers' bills can be expected to increase by approximately 5 percent on average.

## CONCLUSIONS

Based upon the results of our studies and analyses as summarized in this Report, which should be read in its entirety in conjunction with the following, and upon the numerous underlying assumptions and considerations relied upon in making such analyses and incorporated by reference herein, and the data and information provided by the City's management and staff and others, we are of the opinion that:

- (i) The existing rates produce revenues that are approximately equal to the projected revenue requirements in the fiscal years ending September 30, 2020 through 2021 and under recover the projected revenue requirements in the fiscal years ending September 30, 2022 through 2024;
- (ii) The proposed rates reflect a realignment of costs among the residential and commercial rate classes, and are projected to help meet the revenue requirements for the fiscal year ending September 30, 2022.
- (iii) The City should consider adopting the proposed rates shown in Section 6.
- (iv) The City should consider establishing a Rate Stabilization Fund to mitigate fluctuations in purchased power costs.
- (v) The City's existing and proposed rates are comparable to other Florida electric utilities;
- (vi) The City may want to investigate additional rate offerings such as an Economic Development Rider, Residential Time of Use Rate, Solar Subscription Rate, or Electric Vehicle Rate;
- (vii) The City should continue to monitor the cost of purchased power and current market conditions and should make adjustments, if necessary, to its power cost recovery factor to reflect such costs and conditions and to minimize the potential to under recover or over recover its fuel costs; and
- (viii) The City should consider submitting this Report, together with other appropriate filing requirements, to the PSC.

We are prepared to present our analyses and proposed rates to the City Commission and to assist the City with public meetings, with PSC filing requirements, and with presentations in connection with the adoption and implementation of the proposed rates.

The Honorable Mayor and City Commission  
City of Lake Worth Beach  
November 17, 2021  
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We want to take this opportunity to express our appreciation for the spirited cooperation and valuable assistance given us throughout the course of this study by each member of the City management and staff.

Respectfully submitted,

***LEIDOS ENGINEERING, LLC***

# Electric Cost of Service Study

## City of Lake Worth Beach, Florida

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# Section 1

## INTRODUCTION, PURPOSE, AND SCOPE

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### Introduction

The City of Lake Worth Beach (City), located in south Florida, operates a municipal utility system serving 473,590 MWh in 2019 with a system peak load of 97.2 MW. Lake Worth Beach currently meets its load requirements using a variety of resources, including self-owned and self-operated on-site generation assets and off-site resources as a member of Florida Municipal Power Agency (FMPA). As a participant in FMPA Projects, the City benefits from the associated capacity and energy (Generation Entitlements) to meet its customers' load requirements.

Leidos Engineering, LLC, (the Consultant or the firm) conducted this study, which relied upon historical and projected data for the development of operating revenues, operating expenses, and capital requirements. Historical data was obtained from various monthly reports, annual financial reports, actual billing records, analyses, and discussions with members of the management and staff of the City. Projected data was, in part, derived from historical data adjusted for current economic conditions, the Operating Budget for Fiscal Year ending September 30, 2020 and the Capital Improvement Plan for Fiscal Years 2020 through 2024, the City's demand and energy forecasts (including the effects of conservation), the various contracts, and the direction and instructions provided by the City, and other appropriate sources.

### Purpose

The primary purposes of the Electric Rate Study are:

1. To determine the estimated annual revenue requirements for the Fiscal Year ending September 30, 2020, as adjusted for known changes (the Test Year); and Fiscal Years ending September 30, 2021 through 2024 (Study Period).
2. To test the adequacy of the existing rates on a system wide basis for the Fiscal Years 2020 through 2024;
3. To prepare a cost of service analysis to estimate the cost of providing electric service by customer class;
4. To adjust rate levels, if necessary, in order to recover the cost of providing service, and to reflect the policies established by the City; and
5. To continue to recover periodically the costs of purchased power.

### Scope

The overall scope of services of the Electric Rate Study provided for (i) the development of a revenue requirements study for the Test Year and Study Period; (ii) the development

## Section 1

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of proposed rate levels and rate structures that are designed to recover the revenue requirements for the Test Year and Study Period which reflect the City's policy and industry practices; and (iii) the development of comparisons of typical bills for electric service calculated using the existing and proposed rates and the rates charged by neighboring private and public electric utilities.

The Electric Rate Study consists of two parts or phases. The results are presented in this report. Working closely with management and staff, Phase I activities included, among other things, (i) obtaining and reviewing historical billing data, (ii) reconciling such data, (iii) identifying the proper sales forecast to use for purposes of projecting rate revenues and costs (iv) projecting billing determinants in order to calculate the effect on revenues based on revised rates, (v) preparing projections of revenues by major customer class, (vi) developing projected annual revenue requirements for the Test Year and Study Period, (vii) preparing a comparison of the City's existing rates and the rates of other utilities, and (viii) preparing a Phase I report.

Phase II includes (i) the making of revisions to the revenue requirements, (ii) the affirmation of City policies and direction, (iii) the allocation of costs, (iv) the design of proposed rates, and (v) the preparation of a final report.

## ENERGY REQUIREMENTS AND CUSTOMER STATISTICS

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### General

The development of an accurate forecast of future power and energy requirements, sales, customers, and customer usage characteristics, is essential in the evaluation of the adequacy of electric rates and rate structures. This section summarizes the various factors considered and utilized in the development of the City's near term future power and energy requirements.

The estimates of energy and demand requirements developed for inclusion in this study were based on historical sales, customers, and customer usage characteristics.

### Energy Requirements

#### Projection of Electricity Sales to Ultimate Customers

The projections of electric energy sales to ultimate customers are based on an analysis of historical information for the fiscal year ended September 30, 2019. Historical growth, usage patterns, and normalized weather were tested for reasonableness.

Based on information filed with the Energy Information Administration (EIA) and information provided by the City, the following tables show the historical number of residential and commercial customers and residential and commercial energy sales.

Historical Number of Customers			
Fiscal Year	Residential	Commercial	Total
2014	22,179	3,648	25,827
2015	22,830	3,728	26,558
2016	23,053	3,739	26,792
2017	23,357	3,748	27,105
2018	23,399	3,746	27,145
2019	23,528	3,748	27,276
2020	23,758	3,763	27,520

Historical Retail Energy Sales (MWh)			
Fiscal Year	Residential	Commercial	Total
2014	195,937	177,660	373,597
2015	225,813	204,532	430,345
2016	254,734	180,024	434,758
2017	244,928	183,819	428,747
2018	253,196	179,990	433,186
2019	260,305	179,662	439,967
2020	264,974	169,047	434,021

Based on information provided by the City, it was projected that the reported number of customers and kWh sales would increase by 0.5% annually for the projected fiscal year 2021, and Study Period.

## Projected Demand

The historical system peak demand for the fiscal year ending September 30, 2019 was 97.2 MW. For purposes of this Study, it was projected that the system peak demand the Test Year would be 96.8 MW.

## Projected Energy Sales

The monthly system historical and projected energy sales are set forth in Table No. 2-1, page 2. The following tabulation is an annual summary of the historical and projected energy sales by major customer class:

Retail Energy Sales (MWh)			
Fiscal Year	Residential	Commercial	Total
Historical 2019	260,305	179,662	439,967
Historical 2020	264,974	169,047	434,021
Projected 2021	268,937	165,635	434,572

As can be seen from the summary table, energy sales in fiscal years ended September 30, 2019 were 439,967 MWh and 434,021 MWh in Fiscal Year 2020. Sales in Fiscal Year 2021 and the Study Period are based on a projected annual growth rate of 0.5 percent.

## Projected Average Number of Customers

An integral part of the forecasting process is the average number of customers the City expects to serve by major customer class. The detailed historical and projected customers are set forth on Table No. 2-1, page 1. The following is a summary of the historical and projected average number of customers used as a basis for this study:

<b>Average Number of Customers</b>			
<b>Fiscal Year</b>	<b>Residential</b>	<b>Commercial</b>	<b>Total</b>
Historical 2019	23,528	3,748	27,276
Historical 2020	23,758	3,763	27,520
Projected 2021	24,070	3,842	27,911

## **Purchased Power**

The City purchases capacity and energy requirements from a variety of sources, including the FMPA.

## **Energy Losses**

The loss factors utilized in developing the projected energy requirements for the Test Year are 7.3 percent of annual energy requirements and 7.8 percent of energy sales. This factor is used to take into account transmission and distribution losses and unaccounted for energy and demand.

## **Summary of Projected Demand and Energy Requirements**

The following tabulation sets forth the projected annual peak demand at the generation level, energy requirements and the system load factor used in this study:

<b>Description</b>	<b>2020 Test Year</b>
Annual 60-Minute Peak Demand (MW)	96.8
Annual Energy Sales (MWh)	434,021
Losses and Unaccounted for Energy (MWh)	<u>33,854</u>
Annual Energy Requirements (MWh)	<u>467,875</u>
Annual System Load Factor (%)	<u>55.2</u> %

## **Customer Statistics**

Projected customer statistics by major rate classification are set forth on Table No. 2-1 and No. 2-2. Table No. 2-1 sets forth for fiscal years ending September 30, 2019, 2020 and 2021 the historical and projected number of customers and energy sales. Table No. 2-2 sets forth the projected annual billing determinants by major rate classes for fiscal year 2020. The projected average annual number of customers and annual energy sales for the fiscal year ending September 30, 2020 incorporate the following considerations:

- i. continuation of recent historical sales and/or usage characteristics;
- ii. continuation of past, present, and projected conservation and demand-side management programs; and

## Section 2

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iii. continuation of the existing regulatory structure.

Any departure from those assumptions (e.g., change in economic activity) could have a material adverse effect on energy sales and revenues.

As derived from Table No. 2-1 and No. 2-2, the projected fiscal year 2020 composition of the City's ultimate customers and associated energy sales by major rate classification is tabulated below:

<b>Customer Class</b>	<b>Test Year 2020</b>			
	<b>Average Number of Customers</b>	<b>Percent of Total</b>	<b>Annual MWh Sales</b>	<b>Percent of Total</b>
Residential	23,758	86.3%	264,974	61.1%
Commercial	3,128	11.4%	115,953	26.7%
Commercial Demand	85	0.3%	49,286	11.4%
Lighting	550	2.0%	3,808	0.9%
<b>Total Customers and MWh Sales</b>	<b>27,520</b>	<b>100.0%</b>	<b>434,021</b>	<b>100.0%</b>

CITY OF LAKE WORTH BEACH, FLORIDA  
Electric Cost of Service Study

Historical and Projected Customers  
Fiscal Years 2019-2021

Ln. No.	Customer Classes (a)	Oct (b)	Nov (c)	Dec (d)	Jan (e)	Feb (f)	Mar (g)	Apr (h)	May (i)	Jun (j)	Jul (k)	Aug (l)	Sep (m)	Total (n)	Average (o)
<b>Historical FY 2019</b>															
<b>Regular Residential (Schedule R-S)</b>															
1	Residential (Regular)	23,474	23,322	23,408	23,401	23,395	23,462	23,502	23,498	23,431	23,607	23,651	23,464	281,615	23,468
2	Residential Net Metering	0	0	0	71	78	77	78	82	83	81	86	87	723	60
3	<b>Subtotal Residential</b>	<b>23,474</b>	<b>23,322</b>	<b>23,408</b>	<b>23,472</b>	<b>23,473</b>	<b>23,539</b>	<b>23,580</b>	<b>23,580</b>	<b>23,514</b>	<b>23,688</b>	<b>23,737</b>	<b>23,551</b>	<b>282,338</b>	<b>23,528</b>
<b>Regular Commercial (Schedule C-S)</b>															
4	Commercial (Regular)	3,117	3,104	3,113	3,115	3,089	3,136	3,105	3,123	3,108	3,124	3,118	3,101	37,353	3,113
5	Commercial Net Metering	0	0	0	5	6	6	7	4	4	8	8	8	56	5
6	<b>Subtotal Commercial</b>	<b>3,117</b>	<b>3,104</b>	<b>3,113</b>	<b>3,120</b>	<b>3,095</b>	<b>3,142</b>	<b>3,112</b>	<b>3,127</b>	<b>3,112</b>	<b>3,132</b>	<b>3,126</b>	<b>3,109</b>	<b>37,409</b>	<b>3,117</b>
7	<b>Demand Commercial (Schedule CD-S)</b>	<b>85</b>	<b>1,020</b>	<b>85</b>											
<b>Lighting</b>															
8	Private Area Lighting	539	530	537	539	531	534	534	539	534	537	536	543	6,433	536
9	Street Lighting	9	9	9	9	9	9	9	9	9	9	9	9	108	9
10	<b>Subtotal Lighting</b>	<b>548</b>	<b>539</b>	<b>546</b>	<b>548</b>	<b>540</b>	<b>543</b>	<b>543</b>	<b>548</b>	<b>543</b>	<b>546</b>	<b>545</b>	<b>552</b>	<b>6,541</b>	<b>545</b>
11	<b>TOTAL CUSTOMERS</b>	<b>27,224</b>	<b>27,050</b>	<b>27,152</b>	<b>27,225</b>	<b>27,193</b>	<b>27,309</b>	<b>27,320</b>	<b>27,340</b>	<b>27,254</b>	<b>27,451</b>	<b>27,493</b>	<b>27,297</b>	<b>327,308</b>	<b>27,276</b>
<b>Historical FY 2020</b>															
<b>Regular Residential (Schedule R-S)</b>															
12	Residential (Regular)	23,647	23,528	23,582	23,664	23,645	23,760	23,727	23,651	23,663	23,716	23,600	23,675	283,858	23,655
13	Residential Net Metering	94	92	96	97	100	99	103	106	107	110	111	117	1,232	103
14	<b>Subtotal Residential</b>	<b>23,741</b>	<b>23,620</b>	<b>23,678</b>	<b>23,761</b>	<b>23,745</b>	<b>23,859</b>	<b>23,830</b>	<b>23,757</b>	<b>23,770</b>	<b>23,826</b>	<b>23,711</b>	<b>23,792</b>	<b>285,090</b>	<b>23,758</b>
<b>Regular Commercial (Schedule C-S)</b>															
15	Commercial (Regular)	3,099	3,109	3,101	3,106	3,092	3,121	3,127	3,125	3,107	3,145	3,142	3,151	37,425	3,119
16	Commercial Net Metering	8	8	8	9	9	9	9	9	9	9	9	9	105	9
17	<b>Subtotal Commercial</b>	<b>3,107</b>	<b>3,117</b>	<b>3,109</b>	<b>3,115</b>	<b>3,101</b>	<b>3,130</b>	<b>3,136</b>	<b>3,134</b>	<b>3,116</b>	<b>3,154</b>	<b>3,151</b>	<b>3,160</b>	<b>37,530</b>	<b>3,128</b>
18	<b>Demand Commercial (Schedule CD-S)</b>	<b>85</b>	<b>1,020</b>	<b>85</b>											
<b>Lighting</b>															
19	Private Area Lighting	542	542	538	537	537	539	543	540	539	545	542	548	6,492	541
20	Street Lighting	9	9	9	9	9	9	9	9	9	9	9	9	108	9
21	<b>Subtotal Lighting</b>	<b>551</b>	<b>551</b>	<b>547</b>	<b>546</b>	<b>546</b>	<b>548</b>	<b>552</b>	<b>549</b>	<b>548</b>	<b>554</b>	<b>551</b>	<b>557</b>	<b>6,600</b>	<b>550</b>
22	<b>TOTAL CUSTOMERS</b>	<b>27,484</b>	<b>27,373</b>	<b>27,419</b>	<b>27,507</b>	<b>27,477</b>	<b>27,622</b>	<b>27,603</b>	<b>27,525</b>	<b>27,519</b>	<b>27,619</b>	<b>27,498</b>	<b>27,594</b>	<b>330,240</b>	<b>27,520</b>

CITY OF LAKE WORTH BEACH, FLORIDA  
Electric Cost of Service Study

Historical and Projected Customers  
*Fiscal Years 2019-2021*

Ln. No.	Customer Classes (a)	Oct (b)	Nov (c)	Dec (d)	Jan (e)	Feb (f)	Mar (g)	Apr (h)	May (i)	Jun (j)	Jul (k)	Aug (l)	Sep (m)	Total (n)	Average (o)
<b>Projected FY 2021</b>															
<b>Regular Residential (Schedule R-S)</b>															
23	Residential (Regular)	23,768	23,742	23,931	23,815	23,848	23,902	24,015	24,025	24,035	24,045	24,055	24,065	287,246	23,937
24	Residential Net Metering	121	126	127	128	131	133	137	137	137	137	137	137	1,588	132
25	<b>Subtotal Residential</b>	<b>23,889</b>	<b>23,868</b>	<b>24,058</b>	<b>23,943</b>	<b>23,979</b>	<b>24,035</b>	<b>24,152</b>	<b>24,162</b>	<b>24,172</b>	<b>24,182</b>	<b>24,192</b>	<b>24,202</b>	<b>288,834</b>	<b>24,070</b>
<b>Regular Commercial (Schedule C-S)</b>															
26	Commercial (Regular)	3,157	3,193	3,183	3,174	3,178	3,179	3,196	3,196	3,196	3,196	3,196	3,196	38,240	3,187
27	Commercial Net Metering	10	10	10	10	10	10	10	10	10	10	10	10	120	10
28	<b>Subtotal Commercial</b>	<b>3,167</b>	<b>3,203</b>	<b>3,193</b>	<b>3,184</b>	<b>3,188</b>	<b>3,189</b>	<b>3,206</b>	<b>3,206</b>	<b>3,206</b>	<b>3,206</b>	<b>3,206</b>	<b>3,206</b>	<b>38,360</b>	<b>3,197</b>
29	<b>Demand Commercial (Schedule CD-S)</b>	<b>85</b>	<b>1,020</b>	<b>85</b>											
<b>Lighting</b>															
30	Private Area Lighting	553	546	545	546	546	554	554	554	554	554	554	554	6,614	551
31	Street Lighting	9	9	10	9	9	9	9	9	9	9	9	9	109	9
32	<b>Subtotal Lighting</b>	<b>562</b>	<b>555</b>	<b>555</b>	<b>555</b>	<b>555</b>	<b>563</b>	<b>6,723</b>	<b>560</b>						
33	<b>TOTAL CUSTOMERS</b>	<b>27,703</b>	<b>27,711</b>	<b>27,891</b>	<b>27,767</b>	<b>27,807</b>	<b>27,872</b>	<b>28,006</b>	<b>28,016</b>	<b>28,026</b>	<b>28,036</b>	<b>28,046</b>	<b>28,056</b>	<b>334,937</b>	<b>27,911</b>

\* Historical amounts through April 2021 provided by the City and remaining FY2021 months estimated using 0.5% projected residential growth.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

Historical and Projected Energy Sales (kWh)  
Fiscal Years 2019-2021

Ln. No.	Customer Classes (a)	Oct (b)	Nov (c)	Dec (d)	Jan (e)	Feb (f)	Mar (g)	Apr (h)	May (i)	Jun (j)	Jul (k)	Aug (l)	Sep (m)	Total (n)	Average (o)
<b>Historical FY 2019</b>															
<b>Regular Residential (Schedule R-S)</b>															
1	Residential (Regular)	27,512,330	23,176,876	17,372,046	16,019,712	14,266,563	16,493,207	16,536,972	21,358,775	25,785,557	27,015,766	28,276,368	26,016,577	259,830,749	21,652,562
2	Residential Net Metering	0	0	0	38,675	24,881	33,142	31,093	43,170	47,074	78,105	89,679	88,587	474,406	39,534
3	<b>Subtotal Residential</b>	27,512,330	23,176,876	17,372,046	16,058,387	14,291,444	16,526,349	16,568,065	21,401,945	25,832,631	27,093,871	28,366,047	26,105,164	260,305,155	21,692,096
<b>Regular Commercial (Schedule C-S)</b>															
4	Commercial (Regular)	12,742,432	11,490,716	9,329,240	8,697,885	8,343,637	9,197,057	9,060,828	10,787,044	11,541,895	11,412,080	12,157,110	11,384,156	126,144,080	10,512,007
5	Commercial Net Metering	0	0	0	7,580	19,403	14,200	15,920	17,580	22,760	28,159	33,662	31,636	190,900	15,908
6	<b>Subtotal Commercial</b>	12,742,432	11,490,716	9,329,240	8,705,465	8,363,040	9,211,257	9,076,748	10,804,624	11,564,655	11,440,239	12,190,772	11,415,792	126,334,980	10,527,915
7	<b>Demand Commercial (Schedule CD-S)</b>	4,589,459	4,482,597	3,656,680	3,726,406	3,552,872	3,490,700	3,556,593	4,077,286	4,631,304	4,501,099	4,812,655	4,485,084	49,562,735	4,130,228
<b>Lighting</b>															
8	Private Area Lighting	100,930	99,672	100,564	101,174	100,230	100,432	100,532	100,822	100,828	101,772	101,634	102,176	1,210,766	100,897
9	Street Lighting	212,810	212,810	212,810	212,810	212,810	212,810	212,810	212,810	212,810	212,810	212,810	212,810	2,553,720	212,810
10	<b>Subtotal Lighting</b>	313,740	312,482	313,374	313,984	313,040	313,242	313,342	313,632	313,638	314,582	314,444	314,986	3,764,486	313,707
11	<b>TOTAL ENERGY SALES</b>	45,157,961	39,462,671	30,671,340	28,804,242	26,520,396	29,541,548	29,514,748	36,597,487	42,342,228	43,349,791	45,683,918	42,321,026	439,967,356	36,663,946
<b>Historical FY 2020</b>															
<b>Regular Residential (Schedule R-S)</b>															
12	Residential (Regular)	25,581,857	22,673,609	16,632,869	16,318,036	14,778,853	16,359,464	21,034,935	22,118,591	23,711,330	28,382,026	27,076,413	29,327,150	263,995,133	21,999,594
13	Residential Net Metering	79,999	88,014	38,768	57,705	45,334	45,399	66,558	76,872	106,337	117,025	115,786	141,111	978,908	81,576
14	<b>Subtotal Residential</b>	25,661,856	22,761,623	16,671,637	16,375,741	14,824,187	16,404,863	21,101,493	22,195,463	23,817,667	28,499,051	27,192,199	29,468,261	264,974,041	22,081,170
<b>Regular Commercial (Schedule C-S)</b>															
15	Commercial (Regular)	11,737,967	10,793,914	9,137,961	8,801,693	8,384,596	9,224,617	8,816,243	7,843,706	9,086,543	10,588,744	10,077,301	10,981,931	115,475,216	9,622,935
16	Commercial Net Metering	30,623	32,611	26,344	29,654	35,760	33,361	40,891	42,123	45,734	52,477	51,571	56,310	477,459	39,788
17	<b>Subtotal Commercial</b>	11,768,590	10,826,525	9,164,305	8,831,347	8,420,356	9,257,978	8,857,134	7,885,829	9,132,277	10,641,221	10,128,872	11,038,241	115,952,675	9,662,723
18	<b>Demand Commercial (Schedule CD-S)</b>	4,507,729	4,284,893	3,801,114	3,978,279	3,674,724	3,811,177	4,004,282	3,756,058	4,191,759	4,396,329	4,405,591	4,473,877	49,285,812	4,107,151
<b>Lighting</b>															
19	Private Area Lighting	106,270	105,048	103,742	103,970	103,900	103,766	105,818	104,196	104,246	105,076	103,820	104,098	1,253,950	104,496
20	Street Lighting	212,810	212,810	212,810	212,810	212,810	212,898	212,898	212,898	212,898	212,898	212,898	212,898	2,554,336	212,861
21	<b>Subtotal Lighting</b>	319,080	317,858	316,552	316,780	316,710	316,664	318,716	317,094	317,144	317,974	316,718	316,996	3,808,286	317,357
22	<b>TOTAL ENERGY SALES</b>	42,257,255	38,190,899	29,953,608	29,502,147	27,235,977	29,790,682	34,281,625	34,154,444	37,458,847	43,854,575	42,043,380	45,297,375	434,020,814	36,168,401

CITY OF LAKE WORTH BEACH, FLORIDA  
Electric Cost of Service Study

Historical and Projected Energy Sales (kWh)  
Fiscal Years 2019-2021

Ln. No.	Customer Classes (a)	Oct (b)	Nov (c)	Dec (d)	Jan (e)	Feb (f)	Mar (g)	Apr (h)	May (i)	Jun (j)	Jul (k)	Aug (l)	Sep (m)	Total (n)	Average (o)
<b>Projected FY 2021</b>															
<b>Regular Residential (Schedule R-S)</b>															
23	Residential (Regular)	25,872,026	24,031,892	19,817,202	16,662,623	14,674,480	16,832,990	18,481,380	22,229,184	23,829,887	28,523,936	27,211,795	29,473,786	267,641,181	22,303,432
24	Residential Net Metering	131,201	143,169	87,824	75,828	55,739	57,624	54,991	99,353	136,151	145,749	142,907	165,233	1,295,769	107,981
25	<b>Subtotal Residential</b>	<b>26,003,227</b>	<b>24,175,061</b>	<b>19,905,026</b>	<b>16,738,451</b>	<b>14,730,219</b>	<b>16,890,614</b>	<b>18,536,371</b>	<b>22,328,537</b>	<b>23,966,038</b>	<b>28,669,685</b>	<b>27,354,702</b>	<b>29,639,018</b>	<b>268,936,950</b>	<b>22,411,412</b>
<b>Regular Commercial (Schedule C-S)</b>															
26	Commercial (Regular)	10,682,709	11,006,391	9,318,144	7,779,003	7,321,101	8,270,695	9,061,479	7,843,706	9,086,543	10,588,744	10,077,301	10,981,931	112,017,747	9,334,812
27	Commercial Net Metering	52,469	53,665	45,176	40,164	34,838	37,068	38,601	42,123	45,734	52,477	51,571	56,310	550,196	45,850
28	<b>Subtotal Commercial</b>	<b>10,735,178</b>	<b>11,060,056</b>	<b>9,363,320</b>	<b>7,819,167</b>	<b>7,355,939</b>	<b>8,307,763</b>	<b>9,100,080</b>	<b>7,885,829</b>	<b>9,132,277</b>	<b>10,641,221</b>	<b>10,128,872</b>	<b>11,038,241</b>	<b>112,567,943</b>	<b>9,380,662</b>
29	<b>Demand Commercial (Schedule CD-S)</b>	<b>4,507,729</b>	<b>4,284,893</b>	<b>3,801,114</b>	<b>3,978,279</b>	<b>3,674,724</b>	<b>3,811,177</b>	<b>4,004,282</b>	<b>3,756,058</b>	<b>4,191,759</b>	<b>4,396,329</b>	<b>4,405,591</b>	<b>4,473,877</b>	<b>49,285,812</b>	<b>4,107,151</b>
<b>Lighting</b>															
30	Private Area Lighting	105,850	102,510	102,374	102,336	101,844	102,900	102,626	102,626	102,626	102,626	102,626	102,626	1,233,570	102,798
31	Street Lighting	212,898	212,898	211,666	212,282	212,282	212,282	212,282	212,282	212,282	212,282	212,282	212,282	2,548,000	212,333
32	<b>Subtotal Lighting</b>	<b>318,748</b>	<b>315,408</b>	<b>314,040</b>	<b>314,618</b>	<b>314,126</b>	<b>315,182</b>	<b>314,908</b>	<b>314,908</b>	<b>314,908</b>	<b>314,908</b>	<b>314,908</b>	<b>314,908</b>	<b>3,781,570</b>	<b>315,131</b>
33	<b>TOTAL ENERGY SALES</b>	<b>41,564,882</b>	<b>39,835,418</b>	<b>33,383,500</b>	<b>28,850,515</b>	<b>26,075,008</b>	<b>29,324,736</b>	<b>31,955,641</b>	<b>34,285,332</b>	<b>37,604,982</b>	<b>44,022,143</b>	<b>42,204,073</b>	<b>45,466,044</b>	<b>434,572,275</b>	<b>36,214,356</b>

\* Historical amounts through April 2021 provided by the City and remaining FY2021 months estimated using 0.5% projected growth.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Projected Annual Billing Determinants**  
**Fiscal Year Ending September 30, 2020**

Ln. No.	Customer Class Description	Number of Bills	Billing Demand (kW)	Energy Sales (kWh)
	(a)	(b)	(c)	(d)
1	Residential Regular	283,858	0	263,995,133
2	Residential Net Metering	1,232	0	978,908
3	<b>Total Residential</b>	<u>285,090</u>	0	<u>264,974,041</u>
4	Commercial Regular	37,425	0	115,475,216
5	Commercial Net Metering	105	0	477,459
6	<b>Total Commercial</b>	<u>37,530</u>	0	<u>115,952,675</u>
7	<b>Commercial Service Demand</b>	1,020	104,476	49,285,812
8	<b>Lighting</b>	6,600	0	3,808,286
9	<b>TOTAL Residential Service</b>	285,090	0	264,974,041
10	<b>TOTAL Commercial Service</b>	37,530	0	115,952,675
11	<b>TOTAL Commercial Service Demand</b>	1,020	104,476	49,285,812
12	<b>TOTAL Lighting</b>	6,600	0	3,808,286
13	<b>TOTAL SYSTEM</b>	<u><u>330,240</u></u>	<u><u>104,476</u></u>	<u><u>434,020,814</u></u>

## Section 3

# REVENUE REQUIREMENTS

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### General

The various components of costs associated with the operation, maintenance, funding of improvements, renewal and replacement of facilities, and assurance of the adequacy and continuity of reliable service to customers are generally referred to as the revenue requirements of a municipally owned and operated utility. The determination of the revenue requirements as they relate to the City, consistent with the methods of other publicly owned utilities, includes the various generalized cost components described below.

***Operation and Maintenance Expenses:*** These expenses include the cost of purchased power, labor, materials, supplies, transportation, services, and other expenses, which are necessary to the operation and maintenance of the Electric Utility. These expenses do not include an allowance for depreciation or replacement of capital assets, any monies for the payment of interest on indebtedness or any monies transferred to a Reserve Fund.

***Debt Service:*** Included in the debt service component of cost is the annual principal of and interest on bonds and related costs/transfers payable from the net revenues.

***Capital Improvements:*** These expenditures are for the purpose of paying the cost of construction or acquisition of necessary improvements, betterments, extensions, enlargements or additions to, or the renewal and replacement of capital assets of the system and for unusual or extraordinary repairs thereto.

***Revenues Available for Other Lawful Purposes:*** This component of cost is paid out of revenues and includes (a) any additional capital improvements to be financed from revenues; (b) additional working cash to provide for the payment of expenses incurred in providing service prior to the receipt of revenues associated with such service; (c) the establishment of operating reserves for special purposes such as providing funds for self-insuring the facilities against certain perils and for the stabilization of rates to smooth out rate increases and minimize customer rate shock, (d) transfers of certain amounts of revenues from the earnings of the Electric Utility to the City; and (e) allowances for any other lawful purpose.

***Revenue Credits:*** In the determination of projected annual costs, adjustments should be made to reflect among other things, (a) the receipt of revenues from the investment of monies, and (b) the receipt of revenues from other operating sources such as the rental of land, the use of poles and the sale of scrap. The recognition of these revenue credits reduces the overall annual revenue requirement from electric rates to ultimate customers.

***Total Annual Net Revenue Requirements:*** The total of the cost components described above less other income and other operating revenues is the total annual net revenue

requirements and such total represents the amount of revenues required to be recovered through rates and charges to ultimate customers.

### **Projected Revenue Requirements**

Electric rates should be set at a level such that the revenues produced will be sufficient to meet near future revenue requirements. An important objective of a projected test year is to establish rates and rate levels that will also reflect the then current and near future costs of providing service and market conditions. Thus, it is necessary to estimate or project the various cost components over a reasonable period of time in order to determine the required rate levels. Projections must consider changes in operating practices, new facilities, increased regulatory (environmental) costs, expected changes in cost, and other factors that may affect the overall cost of operating and maintaining the utility system.

It was determined that the revenue requirements for this Electric Cost of Service Study would be predicated on the budgeted costs of the Electric Utility for the fiscal year ending September 30, 2020. The budgeted expenditures were used as a baseline in the development of the projections of the annual revenue requirements for the fiscal period ending September 30, 2020 through 2024. Based upon that detailed data and certain adjustments to reflect any known and anticipated changes and certain pro forma adjustments, the Consultant, together with members of the management and staff of the City, developed detailed estimates of projected expenditures for the fiscal years 2020 through 2024.

### **Assumptions and Considerations**

The development of the projected revenue requirements for the Test Year required certain assumptions and considerations in order to reflect certain known or anticipated changes and certain pro forma adjustments. The analyses, estimates and projections summarized herein have been based upon an understanding of certain contracts, agreements, regulations, statutory requirements and planned operations. In the preparation of this report, certain assumptions have been made with respect to conditions, which may occur in the future. While these assumptions are reasonable for the preparation of this study, they are dependent upon future events and actual conditions may differ from those assumed. To the extent that actual future conditions differ from those assumed herein or provided to us by others, the actual results will vary from those projected.

The major assumptions and considerations included in the development of the projected annual revenue requirements have been divided into two categories and are listed below:

#### **General**

1. The general economic activity will not have a major impact on the City's electric sales and annual inflation will be approximately 1.5 percent.

2. Existing federal and state environmental laws, including the Clean Air Act Amendments of 1990, the Clean Air Interstate Rule and the Clean Air Mercury Rule, will continue to be implemented, applied and enforced, and no new laws, regulations, rules and interpretations will be imposed on the City or its wholesale suppliers resulting in more stringent environmental restrictions in the near term.
3. There will be no material change in the taxation of fuel used to produce electricity.
4. There will be no material change in the taxation of municipally-owned or municipally financed electric generation or purchased power, transmission and distribution systems.
5. There will be no material change in the level of federal, state or local regulation of municipally-owned utilities.
6. There will be no material change in the City's existing ability to import or export power over the transmission grid.
7. The existing form of governance and policies established by the City will continue throughout the Study Period.
8. The City will continue to be the exclusive owner and operator of the Electric Utility, including its transmission, distribution, and customer care facilities.

## **Specific**

1. The fiscal year period ending September 30, 2020 through 2024 revenues and expenses for the Electric Utility and the underlying assumptions included therein provide a reasonable basis and reflect normalized system operation.
2. As discussed in Section 2, the sales forecast was the basis for the development of the projected retail energy and demand requirements for the Test Year. It should be recognized that (a) any meaningful variances in the load characteristics of existing or new customers, and/or (b) any differences in expected initiation of service for anticipated new customers, and/or (c) differences in the expected effectiveness of the various conservation programs initiated and contemplated by the City and/or (d) any changes in federal or state legislation that permit customers to select their energy service provider may result in a distortion and/or an over or under recovery of revenue requirements for the Test Year.
3. Power supply costs used herein are predicated in part on cost data provided by the City and on the continued purchase of power supply from its wholesale suppliers.
4. Expenses for the fiscal years 2020 through 2024 have been increased based on an assumed inflation rate of 1.5 percent per year except where noted in Table No. 3-1. Salaries have been escalated at 3.0 percent, benefits at 6.5 percent, insurance at 5.0 percent, and information technology at 15.0 percent for 2021 and 5.0 percent for years 2022 through 2024.

## Section 3

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5. Projected purchased power expenses have been estimated based on an analysis of purchased power expenses assuming an overall increase in kWh usage from 2020 of 0.5 percent per year, as shown on Table No. 3-4.
6. Projected debt service payments have been based on information provided by the City.
7. Capital improvement expenditures have been assumed to be funded from bond proceeds.
8. The amount for the Transfer to the General Fund has been based on current City policies and assumed to be constant at the current level.
9. Other Revenue has been projected based on the adopted fiscal year ending September 30, 2020 Budget and is set forth in Table No. 3-3.
10. Projected revenues from existing rates have been estimated based on the projected increases in sales from 2020 levels of 0.5 percent per year, as shown on Table No. 3-2.

Shown on Table No. 3-1 are the various expenditures and revenues for the fiscal years ending September 30, 2020 through 2024, and the adjustments discussed herein. In addition, each of the adjustments is noted in the footnotes to Table No. 3-1.

### Summary

Based on the projected Test Year revenue requirements developed on Table No. 3-1, the existing rates produce revenues that are approximately the same as the cost of providing service on a system wide basis through fiscal year 2021 but under recover the revenue requirements beginning in fiscal year 2022. The projected revenue requirements and existing rate revenues are summarized below.

Description	Projected				
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Net Revenue Requirements	\$58,158,995	\$58,300,746	\$64,422,550	\$62,237,218	\$61,950,862
Total Existing Rate Revenue	58,558,995	58,931,674	59,307,414	59,686,250	60,068,214
Surplus/(Deficiency)	\$400,000	\$630,927	(\$5,115,136)	(\$2,550,968)	(\$1,882,649)
Percent of Base and Fuel Revenue	0.8%	1.2%	-10.0%	-5.0%	-3.6%

CITY OF LAKE WORTH BEACH, FLORIDA  
Electric Cost of Service Study

Summary of Projected Revenue Requirements and Existing Rate Revenues  
Fiscal Year Ending September 30

Ln. No.	Description	Adopted Budget 2020 [1]	Adjustments to Adopted Budget 2020	2020 Revenue Requirements	2021 Revenue Requirements	2022 Revenue Requirements	2023 Revenue Requirements	2024 Revenue Requirements
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
	<b>Operating Expenses [2]</b>							
1	System Operations							
2	FMPA St. Lucie Project [3]	\$13,383,500	(1,017,663)	\$12,365,837	\$11,311,919	\$10,301,940	\$8,038,739	\$8,038,739
3	Supplemental Purchased Power [3]	6,883,410	(192,587)	6,690,823	2,544,328	2,864,617	3,211,790	4,734,130
4	FMPA Stanton Project [3]	4,068,280	(478,638)	3,589,642	9,222,373	12,019,686	11,178,003	8,406,524
5	Gas Transportation [4]	4,907,122	(899,312)	4,007,810	4,839,676	4,839,676	4,839,676	4,839,676
6	FPL Transmission [3]	2,060,000	(350)	2,059,650	2,105,482	2,263,692	2,275,010	2,286,385
7	Other System Operations	2,139,585	0	2,139,585	2,212,997	2,280,323	2,350,436	2,423,480
8	Total System Operations	33,441,897	(2,588,550)	30,853,347	32,236,775	34,569,933	31,893,654	30,728,934
9	Power Plant	2,811,675	0	2,811,675	2,920,412	3,030,805	3,146,279	3,267,096
10	Transmission and Distribution [5]	6,829,322	(1,345,646)	5,483,676	5,951,008	6,144,635	6,346,475	6,556,950
11	Customer Service	1,786,238	0	1,786,238	1,866,136	1,925,733	1,987,820	2,052,522
12	Meter Shop	1,252,515	0	1,252,515	1,296,276	1,340,612	1,386,903	1,435,250
13	Engineering	1,795,371	0	1,795,371	1,861,627	1,925,470	1,992,052	2,061,514
14	Administration	1,804,700	0	1,804,700	1,868,885	1,928,243	1,990,085	2,054,537
15	Conservation Management	16,390	0	16,390	17,621	18,279	18,966	19,684
16	Total Operating Expenses	49,738,108	(3,934,196)	45,803,912	48,018,740	50,883,710	48,762,233	48,176,487
	<b>Other Revenue Requirements</b>							
17	Debt Service [6]	3,493,633	0	3,493,633	1,120,169	2,964,875	2,974,500	3,686,600
18	Interfund Administrative Services	1,814,900	0	1,814,900	1,924,900	1,953,774	1,983,080	2,012,826
19	Contribution to General Fund	4,536,491	0	4,536,491	4,536,491	4,536,491	4,536,491	4,536,491
20	Other	420,000	0	420,000	426,300	432,695	439,185	445,773
21	Transfer to Rate Stabilization Fund	0	0	0	0	500,000	500,000	500,000
22	Reserves [7]	0	2,090,059	2,090,059	2,274,146	3,151,006	3,041,729	2,592,685
23	Total Other Revenue Requirements	10,265,024	2,090,059	12,355,083	10,282,006	13,538,840	13,474,985	13,774,375
24	<b>TOTAL REVENUE REQUIREMENTS</b>	60,003,132	(1,844,137)	58,158,995	58,300,746	64,422,550	62,237,218	61,950,862
	<b>Projected Revenue From Sales</b>							
25	Existing Base Rate Revenues	38,073,168	(2,736,514)	35,336,654 [8]	35,513,337	35,690,904	35,869,359	36,048,705
26	Power Cost Adjustment (PCA) [9]	15,842,358	(608,411)	15,233,947 [8]	15,310,116	15,386,667	15,463,600	15,540,918
27	Other Revenue	7,588,394	400,000	7,988,394 [10]	8,108,220	8,229,843	8,353,291	8,478,590
28	<b>TOTAL REVENUES FROM SALES</b>	61,503,920	(2,944,925)	58,558,995	58,931,674	59,307,414	59,686,250	60,068,214
29	Revenue Surplus or (Deficiency)	\$1,500,788	(\$1,100,788)	\$400,000	\$630,927	(\$5,115,136)	(\$2,550,968)	(\$1,882,649)
	<b>Surplus or (Deficiency) as a % of:</b>							
30	Existing Base Rate Revenues			1.1%	1.8%	-14.3%	-7.1%	-5.2%
31	Existing Base Rate and PCA Revenues			0.8%	1.2%	-10.0%	-5.0%	-3.6%

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Footnotes to Table No. 3-1**

- [1] Based on the Fiscal Year Ending September 30, 2020 Budget.
- [2] Unless otherwise noted, operating expenses are based on the 2020 Budget, escalated in 2021 through 2024 by the assumed general inflation rate of 1.5% per year; salaries escalated at 3.0%, benefits at 6.6%, insurance at 5.0% and information technology at 15.0% for 2021 and 5% for years 2022 through 2024.
- [3] FY 2020 adjustments based on actual expenses. FY 2021-2024 projections provided by the City's power supply consultant, as shown on Table No. 3-4.
- [4] FY 2020 adjustment based on actual expenses.
- [5] FY 2020 adjustment based on actual expenses. The adjustment includes a \$670,077 reduction in maintenance expenses, a \$398,624 reduction in personnel expenses, and a \$276,945 reduction in other expenses.
- [6] Based on information provided by the City.
- [7] Replenishment of Reserves to maintain cash balances.
- [8] From Table No. 3-2, Page 2.
- [9] Based on current PCA.
- [10] From Table No. 3-3.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Projected Revenues at**  
**EXISTING RATES**  
**Fiscal Year Ending September 30, 2020**

Ln. No.	Customer Class Description	Existing Rate	Billing Determinants	Base Rate Revenue	Power Cost Adjustment	Total Revenue
	(a)	(b)	(c)	(d)	(e)	(f)
<b>Residential Regular</b>						
1	Customer Charge	\$ 10.53	283,858	\$ 2,989,025	\$ -	\$ 2,989,025
2	Energy Charge < 1,000 kWhs	\$ 0.05148	208,292,160	10,722,880	-	10,722,880
3	Energy Charge > 1,000 kWhs	\$ 0.07880	55,702,973	4,389,394	-	4,389,394
4	Power Cost Adjustment < 1,000 kWhs	\$ 0.03578	208,292,160	-	7,452,693	7,452,693
5	Power Cost Adjustment > 1,000 kWhs	\$ 0.03900	55,702,973	-	2,172,416	2,172,416
6	Capacity Charge	\$ 0.01020	263,995,133	2,692,750	-	2,692,750
7	<i>Subtotal Residential Regular</i>			\$ 20,794,050	\$ 9,625,109	\$ 30,419,159
<b>Residential Net Metering</b>						
8	Customer Charge	\$ 10.53	1,232	\$ 12,973	\$ -	\$ 12,973
9	Energy Charge < 1,000 kWhs	\$ 0.05148	772,358	39,761	-	39,761
10	Energy Charge > 1,000 kWhs	\$ 0.07880	206,550	16,276	-	16,276
11	Power Cost Adjustment < 1,000 kWhs	\$ 0.03578	772,358	-	27,635	27,635
12	Power Cost Adjustment > 1,000 kWhs	\$ 0.03900	206,550	-	8,055	8,055
13	Capacity Charge	\$ 0.01020	978,908	9,985	-	9,985
14	<i>Subtotal Residential Net Metering</i>			\$ 78,995	\$ 35,690	\$ 114,685
15	<b>Total Residential</b>		<u>264,974,041</u>	<u>\$ 20,873,045</u>	<u>\$ 9,660,800</u>	<u>\$ 30,533,845</u>
<b>Commercial Regular</b>						
16	Customer Charge	\$ 16.66	37,425	\$ 623,501	\$ -	\$ 623,501
17	Energy Charge	\$ 0.07040	115,475,216	8,129,455	-	8,129,455
18	Capacity Charge	\$ 0.01020	115,475,216	1,177,847	-	1,177,847
19	Power Cost Adjustment	\$ 0.03578	115,475,216	-	4,131,703	4,131,703
20	<i>Subtotal Commercial Regular</i>			\$ 9,930,803	\$ 4,131,703	\$ 14,062,506
<b>Commercial Net Metering</b>						
21	Customer Charge	\$ 16.66	105	\$ 1,749	\$ -	\$ 1,749
22	Energy Charge	\$ 0.07040	477,459	33,613	-	33,613
23	Capacity Charge	\$ 0.01020	477,459	4,870	-	4,870
24	Power Cost Adjustment	\$ 0.03578	477,459	-	17,083	17,083
25	<i>Subtotal Commercial Net Metering</i>			\$ 40,232	\$ 17,083	\$ 57,316
26	<b>Total Commercial</b>		<u>115,952,675</u>	<u>\$ 9,971,035</u>	<u>\$ 4,148,787</u>	<u>\$ 14,119,822</u>

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**  
**Projected Revenues at**  
**EXISTING RATES**  
**Fiscal Year Ending September 30, 2020**

Ln. No.	Customer Class Description (a)	Existing Rate (b)	Billing Determinants (c)	Base Rate Revenue (d)	Power Cost Adjustment (e)	Total Revenue (f)
	<b>Commercial Service Demand</b>					
27	Customer Charge	\$ 120.00	1,020	\$ 122,400	\$ -	\$ 122,400
28	Energy Charge	\$ 0.03550	49,285,812	1,749,646	-	1,749,646
29	Capacity Charge	\$ 0.01020	49,285,812	502,715	-	502,715
30	Power Cost Adjustment	\$ 0.02890	49,285,812	-	1,424,360	1,424,360
31	Demand Charge	\$ 14.48	104,476	1,512,812	-	1,512,812
32	<b>Total Commercial Service Demand</b>			\$ 3,887,574	\$ 1,424,360	\$ 5,311,934
33	<b>Total Private Area Lighting</b>		1,253,950	\$ 250,000		250,000
34	<b>Total Street Lights</b>		2,554,336	\$ 355,000		355,000
35	<b>TOTAL RATE REVENUES</b>			<u>\$ 35,336,654</u>	<u>\$ 15,233,947</u>	<u>\$ 50,570,601</u>
36	<b>OTHER REVENUES</b>					<u>7,588,394</u>
37	<b>TOTAL REVENUES</b>					<u>\$ 58,158,995</u>

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

Summary of Other Electric Revenues

*Fiscal Year Ending September 30*

Ln. No.	Description (a)	Adopted Budget 2020 [1] (b)	Adjustments to Budget (c)	Adjusted Test Year Revenues (d)
<b><u>Other Electric Revenues</u></b>				
1	Gas Transportation Revenues	\$5,090,719	\$0	\$5,090,719
2	NSF and Bank Charges	15,000	0	15,000
3	Miscellaneous [2]	246,600	0	246,600
4	Service Charge	670,000	0	670,000
5	Penalties/Late Fees	520,000	0	520,000
6	Tampering Fines	15,000	0	15,000
7	Investments	147,895	0	147,895
8	FDOT-Reimbursement	131,000	0	131,000
9	Other	38,100	0	38,100
10	Water	381,310	0	381,310
11	Refuse	32,770	0	32,770
12	Local Sewer	300,000	0	300,000
13	Increased Commercial Minimum Charge	0	400,000	400,000
14	<b>Total Other Electric Revenues</b>	<u>\$7,588,394</u>	<u>\$400,000</u>	<u>\$7,988,394</u>

[1] Based on the Budgeted 2020 Electric Revenue Fund provided by the City.

[2] Pole Attachment Fees.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Calculation of Power Cost Adjustment (PCA)**

*Fiscal Year Ending September 30*

Ln. No.	Description	2021	2022	2023	2024	2025
	(a)	(b)	(c)	(d)	(e)	(f)
	<b><u>Power Costs [1]</u></b>					
1	FMPA St. Lucie Project	\$11,311,919	\$10,301,940	\$8,038,739	\$8,038,739	\$8,037,000
2	FMPA Stanton Project	2,544,328	2,428,222	1,975,310	2,074,134	2,178,057
3	Supplemental Purchased Power	9,222,373	12,019,686	11,178,003	8,406,524	8,967,850
4	Solar	0	436,395	1,236,480	2,659,996	2,678,831
5	FPL Transmission	2,105,482	2,263,692	2,275,010	2,286,385	2,297,817
6	<b>Total Power Costs</b>	<u>\$25,184,102</u>	<u>\$27,449,935</u>	<u>\$24,703,542</u>	<u>\$23,465,778</u>	<u>\$24,159,554</u>
7	<b>Total Energy Purchased (kWh)</b>	474,426,000	474,426,718	476,798,852	479,182,846	481,578,760
8	<b>Total Cost Per kWh Purchased</b>	\$0.0531	\$0.0579	\$0.0518	\$0.0490	\$0.0502
9	<b>Total Energy Sales (kWh) [2]</b>	434,572,275	433,070,899	435,236,253	437,412,435	439,599,497
10	<b>Total Cost Per kWh Sold</b>	<u>\$0.0580</u>	<u>\$0.0634</u>	<u>\$0.0568</u>	<u>\$0.0536</u>	<u>\$0.0550</u>
11	FMPA St. Lucie Project Fixed Costs	\$11,311,919	\$10,301,940	\$8,038,739	\$8,038,739	\$8,037,000
12	FMPA Stanton Project Fixed Costs	<u>1,120,499</u>	<u>1,120,499</u>	<u>1,120,499</u>	<u>1,120,499</u>	<u>1,120,499</u>
13	<b>Net Power Costs</b>	\$12,751,684	\$16,027,496	\$15,544,304	\$14,306,540	\$15,002,055
14	Transfer to Rate Stabilization Fund	<u>0</u>	<u>500,000</u>	<u>500,000</u>	<u>500,000</u>	<u>500,000</u>
15	<b>Net Power Costs for PCA</b>	\$12,751,684	\$16,527,496	\$16,044,304	\$14,806,540	\$15,502,055
16	<b>Calculated PCA per kWh</b>	<u>\$0.0293</u>	<u>\$0.0382</u>	<u>\$0.0369</u>	<u>\$0.0339</u>	<u>\$0.0353</u>

[1] FY 2021-2025 provided by the City's power supply consultant.

[2] FY 2022 from Table No. 2-2; FY 2023-2025 based on a growth rate of 0.5% per year.

**Section 4**

## **FUNCTIONALIZATION AND CLASSIFICATION OF COSTS AND DEVELOPMENT OF ALLOCATION FACTORS**

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### **Functionalization and Classification**

In allocating utility costs to the various customer classes, there are three major processes: functionalization, classification, and allocation. The functionalization and classification of the Test Year revenue requirement are discussed in the first part of this section. The development of allocation factors for the Test Year revenue requirement is discussed and set forth in the second half of this section.

### **Functionalization of Test Year Expenditures**

Although budgeting and accounting systems generally follow functional groups, i.e., production, transmission, etc., certain costs such as those associated with administrative and general expenses and bond service generally are not assigned by accounting and budgetary convention to a major function. A COS study usually requires the rearrangement of certain expenditures into functional groups (i) to be more representative of the expenditure causation, (ii) to combine costs that have been incurred for a similar purpose, and (iii) to facilitate the allocation of cost responsibility. Thus, the functionalization of certain costs is merely a ratemaking mechanism to apportion such costs to the common utility function.

The typical functions of the Test Year Revenue Requirements are developed in the COS model and summarized on Table 4-1 and below.

<u><b>Function and Description</b></u>	<u><b>Test Year Amount</b></u>
<b>Production.</b> Those costs associated with generating or purchasing power and delivering that power to the utility's bulk transmission system	\$40,313,652
<b>Transmission and Distribution.</b> Those costs incurred in connection with the delivery of power over the bulk transmission system through the primary and secondary distribution system to the utility's consumers	\$13,863,265
<b>Customer.</b> Those costs that are related to the number, type and size of customers	<u>\$3,982,058</u>
<b>Total</b>	<u><u>\$58,158,995</u></u>

An analysis of the Test Year revenue requirements was made to estimate the functionalized Test Year revenue requirements.

## Classification of Various Costs

Historically, electric utility costs or the components of the annual revenue requirement have generally been classified as (1) demand-related, (2) variable or energy-related, and (3) customer-related. Thus, if a cost or expense is fixed or does not vary directly with the level of kWh purchased or sold, the cost was assumed to be generally related to the demands or load of the customers and was allocated to the various customer classes on the basis of demand or load relationships. Debt service is one example of an expenditure generally classified as demand-related. If a cost or expense was viewed to vary with the amount of kWh the electric utility sold, the cost or expense was usually classified as energy-related and allocated to the various customer classes on the basis of kWh relationships. Purchased energy costs are a primary example of expenses classified as variable or energy-related and allocated on the basis of kWh sales. If the cost is directly related to the number of customers which are being served, these costs would generally be classified as such and allocated to the customer classes based on the customer relationship among the customer classes. An example of customer-related costs is meter reading expenses.

Until such time that the development of more detailed data with regard to hourly usage characteristics and costs is economically justified or legally required, the classification of costs described below reflects usual regulatory practice as well as a reasonable and equitable approach.

**Demand (Fixed) Costs:** Are defined as those costs incurred to maintain in readiness-to-serve an electric system capable of meeting the total combined demands of all classes of customers. Demand costs are those costs that are generally fixed in the short-run, that do not materially vary directly with the number of kWh generated or sold, and that are not defined as customer costs. Demand costs will include that portion of operation and maintenance expenses; debt service; renewals, replacements and improvements; and other costs which are not designated as specifically customer or variable energy costs.

**Customer Costs:** Are defined as those costs directly related to the number, type and size of customers, such as customer accounting and collecting, and costs of meters and services.

**Energy (Variable) Costs:** Are defined as those costs that vary substantially or directly with the amount of energy sold or generated and purchased, including such items as fuel and a portion of operation and maintenance expense for production facilities.

## Development of Allocation Factors

### General

This section discusses the development of the factors utilized to allocate the capacity related, energy related, customer related, and other costs to the various customer classes. The aforementioned costs are allocated to the customer classes according to their respective customer class, and the particular cost allocation factor developed for each

class and for each type of cost. The customer classes include Residential, Commercial, Commercial Demand, and Lighting.

## **Demand Allocation Factors**

"Demand Allocation" refers to the basis on which capacity and other demand related costs are distributed or assigned (allocated) among the various customer classes for the purpose of determining the revenues required from each class to recover such costs. The demand allocation factors, as developed and used herein, reflect the cost responsibility for each of the various customer classes in relation to the capacity or demand related costs to be allocated. The demand allocation factors were used to apportion the following capacity or demand related costs among the various customer classes.

- Production and purchased power expenses (fixed capacity costs only);
- Transmission and distribution expenses;
- Debt service requirements;
- Allowances for renewal and replacements, and reserves; and
- Payments to the City.

The demand allocation factors were developed based on historical demand and energy relationships filed with the Public Service Commission by the investor-owned utilities in Florida for 2018 and an analysis of the City's billing demands. The demand allocation factors are based on the estimated annual coincident and non-coincident peak demands. Table No. 4-2 summarizes the demand allocation factors. Table No. 4-5 shows a comparison of the results of the load research for the investor-owned utilities.

## **Energy Allocation Factors**

Energy allocation factors are the basis for apportioning those costs or expenses classified as variable or energy related and assumed to vary directly with the level of kWh sales or generation. The costs classified herein as variable or energy related are fuel, purchased power, and the variable portion of other production expenses.

The projected fiscal year energy sales data are discussed in Section 2. The resulting energy allocation factors are shown on Table No. 4-3.

## **Customer Allocation Factors**

Customer costs are defined herein as those costs related to the number of customers and the size of service required. Included in the customer related costs are the costs associated with meter reading, meter maintenance, customer installations, billing, collecting, and other customer related accounting, service, and information functions. The customer allocation factors were based on the projected average number of customers in each customer classification during the Test Year.

In apportioning customer related costs and revenues to the various customer classifications, customer allocation factors were utilized that recognized weighted and

unweighted customers and fixtures. The customer weighting factors were based on FPL customer charges. The customer allocation factors are shown on Table No. 4-4.

### **Other Allocation Factors**

Certain elements of the annual revenue requirement are related to revenues. Miscellaneous other allocation factors including the revenue allocation factors are included in the COS model.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**  
**Functionalization of Test Year Revenue Requirements**

<b>Ln No</b>	<b>Function</b>	<i>FY 2020</i> <i>Test Year Amount</i>
1	Production	\$ 40,313,652
2	Transmission and Distribution	\$ 13,863,285
3	Customer	\$ 3,982,058
4	<b>TOTAL REVENUE REQUIREMENTS</b>	<b>\$ 58,158,995</b>

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Summary of Demand Allocation Factors**

Ln. No.	Customer Class	Average 12 CP		Average Demand			PSC 12 CP Methodology				NCP Demand	
		Demand @ Source (kW)	Percent of Total (%)	2020 Energy at Source (Mwh)	Average Demand (kW)	Percent of Total (%)	Avg. 12 CP @ 12/13 (kW)	Avg. kW @ 1/13 (kW)	Total		Demand @ Source (kW)	Percent of Total (%)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
1	Residential	47,377	59.73%	274,869	31,378	61.05%	43,733	2,414	46,146	59.80%	62,668	62.36%
2	Commercial	22,054	27.81%	120,283	13,731	26.72%	20,358	1,056	21,414	27.75%	25,878	25.75%
3	Commercial Demand	8,979	11.32%	51,126	5,836	11.36%	8,288	449	8,737	11.32%	11,012	10.96%
4	Lighting	902	1.14%	3,951	451	0.88%	833	35	867	1.12%	941	0.94%
5	<b>TOTAL SYSTEM</b>	<b>79,312</b>	<b>100.00%</b>	<b>450,229</b>	<b>51,396</b>	<b>100.00%</b>	<b>73,211</b>	<b>3,954</b>	<b>77,165</b>	<b>100.00%</b>	<b>100,499</b>	<b>100.00%</b>

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Development of Demand Allocation Factors**

Ln. No.	Customer Class	Total FY 2020 Energy (Mwh)	Average 12 CP				Non-Coincident Peak					
			Load Factor (%) [1]	Demand @ Meter (kW)	Delivery Efficiency	Demand @ Source (kW)	Percent of Total (%)	Load Factor (%) [1]	Demand @ Meter (kW)	Delivery Efficiency	Demand @ Source (kW)	Percent of Total (%)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
1	Residential	264,974	66.23%	45,671	0.9640	47,377	59.73%	50.07%	60,412	0.9640	62,668	62.36%
2	Commercial	115,953	62.26%	21,260	0.9640	22,054	27.81%	53.06%	24,946	0.9640	25,878	25.75%
3	Commercial Demand	49,286	65.00%	8,656	0.9640	8,979	11.32%	53.00%	10,616	0.9640	11,012	10.96%
4	Lighting	3,808	50.00%	869	0.9640	902	1.14%	47.90%	908	0.9640	941	0.94%
5	<b>TOTAL SYSTEM</b>	<u>434,021</u>		<u>76,457</u>		<u>79,312</u>	<u>100.00%</u>		<u>96,881</u>		<u>100,499</u>	<u>100.00%</u>

[1] Average 12 CP and NCP Load Factors are based on an FPL 2018 Load Research Study filed with the PSC and an analysis of billing demands for the Commercial Demand class.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Summary of Energy Allocation Factors**

*Fiscal Year 2020*

Ln. No.	Customer Class	Energy (Mwh) [1]		Allocation Factors (%)	
		Energy Sales	Net Generation	Energy Sales	Net Generation
	(a)	(b)	(c)	(d)	(e)
1	Residential	264,974	274,869	<b>61.05%</b>	<b>61.05%</b>
2	Commercial	115,953	120,283	<b>26.72%</b>	<b>26.72%</b>
3	Commercial Demand	49,286	51,126	<b>11.36%</b>	<b>11.36%</b>
4	Lighting	3,808	3,951	<b>0.88%</b>	<b>0.88%</b>
5	<b>TOTAL SYSTEM</b>	<b>434,021</b>	<b>450,229</b>	<b>100.00%</b>	<b>100.00%</b>

[1] A factor of 3.6% was assumed for System Losses based on data received from the City of Lake Worth.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Summary of Customer Allocation Factors**  
*Fiscal Year 2020*

Ln. No.	Customer Class (a)	Unweighted Customers		Weighted Customers			Unweighted - No Lighting	
		Customers (b)	Factor (c)	Weighting Factor <sup>[1]</sup> (d)	Customers <sup>[2]</sup> (e)	Factor (f)	Customers (g)	Factor (h)
1	Residential	23,758	86.33%	1.00	23,758	85.05%	23,758	88.09%
2	Commercial	3,128	11.37%	1.30	4,066	14.55%	3,128	11.60%
3	Commercial Demand	85	0.31%	1.30	111	0.40%	85	0.32%
4	Lighting	549	1.99%	0.00	0	0.00%	0	0.00%
5	<b>TOTAL SYSTEM</b>	<b>27,519</b>	<b>100.00%</b>		<b>27,934</b>	<b>100.00%</b>	<b>26,970</b>	<b>100.00%</b>

[1] Based on FPL customer charges.

[2] Weighted customers are equal to Column (b), Unweighted Customers multiplied times Column (d), the Weighting Factor.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Comparison of Load Research Results \***

Ln. No.	<u>Utility</u> (a)	<u>Rate Schedule</u> (b)	<b>12 CP Load Factor</b> (c)	<b>NCP Load Factor</b> (d)
<b><u>Residential Service</u></b>				
1	Florida Power & Light Company	RS-1	66.2%	50.1%
2	Duke Energy Florida	RS-1	54.8%	37.0%
3	Tampa Electric Company	RS	56.0%	45.0%
4	Gulf Power Company	RS	58.4%	38.8%
<b><u>General Service Non-Demand</u></b>				
5	Florida Power & Light Company	GS-1 (less than 21kw)	62.3%	53.1%
6	Duke Energy Florida	GS-1 (no demand breakpoint)	57.6%	45.1%
7	Tampa Electric Company	GS (less than 50 kw)	58.0%	43.0%
8	Gulf Power Company	GS (less than 20 kw)	57.4%	43.5%
<b><u>General Service Demand</u></b>				
9	Florida Power & Light Company	GSD-1 (21 - 499 kw)	72.1%	64.0%
10	Duke Energy Florida	GSD-1 (above 24,000 kwh/year)	74.2%	62.6%
11	Tampa Electric Company	GSD-1 (50 - 999 kw)	75.0%	63.0%
12	Gulf Power Company	GSD-1 (20 - 499 kw)	74.4%	56.4%

\* The information shown for the investor owned electric utilities reflects the results of 2017-2018 Load Research reported to the PSC.

## Section 5 ALLOCATED COST OF SERVICE

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### General

As one of the factors considered in the development of the proposed rate levels and rate structures included herein, certain analyses common in ratemaking have been employed which provide a reasonable indication of the revenue levels required to recover the full cost of service or revenue requirement of each customer class. Since it is not the practice in utility accounting to maintain a subdivision of accounts that will report the cost of rendering service to each customer class, an allocation of costs must be made on the basis of parameters predicated upon the available classifications of operating expense and utility plant.

### Present and Proposed Rate Classifications

The present customer classifications are as follows:

- Residential
- Commercial
- Commercial Demand
- Lighting

### Allocation and Assignment of the Cost of Service

The allocated cost of service was developed, along with the target rate change for each class, based on a comparison of existing rate revenues.

Table No. 5-1 summarizes the results of the allocated COS study. Table No. 5-2 shows the results of the functionalization and classification of the Test Year revenue requirements and Table No. 5-3 summarizes the cost of service by customer class.

The target rate changes by customer class were developed to move toward the cost of service. The projected Test Year revenues under the existing rates and charges, the target revenue adjustments, and the percentage change necessary to recover the revenue requirements to move toward the cost of service for each of the major rate classifications, as summarized from the COS model, are as follows:

Section 5

<b>Test Year 2020</b>			
<b>Customer Class</b>	<b>Total Existing</b>	<b>Target Adjustments</b>	
	<b>Revenue (\$000)</b>	<b>(\$000)</b>	<b>(%) [1]</b>
Residential	\$35,500	\$0	0.0%
Commercial	16,207	(313)	-2.2%
Commercial Demand	6,143	(117)	-2.2%
Lighting	708	30	5.0%
<b>Total System</b>	<b>\$58,559</b>	<b>(\$400)</b>	<b>-0.8%</b>

[1] Percent of existing base rates and PCA revenues.

Based on the cost of service and target adjustments for the Test Year and the projected revenue requirements, the target adjustments for Fiscal Year 2022 can be estimated as follows:

<b>Fiscal Year 2022</b>			
<b>Customer Class</b>	<b>Total Existing</b>	<b>Target Adjustments</b>	
	<b>Revenue (\$000)</b>	<b>(\$000)</b>	<b>(%) [1]</b>
Residential	\$36,200	\$2,896	8.0%
Commercial	16,151	\$808	5.0%
Commercial Demand	6,162	\$308	5.0%
Lighting	700	\$35	5.0%
<b>Total System</b>	<b>\$59,213</b>	<b>\$4,047</b>	<b>6.8%</b>

[1] Percent of existing base rates and PCA revenues.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**  
**Test Year Cost of Service by Customer Class**

Table No. 5-1  
Page 1 of 2

Line No.	Description	Total	Allocation Factor	Residential	Commercial	Commercial Demand	Lighting	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(j)
3								
4								
5	<b>Production</b>							
6	<b>Production Demand related</b>							
7	Production - D	31,643,020	12 CP	18,923,262	8,781,229	3,582,894	355,635	31,643,020
8	Blank	0	N/A	0	0	0	0	0
9	Blank	0	N/A	0	0	0	0	0
10	Blank	0	N/A	0	0	0	0	0
11	Blank	0	N/A	0	0	0	0	0
12	Blank	0	N/A	0	0	0	0	0
13	<b>Production Energy related</b>							
14	Fuel & PP	8,670,632	Test Year Sales - kWh	5,293,507	2,316,439	984,605	76,080	8,670,632
15	Variable O&M	0	N/A	0	0	0	0	0
16	Blank	0	N/A	0	0	0	0	0
17	Blank	0	N/A	0	0	0	0	0
18	<b>Production Direct Assignment</b>							
19	Direct Assignment A	0	N/A	0	0	0	0	0
20	Other	0	N/A	0	0	0	0	0
21	<b>Total Production</b>	40,313,652		24,216,769	11,097,669	4,567,499	431,715	40,313,652
22	Check	TRUE						
23		40,313,652						
24	<b>Transmission</b>							
25	<b>Demand Related</b>							
26	115 kV	0	N/A	0	0	0	0	0
27	69 kV	0	N/A	0	0	0	0	0
28	115 kV - Sub	0	N/A	0	0	0	0	0
29	69 kV - Sub	0	N/A	0	0	0	0	0
30	Blank	0	N/A	0	0	0	0	0
31	Blank	0	N/A	0	0	0	0	0
32	<b>Direct Assignment</b>							
33	Service 1	0	N/A	0	0	0	0	0
34	Service 2	0	N/A	0	0	0	0	0
35	Blank	0	N/A	0	0	0	0	0
36	<b>Total Transmission</b>	0		0	0	0	0	0
37	Check	TRUE						
38		0						
39	<b>Distribution</b>							
40	<b>Demand Related</b>							
41	Substations	0	N/A	0	0	0	0	0
42	Primary-Dmd	0	N/A	0	0	0	0	0
43	Sec-Dmd	0	N/A	0	0	0	0	0
44	Total Demand	13,863,285	1 NCP	8,644,650	3,569,729	1,519,035	129,872	13,863,285
45	Blank	0	N/A	0	0	0	0	0
46	Blank	0	N/A	0	0	0	0	0
47	<b>Customer Related</b>							
48	Primary-Cust	0	N/A	0	0	0	0	0
49	Sec-Cust	0	N/A	0	0	0	0	0
50	Service Drp	0	N/A	0	0	0	0	0
51	Trans-CR	0	N/A	0	0	0	0	0
52	Total Cust	0	N/A	0	0	0	0	0
53	Blank	0	N/A	0	0	0	0	0
54	<b>Direct Assignment</b>							
55	Lighting	0	N/A	0	0	0	0	0
56	Blank	0	N/A	0	0	0	0	0
57	<b>Total Distribution</b>	13,863,285		8,644,650	3,569,729	1,519,035	129,872	13,863,285
58	Check	TRUE						
59		13,863,285						

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**  
**Test Year Cost of Service by Customer Class**

Table No. 5-1  
Page 2 of 2

Line No.	Description	Total	Allocation Factor	Residential	Commercial	Commercial Demand	Lighting	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(j)
60	<b>Customer</b>							
61	Meters	1,672,339	Weighted Customers	1,422,315	243,408	6,615	0	1,672,339
62	Cust. Accounting	0	Weighted Customers	0	0	0	0	0
63	Cust. Service	2,309,719	Weighted Customers	1,964,403	336,179	9,137	0	2,309,719
64	Sales	0	Weighted Customers	0	0	0	0	0
65	Blank	0	N/A	0	0	0	0	0
66	<b>Total Customer</b>	<b>3,982,058</b>		<b>3,386,718</b>	<b>579,587</b>	<b>15,752</b>	<b>0</b>	<b>3,982,058</b>
67	Check	TRUE						
68		3,982,058						
69	<b>Direct Assignments Other</b>							
70	Lighting Adjustment	0		(90,000)	(50,000)	(50,000)	190,000	0
71	<b>Total Direct Assignment Other</b>	<b>0</b>		<b>(90,000)</b>	<b>(50,000)</b>	<b>(50,000)</b>	<b>190,000</b>	<b>0</b>
72	Check	TRUE						
73								
74	<b>Total Cost of Service</b>	<b>\$ 58,158,995</b>		<b>\$ 36,158,138</b>	<b>\$ 15,196,985</b>	<b>\$ 6,052,286</b>	<b>\$ 751,587</b>	<b>\$ 58,158,995</b>
75	Check	TRUE						
76	Total Unit Cost (\$/kWh)			\$ 0.136	\$ 0.131	\$ 0.123	\$ 0.197	\$ 0.134
77	Base Rate Unit Cost (\$/kWh)			\$ 0.136	\$ 0.131	\$ 0.123	\$ 0.197	\$ 0.134
78								
79								
80	<b>Revenue Adequacy Check</b>							
81	TY Base Rate Revenue	\$35,336,654	TY Base Rate Rev	\$20,873,045	\$9,971,035	\$3,887,574	\$605,000	\$35,336,654
82	TY Other Revenue - PCA	\$15,233,947	PCA	9,660,800	4,148,787	1,424,360	0	15,233,947
83	TY Other Revenue	\$7,988,394	Revenue Req	4,966,479	2,087,373	831,308	103,234	\$7,988,394
84	TY Other Revenue	\$0		\$0	\$0	\$0	\$0	\$0
85	Subtotal	\$58,558,995		\$35,500,324	\$16,207,195	\$6,143,242	\$708,234	\$58,558,995
86	Existing Rate Unit Cost (\$/kwh)			\$ 0.134	\$ 0.140	\$ 0.125	\$ 0.186	\$ 0.135
87								
88	TY Rate Revenue	\$58,558,995		\$35,500,324	\$16,207,195	\$6,143,242	\$708,234	\$58,558,995
89	TY Retail Rate Revenue	\$0	Other Revenue	0	0	0	0	\$0
90	TY Total Rate Revenue	\$58,558,995		\$35,500,324	\$16,207,195	\$6,143,242	\$708,234	\$58,558,995
91								
92	TY Rate Revenue Requirement	\$58,158,995		\$ 36,158,138	\$ 15,196,985	\$6,052,286	\$751,587	\$58,158,995
93	TY Other Retail Rate Revenue	\$0		0	0	0	0	0
94	TY Total Rate Revenue Requirement	\$58,158,995		\$36,158,138	\$15,196,985	\$6,052,286	\$751,587	\$58,158,995
95								
96	<b>Difference \$</b>	<b>(\$400,000)</b>		<b>\$ 657,814</b>	<b>(\$1,010,210)</b>	<b>(\$90,956)</b>	<b>\$43,353</b>	<b>(400,000)</b>
97								
98								
99	<b>Unadjusted Difference \$</b>	<b>(\$400,000)</b>		<b>\$657,814</b>	<b>(\$1,010,210)</b>	<b>(\$90,956)</b>	<b>\$43,353</b>	<b>(400,000)</b>
100	<b>Unadjusted Difference %</b>	<b>-0.8%</b>		<b>2.2%</b>	<b>-7.2%</b>	<b>-1.7%</b>	<b>7.2%</b>	
101								
102	<b>Target Difference \$</b>	<b>(\$400,000)</b>		<b>\$0</b>	<b>(\$313,387)</b>	<b>(\$116,863)</b>	<b>\$30,250</b>	<b>(400,000)</b>
103	<b>Target Difference %</b>	<b>-0.8%</b>		<b>0.0%</b>	<b>-2.2%</b>	<b>-2.2%</b>	<b>5.0%</b>	

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**  
**Classification of Test Year Revenue Requirements**

<b>Ln No</b>	<b>Classification</b>	<i>FY 2020</i> <u><i>Test Year Amount</i></u>
	<b>Production</b>	
1	Demand Related	\$ 31,643,020
2	Energy Related	8,670,632
3	<b>Total Production</b>	<u>\$ 40,313,652</u>
	<b>Transmission and Distribution</b>	
4	Demand Related	\$ 13,863,285
5	Customer Related	0
6	Direct Assignment	0
7	<b>Total Distribution</b>	<u>\$ 13,863,285</u>
8	<b>Customer</b> ( <i>Customer Related</i> )	<u>\$ 3,982,058</u>
9	<b>TOTAL REVENUE REQUIREMENTS</b>	<u><u>\$ 58,158,995</u></u>

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**  
**Results of the Cost of Service Analysis**

Ln No	Customer Class (a)	Test Year 2020			Difference (%) [1] (e)
		Cost of Service (b)	Existing Revenues (c)	Difference (d)	
1	Residential	\$36,158,138	\$35,500,324	(\$657,814)	-2.2%
2	Commercial	15,196,985	16,207,195	1,010,210	7.2%
3	Commercial Demand	6,052,286	6,143,242	90,956	1.7%
4	Lighting	<u>751,587</u>	<u>708,234</u>	<u>(43,353)</u>	-7.2%
5	<b>TOTAL</b>	<u>\$58,158,995</u>	<u>\$58,558,995</u>	<u>\$400,000</u>	<b>0.8%</b>

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[1] Percent of existing base rates and PCA revenues.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Calculation of Fixed Costs per Customer [1]**

Ln. No.	Description (a)	Residential (b)	Commercial (c)
1	Distribution Fixed Costs [2]	\$8,644,650	\$3,569,729
2	Customer Fixed Costs [2]	\$3,386,718	\$579,587
3	Total	\$12,031,368	\$4,149,316
4	Number of Customers [3]	23,758	3,128
5	Fixed Cost/Customer/Year	\$506.41	\$1,326.51
6	Fixed Cost/Customer/Month	\$42.20	\$110.54
7	Purchased Capacity [2]	\$18,923,262	\$8,781,229
8	Total Including Purchased Capacity	\$30,954,630	\$12,930,545
9	Fixed Cost/Customer/Month	\$108.58	\$344.48
10	Current Minimum Monthly Bill	\$31.40	\$50.00
11	Percent of Line 6	74%	45%
12	Percent of Line 9	29%	15%
13	Proposed Minimum Monthly Bill	\$35.00	\$100.00

[1] Based on Electric Cost of Service Study.

[2] From Table No. 5-1.

[3] From Table No. 2-1.

## **General Rate Design Criteria**

Rate design is the culmination of a rate study whereby the rates and charges for each customer classification are established in such a manner that the total revenue requirement of the system will be recovered in an equitable manner consistent with the results of the allocated cost of service study and any applicable orders and/or requirements of local, state, and federal regulatory authorities. To the extent possible, rate design should consider and reflect overall revenue stability, historical rate form, conservation considerations, competitiveness with neighboring utility systems, and the policies of those charged with the management and operation of the City.

The proposed rate levels and rate structures developed and submitted to the City for consideration and adoption should continue to meet the following electric utility rate criteria for service provided by municipally owned utilities:

- Electric rates should be based on a rate policy which calls for the lowest possible prices consistent with customer requirements, quality service efficiently rendered, and a payment to the City.
- Electric rates should be simple and understandable.
- Electric rates should be equitable among classes of customers and individuals within classes, taking into consideration the cost of service.
- Electric rates should be designed to encourage the most efficient use of the utility plant and discourage unnecessary or wasteful use of service.
- Electric rates should comply with applicable orders and requirements of local, state and federal regulatory authorities that have jurisdiction.

## **Proposed Rates**

The existing rates and the proposed rates necessary to recover the revenue requirements are summarized on Table No. 6-1. The proposed rates reflect with the required rate changes by class applied to the customer, demand and energy charges. Table No. 6-2 shows calculation of the projected revenues at the proposed rates.

Table No. 6-1 also shows the existing and proposed minimum bills for each rate class. Base on the cost of service shown on Table No. 5-1 and Table No. 5-4, the fixed distribution and customer costs allocated to the residential class are \$8,664,650 and \$3,386,718, respectively, for a total of \$12,051,368. Dividing this total by 23,758 residential customers results in \$507 per customer per year, or approximately \$42 per customer per month. This does not include fixed purchased power costs. Based on this fixed cost per customer, it is proposed that the residential minimum charge be increased

to \$35 per month. Similarly, the fixed distribution and customer costs allocated to the commercial class results in approximately \$111 per customer per month, and it is proposed that the commercial minimum charge be increased to \$100 per month.

## Rate Stabilization Fund

It is recommended that the City establish a Rate Stabilization Fund to use if necessary to avoid variations in customers’ bills because of changes in the cost of purchased power. Section 4.08 of the City’s Bond Resolution states “The issuer may transfer into the Rate Stabilization Fund such moneys which are on deposit in the Utility Reserve Fund as it deems appropriate. The issuer may transfer such amount of moneys from the Rate Stabilization Fund to the Revenue Fund as it deems appropriate.”

## Power Cost Adjustment

It is recommended that a separate rate component continue to be implemented that recovers the cost of purchased power. It is proposed that this factor be calculated every year and adjusted as necessary. The proposed factor includes the variable Stanton costs, capacity and energy purchased power costs, fuel and transmission costs. Table No. 3-4 shows the proposed calculation of the PCA.

## Summary

The following is a comparison of the projected Fiscal Year 2022 revenues produced by applying the projected billing determinants to the existing rates and the proposed rates for each classification, plus an allocation of other revenues:

Customer Class	Fiscal Year 2022		
	Total Existing Revenue (\$000)	Proposed Revenue (\$000)	Rate Adjustment (%) [1]
Residential	\$36,200	\$39,096	8.0%
Commercial	16,151	16,959	5.0%
Commercial Demand	6,162	6,470	5.0%
Lighting	700	735	5.0%
<b>Total System</b>	<b>\$59,213</b>	<b>\$63,260</b>	<b>6.8%</b>

[1] Percent of existing base rates and PCA revenues.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

Table No. 6-1  
Page 1 of 2

Summary of Existing and Proposed Rates and Charges

Ln. No.	Rate Description (a)	Unit (b)	Existing Rates Effective October 1, 2019 (c)	Proposed Rates Effective April 1, 2022 (d)
<b>Residential Service</b>				
<b>Schedule R-S</b>				
1	Monthly Customer Charge	\$/Mo.	\$10.53	\$10.55
<u>Energy Charges &lt; 1,000 kWh's</u>				
2	Base	\$/kWh	\$0.05148	\$0.07000
3	Power Cost Adjustment	\$/kWh	\$0.03578	\$0.03610
<u>Energy Charges &gt; 1,000 kWh's</u>				
4	Base	\$/kWh	\$0.07880	\$0.09000
5	Power Cost Adjustment	\$/kWh	\$0.03900	\$0.04610
6	Capacity Charge All kWh's	\$/kWh	\$0.01020	-
7	Minimum Bill	\$/Mo.	\$31.40	\$35.00
<b>Commercial Service</b>				
<b>Schedule C-S</b>				
8	Monthly Customer Charge	\$/Mo.	\$16.66	\$17.00
<u>Energy Charges All kWh's</u>				
9	Base	\$/kWh	\$0.07040	\$0.08400
10	Power Cost Adjustment	\$/kWh	\$0.03578	\$0.03820
11	Capacity	\$/kWh	\$0.01020	-
12	Minimum Bill - Single Phase	\$/Mo.	\$50.00	\$50.00
13	Minimum Bill - Poly Phase	\$/Mo.	\$50.00	\$100.00
<b>Commercial TOU Service</b>				
<b>Schedule CT-S</b>				
14	Monthly Customer Charge	\$/Mo.	\$28.97	\$30.00
<u>Energy Charges All kWh's</u>				
15	Off - Peak	\$/kWh	\$0.08460	\$0.08400
16	On - Peak	\$/kWh	\$0.26510	\$0.26000
<b>Commercial Demand Service</b>				
<b>Schedule CD-S</b>				
17	Monthly Customer Charge	\$/Mo.	\$120.00	\$130.00
<u>Energy Charges All kWh's</u>				
18	Base	\$/kWh	\$0.03550	\$0.04950
19	Power Cost Adjustment	\$/kWh	\$0.02890	\$0.03820
20	Capacity	\$/kWh	\$0.01020	-
21	Demand Charge	\$/kW	\$14.48	\$12.00
22	Minimum Bill	\$/Mo.	\$140.00	\$250.00

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

Table No. 6-1  
Page 2 of 2

Summary of Existing and Proposed Rates and Charges

Ln. No.	Rate Description (a)	Unit (b)	Existing Rates Effective October 1, 2019 (c)	Proposed Rates Effective April 1, 2022 (d)
<b>Commercial Demand TOU Service</b>				
<b>Schedule CDT-S</b>				
23	Monthly Customer Charge	\$/Mo.	\$130.32	\$140.00
<u>Energy Charges All kWh's</u>				
24	Off - Peak	\$/kWh	\$0.06270	\$0.06200
25	On - Peak	\$/kWh	\$0.24320	\$0.24000
26	Demand Charge	\$/kW	\$7.39	\$7.00
<b>Private Area Lighting</b>				
<b>Schedule L-P</b>				
27	175 W Mercury Vapor	\$/Mo.	\$11.63	\$12.21
28	400 W Mercury Vapor	\$/Mo.	\$18.24	\$19.15
29	1,000 W Mercury Vapor	\$/Mo.	\$35.89	\$37.68
30	100 W Sodium Vapor	\$/Mo.	\$9.46	\$9.93
31	250 W Sodium Vapor	\$/Mo.	\$13.58	\$14.26
32	360 W Sodium Vapor	\$/Mo.	\$16.24	\$17.05
33	400 W Sodium Vapor	\$/Mo.	\$16.33	\$17.15
34	48 W LED	\$/Mo.	-	20 \$9.00
35	70 W LED	\$/Mo.	-	29 \$9.70
36	80 W LED	\$/Mo.	-	33 \$9.70
37	101 W LED	\$/Mo.	-	41 \$16.30
38	110 W LED	\$/Mo.	-	45 \$16.30
39	133 W LED	\$/Mo.	-	55 \$16.30
40	150 W LED	\$/Mo.	-	62 \$16.30
41	Wood Pole and Span	\$/Mo.	\$2.55	\$10.00
42	Concrete Pole and Span	\$/Mo.	\$3.82	\$15.00
43	Underground Conductors up to 150 ft	\$/ft/Mo.	\$1.27	\$1.33
44	Underground Conductors 150-300 ft	\$/ft/Mo.	\$2.55	\$2.68
<b>Street Lighting</b>				
<b>Schedule L-S</b>				
45	100 W Sodium Vapor	\$/Mo.	\$7.48	\$7.85
46	150 W Sodium Vapor	\$/Mo.	\$8.89	\$9.33
47	250 W Sodium Vapor	\$/Mo.	\$11.68	\$12.26
48	360 W Sodium Vapor	\$/Mo.	\$14.47	\$15.19
49	400 W Sodium Vapor	\$/Mo.	\$16.28	\$17.09
50	48 W LED	\$/Mo.	-	20 \$9.00
51	70 W LED	\$/Mo.	-	29 \$9.70
52	80 W LED	\$/Mo.	-	33 \$9.70
53	101 W LED	\$/Mo.	-	41 \$16.30
54	110 W LED	\$/Mo.	-	45 \$16.30
55	133 W LED	\$/Mo.	-	55 \$16.30
56	150 W LED	\$/Mo.	-	62 \$16.30
50	Wood Pole and Span	\$/Mo.	\$2.55	\$10.00
57	Concrete Pole and Span	\$/Mo.	\$3.82	\$15.00
58	Underground Conductors up to 150 ft	\$/ft/Mo.	\$1.27	\$1.33
59	Underground Conductors 150-300 ft	\$/ft/Mo.	\$2.55	\$2.68

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Projected Revenues at  
PROPOSED RATES  
Fiscal Year Ending September 30, 2022**

Ln. No.	Customer Class Description (a)	Proposed Rate (b)	Billing Determinants (c)	Base Rate Revenue (d)	Power Cost Adjustment (e)	Total Revenue (f)
<b>Residential Regular</b>						
1	Customer Charge	\$ 10.55	286,364	\$ 3,021,140	\$ -	\$ 3,021,140
2	Energy Charge < 1,000 kWhs	\$ 0.07000	210,058,337	14,704,084	-	14,704,084
3	Energy Charge > 1,000 kWhs	\$ 0.09000	56,175,297	5,055,777	-	5,055,777
4	Power Cost Adjustment < 1,000 kWhs	\$ 0.03610	210,058,337	-	7,583,106	7,583,106
5	Power Cost Adjustment > 1,000 kWhs	\$ 0.04610	56,175,297	-	2,589,681	2,589,681
6	Capacity Charge	\$ -	266,233,634	-	-	-
7	<i>Subtotal Residential Regular</i>			\$ 22,781,001	\$ 10,172,787	\$ 32,953,788
<b>Residential Net Metering</b>						
8	Customer Charge	\$ 10.55	1,588	\$ 16,753	\$ -	\$ 16,753
9	Energy Charge < 1,000 kWhs	\$ 0.07000	1,022,362	71,565	-	71,565
10	Energy Charge > 1,000 kWhs	\$ 0.09000	273,407	24,607	-	24,607
11	Power Cost Adjustment < 1,000 kWhs	\$ 0.03610	1,022,362	-	36,907	36,907
12	Power Cost Adjustment > 1,000 kWhs	\$ 0.04610	273,407	-	12,604	12,604
13	Capacity Charge	\$ -	1,295,769	-	-	-
14	<i>Subtotal Residential Net Metering</i>			\$ 112,925	\$ 49,511	\$ 162,437
15	<b>Residential Minimum Bill Revenue</b>	<b>\$35.00</b>	23,160	\$ 566,262	\$ -	\$ 566,262
16	<b>Total Residential</b>		<u>267,529,403</u>	<u>\$ 23,460,188</u>	<u>\$ 10,222,299</u>	<u>\$ 33,682,486</u>
<b>Commercial Regular</b>						
17	Customer Charge	\$ 17.00	37,416	\$ 636,072	\$ -	\$ 636,072
18	Energy Charge	\$ 0.08400	111,923,908	9,401,608	-	9,401,608
19	Capacity Charge	\$ -	111,923,908	-	-	-
20	Power Cost Adjustment	\$ 0.03820	111,923,908	-	4,275,493	4,275,493
21	<i>Subtotal Commercial Regular</i>			\$ 10,037,680	\$ 4,275,493	\$ 14,313,174
<b>Commercial Net Metering</b>						
22	Customer Charge	\$ 17.00	120	\$ 2,040	\$ -	\$ 2,040
23	Energy Charge	\$ 0.08400	550,196	46,216	-	46,216
24	Capacity Charge	\$ -	550,196	-	-	-
25	Power Cost Adjustment	\$ 0.03820	550,196	-	21,017	21,017
26	<i>Subtotal Commercial Net Metering</i>			\$ 48,256	\$ 21,017	\$ 69,274
27	<b>Commercial Minimum Bill Revenue -1Ph</b>	<b>\$50.00</b>	6,240	\$ 205,920	\$ -	\$ 205,920
28	<b>Commercial Minimum Bill Revenue -PolyPh</b>	<b>\$100.00</b>	1,440	\$ 119,520	\$ -	\$ 119,520
29	<b>Total Commercial</b>		<u>112,474,104</u>	<u>\$ 10,411,377</u>	<u>\$ 4,296,511</u>	<u>\$ 14,707,888</u>

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**  
**Projected Revenues at**  
**PROPOSED RATES**  
**Fiscal Year Ending September 30, 2022**

Ln. No.	Customer Class Description (a)	Proposed Rate (b)	Billing Determinants (c)	Base Rate Revenue (d)	Power Cost Adjustment (e)	Total Revenue (f)
	<b>Commercial Service Demand</b>					
30	Customer Charge	\$ 130.00	1,020	\$ 132,600	\$ -	\$ 132,600
31	Energy Charge	\$ 0.04950	49,285,812	2,439,648	-	2,439,648
32	Capacity Charge	\$ -	49,285,812	-	-	-
33	Power Cost Adjustment	\$ 0.03820	49,285,812	-	1,882,718	1,882,718
34	Demand Charge	\$ 12.00	105,763	1,269,156	-	1,269,156
35	<b>Total Commercial Service Demand</b>			\$ 3,841,404	\$ 1,882,718	\$ 5,724,122
36	<b>Total Private Area Lighting</b>		1,233,570	\$ 262,500		\$ 262,500
37	<b>Total Street Lights</b>		2,548,000	\$ 372,750		\$ 372,750
38	<b>TOTAL RATE REVENUES</b>			\$ 38,348,218	\$ 16,401,527	\$ 54,749,746
39	<b>OTHER REVENUES</b>					7,993,439
40	<b>TOTAL REVENUES</b>					\$ 62,743,185
41	<b>ADJUSTED FOR 4/22 EFFECTIVE DATE</b>					\$ 61,154,597

## Section 7 RATE COMPARISONS

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### General

This section provides a summary of the billing effects of the proposed rates for major rate classifications. Specifically, the tables in this section provide for two types of billing comparisons for each major rate classification at various levels of usage which include (i) monthly bills calculated under the City's proposed rates compared with bills calculated under its existing rates, and (ii) monthly bills calculated under the City's existing and proposed rates compared with those calculated under the rates of selected utilities for the billing month of January 2021.

### Existing and Proposed Rates

Table No. 7-1 provides a comparison of monthly bills calculated under the proposed rates and the existing rates over a wide range of usage levels.

### Comparisons with Other Utilities

Table No. 7-2 show the City's existing and proposed rates along with those of other electric utilities. As can be seen from these tables, the City's rates are comparable to other utilities.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Comparison of Existing and Proposed Residential Service Rates [1]**

Residential Service						
			Existing	Proposed 2022		
Customer Charge		(\$)	\$10.53	\$10.55		
Energy Charge	First 1,000 kWh	(\$/kWh)	\$0.05148	\$0.07000		
Energy Charge	Additional kWh	(\$/kWh)	\$0.07880	\$0.09000		
PCA	First 1,000 kWh	(\$/kWh)	\$0.03578	\$0.03610		
PCA	Additional kWh	(\$/kWh)	\$0.03900	\$0.04610		
Capacity Charge	All kWh	(\$/kWh)	\$0.01020	-		
Minimum Bill			\$31.40	\$35.00		
Total for 1,000 kWh			\$107.99	\$116.65		
Neighboring Utility 1,000 kWh			\$106.47	\$119.37		
Usage (kWh)	Existing		Proposed		Difference	
	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
<b>500</b>	59.26	11.852	63.60	12.720	4.34	0.868
<b>600</b>	69.01	11.501	74.21	12.368	5.20	0.867
<b>700</b>	78.75	11.250	84.82	12.117	6.07	0.867
<b>800</b>	88.50	11.062	95.43	11.929	6.93	0.867
<b>900</b>	98.24	10.916	106.04	11.782	7.80	0.866
<b>1,000</b>	107.99	10.799	116.65	11.665	8.66	0.866
<b>1,100</b>	120.79	10.981	130.26	11.842	9.47	0.861
<b>1,200</b>	133.59	11.133	143.87	11.989	10.28	0.857
<b>1,300</b>	146.39	11.261	157.48	12.114	11.09	0.853
<b>1,400</b>	159.19	11.371	171.09	12.221	11.90	0.850
<b>1,500</b>	171.99	11.466	184.70	12.313	12.71	0.847
<b>2,000</b>	235.99	11.800	252.75	12.638	16.76	0.838
<b>2,500</b>	299.99	12.000	320.80	12.832	20.81	0.832
<b>3,000</b>	363.99	12.133	388.85	12.962	24.86	0.829
<b>4,000</b>	491.99	12.300	524.95	13.124	32.96	0.824
<b>5,000</b>	619.99	12.400	661.05	13.221	41.06	0.821

[1] Amounts shown reflect single phase, inside the City service.

[2] Proposed Power Cost Adjustment for April 2022.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Comparison of Existing and Proposed General Service Non-Demand Rates [1]**

		<b>General Service Non-Demand</b>	
		<b>Existing</b>	<b>Proposed 2022</b>
Customer Charge	(\$)	\$16.66	\$17.00
Energy Charge	All kWh (\$/kWh)	\$0.07040	\$0.08400
Power Cost Adjustment	(\$/kWh)	\$0.03578	\$0.03820
Capacity Charge	(\$/kWh)	\$0.01020	-
Minimum Bill - Single Phase		\$50.00	\$50.00
Minimum Bill - Poly Phase		\$50.00	\$100.00
Total for 1,500 kWh		\$191.23	\$200.30

Usage (kWh)	<b>Existing</b>		<b>Proposed</b>		<b>Difference</b>	
	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
<b>1,000</b>	133.04	13.304	<b>139.20</b>	13.920	6.16	0.616
<b>1,250</b>	162.14	12.971	<b>169.75</b>	13.580	7.62	0.609
<b>1,500</b>	191.23	12.749	<b>200.30</b>	13.353	9.07	0.605
<b>1,750</b>	220.33	12.590	<b>230.85</b>	13.191	10.53	0.601
<b>1,900</b>	237.78	12.515	<b>249.18</b>	13.115	11.40	0.600
<b>2,000</b>	249.42	12.471	<b>261.40</b>	13.070	11.98	0.599
<b>3,000</b>	365.80	12.193	<b>383.60</b>	12.787	17.80	0.593
<b>4,000</b>	482.18	12.055	<b>505.80</b>	12.645	23.62	0.590
<b>5,000</b>	598.56	11.971	<b>628.00</b>	12.560	29.44	0.589
<b>6,000</b>	714.94	11.916	<b>750.20</b>	12.503	35.26	0.588
<b>7,000</b>	831.32	11.876	<b>872.40</b>	12.463	41.08	0.587
<b>8,000</b>	947.70	11.846	<b>994.60</b>	12.433	46.90	0.586
<b>9,000</b>	1,064.08	11.823	<b>1,116.80</b>	12.409	52.72	0.586
<b>10,000</b>	1,180.46	11.805	<b>1,239.00</b>	12.390	58.54	0.585

[1] Amounts shown reflect single phase, inside the City service.

[2] Proposed Power Cost Adjustment for April 2022.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

**Comparison of Existing and Proposed Rates for General Service Demand [1]**

<b>General Service Demand</b>								
					<u>Existing</u>	<u>Proposed 2022</u>		
		Customer Charge		(\$)	\$120.00	\$130.00		
		Demand Charge		(\$/kW)	\$14.48	\$12.00		
		Energy Charge	All kWh	(\$/kWh)	\$0.03550	\$0.04950		
		Power Cost Adjustment		(\$/kWh)	\$0.02890	\$0.03820		
		Capacity Charge		(\$/kWh)	\$0.01020	-		
Total for 30 kW and 6,000 kWh					\$1,002.00	\$1,016.20		

Demand (kW)	Hours	Usage (kWh)	Existing		Proposed		Difference	
			Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)	Amount (\$)	Unit Cost (Cents/kWh)
<b>30</b>	<b>200</b>	<b>6,000</b>	1,002.00	16.700	<b>1,016.20</b>	16.937	14.20	0.237
	<b>300</b>	<b>9,000</b>	1,225.80	13.620	<b>1,279.30</b>	14.214	53.50	0.594
	<b>400</b>	<b>12,000</b>	1,449.60	12.080	<b>1,542.40</b>	12.853	92.80	0.773
<b>150</b>	<b>200</b>	<b>30,000</b>	4,530.00	15.100	<b>4,561.00</b>	15.203	31.00	0.103
	<b>300</b>	<b>45,000</b>	5,649.00	12.553	<b>5,876.50</b>	13.059	227.50	0.506
	<b>400</b>	<b>60,000</b>	6,768.00	11.280	<b>7,192.00</b>	11.987	424.00	0.707
<b>500</b>	<b>200</b>	<b>100,000</b>	14,820.00	14.820	<b>14,900.00</b>	14.900	80.00	0.080
	<b>300</b>	<b>150,000</b>	18,550.00	12.367	<b>19,285.00</b>	12.857	735.00	0.490
	<b>400</b>	<b>200,000</b>	22,280.00	11.140	<b>23,670.00</b>	11.835	1,390.00	0.695

[1] Amounts shown reflect inside the City service, and exclude any applicable primary service discount or power factor correction.

[2] Proposed Power Cost Adjustment for April 2022.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

Inter-Utility Comparison of Typical Monthly Electric Bills <sup>[1]</sup>

Ln. No.	Utility	Fuel Adj. \$/1000 kWh	Residential Class							
			250 kWh	500 kWh	750 kWh	1,000 kWh	1,200 kWh	2,000 kWh	2,500 kWh	3,000 kWh
1	City of Lake Worth Beach <b>(Existing)</b>	35.78	34.90	59.26	83.63	107.99	133.59	235.99	299.99	363.99
2	City of Lake Worth Beach <b>(Proposed)</b>	36.10	37.08	63.60	90.13	116.65	143.87	252.75	320.80	388.85
<b><u>Other Florida Municipalities:</u></b>										
3	City of Alachua	10.75	35.18	61.22	87.25	113.29	136.16	227.64	284.82	341.99
4	City of Bushnell	19.00	37.41	64.83	92.24	119.65	141.58	229.30	284.13	338.95
5	Fort Pierce Utilities Authority	(8.00)	31.07	56.12	81.18	108.84	130.96	219.48	274.80	330.12
6	Gainesville Regional Utilities	30.00	41.13	67.25	93.38	123.13	148.87	251.83	316.18	380.53
7	Jacksonville Electric Authority	32.50	31.25	57.00	82.75	108.50	129.10	211.50	263.00	317.00
8	Kissimmee Utilities Authority	(38.28)	31.38	52.58	73.79	94.99	114.48	192.46	241.20	289.93
9	City of Lakeland	35.00	33.22	55.43	77.65	99.87	119.08	198.98	250.07	301.15
10	City of Leesburg	2.50	35.29	58.39	81.48	104.58	127.59	219.63	277.15	334.67
11	City of New Smyrna Beach	15.75	28.70	51.75	74.80	97.85	116.29	190.05	236.15	282.25
12	City of Newberry	5.00	35.00	61.50	88.00	114.50	144.00	228.00	280.50	333.00
13	City of Ocala	14.00	42.91	68.82	94.73	120.64	141.37	224.28	276.10	327.92
14	Orlando Utilities Commission	32.02	36.75	61.00	85.25	109.50	132.90	226.50	285.00	343.50
15	City of Tallahassee	28.08	33.66	59.27	84.89	110.50	130.99	212.96	264.19	315.42
<b><u>Florida Cooperatives</u></b>										
16	Sumter Electric Cooperative	(20.70)	53.48	75.95	98.43	120.90	142.88	230.80	285.75	340.70
17	Central Florida Cooperative	(5.50)	52.58	75.70	98.83	121.95	140.45	214.45	260.70	306.95
18	Clay Electric Cooperative	11.40	43.98	64.95	85.93	106.90	127.44	209.60	260.95	312.30
<b><u>Investor-Owned Utilities: <sup>[2]</sup></u></b>										
19	Florida Power and Light	21.23	32.22	55.60	78.98	102.36	125.44	217.75	275.44	333.13
20	Gulf Power Company	30.70	51.58	82.80	114.03	145.25	170.23	270.15	332.60	395.05
21	Duke Energy	28.11	41.78	71.48	101.17	130.87	160.38	278.43	352.21	425.99
22	Tampa Electric Company	28.56	39.21	62.46	85.71	108.97	131.81	223.18	280.29	337.40

[1] Amounts shown are based on the rates for single phase service and reflect when applicable, inside city service. In addition, amounts include January 2021 fuel adjustments and franchise fees but do not include taxes.

[2] Amounts shown include the energy conservation, capacity, environmental and storm cost recovery charges where appropriate, as filed with the the Florida Public Service Commission (FPSC). Franchise fees of 6 percent are included for each of the IOU's listed.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

Inter-Utility Comparison of Typical Monthly Electric Bills <sup>[1]</sup>

Ln. No.	Utility	Fuel Adj. \$/1000 kWh	General Service Non-Demand Class							
			250 kWh	500 kWh	750 kWh	1,000 kWh	1,500 kWh	2,000 kWh	2,500 kWh	3,000 kWh
1	City of Lake Worth Beach ( <b>Existing</b> )	35.78	45.76	74.85	103.95	133.04	191.23	249.42	307.61	365.80
2	City of Lake Worth Beach ( <b>Proposed</b> )	38.20	47.55	78.10	108.65	139.20	200.30	261.40	322.50	383.60
<b><u>Other Florida Municipalities:</u></b>										
3	City of Alachua	10.75	38.99	66.31	93.62	120.93	175.56	230.18	284.81	339.43
4	City of Bushnell	19.00	40.72	71.43	102.15	132.86	194.29	255.72	317.15	378.58
5	Fort Pierce Utilities Authority	(8.00)	33.61	61.37	89.14	116.90	172.43	227.96	283.49	339.02
6	Gainesville Regional Utilities	30.00	63.10	95.20	127.30	159.40	223.60	304.05	384.50	464.95
7	Jacksonville Electric Authority	32.50	33.65	58.05	82.44	106.84	155.64	204.43	253.23	302.02
8	Kissimmee	(38.28)	35.08	59.09	83.09	107.09	155.10	203.10	251.11	299.11
9	City of Lakeland	35.00	35.01	57.01	79.02	101.03	145.04	189.05	233.06	277.08
10	City of New Smyrna Beach	15.75	28.61	51.18	73.74	96.30	141.43	186.55	231.68	276.80
11	City of Ocala	14.00	46.19	72.39	98.58	124.77	177.16	229.54	281.93	334.31
12	Orlando Utilities Commission	32.02	40.30	65.84	91.39	116.93	168.02	219.11	270.20	321.29
13	City of Tallahassee	28.08	32.66	54.39	76.12	97.85	141.31	184.77	228.23	271.69
<b><u>Florida Cooperatives</u></b>										
14	Sumter Electric Cooperative	(20.70)	56.80	80.42	104.05	127.67	174.92	222.17	269.42	316.67
15	Clay Electric Cooperative	17.40	47.68	72.35	97.03	121.70	171.05	220.40	269.75	319.10
<b><u>Investor-Owned Utilities:</u> <sup>[2]</sup></b>										
16	Florida Power and Light	24.49	35.11	58.98	82.84	106.71	154.44	202.17	249.91	297.64
17	Gulf Power Company	30.70	58.79	90.81	122.83	154.86	218.90	282.95	346.99	411.04
18	Duke Energy	30.94	47.66	79.32	110.98	142.64	205.97	269.29	332.62	395.94
19	Tampa Electric Company	31.67	43.91	68.68	93.44	118.21	167.75	217.28	266.81	316.35

[1] Amounts shown are based on the rates for single phase service and reflect when applicable, inside city service. In addition, amounts include January 2021 fuel adjustments and franchise fees but do not include taxes.

[2] Amounts shown include the energy conservation, capacity, environmental and storm cost recovery charges where appropriate, as filed with the the Florida Public Service Commission (FPSC). Franchise fees of 6 percent are included for each of the IOU's listed.

**CITY OF LAKE WORTH BEACH, FLORIDA**  
**Electric Cost of Service Study**

Inter-Utility Comparison of Typical Monthly Electric Bills [1]

		<b>General Service Demand Class</b>								
Ln. No.	Utility	30 kW			150 kW			500 kW		
		6,000 kWh	12,000 kWh	18,000 kWh	30,000 kWh	60,000 kWh	90,000 kWh	100,000 kWh	200,000 kWh	300,000 kWh
1	City of Lake Worth Beach <b>(Existing)</b>	1,002	1,450	1,897	4,530	6,768	9,006	14,820	22,280	29,740
2	City of Lake Worth Beach <b>(Proposed)</b>	1,016	1,542	2,069	4,561	7,192	9,823	14,900	23,670	32,440
<b><u>Other Florida Municipalities:</u></b>										
3	Fort Pierce Utilities Authority	719	1,196	1,673	3,439	5,822	8,206	11,370	19,316	27,262
4	Gainesville Regional Utilities	976	1,548	2,120	4,482	7,341	10,200	14,705	24,235	33,765
5	Jacksonville Electric Authority	737	1,137	1,537	3,345	5,345	7,345	10,952	17,619	24,286
6	Kissimmee	701	1,080	1,459	3,284	5,179	7,074	11,618	17,099	22,580
7	City of Lakeland	637	980	1,324	3,017	4,734	6,452	9,958	15,683	21,409
8	City of New Smyrna Beach	721	1,205	1,690	3,469	5,891	8,314	10,859	18,434	26,009
9	City of Ocala	700	1,140	1,579	3,301	5,498	7,695	11,522	18,634	25,746
10	Orlando Utilities Commission	683	1,029	1,374	3,265	4,993	6,720	10,796	16,554	22,312
11	City of Tallahassee	804	1,115	1,365	3,720	5,275	6,524	12,162	17,284	21,417
<b><u>Florida Cooperatives</u></b>										
12	Sumter Electric Cooperative	680	1,099	1,518	3,069	5,163	7,257	10,038	17,018	23,998
<b><u>Investor-Owned Utilities:</u> <sup>[2]</sup></b>										
13	Florida Power and Light	693	998	1,304	3,352	4,879	6,407	11,926	16,524	21,121
14	Gulf Power Company	767	1,261	1,754	3,638	6,105	8,573	14,461	20,620	26,779
15	Duke Energy	784	1,182	1,579	3,858	5,846	7,833	12,789	19,382	25,975
16	Tampa Electric Company	741	1,060	1,379	3,576	5,173	6,770	11,847	17,169	22,491

[1] Amounts shown are based on the rates for single phase service and reflect when applicable, inside city service. In addition, amounts include January 2021 fuel adjustments and franchise fees but do not include taxes.

[2] Amounts shown include the energy conservation, capacity, environmental and storm cost recovery charges where appropriate, as filed with the the Florida Public Service Commission (FPSC). Franchise fees of 6 percent are included for each of the IOU's listed.

## GLOSSARY [1]

**Administrative and general expenses:** Expenses of an electric utility relating to the overall directions of its corporate offices and administrative affairs, as contrasted with expenses incurred for specialized functions. Examples include office salaries, office supplies, advertising, and other general expenses.

**AMI:** Advanced Metering Infrastructure is a term denoting electricity meters that measure and record usage data at a minimum, in hourly intervals, and provide usage data to both consumers and energy companies at least once daily.

**Base rate:** A fixed kilowatthour charge for electricity consumed that is independent of other charges and/or adjustments.

**Bulk power transactions:** The wholesale sale, purchase, and interchange of electricity among electric utilities. Bulk power transactions are used by electric utilities for many different aspects of electric utility operations, from maintaining load to reducing costs.

**Capacity (purchased):** The amount of energy and capacity available for purchase from outside the system.

**Capacity charge:** An element in a two-part pricing method used in capacity transactions (energy charge is the other element). The capacity charge, sometimes called Demand Charge, is assessed on the amount of capacity being purchased.

**Capacity factor:** The ratio of the electrical energy produced by a generating unit for the period of time considered to the electrical energy that could have been produced at continuous full power operation during the same period.

**Capital cost:** The cost of field development and plant construction and the equipment required for industry operations.

**Class rate schedule:** An electric rate schedule applicable to one or more specified classes of service, groups of businesses, or customer uses.

**Classes of service:** Customers grouped by similar characteristics in order to be identified for the purpose of setting a common rate for electric service. Usually classified into groups identified as residential, commercial, industrial, and other.

**Coincidental demand:** The sum of two or more demands that occur in the same time interval.

**Coincidental peak load:** The sum of two or more peak loads that occur in the same time interval.

**Consumer charge:** An amount charged periodically to a consumer for such utility costs as billing and meter reading, without regard to demand or energy consumption.

**Cost of service:** A ratemaking concept used for the design and development of rate schedules to ensure that the filed rate schedules recover only the cost of providing the electric service at issue. This concept attempts to correlate the utility's costs and revenue with the service provided to each of the various customer classes.

**Demand charge:** That portion of the consumer's bill for electric service based on the consumer's maximum electric capacity usage and calculated based on the billing demand charges under the applicable rate schedule.

**Distribution system:** The portion of the transmission and facilities of an electric system that is dedicated to delivering electric energy to an end-user.

**Electric rate:** The price set for a specified amount and type of electricity by class of service in an electric rate schedule or sales contract.

**Electric rate schedule:** A statement of the electric rate and the terms and conditions governing its application, including attendant contract terms and conditions that have been accepted by a regulatory body with appropriate oversight authority.

**Electricity sales:** The amount of kilowatthours sold in a given period of time; usually grouped by classes of service, such as residential, commercial, industrial, and other. "Other" sales include sales for public street and highway lighting and other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

**Energy charge:** That portion of the charge for electric service based upon the electric energy (kWh) consumed or billed.

**Federal Energy Regulatory Commission (FERC):** The Federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification. FERC is an independent regulatory agency within the Department of Energy and is the successor to the Federal Power Commission.

**FERC guidelines:** A compilation of the Federal Energy Regulatory Commission's enabling statutes; procedural and program regulations; and orders, opinions, and decisions.

**Fixed cost (expense):** An expenditure or expense that does not vary with volume level of activity.

**Fixed operating costs:** Costs other than those associated with capital investment that do not vary with the operation, such as maintenance and payroll.

**Investor-owned utility (IOU):** A privately-owned electric utility whose stock is publicly traded. It is rate regulated and authorized to achieve an allowed rate of return.

**Kilowatt (kW):** One thousand watts.

**Kilowatthour (kWh):** A measure of electricity defined as a unit of work or energy, measured as 1 kilowatt (1,000watts) of power expended for 1 hour. One kWh is equivalent to 3,412 Btu.

**Load diversity:** The difference between the peak of coincident and noncoincident demands of two or more individual loads.

**Load factor:** The ratio of the average load to peak load during a specified time interval.

**Megawatt (MW):** One million watts of electricity.

**Megawatthour (MWh):** One thousand kilowatt-hours or 1million watt-hours.

**Noncoincident demand:** Sum of two or more demands on individual systems that do not occur in the same demand interval.

**Noncoincidental peak load:** The sum of two or more peak loads on individual systems that do not occur in the same time interval. Meaningful only when considering loads within a limited period of time, such as a day, week, month, a heating or cooling season, and usually for not more than 1 year.

**O&M:** Operation and Maintenance.

**Peak demand:** The maximum load during a specified period of time.

**Purchased power:** Power purchased or available for purchase from a source outside the system.

**Rate schedule (electric):** The rates, charges, and provisions under which service is supplied to the designated class of customers.

**Ratemaking authority:** A utility commission's legal authority to fix, modify, approve, or disapprove rates as determined by the powers given the commission by a State or Federal legislature.

**Rates:** The authorized charges per unit or level of consumption for a specified time period for any of the classes of utility services provided to a customer.

**Time-of-day rate:** The rate charged by an electric utility for service to various classes of customers. The rate reflects the different costs of providing the service at different times of the day.

**Watt (W):** The unit of electrical power equal to one ampere under a pressure of one volt. A Watt is equal to 1/746 horse power.

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[1] From U. S. Energy Information Administration Glossary  
<https://www.eia.gov/tools/glossary/index.php?id=xyz>.

RESOLUTION NO. 69-2021 OF THE CITY OF LAKE WORTH BEACH, FLORIDA, PROVIDING FOR RATES, FEES AND CHARGES, AND REGULATIONS FOR ALL ELECTRICITY SOLD BY THE CITY OF LAKE WORTH BEACH, FLORIDA FOR USE OF ELECTRIC LIGHT AND POWER SYSTEM; REPEALING ALL RESOLUTIONS IN CONFLICT HERewith; PROVIDING FOR SEVERABILITY; PROVIDING AN EFFECTIVE DATE

WHEREAS, the City of Lake Worth Beach, Florida, is authorized and required to fix uniform and adequate rates for its service; and

WHEREAS, the rates set forth herein are just and equitable and serve a valid public purpose.

NOW, THEREFORE, BE IT RESOLVED BY THE COMMISSION OF THE CITY OF LAKE WORTH BEACH, FLORIDA as follows:

Section 1. Definitions: For the purpose of this resolution, the following terms, phrases, words, and their derivations shall have the meaning given herein. When not inconsistent with the context, words used in the present tense include the future, words in the plural in the present tense include the future, words in the plural include the singular, and words in the singular include the plural.

- A. "Shall" is always mandatory and not merely directory.
- B. "Net Metering Accounts" are those customer accounts with the City's Electric Utility where the customer has applied to the City's Electric Utility; installed a Customer-Owned Renewable Generation System (as defined in the Net Metering Program Rules and Regulations); executed a City Interconnection Agreement; has been approved by the Electric Utility for interconnection with the City's electric system; and, remains in compliance with the City's Net Metering Program. All rates applicable to Net Metering Accounts are governed by Resolution No. 45-2019 (as may be amended from time to time).
- C. "Purchased Power Cost Adjustment (PCA)" The cost of electricity is affected by the price of fuel and the purchase price of power supply. The PCA is an adjustment charge caused by an increased or decreased in the cost to purchase or supply power to customers. It is shown on the customer's bill as a credit or a surcharge to the price per kilowatt-hour. The customer's utility bill may have a credit, as the cost of power supply decreases, or it may have a surcharge when the costs increase.

Section 2. The following schedules shall be the rates charged and the regulations imposed by the City of Lake Worth Beach, Florida, on all electric power sold by the City of Lake Worth Beach, Florida for lighting, heating and power purposes, to wit:

- A. Regular Residential Electric (Schedule R-S)

1. Designation: Regular Residential Electric
2. Applicable: For domestic electric purposes in private residences and individually metered apartments. Residential rates shall apply for electric energy used in commonly-owned facilities in condominiums and cooperative apartment buildings, subject to the following criteria:
  - a. 100% of the energy is used exclusively for the co-owner's benefit.
  - b. None of the energy is used in any endeavor which sells or rents a commodity or provides service for a fee.
  - c. Each point of delivery will be separately metered and billed.
  - d. A responsible legal entity is established as the customer to whom the City of Lake Worth Beach can render its bills for said service.
  - e. A cooperative or condominium requesting residential rates shall apply for the rate and establish the above criteria.
3. Limitations: Auxiliary and stand-by generation or resale of the electric energy not permitted hereunder. Recognized rooming houses, tourist homes and dwellings accommodating more than four paying guests supplied through a single meter will not be served under this schedule.
4. Service: Single phase, 60 cycles at available standard voltage. Three phase service may be furnished but only under special arrangements and at the option of the City of Lake Worth Beach.
5. Monthly Rates:
  - a. Customer Charge: A fixed charge based on the cost of preparing and delivering a bill, which will be applied to each electric account receiving a bill. \$10.53 per month.
  - b. Energy Charge per kWh
6. The rates listed above include all administrative charges from the City of Lake Worth Beach.
7. Purchased Power Cost Adjustment Charge:
  - A. Purchased Power Cost Adjustment Charge will be applied as set forth below.

	<b>First 1,000 KWH's</b>	<b>Excess</b>
Base Energy-kWh	0.05148	0.0788
Fuel	0.03578	0.0390
Capacity	0.01020	0.0102
<b>Total</b>	<b>0.09746</b>	<b>0.1280</b>

8. Outside City Limits Surcharge: A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth below.
9. Minimum Bill: The minimum bill for electric use shall be charged at \$31.40 per month.

**B. Regular Commercial Service (Schedule C-S)**

1. Designation: Regular Commercial Electric.
2. Applicable: For commercial, industrial, and governmental use within the territory served by the Electric Distribution System of the City of Lake Worth Beach, as available and at the option of the City.
3. Limitations: For consumers who own renewable energy facilities (such as wind, solar power or home fuel cells), resale of the electric energy is not permitted hereunder.
4. Service: Single or three phase, 60 cycles and at any available standard voltage, at the option of the City of Lake Worth Beach.
5. Monthly Rates:
  - a. Customer Charge: A fixed charge based on the cost of preparing and delivering a bill which will be applied to each electric account receiving a bill. \$16.66 per month.
  - b. Charge per kWh.

	<b>All kWhs</b>
Base Energy - kWh	0.0704
Fuel	0.03578
Capacity	0.0102
<b>Total</b>	<b>0.11638</b>

6. The rates listed above includes all administrative charges from the City of Lake Worth Beach.
7. Purchased Power Cost Adjustment Charge: A Purchased Power Cost Adjustment Charge will be applied as set forth below.
8. Outside City Limits Surcharge: A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth below.
9. Minimum Bill: The minimum bill for electric use shall be \$50.00 per month.

**C. Demand Commercial Service (Schedule CD-S)**

1. Designation: Demand Commercial Electric
2. Applicable: For customers who qualifies for service under Schedule C-S above and has a peak demand of 18 kW or greater for three (3) consecutive months:
3. Limitations: Auxiliary or stand-by service or resale not permitted hereunder.
4. Service: Single or three phase, 60 cycles and at any available standard voltage, at the option of the City of Lake Worth Beach.
5. Monthly Rates:
  - a. Customer Charge: A fixed charge based on the cost of preparing and delivering a bill, which will be applied to each electric account receiving a bill. \$120.00 per month.
  - b. Charge per KWH

	All kWhs	Demand - KW
Base Energy-kWh	0.0355	\$ 14.48
Fuel	0.0289	
Capacity	0.0102	
<b>Total</b>	<b>0.0746</b>	<b>\$14.48</b>

6. The rates listed above include all administrative charges from the City of Lake Worth Beach.
7. Billing Demand: The maximum 15 minute measured demand in the month, subject to power factor adjustment.
8. Power Factor Adjustment: When demand is measured with a kW meter and customer's power factor in any month is below 95% the measured demand may be adjusted to 95% power factor.
9. Purchased Power Cost Adjustment Charge:
  - A. Purchased Power Cost Adjustment Charge will be applied as set forth below.
10. Outside City Limits Surcharge: A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth below.
11. Minimum Bill: The minimum bill for electric use shall be \$140.00 per month.

D. Regular Time of Use Commercial Service (Schedule CT-S)

1. Designation: Time of Use Commercial Service
2. Applicable: For commercial, industrial, and governmental use within the territory served by the Electric Distribution System of the City of Lake Worth Beach, as available and at the option of the City.
3. Limitations: For consumers who own renewable energy facilities (such as wind, solar power or home fuel cells), resale of the electric energy is not permitted hereunder.
4. Service: Single or three phase, 60 cycles and at any available standard voltage, at the option of the City of Lake Worth Beach.
5. Monthly Rates:
  - a. Customer Charge: A fixed charge based on the cost of preparing and delivering a bill which will be applied to each electric account receiving a bill. \$28.97 per month.
  - b. Energy Charge:
    - i. Off Peak \$0.0846 per kWh
    - ii. On Peak \$0.2651 per kWh
    - iii. Determination of Off-Peak Period: October – May: The off-peak period is defined as the hours between 1:00 p.m. and 6:00 a.m., Monday through Friday and all day Saturday and Sunday. In addition, the following holidays will also be considered off-peak: New Year's Day, Memorial Day, Thanksgiving Day, and Christmas Day. June – September: The off-peak period is defined as the hours between 7:00 p.m. and 2:00 p.m., Monday through Friday and all day Saturday and Sunday. In addition, the following holidays will also be considered off-peak: Independence Day and Labor Day. All other hours are considered on peak hours.

6. Term of Contract: One year and thereafter until terminated at the option of either party by the giving of not less than thirty (30) days advance written notice of the effective date of termination.
  7. Purchased Power Cost Adjustment Charge: A Purchased Power Cost Adjustment Charge will be applied as set forth below.
  8. Outside City Limits Surcharge: A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth below.
  9. Minimum Bill: The minimum bill for electric use shall be \$50.00 per month.
- E. Time of Use Demand Commercial Service (Schedule CDT-S)
1. Designation: Time of Use Demand Commercial Service
  2. Applicable: For commercial, industrial, and governmental use within the territory served by the Electric Distribution System of the City of Lake Worth Beach, as available and at the option of the City.
  3. Limitations: For consumers who own renewable energy facilities (such as wind, solar power or home fuel cells), resale of the electric energy is not permitted hereunder.
  4. Service: Single or three phase, 60 cycles and at any available standard 416 voltage, at the option of the City of Lake Worth Beach.
  5. Monthly Rates:
    - a. Customer Charge: A fixed charge based on the cost of preparing and delivering a bill which will be applied to each Electric account receiving a bill. \$130.32 per month.
    - b. Energy Charge:
      - i. Off Peak \$0.0627 per kWh
      - ii. On Peak \$0.2432 per kWh
      - iii. Demand Charge: \$7.39 per kW.
      - iv. Billing Demand: The maximum 15 minute measured demand in the month, subject to power factor adjustment.
      - v. Power Factor Adjustment: When demand is measured with a kW 438 meter and customer's power factor in any month is below 95% the measured demand may be adjusted to 95% power factor.
      - vi. Determination of Off-Peak Period: October – May: The off-peak period is defined as the hours between 1:00 p.m. and 6:00 a.m., Monday through Friday and all day Saturday and Sunday. In addition, the following holidays will also be considered off-peak: New Year's Day, Memorial Day, Thanksgiving Day, and Christmas Day.
      - vii. June – September: The off-peak period is defined as the hours between 7:00 p.m. and 2:00 p.m., Monday through Friday and all day Saturday and Sunday. In addition, the following holidays will also be considered off-peak: Independence Day and Labor Day. All other hours are considered on peak hours.
  6. Term of Contract: One year and thereafter until terminated at the option of either party by the giving of not less than thirty (30) days advance written notice of the effective date of termination.
  7. Purchased Power Cost Adjustment Charge: A Purchased Power Cost Adjustment Charge will be applied as set forth below.
  8. Outside City Limits Surcharge: A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth below.
  9. Minimum Bill: The minimum bill for electric use shall be \$140.00 per month.

F. Electric Vehicle Charging Level II (Schedule EV2-S)

1. Designation: Electric Vehicle Charging Level II
2. Applicable: For City owned public electric vehicle Level II charging stations.
  - a. None of the energy is used in any endeavor which sells or rents a commodity or provides service for a fee.
  - b. Each point of delivery will be separately metered and billed.
  - c. Limitations: Auxiliary and stand-by generation or resale of the electric energy not permitted hereunder.

3. Energy Charge per kWh

	All KWH's
Base Energy-kWh	0.05148
Fuel	0.03578
Capacity	0.0102
<b>Total</b>	<b>0.09746</b>

4. The rates listed above include all administrative charges from the City of Lake Worth Beach.
5. Purchased Power Cost Adjustment Charge:
  - A. Purchased Power Cost Adjustment Charge will be applied as set forth below.
6. Outside City Limits Surcharge: A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth below.

G. Private Area Lighting (Schedule L-P)

1. Designation: Private Area Lighting
2. Applicable: For year-round outdoor security lighting of yards, driveways, walkways, parking lots, parks, and other areas, under the following conditions:
  - a. Lights to be served hereunder shall be at locations that are easily and economically accessible to the City of Lake Worth Beach equipment and personnel for construction and maintenance.
  - b. Original location of lighting fixtures shall be by mutual agreement and shall not be located so as to create a public nuisance.
  - c. Any relocation requested by customer after installation shall be made at customer's expense. All new lighting units provided under this Schedule shall be the high pressure sodium vapor (conservation lighting) type.
3. Limitations:
  - a. Auxiliary and stand-by generation or resale of the electric energy not permitted hereunder.
  - b. The City of Lake Worth Beach, while exercising reasonable diligence at all times to furnish service hereunder, does not guarantee continuous lighting and will not be liable for damages for any interruption, deficiency or failure of service and reserves the right to interrupt service at any time for necessary repairs to lines or equipment.

4. **Service:** Service includes lamp renewals, energy from approximately dusk each day until approximately dawn the following day and maintenance of facilities. The City of Lake Worth Beach will replace all burned out lamps and will maintain its facilities during regular daytime working hours as soon as practicable following notification by the customer that such work is necessary. The City of Lake Worth Beach shall be permitted to enter the customer's premises at all reasonable times for the purpose of inspecting, maintaining, installing and removing any or all of its equipment and facilities. Single phase, 60 cycles at available standard voltage. Three phase service may be furnished but only under special arrangements and at the option of the City of Lake Worth Beach.
5. **Term of Service:** Not less than one (1) year.
6. **Monthly Rates:** A fixed monthly charge based on the number of units installed shall be charged based on the following schedule.
  - a. **Standard Lighting:**

Description Unit Cost per Month 175 Watt (7,000 Lumen) \$11.63

Mercury-Vapor Existing Pole Street Light Unit on	
400 Watt (20,500 Lumen) Mercury-Vapor Street Light Unit on Existing Pole	\$18.24
1,000 Watt (55,000 Lumen) Mercury-Vapor Street Light Unit on Existing Pole Conservation Lighting: Description 100 Watt (9,500 Lumen) High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$35.89 unit cost per month \$9.46
250 Watt (27,500 Lumen) High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$13.58
360 Watt High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$16.24
400 Watt (50,000 Lumen) High Pressure Sodium Vapor Street Light Unit on existing pole Appurtenances: Description Wood Pole and span of Overhead Conductors or Pole used only for Light	\$16.33 unit cost per month \$2.55
Concrete Pole and Span of Overhead Conductors or Pole used only for Light	\$3.82
Underground Conductors up to 150 feet	\$1.27
Underground Conductors from 150 feet to 300 feet	\$2.55

7. **Purchased Power Cost Adjustment Charge:** A Purchased Power Cost Adjustment Charge will be applied as set forth below.
  8. **Outside City Limits Surcharge:** A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth below
- H. **Street Lighting (Schedule L-S)**
1. **Designation:** Street Lighting
  2. **Applicable:** For lighting of public right-of ways. All new lighting units provided under this Schedule shall be the high pressure sodium vapor (conversation) type.
  3. **Limitations:**
    - a. Auxiliary and stand-by generation or resale of the electric energy not permitted hereunder.

- b. The City of Lake Worth Beach, while exercising reasonable diligence at all times to furnish service hereunder, does not guarantee continuous lighting and will not be liable for damages for any interruption, deficiency or failure of service and reserves the right to interrupt service at any time for necessary repairs to lines or equipment.
- c. Should the City of Lake Worth Beach be required by the customer to replace the street light(s) with a light (or lights) of another type or rating, then the customer may be required to pay the estimated labor, vehicle use and other direct costs involved in replacing the fixtures.
- 4. Service: Service includes lamp renewals, energy from approximately dusk each day until dawn the following day and maintenance of City of Lake Worth Beach owned street lighting systems.
- 5. Term of Service: For not less than ten (10) years for City of Lake Worth Beach facilities or customer will be required to pay depreciated cost of installed facilities plus cost of removal.
- 6. Monthly Rates:
  - a. A fixed monthly charge based on the number of units installed shall be charged based on the following schedule.
  - b. Conservation Lighting:

Description Unit Cost per Month

100 Watt (9,500 Lumen) High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$7.48
150 Watt (27,500 Lumen) High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$8.89
250 Watt (27,500 Lumen) High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$11.68
360 Watt High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$14.47
400 Watt (50,000 Lumen) High Pressure Sodium Vapor Street Light Unit on existing pole	\$16.28

- c. Appurtenances:

Description Unit Cost per Month

Wood Pole and span of Overhead Conductors \$2.55 or Pole used only for Light  
 Concrete Pole and Span of Overhead Conductors \$3.82 or Pole used only for Light  
 Underground Conductors up to 150 feet \$1.27  
 Underground Conductors from 150 feet to 300 feet \$2.55

- 7. Purchased Power Cost Adjustment Charge:
  - A. Purchased Power Cost Adjustment Charge will be applied as set forth below.
- 8. Outside City Limits Surcharge:
  - A. Surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth below.

Section 3. Purchased Power Cost Adjustment (PCA): A Purchased Power Cost Adjustment Charge (PCA) shall be established each month for energy sales during that month as follows:

A+B+C+D  
 X (1+F)  
 E

where:

A = The actual purchased power costs for the month and includes power supply from all sources including St. Lucie, Stanton, Purchase Power and generating fuel & transmission

B = Purchased Power cost paid in customer rates for month, which is equal to (PCA from last month plus base power costs) divided by 1 plus system loss estimate (7 percent) times MWh's of purchased power (Purchased power includes power supply & transmission from all resources)

C = Projected power supply cost for up to next twelve months

D = Projected power supply costs recovered in base rates remainder of year, which is equal to the projected purchased power in MWh's times base rate divided by 1 plus system losses (estimated at 7 percent)

E = The projected sales over remainder of year equal to projected MWh's of purchased power divided by 1 plus system losses (estimated at 7 percent)

F = The contribution factor to the General Fund of the City.

The base power cost included in the base rates is \$ 81.80 per MWh.

The purchased power cost adjustment charge will be reconciled periodically but at a minimum of once a year and trued up between estimated billing units defined as MWh's of purchased power divided by 1 plus system losses and actual billing units.

The calculation of the purchased power cost adjustment will be lagging by two months. For example, the power supply for the month of September will be charged to customers beginning in November that year.

Section 4. Surcharge For Service Outside The Municipal Limits: With respect to any residents, premises and/or users outside the corporate limits of the City of Lake Worth Beach, Florida, where such residents, premises and/or users now or hereafter have or use electrical utility service with the electrical system of the City of Lake Worth Beach, they shall be charged a rate for the electricity they use equal to the charge established for service to the residents, premises and/or users within the City of Lake Worth Beach, Florida, plus any applicable taxes or fees that are required in the Code of Ordinances or Resolutions of the specific jurisdiction in which those accounts reside. Such taxes and fees are collected by the City of Lake Worth Beach and remitted directly to the appropriate County or Municipal entity.

Section 5. Nothing in this resolution shall prohibit the City of Lake Worth Beach from entering into an agreement to provide electricity and electric utility services to or within any unit of government or governmental subdivision with terms and conditions other than contained herein.

Section 6. All resolutions or parts of resolutions in conflict herewith are expressly repealed.

Section 7. If any provision of this resolution or the application thereof to any person or circumstance is held invalid, the invalidity shall not affect other provisions or applications

of the resolution, which can be given effect without the invalid provision or application, and to this end the provisions of this resolution are declared severable.

Section 8. This resolution shall be in effect for billings issued on or after October 1, 2021.

The passage of this resolution was moved by Commissioner McVoy, seconded by Commissioner Stokes and upon being put to a vote, the vote was as follows:

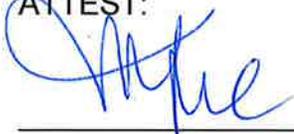
Mayor Betty Resch	AYE
Vice Mayor Herman Robinson	AYE
Commissioner Sarah Malega	AYE
Commissioner Christopher McVoy	AYE
Commissioner Kimberly Stokes	AYE

The Mayor thereupon declared this resolution duly passed and enacted on the 27<sup>th</sup> day of September 2021.

LAKE WORTH BEACH CITY COMMISSION

By:   
Betty Resch, Mayor

ATTEST:



Melissa Ann Coyne, City Clerk



RESOLUTION NO. xx-2021 OF THE CITY OF LAKE WORTH BEACH, FLORIDA, PROVIDING FOR RATES, FEES AND CHARGES, AND REGULATIONS FOR ALL ELECTRICITY SOLD BY THE CITY OF LAKE WORTH BEACH, FLORIDA FOR USE OF ELECTRIC LIGHT AND POWER SYSTEM; REPEALING ALL RESOLUTIONS IN CONFLICT HEREWITH; PROVIDING FOR SEVERABILITY; PROVIDING AN EFFECTIVE DATE

WHEREAS, the City of Lake Worth Beach, Florida, is authorized and required to fix uniform and adequate rates for its service; and

WHEREAS, the rates set forth herein are just and equitable and serve a valid public purpose.

NOW, THEREFORE, BE IT RESOLVED BY THE COMMISSION OF THE CITY OF LAKE WORTH BEACH, FLORIDA as follows:

Section 1. Definitions: For the purpose of this resolution, the following terms, phrases, words, and their derivations shall have the meaning given herein. When not inconsistent with the context, words used in the present tense include the future, words in the plural in the present tense include the future, words in the plural include the singular, and words in the singular include the plural.

- A. "Shall" is always mandatory and not merely directory.
- B. "Net Metering Accounts" are those customer accounts with the City's Electric Utility where the customer has applied to the City's Electric Utility; installed a Customer-Owned Renewable Generation System (as defined in the Net Metering Program Rules and Regulations); executed a City Interconnection Agreement; has been approved by the Electric Utility for interconnection with the City's electric system; and, remains in compliance with the City's Net Metering Program. All rates applicable to Net Metering Accounts are governed by Resolution No. 45-2019 (as may be amended from time to time).
- C. "Purchased Power Cost Adjustment (PCA)" The cost of electricity is affected by the price of fuel and the purchase price of power supply. The PCA is an adjustment charge caused by an increased or decreased in the cost to purchase or supply power to customers. It is shown on the customer's bill as a credit or a surcharge to the price per kilowatt-hour. The customer's utility bill may have a credit, as the cost of power supply decreases, or it may have a surcharge when the costs increase.

Section 2. The following schedules shall be the rates charged and the regulations imposed by the City of Lake Worth Beach, Florida, on all electric power sold by the City of Lake Worth Beach, Florida for lighting, heating and power purposes, to wit:

A. Regular Residential Electric (Schedule R-S)

1. Designation: Regular Residential Electric
2. Applicable: For domestic electric purposes in private residences and individually metered apartments. Residential rates shall apply for electric energy used in commonly-owned facilities in condominiums and cooperative apartment buildings, subject to the following criteria:
  - a. 100% of the energy is used exclusively for the co-owner's benefit.
  - b. None of the energy is used in any endeavor which sells or rents a commodity or provides service for a fee.
  - c. Each point of delivery will be separately metered and billed.
  - d. A responsible legal entity is established as the customer to whom the City of Lake Worth Beach can render its bills for said service.
  - e. A cooperative or condominium requesting residential rates shall apply for the rate and establish the above criteria.
3. Limitations: Auxiliary and stand-by generation or resale of the electric energy not permitted hereunder. Recognized rooming houses, tourist homes and dwellings accommodating more than four paying guests supplied through a single meter will not be served under this schedule.
4. Service: Single phase, 60 cycles at available standard voltage. Three phase service may be furnished but only under special arrangements and at the option of the City of Lake Worth Beach.
5. Monthly Rates:
  - a. Customer Charge: A fixed charge based on the cost of preparing and delivering a bill, which will be applied to each electric account receiving a bill. \$TBD per month.
  - b. Energy Charge per kWh

	<b>First 1,000 KWH's</b>	<b>Excess</b>
Base Energy	TBD	TBD
Power Cost Adjustment	TBD	TBD
<b>Total</b>	<b>TBD</b>	<b>TBD</b>

6. The rates listed above include all administrative charges from the City of Lake Worth Beach.
7. Purchased Power Cost Adjustment Charge:
  - A. Purchased Power Cost Adjustment Charge will be applied as set forth in Section 3 below.
8. Outside City Limits Surcharge: A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth in Section 4 below.
9. Minimum Bill: The minimum bill for electric use shall be charged at \$35.00 per month.

- B. Regular Commercial Service (Schedule C-S)
1. Designation: Regular Commercial Electric.
  2. Applicable: For commercial, industrial, and governmental use within the territory served by the Electric Distribution System of the City of Lake Worth Beach, as available and at the option of the City.
  3. Limitations: For consumers who own renewable energy facilities (such as wind, solar power or home fuel cells), resale of the electric energy is not permitted hereunder.
  4. Service: Single or three phase, 60 cycles and at any available standard voltage, at the option of the City of Lake Worth Beach.
  5. Monthly Rates:
    - a. Customer Charge: A fixed charge based on the cost of preparing and delivering a bill which will be applied to each electric account receiving a bill. \$TBD per month.
    - b. Energy Charge per kWh.

	<b>All kWhs</b>
Base Energy	TBD
Power Cost Adjustment	TBD
<b>Total</b>	<b>TBD</b>

6. The rates listed above includes all administrative charges from the City of Lake Worth Beach.
  7. Purchased Power Cost Adjustment Charge:
    - A. Purchased Power Cost Adjustment Charge will be applied as set forth in Section 3 below.
  8. Outside City Limits Surcharge: A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth in Section 4 below.
  9. Minimum Bill: The minimum bill for electric use shall be \$50.00 per month for single phase service and \$100.00 per month for poly phase service.
- C. Demand Commercial Service (Schedule CD-S)
1. Designation: Demand Commercial Electric
  2. Applicable: For customers who qualifies for service under Schedule C-S above and has a peak demand of 25 kW or greater for three (3) consecutive months:
  3. Limitations: Auxiliary or stand-by service or resale not permitted hereunder.
  4. Service: Single or three phase, 60 cycles and at any available standard voltage, at the option of the City of Lake Worth Beach.
  5. Monthly Rates:
    - a. Customer Charge: A fixed charge based on the cost of preparing and delivering a bill, which will be applied to each electric account receiving a bill. \$TBD per month.
    - b. Energy Charge per KWH

	All kWhs	Demand - KW
Base Energy	TBD	\$TBD
Power Cost Adjustment	TBD	
<b>Total</b>	<b>TBD</b>	<b>\$TBD</b>

6. The rates listed above include all administrative charges from the City of Lake Worth Beach.
7. Billing Demand: The maximum 15 minute measured demand in the month, subject to power factor adjustment.
8. Power Factor Adjustment: When demand is measured with a kW meter and customer's power factor in any month is below 95% the measured demand may be adjusted to 95% power factor.
9. Purchased Power Cost Adjustment Charge:
  - A. Purchased Power Cost Adjustment Charge will be applied as set forth in Section 3 below.
10. Outside City Limits Surcharge: A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth in Section 4 below.
11. Minimum Bill: The minimum bill for electric use shall be \$250.00 per month.

D. Regular Time of Use Commercial Service (Schedule CT-S)

1. Designation: Time of Use Commercial Service
2. Applicable: For commercial, industrial, and governmental use within the territory served by the Electric Distribution System of the City of Lake Worth Beach, as available and at the option of the City.
3. Limitations: For consumers who own renewable energy facilities (such as wind, solar power or home fuel cells), resale of the electric energy is not permitted hereunder.
4. Service: Single or three phase, 60 cycles and at any available standard voltage, at the option of the City of Lake Worth Beach.
5. Monthly Rates:
  - a. Customer Charge: A fixed charge based on the cost of preparing and delivering a bill which will be applied to each electric account receiving a bill. \$30.00 per month.
  - b. Energy Charge:
    - i. Off Peak \$0.0840 per kWh
    - ii. On Peak \$0.2600 per kWh
    - iii. Determination of Off-Peak Period: October – May: The off-peak period is defined as the hours between 1:00 p.m. and 6:00 a.m., Monday through Friday and all day Saturday and Sunday. In addition, the following holidays will also be considered off-peak: New Year's Day, Memorial Day, Thanksgiving Day, and Christmas Day. June – September: The off-peak period is defined as the hours between 7:00 p.m. and 2:00 p.m., Monday through Friday and all day Saturday and Sunday. In addition, the following holidays will also be considered off-peak: Independence Day and Labor Day. All other hours are considered on peak hours.

6. Term of Contract: One year and thereafter until terminated at the option of either party by the giving of not less than thirty (30) days advance written notice of the effective date of termination.
  7. Purchased Power Cost Adjustment Charge: A Purchased Power Cost Adjustment Charge will be applied as set forth in Section 3 below.
  8. Outside City Limits Surcharge: A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth in Section 4 below.
  9. Minimum Bill: The minimum bill for electric use shall be \$50.00 per month for single phase service and \$100.00 per month for poly phase service.
- E. Time of Use Demand Commercial Service (Schedule CDT-S)
1. Designation: Time of Use Demand Commercial Service
  2. Applicable: For commercial, industrial, and governmental use within the territory served by the Electric Distribution System of the City of Lake Worth Beach, as available and at the option of the City.
  3. Limitations: For consumers who own renewable energy facilities (such as wind, solar power or home fuel cells), resale of the electric energy is not permitted hereunder.
  4. Service: Single or three phase, 60 cycles and at any available standard 416 voltage, at the option of the City of Lake Worth Beach.
  5. Monthly Rates:
    - a. Customer Charge: A fixed charge based on the cost of preparing and delivering a bill which will be applied to each Electric account receiving a bill. \$140.00 per month.
    - b. Energy Charge:
      - i. Off Peak \$0.0620 per kWh
      - ii. On Peak \$0.2400 per kWh
      - iii. Demand Charge: \$7.00 per kW.
      - iv. Billing Demand: The maximum 15 minute measured demand in the month, subject to power factor adjustment.
      - v. Power Factor Adjustment: When demand is measured with a kW 438 meter and customer's power factor in any month is below 95% the measured demand may be adjusted to 95% power factor.
      - vi. Determination of Off-Peak Period: October – May: The off-peak period is defined as the hours between 1:00 p.m. and 6:00 a.m., Monday through Friday and all day Saturday and Sunday. In addition, the following holidays will also be considered off-peak: New Year's Day, Memorial Day, Thanksgiving Day, and Christmas Day.
      - vii. June – September: The off-peak period is defined as the hours between 7:00 p.m. and 2:00 p.m., Monday through Friday and all day Saturday and Sunday. In addition, the following holidays will also be considered off-peak: Independence Day and Labor Day. All other hours are considered on peak hours.
  6. Term of Contract: One year and thereafter until terminated at the option of either party by the giving of not less than thirty (30) days advance written notice of the effective date of termination.
  7. Purchased Power Cost Adjustment Charge: A Purchased Power Cost Adjustment Charge will be applied as set forth in Section 3 below.

8. Outside City Limits Surcharge: A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth in Section 4 below.
9. Minimum Bill: The minimum bill for electric use shall be \$140.00 per month.

F. Electric Vehicle Charging Level II (Schedule EV2-S)

1. Designation: Electric Vehicle Charging Level II
2. Applicable: For City owned public electric vehicle Level II charging stations.
  - a. None of the energy is used in any endeavor which sells or rents a commodity or provides service for a fee.
  - b. Each point of delivery will be separately metered and billed.
  - c. Limitations: Auxiliary and stand-by generation or resale of the electric energy not permitted hereunder.

3. Energy Charge per kWh

	<b>All KWH's</b>
Base Energy	TBD
Power Cost Adjustment	TBD
<b>Total</b>	<b>TBD</b>

4. The rates listed above include all administrative charges from the City of Lake Worth Beach.
5. Purchased Power Cost Adjustment Charge:
  - A. Purchased Power Cost Adjustment Charge will be applied as set forth in Section 3 below.
6. Outside City Limits Surcharge: A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth in Section 4 below.

G. Private Area Lighting (Schedule L-P)

1. Designation: Private Area Lighting
2. Applicable: For year-round outdoor security lighting of yards, driveways, walkways, parking lots, parks, and other areas, under the following conditions:
  - a. Lights to be served hereunder shall be at locations that are easily and economically accessible to the City of Lake Worth Beach equipment and personnel for construction and maintenance.
  - b. Original location of lighting fixtures shall be by mutual agreement and shall not be located so as to create a public nuisance.
  - c. Any relocation requested by customer after installation shall be made at customer's expense. All new lighting units provided under this Schedule shall be the high pressure sodium vapor (conservation lighting) type.
3. Limitations:
  - a. Auxiliary and stand-by generation or resale of the electric energy not permitted hereunder.
  - b. The City of Lake Worth Beach, while exercising reasonable diligence at all times to furnish service hereunder, does not guarantee continuous lighting and will not be liable for damages for any interruption, deficiency or failure of service and reserves the right to interrupt service at any time for necessary repairs to lines or equipment.

4. Service: Service includes lamp renewals, energy from approximately dusk each day until approximately dawn the following day and maintenance of facilities. The City of Lake Worth Beach will replace all burned out lamps and will maintain its facilities during regular daytime working hours as soon as practicable following notification by the customer that such work is necessary. The City of Lake Worth Beach shall be permitted to enter the customer's premises at all reasonable times for the purpose of inspecting, maintaining, installing and removing any or all of its equipment and facilities. Single phase, 60 cycles at available standard voltage. Three phase service may be furnished but only under special arrangements and at the option of the City of Lake Worth Beach.
5. Term of Service: Not less than one (1) year.
6. Monthly Rates: A fixed monthly charge based on the number of units installed shall be charged based on the following schedule.
  - a. Standard Lighting:

Description Unit Cost per Month

175 Watt (7,000 Lumen) Mercury –Vapor Street Light Unit on Existing Pole	\$12.21
400 Watt (20,500 Lumen) Mercury-Vapor Street Light Unit on Existing Pole	\$19.15
1,000 Watt (55,000 Lumen) Mercury-Vapor Street Light Unit on Existing Pole	\$37.68
100 Watt (9,500 Lumen) High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$9.93
250 Watt (27,500 Lumen) High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$14.26
360 Watt High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$17.05
400 Watt (50,000 Lumen) High Pressure Sodium Vapor Street Light Unit on existing pole	\$17.15
48 Watt LED Street Light Unit on Existing Pole	\$9.00
70 Watt LED Street Light Unit on Existing Pole	\$9.70
80 Watt LED Street Light Unit on Existing Pole	\$9.70
101 Watt LED Street Light Unit on Existing Pole	\$16.30
110 Watt LED Street Light Unit on Existing Pole	\$16.30
133 Watt LED Street Light Unit on Existing Pole	\$16.30
150 Watt LED Street Light Unit on Existing Pole	\$16.30
Wood Pole and span of Overhead Conductors or Pole used only for Light	\$10.00
Concrete Pole and Span of Overhead Conductors or Pole used only for Light	\$15.00
Underground Conductors up to 150 feet	\$1.33
Underground Conductors from 150 feet to 300 feet	\$2.68

7. Purchased Power Cost Adjustment Charge: A Purchased Power Cost Adjustment Charge will be applied as set forth in Section 3 below.
8. Outside City Limits Surcharge: A surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth in Section 4 below.

H. Street Lighting (Schedule L-S)

1. Designation: Street Lighting
2. Applicable: For lighting of public right-of ways.
3. Limitations:
  - a. Auxiliary and stand-by generation or resale of the electric energy not permitted hereunder.
  - b. The City of Lake Worth Beach, while exercising reasonable diligence at all times to furnish service hereunder, does not guarantee continuous lighting and will not be liable for damages for any interruption, deficiency or failure of service and reserves the right to interrupt service at any time for necessary repairs to lines or equipment.
  - c. Should the City of Lake Worth Beach be required by the customer to replace the street light(s) with a light (or lights) of another type or rating, then the customer may be required to pay the estimated labor, vehicle use and other direct costs involved in replacing the fixtures.
4. Service: Service includes lamp renewals, energy from approximately dusk each day until dawn the following day and maintenance of City of Lake Worth Beach owned street lighting systems.
5. Term of Service: For not less than ten (10) years for City of Lake Worth Beach facilities or customer will be required to pay depreciated cost of installed facilities plus cost of removal.
6. Monthly Rates:
  - a. A fixed monthly charge based on the number of units installed shall be charged based on the following schedule.
  - b. Conservation Lighting:

Description Unit Cost per Month

100 Watt (9,500 Lumen) High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$7.85
150 Watt (27,500 Lumen) High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$9.33
250 Watt (27,500 Lumen) High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$12.26
360 Watt High Pressure Sodium Vapor Street Light Unit on Existing Pole	\$15.19
400 Watt (50,000 Lumen) High Pressure Sodium Vapor Street Light Unit on existing pole	\$17.09
48 Watt LED Street Light Unit on Existing Pole	\$9.00
70 Watt LED Street Light Unit on Existing Pole	\$9.70
80 Watt LED Street Light Unit on Existing Pole	\$9.70
101 Watt LED Street Light Unit on Existing Pole	\$16.30
110 Watt LED Street Light Unit on Existing Pole	\$16.30
133 Watt LED Street Light Unit on Existing Pole	\$16.30
150 Watt LED Street Light Unit on Existing Pole	\$16.30

## c. Appurtenances:

Description Unit Cost per Month

Wood Pole and span of Overhead Conductors \$10.00 or Pole used only for Light  
 Concrete Pole and Span of Overhead Conductors \$15.00 or Pole used only for Light  
 Underground Conductors up to 150 feet \$1.33  
 Underground Conductors from 150 feet to 300 feet \$2.68

7. Purchased Power Cost Adjustment Charge:
  - A. Purchased Power Cost Adjustment Charge will be applied as set forth in Section 3 below.
8. Outside City Limits Surcharge:
  - A. Surcharge for electric use outside the City of Lake Worth Beach, Florida, municipal limits shall be charged as set forth in Section 4 below.

Section 3. Purchased Power Cost Adjustment (PCA): A Purchased Power Cost Adjustment Charge (PCA) shall be established for a projected 12 month period for energy sales during that period as follows:

$$PCA = (A + B + C) / D$$

where:

A = The projected purchased power costs for the projected 12 month period comprised of costs such as the FMPA Stanton 1 variable costs, the FMPA Municipal Solar Project power costs, supplemental purchased power capacity, energy and directly related costs, Lake Worth Beach electric utility power generating fuel, and transmission costs

B = A true-up amount representing the over or under recovery of purchased power costs from the prior period

C = The amount transferred to or from the Rate Stabilization Fund for the projected period

D = The projected total retail sales in MWh for the projected 12 month period

The purchased power cost adjustment charge will be reconciled periodically at a minimum of once a year and trued up between estimated costs and billing units and actual costs and billing units.

Section 4. Surcharge For Service Outside The Municipal Limits: With respect to any residents, premises and/or users outside the corporate limits of the City of Lake Worth Beach, Florida, where such residents, premises and/or users now or hereafter have or use electrical utility service with the electrical system of the City of Lake Worth Beach, they shall be charged a rate for the electricity they use equal to the charge established for service to the residents, premises and/or users within the City of Lake Worth Beach, Florida, plus any applicable taxes or fees that are required in the Code of Ordinances or Resolutions of the specific jurisdiction in which those accounts reside. Such taxes and fees are collected by the City of Lake Worth Beach and remitted directly to the appropriate County or Municipal entity.

Section 5. Nothing in this resolution shall prohibit the City of Lake Worth Beach from entering into an agreement to provide electricity and electric utility services to or within any unit of government or governmental subdivision with terms and conditions other than contained herein.

Section 6. All resolutions or parts of resolutions in conflict herewith are expressly repealed.

Section 7. If any provision of this resolution or the application thereof to any person or circumstance is held invalid, the invalidity shall not affect other provisions or applications of the resolution, which can be given effect without the invalid provision or application, and to this end the provisions of this resolution are declared severable.

Section 8. This resolution shall be in effect for billings issued on or after April 1, 2022.

The passage of this resolution was moved by Commissioner McVoy, seconded by Commissioner Stokes and upon being put to a vote, the vote was as follows:

Mayor Betty Resch	AYE
Vice Mayor Herman Robinson	AYE
Commissioner Sarah Malega	AYE
Commissioner Christopher McVoy	AYE
Commissioner Kimberly Stokes	AYE

The Mayor thereupon declared this resolution duly passed and enacted on the 30<sup>th</sup> day of November 2021.

LAKE WORTH BEACH CITY COMMISSION

By: \_\_\_\_\_  
Betty Resch, Mayor

ATTEST:

\_\_\_\_\_  
Melissa Ann Coyne, City Clerk

# **EXECUTIVE BRIEF ELECTRIC UTILITY MEETING**

**AGENDA DATE:** November 30, 2021

**TITLE:**

Eighth Amendment to the Professional Services Agreement with Vantage Services Consulting LLC

**SUMMARY:**

The Eighth Amendment to the Professional Services Agreement with Vantage Energy Consulting LLC extends the term of the Agreement for one (1) year, includes additional services to be provided, and a rate increase to be paid by the City for the consulting services.

**BACKGROUND AND JUSTIFICATION:**

The Electric Utility Department entered into an agreement with Vantage Energy Consulting LLC (“Vantage”) to provide consulting services related to the purchase of electric power, development of electric supply cost models to support cost tracking, budgeting and fiscal modeling, auditing of energy supplier and transmission provider bills, nomination of electric energy and capacity purchases, assistance with natural gas pipeline capacity sales, development of electric reliability reports, and analysis of natural gas supply pipeline options.

The purpose of this eighth amendment is to renew the term for one (1) year and set forth the additional services to be provided by Vantage over the next year. Vantage has submitted a proposal for services along with a proposed rate increase. The Electric Utility has reviewed the consultant’s proposal and concluded the rate increase is reasonable for the said consulting services. The Eighth Amendment includes a not to exceed amount of \$197,760.00.

**MOTION:**

Move to approve/disapprove Eighth Amendment to Professional Services Agreement with Vantage Services Consulting LLC

**ATTACHMENT(S):**

Fiscal Impact Analysis  
Eighth Amendment

**FISCAL IMPACT ANALYSIS**

**A. Five Year Summary of Fiscal Impact:**

<b>Fiscal Years</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Capital Expenditures	0	0	0	0	0
Operating Expenditures	\$197,760	0	0	0	0
External Revenues	0	0	0	0	0
Program Income	0	0	0	0	0
In-kind Match	0	0	0	0	0
<b>Net Fiscal Impact</b>	<b>\$197,760</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
No. of Addn'l Full-Time Employee Positions	0	0	0	0	0

**B. Recommended Sources of Funds/Summary of Fiscal Impact:**

Account Number	Account Description	Project Number	FY22 Budget	Current Balance	Budget Transfer	Agenda Expenditure	Balance
401-6010-531.31-90	Prof Serv/Other	N/A	\$406,193	\$359,160	\$0	\$197,760	\$161,400

## **EIGHTH AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT**

This Eighth Amendment to the Professional Services Agreement (“Eight Amendment”) is made as of the \_\_\_\_\_, by and between the **City of Lake Worth Beach**, Florida, a municipal corporation of the State of Florida (“CITY”) and **Vantage Energy Consulting, LLC**, a Florida limited liability company (“CONSULTANT”).

**WHEREAS**, the CONSULTANT has a distinct field of expertise in Florida and beyond in regard to auditing electric services and providing variety of consulting services related to electric utility rate and regulatory issues, asset management, and procurement; and

**WHEREAS**, the CITY and CONSULTANT entered a Professional Services Agreement based upon the CONSULTANT’s distinct field of expertise on November 8, 2017 (the “Agreement”); and

**WHEREAS**, the Agreement has been amended seven times to extend the term and broaden the scope of services which CONSULTANT was providing to the CITY; and

**WHEREAS**, the Fourth, Fifth, Sixth, and Seventh Amendment included specific tasks that CONSULTANT provided in the past year and the CITY wishes to extend the same services for an additional year; and

**WHEREAS**, the CONSULTANT has submitted new rates for the services sought by the CITY; and

**WHEREAS**, the purpose of this Eighth Amendment is to renew the term of the Agreement for one (1) year and set forth certain terms and conditions for the provision of additional services by the CONSULTANT to the CITY; and

**WHEREAS**, the CITY’s Electric Utility has reviewed the CONSULTANT’s rates and concluded the rates are reasonable; and

**WHEREAS**, under section 2-112(c)(6) of the CITY’s procurement code, the City Commission is authorized to approve an agreement with a consultant with a distinct field of expertise without competitive selection; and

**WHEREAS**, the CITY finds approving this Eighth Amendment with the CONSULTANT serves a valid public purpose.

**NOW, THEREFORE**, in consideration of the mutual promises contained herein, the sufficiency of which is hereby acknowledged by each party hereto, the CITY and the CONSULTANT agree to amend the Agreement as follows:

1. **Recitals.** The above recitals are true and correct and are incorporated herein by reference.

2. **Consultant's Services.** Section 2 of the Agreement, regarding the CONSULTANT's services, is amended to add the additional services as outlined in the CONSULTANT's proposal and new rates, and consisting of one page, which is attached hereto as **Exhibit "1"** and incorporated herein.

3. **Fees.** Section 5 of the Agreement, regarding the CONSULTANT's fees, is amended to allow for the additional services to be provided by the CONSULTANT under this Eighth Amendment. Compensation paid by the CITY to the CONSULTANT shall not exceed **One Hundred Ninety-Seven Thousand, Seven Hundred Sixty Dollars (\$197,760.00) under this Eighth Amendment.**

4. **Term of Agreement.** Section 4 of the Agreement shall be amended to provide that the Agreement expires November 30, 2022 unless earlier terminated as stated in the Agreement.

5. **Entire Agreement.** The CITY and the CONSULTANT agree that the Agreement (as previously amended) and this Eighth Amendment set forth the entire agreement between the parties, and that there are no promises or understandings other than those stated herein. None of the provisions, terms and conditions contained in this Eighth Amendment may be added to, modified, superseded or otherwise altered, except by written instrument executed by the parties hereto. All other terms and conditions of the Agreement (as previously amended) remain in full force and effect.

6. **Counterparts.** This Eighth Amendment may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument. Either or both parties may sign this Eighth Amendment electronically and provide a copy to the other via facsimile or email and such signature is as valid as the original signature of such party.

**REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK**  
**SIGNATURE PAGE FOLLOWS**

IN WITNESS WHEREOF the parties hereto have made and executed this Eighth Amendment to the Professional Services Agreement on the day and year first above written.

**CITY OF LAKE WORTH BEACH, FLORIDA**

ATTEST:

By: \_\_\_\_\_  
Melissa Ann Coyne, City Clerk

By: \_\_\_\_\_  
Betty Resch, Mayor

APPROVED AS TO FORM AND  
LEGAL SUFFICIENCY:

APPROVED FOR FINANCIAL  
SUFFICIENCY

By: \_\_\_\_\_  
Glen J. Torcivia, City Attorney

By: \_\_\_\_\_  
Bruce T. Miller, Financial Services Director

CONSULTANT: **Vantage Energy Consulting, LLC**

[Corporate Seal]

By: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_

STATE OF \_\_\_\_\_)  
COUNTY OF \_\_\_\_\_)

THE FOREGOING instrument was acknowledged before me by means of • physical presence or • online notarization on this \_\_\_\_ day of \_\_\_\_\_ 2021, by \_\_\_\_\_, as the \_\_\_\_\_ of **Vantage Energy Consulting, LLC**, a corporation authorized to do business in the State of Florida, who is personally known to me or who has produced \_\_\_\_\_ as identification, and who did take an oath that he or she is duly authorized to execute the foregoing instrument and bind the CONTRACTOR to the same.

**Exhibit “1”**  
(Vantage Rates – 1 page)

		<b>Proposed Vantage Budget for LWB Work Fiscal 2022</b>	Days	Hours
1	Assist with rates and budgeting including			
	LWB Budgeting			
	Actual versus Budget updates		7	56
	Work with external rate consultants		7	56
	Rate and Financial Projections		8	64
	Bill Verification		4	24
	Load Forecasting for Model		7	56
	Nominations(including Model Update)		2	16
2	Solar Energy /Avoided cost/Energy Conservation		7	48
3	Greenhouse and carbon free		4	32
4	Maintain All In Cost Model		15	120
5	Produce Budget Variance Reports			
	Monthly		15	120
	Quarterly		12	96
6	Assist with Ad Hoc Presentations, Reports and meetings		7	56
7	Assist with new OM/renegoiate Supplemental if required		10	80
	<b>Total</b>		<b>105</b>	<b>824</b>
			Blended Hourly Rate	\$240
			Annual Budget	\$197,760

# **EXECUTIVE BRIEF ELECTRIC UTILITY MEETING**

**AGENDA DATE:** November 30, 2021

**TITLE:**

Task Order No. 10 with E.C. Fennell, PA., for Distribution System Planning services for the 6th Avenue Substation Circuits and Southeast Quadrant of the City's Electrical Service Area

**SUMMARY:**

Task Order No. 10 authorizes E.C. Fennell, PA, to provide Distribution Planning engineering services for the 6th Avenue Substation Circuits and Southeast Quadrant of the City's Electrical Service Area a cost not to exceed \$97,812. This project has been identified as an element of the City's electric utility System Hardening and Reliability Improvement Project (SHRIP) and for which bonds were sold in November 2020.

**BACKGROUND AND JUSTIFICATION:**

The City issued a Request for Qualifications (RFQ 18-303) to provide letters of interest and Professional Qualifications from consulting companies/firms for civil engineering, geotechnical engineering, surveying, architecture, hydrogeological services, energy management and engineering services. E.C. Fennell, PA, was one of three firms selected under the Energy Management category for the Continuing Contracts for Professional Services.

The City's Electric Utility is currently working with E.C. Fennell on the engineering design for the voltage conversion and system hardening of the four (4) existing 6th Avenue Substation circuits. In addition, E.C. Fennell has also prepared the PB&Z package for the new 6th Avenue 8-Bay Substation that will provide power to the existing 6th Avenue circuits and will also provide power to additional circuits currently being fed power from the 4kV House at the Main Yard Substation.

Task Order No. 10 authorizes E.C. Fennell to complete distribution planning analysis of the existing 6th Avenue circuits, 4kV House circuits and also evaluate the 12th Avenue South Substation circuits and 15th Avenue South Substation Circuits which canvas the Southeastern quadrant of the City.

The primary objective of the Distribution System Planning is to maintain grid safety and improve reliability at a reasonable cost. E.C. Fennell will utilize the newly developed Milsoft model of the City's electrical distribution system to evaluate existing loads on the 4kV House circuits, 12th Ave. South Substation circuits and 15th Ave. South Substation circuits to support and optimize capital decisions pertaining to voltage conversion and network reconfiguration. The Distribution System Planning scope includes; evaluating, comparing and tuning the Milsoft model against real-time operational data, evaluate loading and spare capacity on the existing circuits and transformers, perform power flow analysis to calculate kW, kVar, Voltage and current flows on the existing circuits, evaluate sub-transmission circuit routes, model various switching scenarios to identify potential issues, complete short circuit analysis on 26kV circuits and complete fuse coordination analysis.

**MOTION:**

Move to approve/disapprove Task Order No. 10 to E.C. Fennell PA., for Distribution System Planning services for the 6th Avenue Substation Circuits and Southeast Quadrant of the City's Electrical Service Area at a cost not to exceed \$97,812.

**ATTACHMENT(S):**

Fiscal Impact Analysis  
Task Order No. 10

**FISCAL IMPACT ANALYSIS**

**A.** Five Year Summary of Fiscal Impact:

<b>Fiscal Years</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Capital Expenditures	\$97,812	0	0	0	0
Operating Expenditures	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income	0	0	0	0	0
In-kind Match	0	0	0	0	0
 Net Fiscal Impact	 \$97,812	 0	 0	 0	 0
 No. of Addn'l Full-Time Employee Positions	 0	 0	 0	 0	 0

**B.** Recommended Sources of Funds/Summary of Fiscal Impact: Funds have been identified in account No. 421-6034-531-63.15, Project SH2132.

**C.**

Account Number	Account Description	Project Number	FY22 Budget	Current Balance	Budget Transfer	Agenda Expenditure	Balance
421-6034-531-63.15	Improve Other than Build / Infrastructure	SH2132	\$229,184	\$200,000		-\$97,812	\$102,188

## **TASK ORDER NO. 10**

### **Distribution Planning Services – 6<sup>th</sup> Avenue Substation & Southeast Quadrant of Electrical Service Area**

THIS TASK ORDER ("Task Order") is made on the \_\_\_\_\_, 2021, between the **City of Lake Worth Beach**, a Florida municipal corporation located at 7 North Dixie Highway, Lake Worth, Florida 33460 ("City") and **E.C.Fennell, PA**, a Florida corporation ("Consultant").

#### **1.0 Project Description:**

The City desires the Consultant to provide those services as identified herein and generally described as: **Distribution Planning Services for 6<sup>th</sup> Avenue Substation & SE Quadrant of Service Area** (the "Project"). The Project is described in the consultant's proposal, dated November, 2021, and is attached hereto as Exhibit "1" and incorporated herein.

#### **2.0 Scope**

Under this Task Order, the Consultant will provide professional services to the City as detailed in the **Consultant's proposal attached hereto and incorporated herein as Exhibit "1"**.

#### **3.0 Schedule**

The services to be provided under this Task Order shall be completed within **180** calendar days from the City's approval of this Task Order or the issuance of a Notice to Proceed.

#### **4.0 Compensation**

This Task Order is issued for a time and expense, not to exceed amount of **\$97,812.00**. The attached proposal identifies all costs and expenses anticipated in the time and expense, not to exceed amount.

#### **5.0 Project Manager**

The Project Manager for the Consultant is Tarek El-Sadek, phone: 561-471-4029 x 247; email: [telsadek@ecfconsultants.com](mailto:telsadek@ecfconsultants.com); and, the Project Manager for the City is Paul Nicholas, phone: 561-533-7353; email: [Pnicholas@LakeWorthBeachfl.gov](mailto:Pnicholas@LakeWorthBeachfl.gov).

#### **6.0 Progress Meetings**

The Consultant shall schedule periodic progress review meetings with the City Project Manager as necessary but every 30 days as a minimum.

#### **7.0 Authorization**

This Task Order is issued in compliance with the Consultants' Competition Negotiation Act, section 287.055, Florida Statutes, and pursuant to the Agreement for Professional Services between the City of Lake Worth and the Consultant, dated **March 16<sup>th</sup>, 2018** ("Agreement" hereafter). If there are any conflicts between the terms and conditions of this Task Order and the Agreement, the terms and conditions of the Agreement shall prevail; however, the specific scope of services set forth in this Task Order shall take precedence over any other more general description of services.

IN WITNESS WHEREOF the parties hereto have made and executed this Task Order No. 10 on the day and year first above written.

**CITY OF LAKE WORTH BEACH, FLORIDA**

By: \_\_\_\_\_  
Betty Resch, Mayor

ATTEST:

By: \_\_\_\_\_  
Deborah M. Andrea, City Clerk

APPROVED AS TO FORM AND  
LEGAL SUFFICIENCY:

By: \_\_\_\_\_  
Glen J. Torcivia, City Attorney

APPROVED FOR FINANCIAL  
SUFFICIENCY

By: \_\_\_\_\_  
Bruce T. Miller, Financial Services Director

CONTRACTOR: E.C. Fennell, PA

[Corporate Seal]

By: Jolie Gonzalez  
Print Name: Jolie Gonzalez  
Title: Manager

STATE OF FLORIDA  
COUNTY OF BROWARD

The foregoing instrument was acknowledged before me this 10<sup>th</sup> day of NOV, 2021, by JOLIE GONZALEZ who was physically present, as MANAGER (title), of E.C. Fennell, PA, a Florida Corporation, which is authorized to do business in the State of Florida, and who is personally known to me or who has produced the following DL as identification.

Notary Public

Josangel Gonzalez  
Print Name: JOSANGEL GONZALEZ  
My commission expires: \_\_\_\_\_



**Josangel Gonzalez**  
Comm. #GG925527  
Expires: October 23, 2023  
Bonded Thru Aaron Notary

**EXHIBIT "1"**  
**Contractors Proposal**

**Voltage Conversion &  
Network Reconfiguration – Phase A**

**Distribution Planning Proposal**

Prepared for

**City of Lake Worth Beach**  
**7 North Dixie Hwy**  
**Lake Worth Beach, FL 33460-3725**

Prepared by

**E.C. Fennell P.A.**  
**701 Northpoint Parkway Suite 110**  
**West Palm Beach, FL 33407**

**November, 2021**



**ENGINEERING**  
**CONSULTANTS**

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**City of Lake Worth Beach**  
Procurement Department  
7 North Dixie Highway  
Lake Worth Beach, FL 33460



Re: Request for Proposal for distribution planning analysis pertaining to Voltage Conversion and associated Network Reconfiguration

Dear City of Lake Worth Beach:

This letter serves to formally inform you and the review/ranking committee members for the City of Lake Worth Beach, of E.C. Fennell P.A. (ECF Engineering Consultants), intent to express interest in providing professional engineering services to CLWB for Distribution Planning Support.

ECF Engineering Consultants is a Minority Owned multi-disciplined consulting firm established in West Palm Beach, Florida and incorporated as a corporation in 2002. ECF since its conception, has provided consultation and technical solutions to a number of engineering markets worldwide. ECF's core business is to serve Public Municipal Agencies, Private Development Projects and Utility Companies on an array of projects offering planning, investigative, design and construction administration services. Our expertise is in value engineering and providing a comprehensive engineering solution to exceed our clients' expectations. Our services are tailored to meet industry guidelines, technological advances, and most importantly client, project and system needs.

In this proposal, ECF has provided to the City of Lake Worth Beach Procurement Department all the required information necessary to be considered highly qualified to fulfill CLWB's distribution study needs. Our firms' history shall demonstrate ECF's ability over an extended period of time to provide technical leadership in the areas the CLWB is requesting services. Our team member's resumes are exemplary. ECF has assembled a team with extensive knowledge and experience in many aspects of electric utilities.

Our team has the ability to get the job done effectively and meet CLWB's project objectives. We are confident that once the information presented in this proposal has been examined, you shall recognize the added value ECF Engineering Consultants can bring to City of Lake Worth Beach.

Please accept this letter as ECF's official intent to assist the City of Lake Worth Beach towards achieving its objective of maintaining and improving its facilities.

Sincerely.

**Shauna Fennell Hawkins**

President

ECF Engineering Consultants

701 Northpoint Parkway

Suite 110

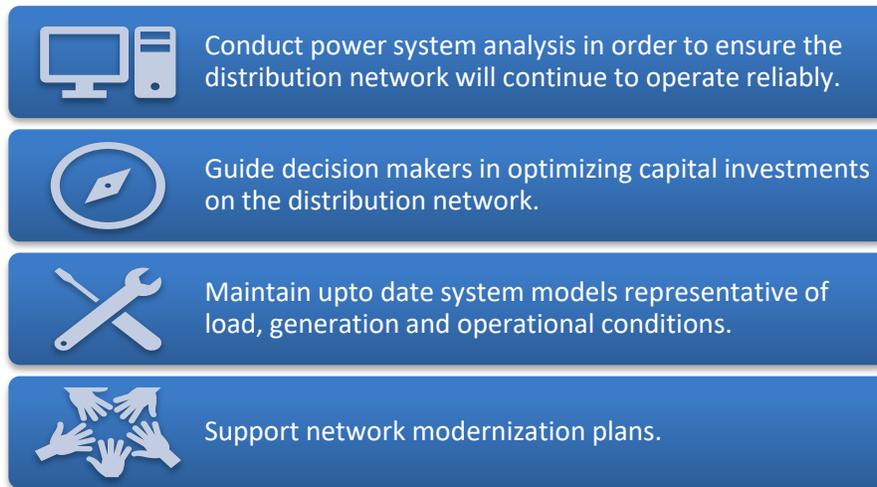
West Palm Beach, FL 33407

[efennell@ecfconsultants.com](mailto:efennell@ecfconsultants.com)

# 1 Background Information

The City of Lake Worth Electric Utility (CLWU) is a non-profit and citizen owned utility providing power to 27,000 customers with a peak demand of 97MW. The local load is served through approximately 80MW of conventional generation, 2MW via a solar PV plant, 1.5MW through net-metering rooftop solar PV and the rest via an interconnection to FPL.

Since the primary objective of distribution system planning is to maintain grid safety and reliability at a reasonable cost, as the grid continues on evolving, the CLWU has requested a proposal from ECF Engineering Consultants, LLC (ECF) to perform a distribution planning study on their 26kV and 4.16kV system spanning a four-square mile area, focusing on the southeast quadrant of the city. Distribution planning in any utility covers multiple critical responsibilities as shown below in Figure 1.



**Figure 1 - Typical Distribution Planning Responsibilities**

Furthermore, the distribution planning study will support and optimize capital decisions pertaining to voltage conversion and network reconfiguration. The analysis will be an ongoing effort to model planned and proposed voltage conversion at 6<sup>th</sup> Ave substation, identify potential synergy in converting close by 4kV feeders, load-serving reliability, and sub-transmission reinforcement. During the span of the study, ECF will act as CLWU’s in-house distribution planner with ongoing staff interaction, discussion and analysis.

In addition, the study will focus on the following main tasks:

1. Analysis of exiting loads on the 4kV House, 12 Ave S, 15 Ave S circuits and studying the best approach to convert its current feeders to 26kV.
2. Assess the need for a 4 vs 8 configuration at 6<sup>th</sup> Ave substation including studying N-1

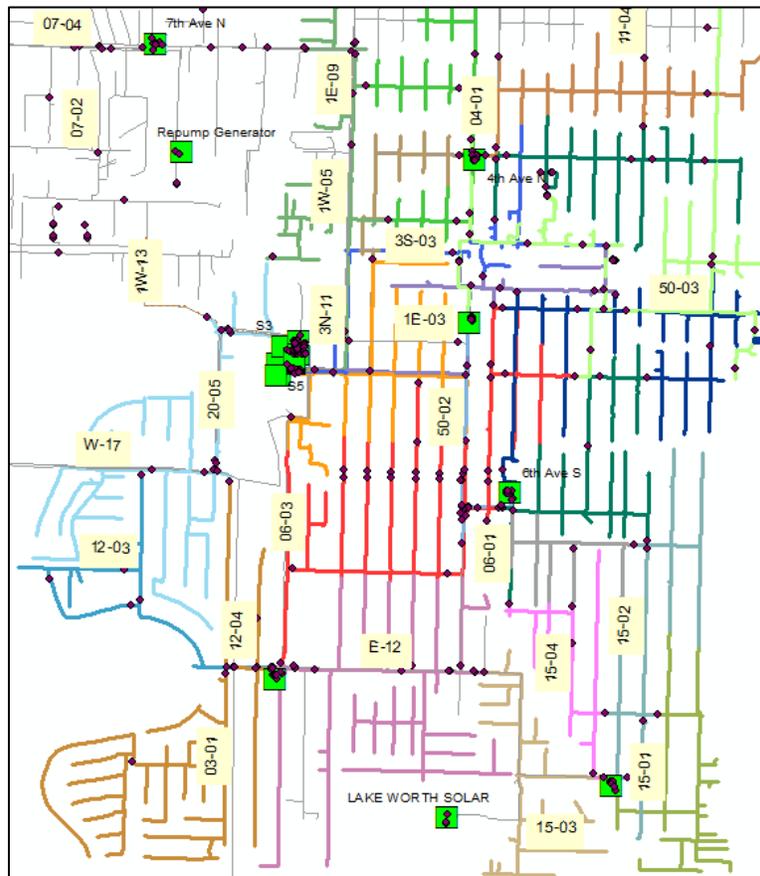
contingencies and voltage drop at tail end of feeders.

3. Update system model, provided by Milsoft, as needed to include accurate feeder loads, voltages, fuses, relays, and other equipment.
4. Analyze appropriate path and source for distribution substations to have redundant sub-transmission supply.
5. Analysis of current loads fed from sub-transmission feeders and moving these loads to 26kV distribution feeders.

## 2 Study Proposal

The CLWU has started the process of converting 4kV feeders to 26kV, allowing for more thermal capabilities and load serving on the conductors. The conversion process is no easy task and requires well a planned approach to achieve the level of reliability thought after.

In addition, the CLWU is currently focusing its conversion efforts on the southeast quadrant of the city's electric network, as shown below in Figure 2. This area consists of both sub-transmission and distribution substations, and feeder lines.



**Figure 2 – CLWU Southeast Quadrant Electric Network**

The hardening and conversion design is close to completion for the 6<sup>th</sup> Ave substation. The 6<sup>th</sup> Ave substation is located within a close proximity to the 4kV House, Main 26 Yard Sub, 12<sup>th</sup> Ave Sub, 15<sup>th</sup> Ave Sub, East Switching Station and the 4<sup>th</sup> Ave North Sub. A critical element to the hardening of 6<sup>th</sup> Ave is determining the number of recloser bays to be utilized, 4 or 8 recloser bays. Having spare recloser bays allows for N-1 contingency load serving for faults at the station level.

Also, the 4kV House is planned for decommissioning which will require its feeders a new source, namely 3N-11, 3N-12, 3N-13, 3S-03, 3S-04 and 3S-05. These 4kV feeders will be converted to 26kV and tied to adjacent feeders and/or routed to a new source. These planned activities will require analysis to ascertain thermal capability of conductors/equipment and acceptable power quality, specifically voltage drop at tail ends of feeders.

Sub-transmission station Main 26 Yard Sub is the main source feeding distribution substations in the area. As the 4kV feeders were overloaded and as the voltage conversion occurs, the sub-transmission station feeders were utilized to serve load directly or through distribution feeder tie-in. These source feeders need to regain their initial intent by serving distribution substations. The study, will analyze other avenues to clear load off the source feeders through load reallocation.

Currently, distribution substations are sometimes feed from other distribution subs or from a single sub-transmission feed. A contingency scenario where a single sub-transmission feeder or station is faulted can cause cascading blackouts over a wide serving area. To mitigate such adverse impacts, the study will explore redundant sub-transmission feeding of distribution substations. This could occur by tying-in to sub-transmission feeders and finding alternate paths through usage of existing distribution feeders or adding new circuits on the distribution feeder poles.

### **3 Scope of work**

The below high-level scope of work will be utilized to achieve the study goals

#### **3.1 Model Tuning**

Prior to conducting planning studies with the newly created model, by Milsoft, the model's performance has to be indexed against operational data recorded by CLWU. Operational data including short circuit levels, voltage levels and loading levels at specific feeders will be monitored for consistency with the model, by ECF. Any missing fusing data, conductor sizing, etc will need to be manually modelled by ECF. Also, recloser and substation over current relays will be modeled with their appropriate settings, by ECF.

### **3.2 Load Modelling**

In order to confirm thermal loadings and spare capacity on feeders and transformers, an accurate representation of the network's loading condition needs to be modeled. As discussed with the CLWU team, AMI readings or manual probing of circuits will be required, by CLWU. After loading data is gathered, a conversion of loads from 4kV to 26kV will be calculated and modeled on the laterals they represent, by ECF.

### **3.3 Power Flow Analysis**

ECF will perform power flow analyses to calculate KW, KVar, Voltage and Current flows on the feeder circuits. Different tie-ins and joining of feeders, adding a feeder to another feeder, will then occur and simulations will be carried out, while observing system conditions for any adverse impacts. If adverse impacts are found, mitigative measure will be proposed and discussed with CLWU including low voltage issues, capacitor placement, etc. Moreover, different switching scenarios and sub-transmission routes will be studied by ECF. The list of feeder tie-in and switching scenarios will be provided by CLWU. ECF will deliver powerflow diagrams and tabulations of analyses results. Powerflow analyses will only be conducted on 26kV circuits and not secondary circuits.

### **3.4 Short Circuit Analysis**

ECF will carry out short circuit simulations for all affected feeders to ensure convergence and gauge the model readiness to perform fuse coordination studies. Short circuit current levels will be documented for equipment on the feeders including over-head and underground conductors, switches, devices, and electrical nodes. Short circuit analyses will only be conducted on 26kV circuits and not secondary circuits.

### **3.5 Fuse Coordination Analysis**

Coordination of protection devices in a complex distribution system is an ongoing activity that requires updated system data and a protection philosophy. The CWLU fusing guidelines will be reviewed, compared to the installed fuse banks and coordinated with updated short circuit data. ECF will conduct coordination analysis and deliver coordination curves for 26kV circuits only.

## **4 Required Data**

A distribution system model utilizes a large amount of data to accurately depict each asset's behavior during normal and abnormal system conditions. Study simulations require data to be as true as possible so resulting datapoints aren't inherently skewed. Moreover, system planners strive

to build accurate desktop models while knowing that a percent error will always linger, nonetheless must be minimized.

ECF will work with CLWU personnel to acquire the data needed for modelling and subsequent studies. As a minimum, and to serve as a reference, the below list of data will be needed by the study kickoff date.

#### **4.1 Lines (Sub-transmission & Distribution)**

- a. Overhead/Underground
- b. Conductor Types
- c. Tower Configurations
- d. Distance
- e. Conductor Spacing
- f. Single, Two, or Three Phase Labels

#### **4.2 Distribution Transformer & In-Line Transformers**

- a. Location
- b. KVA, Voltage Ratings, and impedance
- c. Connections

#### **4.3 Shunt Capacitors**

- a. Location
- b. kVAR & Voltage Rating
- c. Phase Connections

#### **4.4 Voltage Regulators/LTC**

- a. Location
- b. Phase Connections
- c. Single Phase or Three Phase Regulation
- d. Type A or B

#### **4.5 Switches**

- a. Location
- b. Normal Operating Position – NO or NC

#### **4.6 Loading Information**

- a. Location
- b. System
- c. Substations
- d. Transformers

- e. Consumers
- f. Peak/Light/Forecasted

#### 4.7 Generation Sources

- a. Location
- b. MVA, PF
- c. Impedance

#### 4.8 Protection

- a. Fusing guide lines and charts
- b. Relay type, model and settings
- c. Operational reference data including fault data and trips

### 5 Cost Proposal

#### 5.1 Time and Material (Not to Exceed) Proposal

ECF is providing a proposal for services indicated in Section 2 “Study Proposal” and outlined in this document in the form of time and material not to exceed.

Task	Planning Engineer Hours
1. Analysis of exiting loads on the 4kV House, 12 Ave S, 15 Ave S circuits and studying the best approach to convert its current feeders to 26kV.	163.2
2. Assess the need for a 4 vs 8 configuration at 6th Ave substation including studying N-1 contingencies and voltage drop at tail end of feeders.	13.8
3. Update system model, provided by Milsoft, as needed to include accurate feeder loads, voltages, fuses, relays, and other equipment.	64.8
4. Analyze appropriate path and source for distribution substations to have redundant sub-transmission supply.	156
5. Analysis of current loads fed from sub-transmission feeders and moving these loads to 26kV distribution feeders.	100.8
ECF’s Time and Material (Not to Exceed) offer for the services defined in this document is: <b>\$97,812.00</b>	514.8

**Table 1 – Time and Material (Not to Exceed) Proposal**

## **5.2 Out of Scope Support Cost Plus Offer**

Fees for services rendered beyond those indicated in this document will be invoiced on a cost plus basis. Prior to executing a request, the scope of work, anticipated duration and pay rate of said task would be agreed to by all parties. ECF shall be paid at the man-hour rates indicated below for resources used in completing out of scope work, plus any Reimbursable Expenses, which shall, for the purposes of this proposal, mean the actual, direct, out-of-pocket expenses consisting of (i) costs incurred for drawing reproduction, travel is requested by Company, and related car rental, lodging and meals of Consultant, and (ii) costs for

## **5.3 Payment Schedule**

The payment schedule for the project will be based on a monthly invoice submittal.

## **5.4 Invoices**

Payment of invoices shall be mailed to the following:

**Attn: Ms. Shauna E. Hawkins**

**E. C. Fennell, P.A.**

**701 Northpoint Parkway, Suite #110 West Palm Beach, FL 33407**

# Thank You

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For Considering ECF Engineering Consultants



**ENGINEERING  
CONSULTANTS**

# **EXECUTIVE BRIEF ELECTRIC UTILITY MEETING**

**AGENDA DATE:** November 30, 2021

**TITLE:**

Agreement for Call Center Support Services with ENCO Utility Services, LLC

**SUMMARY:**

Agreement for Call Center Support Services with ENCO Utility Services, LLC utilizing the City of Homestead Contract (RFP# 202107) and authorization of funding the agreement to provide Call Center Support Services for Customer Service division in the prorated amount not exceed \$342,000 for Fiscal Year 2022; \$460,000 for Fiscal Year 2023; and the prorated amount of \$152,000 for Fiscal Year 2024.

**BACKGROUND AND JUSTIFICATION:**

The Florida Municipal Power Agency (FMPA) issued a Request for Proposal (RFP #2018-214) for qualified firms to offer Utility Call Center Support Services for its Florida members. The City along with other Florida municipalities participated in the F.M.P.A. RFP in which the City Commission later approved the F.M.P.A. agreement with ENCO on August 21, 2018 and retained ENCO to provide call center services to the City. The City's current agreement with ENCO expires on December 31, 2021.

On February 1, 2021, the City of Homestead awarded a contract for Call Center Services under RFP #202107 to ENCO Utility Services, LLC as the only respondent with Water, Sewer and Electric service experience and experience using the NaviLine CRM system (which both Homestead and Lake Worth Beach utilize). The CITY has requested and the the City of Homestead has agreed to extend the terms and conditions of the City of Homestead Contract to the CITY for Call Center Support Services. The CITY has reviewed the unit prices from the City of Homestead Contract and determined that the City of Homestead Contract unit prices are competitive and will result in the best value to the CITY.

The Agreement with ENCO for Call Center Services has allowed the City to offer its customers 7x24 access to a live customer service representative, something that was not possible under the previous business model of answering calls in person at the Annex only during normal business hours. This has expanded the hours of operation to serve our customers from M-F 8am to 5pm to 7x24x365 along with disaster recovery during hurricane season.

The City is hereby requesting authorization of funding in the amount of a prorated amount not exceed \$342,000 for Fiscal Year 2022; \$460,000 for Fiscal Year 2023; and a prorated amount of \$152,000 for Fiscal Year 2024.

**MOTION:**

Move to approve/disapprove the Agreement for Call Center Support Services with ENCO Utility Services, LLC utilizing the City of Homestead Contract (RFP# 202107) for a prorated amount

not to exceed \$342,000 for Fiscal Year 2022; \$460,000 for Fiscal Year 2023; and a prorated amount of \$152,000 for Fiscal Year 2024.

**ATTACHMENT(S):**

Fiscal Impact Analysis Agreement

**FISCAL IMPACT ANALYSIS**

**A. Five Year Summary of Fiscal Impact:**

<b>Fiscal Years</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Capital Expenditures	0	0	0	0	0
Operating Expenditures	\$342,000	\$460,000	\$152,000	0	0
External Revenues	0	0	0	0	0
Program Income	0	0	0	0	0
In-kind Match	0	0	0	0	0
<b>Net Fiscal Impact</b>	<b>\$342,000</b>	<b>\$460,000</b>	<b>\$152,000</b>	<b>0</b>	<b>0</b>
No. of Addn'l Full-Time Employee Positions	0	0	0	0	0

**B. Recommended Sources of Funds/Summary of Fiscal Impact:**

Account Number	Account Description	Project Number	FY22 Budget	Current Balance	Agenda Expenditure	Balance
401-1240-513.34-50	Contractual Services		\$400,000	\$400,000	-\$342,000	\$58,000



4. Conflict of Terms and Conditions. Conflicts between documents that make up this Agreement shall be resolved in the following order of precedence:

- a. Any amendments to this Agreement;
- b. This Agreement; and,
- b. The City of Homestead Contract.

5. Compensation to CONTRACTOR. CONTRACTOR shall submit invoices to the CITY for review and approval by the CITY's representative, indicating that all goods and services have been provided and rendered in conformity with this Agreement and then will be sent to the Finance Department for payment. The invoices will reflect the rates to be charged under the City of Homestead Agreement, which are attached as **Exhibit "A"** to this Agreement for ease of reference. Invoices will normally be paid within thirty (30) days following the CITY representative's approval. In order for both parties herein to close their books and records, CONTRACTOR will clearly state "final invoice" on the CONTRACTOR's final/last billing to the CITY. This certifies that all services have been properly performed and all charges have been invoiced to the CITY. Since this account will thereupon be closed, any and other further charges if not properly included in this final invoice are waived by the CONTRACTOR. The CITY will not be liable for any invoice from the CONTRACTOR submitted thirty (30) days after the provision of all services.

6. Miscellaneous Provisions.

- A. This Agreement shall be governed by the laws of the State of Florida. Any and all legal action necessary to enforce this Agreement will be held in Palm Beach County. No remedy herein conferred upon any party is intended to be exclusive of any other remedy, and each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. No single or partial exercise by any party of any right, power, or remedy hereunder shall preclude any other or further exercise thereof.
- B. Except for any obligation of the CONTRACTOR to indemnify the CITY, if any legal action or other proceeding is brought for the enforcement of this Agreement, or because of an alleged dispute, breach, default or misrepresentation in connection with any provisions of this Agreement, each party shall be liable and responsible for their own attorney's fees incurred in that enforcement action, dispute, breach, default or misrepresentation. FURTHER, TO ENCOURAGE PROMPT AND EQUITABLE RESOLUTION OF ANY LITIGATION, EACH PARTY HEREBY WAIVES ITS RIGHTS TO A TRIAL BY JURY IN ANY LITIGATION RELATED TO THIS AGREEMENT.
- C. If any term or provision of this Agreement, or the application thereof to any person or circumstances shall, to any extent, be held invalid or unenforceable, to remainder of this Agreement, or the application of such terms or provision, to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected, and every other term and provision of this Agreement shall be deemed valid and enforceable to the extent permitted by law.





4. The Contractor agrees that the certifications in this section shall be effective and relied upon by the City for the term of this Agreement, including any and all renewals.
5. The Contractor agrees that if it or any of its subcontractors' status changes in regards to any certification herein, the Contractor shall immediately notify the City of the same.
6. As provided in Subsection 287.135(8), Florida Statutes, if federal law ceases to authorize the above-stated contracting prohibitions then they shall become inoperative.

L. E-VERIFY.

Pursuant to Section 448.095(2), Florida Statutes, beginning on January 1, 2021, the CONTRACTOR shall:

1. Register with and use the E-Verify system to verify the work authorization status of all newly hired employees and require all subcontractors (providing services or receiving funding under this Agreement) to register with and use the E-Verify system to verify the work authorization status of all the subcontractors' newly hired employees;
2. Secure an affidavit from all subcontractors (providing services or receiving funding under this Agreement) stating that the subcontractor does not employ, contract with, or subcontract with an "unauthorized alien" as defined in Section 448.095(1)(k), Florida Statutes;
3. Maintain copies of all subcontractor affidavits for the duration of this Agreement and provide the same to the CITY upon request;
4. Comply fully, and ensure all of its subcontractors comply fully, with Section 448.095, Florida Statutes;
5. Be aware that a violation of Section 448.09, Florida Statutes (Unauthorized aliens; employment prohibited) shall be grounds for termination of this Agreement; and,
6. Be aware that if the CITY terminates this Agreement under Section 448.095(2)(c), Florida Statutes, CONTRACTOR may not be awarded a contract for at least 1 year after the date on which the Agreement is terminated and will be liable for any additional costs incurred by the CITY as a result of the termination of the Agreement.

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SIGNATURE PAGE FOLLOWS











# Contract Summary Form

Form#: 4620

## GENERAL INFORMATION

<b>Contract Status:</b>	Active	Veronica Sanchez	<b>Date:</b>	2/16/2021
<b>Assigned Contract #:</b>	21-CS-003	<b>Form Prepared By:</b>	Tanesha Reid	1/26/2021
<b>Department / Division:</b>	Electric Utilities	<b>Vendor Name:</b>	ENCO UTILITY SERVICES, LLC	
<b>Primary Contact:</b>	Barbara Quinones	<b>Vendor Contact:</b>	RUBY M IRIGOVEN	
<b>Primary Email:</b>	BQuinones@cityofhomestead.co	<b>Vendor Address:</b>	8141 E KAISER BLVD	
<b>Secondary Contact:</b>	Tanesha Reid	<b>City:</b>	ANAHEIM	<b>State:</b> CA <b>Zip:</b> 92808
<b>Secondary Email:</b>	TReid@cityofhomestead.com	<b>Vendor Email:</b>	irigoyen@encous.com	
<b>Phone Number:</b>	305-224-4700	<b>Vendor Phone Number:</b>	951 9258092	
<b>Fax Number:</b>	305-224-4769	<b>Vendor Fax Number:</b>	951-257-0316	
<b>Contract Name:</b>	ENCO Customer Service Call Center Agreement pursuant to RFP #202107			
<b>Agreement Type:</b>	Agreement	<b>Does this replace an existing agreement?</b>	No	<b>Contract #</b>

**Briefly explain the purpose or description of the scope of service of this contract:** ENCO to provide services for

Alternative A: 24/7 Call Center Services and Alternative B: Expanded 24/7 Customer Service Solution.

Contract may be renewed for (2) additional (1) year periods. Contract value within dept. budgets

**Please note that it is the Departments responsibility to obtain Risk approval.**

**Insurance Required?** Yes **If yes, who is required to have it?** Vendor

**If the vendor is required to have insurance, please enter the insurance expiration date(s) here.**

**Auto Insurance:** 10/28/2021 **General Liability:** 10/28/2021 **Workmans Comp:** 7/11/2021

**Other:PLI** 10/28/2021

**Term of Contract:** **Start Date** 2/1/2021 **End Date:** 1/31/2024 **Project Number:**

**Does this agreement auto renew?** No **If so, how many times?** **How many yearly increments?**

**Total Contract Value:** \$0.00 **Paid to:** **Payment Freq:** **Payment Amount:** \$0.00

**Account Number(s) to be used:** 540-4100-519-33-05 401-1100-531-33-05

**If moneys are paid to City, does Vendor pay sales tax?** **Do late fees apply?** No **Percentage of late fee?**

All agreements involving payment to vendor must be accompanied by a requisition. Requisition #:

PROCUREMENT & CONTRACTS

REVIEWED BY: V. SAUNDERS

DATE: 2/18/2021

Was this agreement reviewed or drafted by a City Attorney?  Yes  No If yes, whom?

"Right to Audit" clause included?  Yes  No Was this approved by Council?  Yes  No Date / CAR#  /

If so, please attach supporting documentation below:

### BACKGROUND AND EXHIBITS

Exhibit Attachment(s):	<input type="text" value="0(6)"/>			
Exhibit Description(s)	1	<input type="text" value="COUNCIL MEETING AGENDA SUMMARY"/>	6	<input type="text" value="CALL CENTER AGREEMENT"/>
	2	<input type="text" value="RFP# 202107 - CALL CENTER SOLUTION-FINAL"/>	7	<input type="text"/>
	3	<input type="text" value="CERTIFICATE OF INSURANCE"/>	8	<input type="text"/>
	4	<input type="text" value="LEGAL APPROVAL EMAIL"/>	9	<input type="text"/>
	5	<input type="text" value="RESOLUTION APPROVING ENCO AGREEMENT"/>	10	<input type="text"/>

### REVIEW - APPROVALS

Dept. Head Approval:	<input type="text" value="Approved"/>	<input type="text" value="Roxana Pereira"/>	Date:	<input type="text" value="1/27/2021"/>
HR Dept. Approval:	<input type="text" value="Not Applicable"/>	<input type="text" value="Priscilla Thompson"/>	Date:	<input type="text" value="1/28/2021"/>
Risk Approval:	<input type="text" value="Approved"/>	<input type="text" value="Priscilla Thompson"/>	Date:	<input type="text" value="1/28/2021"/>
Finance Dept. Approval:	<input type="text" value="Approved"/>	<input type="text" value="Carlos M. Perez"/>	Date:	<input type="text" value="1/27/2021"/>
ITS Div. Approval:	<input type="text" value="Approved"/>	<input type="text" value="Yaniel Corrales"/>	Date:	<input type="text" value="1/27/2021"/>
Fleet Div. Approval:	<input type="text" value="Not Applicable"/>	<input type="text" value="Lillian Lopez"/>	Date:	<input type="text" value="1/28/2021"/>

### For Administrative Use Only

Completed and Appropriate Packet Submitted to Procurement on:		Date:	<input type="text" value="1/28/2021"/>	
Prepared By:	<input type="text" value="Approved"/>	<input type="text" value="Veronica Sanchez"/>	Date:	<input type="text" value="1/28/2021"/>
2nd Review:			Date:	
Final Review:	<input type="text" value="Approved"/>	<input type="text" value="Malia Rivera"/>	Date:	<input type="text" value="1/29/2021"/>
Procurement/Contracts:			Date:	
Lock Summary Form:	<input type="text" value="Locked"/>	<input type="text" value="Malia Rivera"/>	Date:	<input type="text" value="1/29/2021"/>

## **CALL CENTER SUPPORT SERVICES AGREEMENT**

**THIS CONTRACT** is made and entered into this day 2/1/2021, by and between the City of Homestead, a Florida municipal corporation, (the “City”) acting through the City’s Utilities Customer Service department, Homestead Public Services, hereinafter referred to as “City” and, ENCO Utility Services LLC hereinafter referred to as “ENCO.” City and ENCO may hereafter be referred to individually as a “Party” or collectively as “Parties.”

### **RECITALS:**

**WHEREAS**, City desires to retain a person or firm to provide Call Center Services as described in **Exhibit A** of this Contract, pursuant to Request for Proposals For Call Center Solutions RFP # 202107; and

**WHEREAS**, ENCO warrants that it is qualified and competent to render the aforesaid services.

**NOW, THEREFORE**, for and in consideration of the Contract made, and the payments to be made by City, the parties agree to the following:

### **INTRODUCTION: CONTRACT DOCUMENTS:**

This Agreement is comprised of this document (Call Center Support Services Agreement), the RFP # 202107 For Call Center Solutions, Exhibit A, Scope of Services, Exhibit B, Fees and Payment Schedule, which are attached and incorporated herein. In the event there is a conflict between any provision in this document, and any other provisions in any attached Exhibit, the parties agree that the provisions of this document shall be controlling. In the event there is a conflict between the Fees and Payment Schedule and the other Exhibits, the parties agree that the Fees and Payment Schedule shall be controlling.

### **1. SCOPE OF SERVICES.**

- A. ENCO agrees to provide all of the services described in the Scope of Service attached hereto as Exhibit “A” (collectively, the “Services”).
- B. Reduction in Services. The City reserves the right to reduce the level of Services provided under this Agreement in its sole and absolute discretion upon 30 days prior written notice to ENCO. The reduction in the Scope of Service shall take effect not more than 30 days following receipt of written notice by ENCO. In the event of a reduction in the level of Services made in accordance with this Section, the terms and conditions of this Agreement shall remain in effect.
- C. The City may also require additional services not specifically identified in the contract. The Contractor agrees to provide such services, and shall provide the City prices on such additional services based upon a formula or method which is the same or similar to that used in establishing the prices in this proposal. If the price(s) offered are not acceptable to the City, and the situation cannot be resolved to the satisfaction of the City, the City reserves the right to procure those services from other vendors. Furthermore, the City reserves the right to delete or revise items and services under this agreement at any time during the contract period when and where deemed necessary. Reduction in the Scope of Services, at the sole discretion of the City at any time during the contract period in accordance with Section 1.

2. **CITY OBLIGATIONS.**

The City agrees to:

- A. Provide access to and make provisions for the ENCO to obtain information required to perform its work as described in **Exhibit A**.
- B. Make available all pertinent data and records required to perform the work as described in **Exhibit A**.

3. **FEES AND PAYMENT SCHEDULE.**

- A. The fees, payment schedule and term for furnishing services under this Contract shall be based on the rate schedule attached hereto as **Exhibit B** and by this reference incorporated herein. Said fees and schedules shall remain in effect as described in Exhibit B for the term of the Contract.
- B. ENCO shall provide City with its Federal Tax I.D. number prior to submitting the first invoice.

4. **TERM OF CONTRACT.**

A. **TERM:**

At all times during the term of the contract, the Contractor shall act as an independent Contractor and at no time shall be considered an agent or partner of the City. The City does not guarantee any work during the term of the Agreement.

- i. **Contract Period:** This contract shall have an initial term of three (3) years and shall continue until the successful completion of the Services and may be earlier terminated, by either Party in accordance with the Termination clauses below. The contract may be renewed for two (2) additional one year periods provided both the Contractor and the City agree and all terms and conditions remain the same. Any contract or amendments shall be subject to fund availability and mutual written agreement between the City and the Contractor.
- ii. **Option to Extend:** The performance period of this contract a may be extended upon mutual agreement between the contractor and the City with no change in terms or conditions. Any extension of the performance period under this provision shall be in one-year increments (12 month duration). The contract may be renewed for two (2) additional one-year periods, provided both parties are in agreement. Total contract length, including individual one-year extensions, shall not exceed five (5) years.

Extension of the contract(s) for additional thirty (30) day periods for the convenience of the City, shall be permissible at the mutual consent of both parties not to exceed six (6) months to allow for a new solicitation to be solicited so long as it does not exceed a total of five (5) years inclusive of any extensions or renewal periods.

5. **TERMINATION CLAUSES.**

- A. Termination for Convenience by City: The City upon 30 days written notice to the Contractor may terminate this Agreement, in whole or in part, with or without cause. In the event of termination, the Contractor shall be paid for all services rendered to the date of termination. The City reserves the right to immediately terminate the Contract upon City Manager's determination to protect the public's health, safety and welfare.

B. Termination for Cause by City: The obligation to provide further services under this Agreement may be terminated by the City upon seven (7) days written notice in the event of failure by the Contractor to perform in accordance with the terms hereof through no fault of the City. The City can terminate immediately if deemed in the health, safety and welfare of the City. The City may then consider said inability to be a breach of this Contract and may undertake the necessary work through its own services or those of another Contractor. The City shall have the right to deduct the cost incurred in having to provide said services from the payments to be made to the Contractor under this Contract.

C. Termination for Convenience or Cause by the Contractor: The Contractor upon at least 120 days written notice to the City may terminate this Agreement with or without cause.

6. **INSURANCE.** ENCO shall comply with the insurance provisions set forth in Section VII. Information Required of Proposer, Tab 4, Subsection e of the RFP.

7. **CONFIDENTIALITY AND PUBLICATION; SURVIVAL OF OBLIGATIONS.**

A. **Confidential Information.** The term “Confidential Information” means written, recorded, and machine-readable information, or other information provided in tangible form by one Party to the other Party relating to the subject matter of this Contract, and which is clearly marked as “Confidential Information,” and which is not a “public record” or which otherwise must not be disclosed under Chapter 119, Florida Statutes.

B. **Nondisclosure Obligations.** If a Party has designated information as Confidential Information, neither Party shall disclose it in whole or in part, including derivations thereof, to any third party without the prior written consent of the other Party unless required to do so by law, in which case, the disclosing Party shall notify the other Party as soon as practicable.

A Party shall not be liable to the other Party for inadvertent or accidental disclosure of Confidential Information if the disclosing Party: (i) holds the Confidential Information in confidence to the same extent it protects its own confidential information; (ii) limits access to the Confidential Information to its employees and agents who are involved in subject matter of the Confidential Information and informs its employees and agents who have access to the Confidential Information of the Party’s duty not to disclose, provided however, that ENCO acknowledges that City representatives, including but not limited to department heads, and legal counsel may have access to any and all Confidential Information and nothing herein shall be construed as prohibiting or limiting such access; and (iii) upon discovery of inadvertent disclosure, endeavors to prevent any further disclosure.

Either Party may disclose any Confidential Information when required by applicable law, order of a court, or other governmental authority, but shall promptly notify the other Party before making such disclosure. Nothing in this subsection is intended to limit the rights of either Party to challenge any disclosure request or order from a court or any other governmental authority.

C. **Survival of Obligations.** The obligations set forth in this Section shall survive the

termination of the Contract.

- D. Customer Information. ENCO shall not disclose to third parties Customer information, including, but not limited to Customer name, service address, billing address, credit history, or usage history, without the express written authorization of the Customer.
- E. Publication. Unless agreed upon in writing, no Party shall publish or use the other Party's name, language, pictures, or symbols from which the other Party's name may be reasonably inferred or implied in any advertising, promotion, or any other publicity. Both Parties may refer to this Contract and its relationship to the other Party as a matter of fact.

**8. INDEMNIFICATION**. The parties shall comply with the indemnification provisions set forth in Section XI.I of the RFP.

Nothing in this Contract is intended to serve as a waiver of sovereign immunity by the City. Nothing in this Contract shall be construed as consent by the City to be sued by third parties in any matter arising out of this Contract or any other contract.

**9. REMEDIES**.

In the event of a material breach of this Contract, the non-breaching party may, at its sole discretion, pursue all available remedies, and elect to terminate the Contract. Except as otherwise provided in this Contract, all rights of termination, cancellation, or other remedies in this Contract are cumulative.

**10. LIMITATION OF LIABILITY**.

- A. Each Party's liability to the other for any losses relating to or arising out of any act or omission in its performance of obligations under this Contract shall be limited to the amount of direct damages, expenses and costs, and neither Party shall be liable to the other Party for any indirect, special, punitive or consequential damages of any kind whatsoever. The limitations set forth in this paragraph shall not apply to the Parties' indemnity obligations set forth above, nor to acts or omissions arising out of a Party's gross negligence or willful misconduct.
- B. Notwithstanding anything to the contrary, ENCO's cumulative liability to HOMESTEAD PUBLIC SERVICES under this Contract, whether in contract, tort, or otherwise, shall not exceed the total applicable insurance limits set forth in Section 6 of this Contract.
- C. ENCO will reimburse City costs, at union rates, incurred as a result of an ENCO failure to dispatch calls in accordance with City union call out requirements except that the reimbursement will be limited to actual out of pocket costs not to exceed \$500 per instance. ENCO will immediately investigate the error to determine the cause and implement process changes to reduce potential of future errors. ENCO will take disciplinary action as appropriate with the involved employee up to and including termination of the employee's employment if warranted and provide documentation for review to City.

**13. MISCELLANEOUS**.

13.1 NOTICES. Whenever either party desires to give notice to the other, such notice must be in writing, sent by certified United States Mail, postage prepaid, return receipt requested, or by hand-deliver with request for a written receipt of acknowledgment of delivery, addressed to the party for whom it is intended at the place last specified. Notice shall be deemed given on the day on which personally served, or if by mail, on the date of actual receipt. The place for giving notice shall remain the same as set forth in this Section until changed in writing in the manner provided in this Section. For the present, the parties designate the following:

**City of  
Homestead**  
100 Civic Court  
Homestead, FL 33030

**ENCO Utility Services, LLC,**  
a Delaware limited liability company  
8141 E. Kaiser Blvd., Ste. 212  
Anaheim, CA 92808

13.2 Applicable Law and Venue. This Contract shall be interpreted and constructed in accordance with and governed by the laws of the State of Florida. Venue for litigation concerning this Contract shall be in Miami-Dade County, Florida. The parties hereby knowingly and voluntarily waive the right to trial by jury in any litigation between the parties hereto.

13.3 Amendments. No modification, amendment or alteration of the terms or conditions contained in this Contract shall be effective unless contained in a written document prepared with the same or similar formality as this Contract and executed by both City and ENCO.

13.4 Contract / Service Audit. ENCO hereby grants City the right to audit any of ENCO's books, documents and papers pertaining to the services pursuant to this Agreement that were generated during the course of administration and performance of the Services under this Agreement.

13.5 Public Records Act Compliance.

- A. ENCO agrees to keep and maintain public records in ENCO's possession or control in connection with ENCO's performance under this Agreement. ENCO additionally agrees to comply specifically with the provisions of Section 119.0701, Florida Statutes, as amended. ENCO shall ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed, except as authorized by law, for the duration of the Agreement, and following completion of the Agreement until the records are transferred to City.
- B. Upon request from the City custodian of public records, ENCO shall provide City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided by Chapter 119, Florida Statutes, or as otherwise provided by law.
- C. Unless otherwise provided by law, any and all records, including but not limited to reports, surveys, and other data and documents provided or created in connection with this Agreement are and shall remain the property of City.
- D. Upon completion of this Agreement or in the event of termination by either party, any and all public records relating to the Agreement in the possession of ENCO

shall be delivered by ENCO to the City Manager, at no cost to City, within seven (7) days. All such records stored electronically by ENCO shall be delivered to City in a format that is compatible with the City's information technology systems. Once the public records have been delivered upon completion or termination of this Agreement, ENCO shall destroy any and all duplicate public records that are exempt or confidential and exempt from public records disclosure requirements.

- E. Any compensation due to ENCO shall be withheld until all records are received as provided herein.
- F. ENCO's failure or refusal to comply with the provisions of this section shall result in the immediate termination of this Agreement by City. Section 119.0701(2)(a), Florida Statutes.

IF ENCO HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO ENCO'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS.

<b>Custodian of Records:</b>	<b>ELIZABETH SEWELL, CITY CLERK</b>
<b>Mailing address:</b>	<b>100 CIVIC COURT, HOMESTEAD, FL 33030</b>
<b>Telephone number:</b>	<b>305-224-4442</b>
<b>Email:</b>	<b>ESEWELL@CITYOFHOMESTEAD.COM</b>

IN WITNESS WHEREOF, the Parties have caused this Contract to be executed as of the date first above written.

**City of Homestead**

By: \_\_\_\_\_

Name: Jerry Estrada

Title: Asst. City manager

Date: 02/05/21

**ENCO Utility Services,  
LLC, a Delaware limited  
liability company**

By: \_\_\_\_\_

Name: Ruby M. Irigoyen

Title: Sr. V.P. Customer

Services Date:

01-26-21

**EXHIBIT A**  
**SCOPE OF SERVICES**

The following describes the scope of services to be provided by ENCO UTILITY SERVICES for City.

**General Scope:**

- Provide services in English, Spanish, and Creole.
- Provide staff and supervision with appropriate training and experience with electric, water, wastewater, solid waste, utility and customer service operations to handle incoming customer calls.
- Train call center staff on the rules, policies, rates and guidelines of the City and on the use of the Homestead CIS / billing system (Central Square formerly HTE Sungard) and any future CIS systems as needed.
- Provide toll free or local telephone number for Homestead Public Service (HPS) customers.
- Host a multi-level auto attendant menu and provide opportunities for callers to leave a voicemail, hold their place in queue and receive a call back or wait for an agent.
- Ensure that processes, procedures and communications are compliant with all applicable laws and regulations, including legal privacy, and data retention requirements.
- Handle incoming calls within the established Homestead guidelines as set forth in training and documented processes and procedures.
- Contractor shall be able to record all calls (inbound and outbound) and make recordings available to the City within 24 hours of the request. Call recordings shall be archived for minimum of one (1) year.

**Training of New Staff:**

- Training will be provided on a train-the-trainer basis with Homestead personnel training our trainer. Training of ENCO staff shall be approximately ten (10) days in length.
- Ongoing training will be provided as needed one-on-one and for groups via live ENCO trainer and video recorded training.
- The City will supply required training documentation electronically, the Contractor will be responsible for the development, on-going revision and maintenance of the training documentation. ENCO will share its One Note training manual with the City.

**Implementation Period**

- The parties shall mutually agree on a plan to implement the Scope of Work and training requirements. Upon completion of the plan, the parties will utilize projections to continually provide adequate staffing and training levels to meet the performance standards. ENCO will perform three (3) Quality Evaluations monthly for each CSR and more frequently if a repeated issue is identified. Results can be shared with Homestead management.
- ENCO shall assign to the Homestead Public Service (HPS) a designated contact person for on-going day-to-day account services and management of the program.
- Services are currently being provided; however, additional staff is required to bring the levels of staffing to the number needed to meet desired service levels. Hiring and training of these additional staff will take 30 to 45 days. The service level monitoring will begin 90 days after contract initiation.

**Services Package A: 24/7 Call Center Services**

- Receive and respond to all power outage or power emergency calls, 24/7. Receive and respond

to all after-hours utility related calls, 5:00 p.m. to 8:00 a.m. Monday through Friday and full days on weekend and holidays.

- Provide Power Outage Management software and system. Design and set up of customer and electric system equipment tables to allow for sorting of orders by field equipment/circuits and to allow for standard power outage reliability reporting metrics such as length of outage, reason for outage and number of customers affected.
- Forward information on outage calls to Homestead dispatch center, using Outage Management software. Homestead's dispatchers will call in repair crews.
- Provide a system that allows for on-line input of power outage reports by customer address.
- Contact customers to assure power has been restored after an outage up to 10:00 p.m. EST or later if requested by customer.
- Provide text messaging capability to provide customers with power outage status updates if requested by the customer.
- Provide outage message for customers when there is a large outage giving general location of affected area if available.
- Verify after-hours payments and create work orders to reconnect service(s).
- Callout appropriate employees and dispatch assigned HPS personnel/crews for field emergency service reconnect work at the meter once after-hours payments are processed.
- Process after-hour payments for reconnects.
- Run call out list and dispatch customer service personnel if required in accordance with overtime list (contact and current overtime lists to be provided by City).
- Take overflow calls during normal business hours as need.
- Handle basic billing and payment inquiries. Submit information to Homestead Public Service (HPS) to ensure that requests that cannot be managed by ENCO staff are escalated to the City utility staff as appropriate.

### **Services Package B: Expanded 24/7 Customer Service Solution**

Between the hours of 8:00 a.m. to 5:00 p.m. local time Monday through Friday, ENCO will provide expanded customer services to include the following:

- Receive and address all incoming and outbound calls for routine and emergency services.
- Respond to and address all billing-related requests and inquiries such as: Billing and Payment inquiries, Billing disputes, Payment Arrangements, Utility consumption and meter reads
- Provide assistance, status and specific information on customer's application for new and or change of service, determine account balance and assist with payment processing.
- Respond to inquiries that require account research, take the appropriate action to resolve the issue and document in Customer Information System (CIS) Application.
- Provide information and guidance on a variety of processes and topics. E.g. billing rates, utility applications, payment options, sewer credit request forms, how to register utility accounts online, etc.
- Explain billing related notices, projects and communications administered by the City.
- Process account activations and shut offs. Document and process service orders.
- Provide information and education about utility specific programs, such as energy efficiency programs.
- Provide internal escalation of calls to an ENCO supervisor for specialized customer service issues as necessary.

- Communication of requests for special examination/review by Homestead Public Service (HPS) staff.
- Provide a system that allows for on-line request for service that sends an email to ENCO to handle and respond to customers of the City.
- Provide a system that allows for online request for payment arrangements requests that sends an email to either the City staff or ENCO to handle – details to be worked out with the City.
- City will work with ENCO to redo the City’s queue that is hosted by ENCO to provide customers with options to leave a voicemail, hang up and hold their place in queue for a call back and receive information about online, no call options for service requests.
- The City will develop and send out a bill stuffer to advise customers of the new ways to submit request to drive customers to these alternative methods such as the online customer service request, payment arrangement request and online outage order. Unless otherwise directed by the City, these orders will be worked by ENCO.

**PERFORMANCE EVALUATION:**

Throughout the contract period the vendor(s) performance will be monitored by City staff. If vendor performance fails to meet the standards specified and receives an unacceptable rating, the City may without cause and without prejudice to any other right or remedy, terminate the contract(s) whenever the City determines that such termination is in the best interest of the City. Notification of Contractor will be by certified mail. Contract termination shall be served by written notice by the Procurement Division.

**Key Performance Goals:** Performance shall be measured on a monthly basis according to the following goals and exceptions:

- **Average Speed of Answer:** Time for Customer Service Representative, CSR, to answer an inbound call after entering the queue. The queue is the point in the call flow process at which the call is first eligible to be directed to a CSR’s workstation for handling.
  - Customer Services:
    - Eighty percent (80%) of calls answered within 3 minutes except in major events or client caused over volume
    - Ninety-five percent (95%) of emails answered within 24 business hours
    - Eighty-five percent (85%) of voicemails answered within 6 business hours
  - Power Outage calls:
    - Non-Storm – 90% of calls answered within 60 seconds
    - Storm – 70% of calls answered within 60 seconds (except for major events such as hurricanes)
- **Percent of Abandonment:** Abandonment rate is calculated as the number of calls abandoned divided by the total number of calls that last at least fifteen (15) seconds after the call is put into the queue following the IVR messaging, measured per calendar month. Excludes times when an active outage is in progress and or is being restored. Excludes calls where caller has selected a non-call center queue, excludes calls where the caller hangs up during the IVR message or during IVR call handling; excludes calls where the caller hangs up due to outage restoration or outbound IVR advising of Estimated Time of Restoration (ETR).
  - Five percent (5%) or less for customer service calls except in major events
  - Five percent (5%) or less abandonment rate for First Responder calls

**Reports:** ENCO shall provide a daily summary report and monthly detail report including the following: Total number of outbound and inbound calls, Calls answered; Average handle time; Average Wrap-up Time; Abandonment rate; Average speed of answer.

**EXHIBIT B**  
**FEES AND PAYMENT SCHEDULE**

City shall pay ENCO for approved services performed under this Agreement, at City’s direction and as its agent, as set forth below:

ENCO’s pricing is firm for a period of two years after agreement is signed with an annual pricing increase of 2% for year 3 and then annually beyond. Pricing for both alternatives excludes direct costs of travel and lodging if required by the City.

<b>Service Package A - 24/7 Call Center Services</b>	<b>Monthly Average based on 2020</b>	<b>Price per Call per Month</b>	<b>Estimated Annual Cost (Based on 2020 Ave)</b>
If total calls are 500 or less		\$ 3.13	
If total calls per month are between 501 and 2000	1150	\$ 3.02	\$41,676.00
If total calls per month are between 2001 and 5000		\$ 2.92	
If total calls per month are 5001 or higher		\$ 2.72	
Autoserve Online, IVR and Emergency Orders	250	\$ 1.50	\$4,500.00
Outbound text Messages regarding Outages	90	No Charge	
Outbound IVR Calls regarding Outages	45	\$ 0.50	\$270.00
<b>TOTAL ESTIMATED ANNUAL COST &amp; ONE-TIME COST(S):</b>			<b>\$46,446.00</b>

<b>Service Package B – Expanded 24/7 Customer Service Solutions</b>	<b>Monthly Average based on 2020</b>	<b>Price per Call per Month</b>	<b>Estimated Annual Cost (Based on 2020 Ave)</b>
If total calls are 500 or less		\$ 5.60	
If total calls per month are between 501 and 2000		\$ 5.60	
If total calls per month are between 2001 and 5000		\$ 5.60	
If total calls per month are 5001 or higher	5746	\$ 5.60	\$386,131.00
<b>TOTAL ESTIMATED ANNUAL COST &amp; ONE-TIME COST(S):</b>			<b>\$386,131.20</b>

<b>Online Customer Service Requests and Emails</b>	<b>Price per Call per Month</b>
If handled with email and no customer call back	\$ 3.75
If handled but require a customer call back	\$ 5.60
Autoserve Online	\$ 1.50

ENCO will perform customer service surveys as mutually agreed via email, text and or IVR with regular reports to the City. Development and deployment process to be mutually agreed and provided as additional services for the City.

**Performance Adjustments**

Performance adjustments are a mechanism to drive good performance and customer satisfaction by establishing achievable goals with reward and penalty elements where they are appropriate and supportable. Measurement of performance to goals must be objective and reliable.

Responsibilities: ENCO will deliver services in a good workmanlike manner and provide the staffing, supervision and systems to handle calls as described in Packages A and B based on the volumes provided by the City. The City will manage its activities in support of managing and controlling call volumes and spikes resulting from billing and other internal activities.

Outage and Other Emergency Calls: Storms, weather and equipment failures impact the volume of calls and the duration of those volumes. For these types of calls, neither the City nor ENCO has control. ENCO and the City will work together to deliver alternative means for the customers of the City to report an emergency and reduce the call volume. No performance adjustments will be applied to goals for call handling associated with outage and other emergency calls. ENCO and the City will work together to meet the performance goals as stated as much as is practicable.

Customer Service Calls: ENCO has no control over the number of calls being delivered to it or the ability to slow them down or prevent spikes. Call volumes are driven by City billing processes and City department communications and events. The City will manage its billing services workload in support of managing and controlling call volumes and spikes. ENCO and the City will review the upcoming week’s anticipated volume driving events to level those activities with the goal of normalizing the volumes and avoiding otherwise already heavy days such as Mondays and Fridays.

In recognition that volumetric variables are out of ENCO’s control, these performance adjustments will only apply after ENCO has been given thirty (30) days to cure any defect causing the underperformance where the defect is on ENCO’s side of service delivery. These Performance adjustments will not be placed into effect until after the end of the Implementation Period as noted in Exhibit A. If the call volumes are greater than the averages in the forecast for calls or if the underperformance is due to actions out of ENCO’s control, then no penalty will apply. Incentive and discounts will be applied monthly and trued up the last month of each contract year. Incentive and discounts totals as aggregated shall not exceed 1% of the total invoiced for customer service incoming call handling.

<b>Goal</b>	<b>Performance Adjustments</b>												
Speed of Answer	If Actual Monthly Performance Equals:												
80% within 3 Mins						<b>80</b>							
	95%	92%	89%	86%	83%	%	77%	74%	71%	68%	65%	>55%	
	\$750	\$650	\$550	\$450	\$350	\$ -	\$(100)	\$(200)	\$(300)	\$(400)	\$(500)	\$(750)	
	Monthly Incentive						Monthly Discount						

<b>Goal</b>	<b>Performance Adjustments</b>												
% Abandonment	If Actual Monthly Performance Equals:												
10% or less						<b>10</b>							
	5%	6%	7%	8%	9%	%	11%	12%	13%	14%	15%	>15%	
	\$ 750	\$ 650	\$ 550	\$ 450	\$ 350	\$ -	\$(100)	\$(200)	\$(300)	\$(400)	\$(500)	\$(750)	
	Monthly Incentive						Monthly Discount						

If other Professional Services are requested, that are not described in the scope of services, contractor shall be compensated according to the following schedule:

Hourly Rates for Personnel:

Title	Rate / Hour
Project Manager	\$105.00
Analyst	\$75.00
CSR / Admin	\$30.00
Programmer	\$175.00

Hourly rates may be adjusted annually. Such annual adjustments shall not reflect a greater increase than the Miami / Fort Lauderdale consumer price index for that year and shall be approved by the City.

Direct expenses actually incurred by ENCO in the provision of the additional Professional Services under this Contract shall be reimbursed at cost, with no additional mark-up. Such reimbursable expenses include, but are not limited to, all travel expenses (with mileage at the IRS approved rate), lodging, long distance telephone and facsimile charges, photo-copying and printing costs, taxis and auto rental, postage, filing fees, word processing costs, transcript costs, secretarial overtime, notary fees and other expenses incurred on behalf of the City.

All such reimbursable expenses are subject to prior agreement in writing by both parties.

ENCO will bill City on a monthly basis; all payments under this Contract are due and payable within 30 days of invoice receipt date.

**OTHER SERVICES AVAILABLE:**

**All of the following services are available via this Agreement:** Outbound courtesy reminder IVR calls, utility bill printing and mailing, brochure and bill insert printing, lockbox services. Electric system design services, utility material maintenance management software (UMMS).

**OUTBOUND COURTESY NOTIFICATIONS SERVICES**

Our notifications can be sent via Email, text message, or automated outbound IVR. We send the notices out based on your requirements within 24 hours.

Examples of the notification types are as follows:

Email: This is The City of Homestead with a reminder. Your utility bill must be paid by 6PM on Monday July 31st to avoid additional fees and possible service interruption. To pay your bill online visit our website at [http://www.\\_\\_\\_\\_\\_.org](http://www._____.org) and click on "Pay My Bill" at the bottom of the home page.

Text: This is The City of Homestead with a reminder. Your utility bill must be paid by 6PM July 31st to avoid additional fees & possible service interruption. Reply STOP to opt out.

IVR: This is The City of Homestead with a reminder. Your utility bill must be paid by 6 P M on July thirty first to avoid additional fees and possible service interruption.

**Pricing Schedule:**

Initial Programming and Set-Up One Time	Waived
Monthly Base Charge	\$125.00

<u>Type of Alert</u>	<u>Per Alert</u>
Email	\$0.28

Text	\$0.25
IVR Calls	\$0.38

# EXECUTIVE BRIEF

## ELECTRIC UTILITY MEETING

**AGENDA DATE:** November 30, 2021

**TITLE:**

Second Amendment to Agreement with G&W Electric Company for the purchase of 38kV Reclosers

**SUMMARY:**

The Second Amendment to the Agreement with G&W Electric Company (G&W), authorizes G&W to provide 38kV Reclosers for use on the City's electrical distribution systems and substations at a cost not to exceed \$1,080,000. The 38kV Reclosers have been identified as critical components for the City's electric utility System Hardening and Reliability Improvement Projects (SHRIP) and for which bonds were sold in November 2020.

**BACKGROUND AND JUSTIFICATION:**

In 2019, the City issued Request for Proposals (RFP 18-218) for the procurement of 38kV Reclosers for use on the City's Electric Distribution Systems.

On, April 2, 2019 the City awarded the Agreement based on the competitive solicitation to G&W to provide 38kV Reclosers. The Term of the Agreement was for two (2) years, with two (2) single-year renewal options with a not-to-exceed value of \$580,000.

On April 6, 2021 the City exercised its first option to renew the G&W Agreement extending the terms of the Agreement through April 2, 2022.

Over the past two years, the electric utility has purchased and installed multiple reclosers on the City's Electrical Distribution Systems to improve system performance and reliability. The use of Reclosers on electrical distribution systems offer the following benefits;

- Utilized to split large circuits into smaller circuits minimizing customer impacts during an outage event and improving reliability
- Provide for automated and remote control to provide alternate power source to speed up restoration time when needed in an emergency situation
- New Schweitzer Engineering Laboratories (SEL) controls provide additional Supervisory Control and Data Acquisition (SCADA) functionality for fault detection and recovery
- Improve system reliability and improved customer satisfaction

The reclosers purchased to date were installed at the distribution substations and at selected locations on the distribution feeders to minimize the number of customers affected during an outage event. To continue with the SHRIP program, the City is requesting the purchase of additional substation and pole-mounted reclosers and is requesting an increase of \$500,000 in the not-to-exceed value of the Agreement with G&W from \$580,000 to \$1,080,000

This Second Amendment to the Agreement with G&W, authorizes G&W to provide 38kV Reclosers for use on the City's electrical distribution systems and substations at a cost not to exceed \$1,080,000.

**MOTION:**

Move to approve/disapprove the Second Amendment to the Agreement with G&W Electric Company for the purchase of 38kV Reclosers at a cost not to exceed \$1,080,000.

**ATTACHMENT(S):**

Fiscal Impact Analysis  
Second Amendment

**FISCAL IMPACT ANALYSIS**

**A.** Five Year Summary of Fiscal Impact:

<b>Fiscal Years</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Capital Expenditures	\$1,080,000	0	0	0	0
Operating Expenditures	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income	0	0	0	0	0
In-kind Match	0	0	0	0	0
<b>Net Fiscal Impact</b>	<b>\$1,080,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
No. of Addn'l Full-Time Employee Positions	0	0	0	0	0

**B.** Recommended Sources of Funds/Summary of Fiscal Impact: Funds have been identified in account No. 421-6034-531-6315.

Account Number	Account Description	Project Number	FY22 Budget	Current Balance	Budget Transfer	Agenda Expenditure	Balance
421-6034-531-63.15	Improve Other than Build / Infrastructure	Multiple	\$43,120,563	\$31,076,222		\$1,080,000	\$29,996,222

**SECOND AMENDMENT TO CONTRACTOR AGREEMENT  
38 KV Reclosers (Electric Utilities)**

THIS SECOND AMENDMENT ("Amendment") to the Contractor Agreement for 38 KV Reclosers is made as of \_\_\_\_\_, 2021, by and between the **City of Lake Worth Beach**, Florida, a municipal corporation of the State of Florida ("CITY") and **G&W ELECTRIC COMPANY**, an Illinois Corporation with its principle office located at 305 W Crossroads Parkway IL, 60440 ("CONTRACTOR").

**WHEREAS**, the City issued Request for Proposal RFP 18-218 for the procurement of 38KV Reclosers ("RFP"); and

**WHEREAS**, on April 2, 2019, the CITY and CONTRACTOR entered into the Contractor Agreement for CONTRACTOR to provide 38KV Reclosers to the CITY ("Agreement"); and

**WHEREAS**, the term of the Agreement was for two (2) years with two (2) additional single year renewal options; and

**WHEREAS**, on April 6, 2021, the CITY exercised its first option to renew the Agreement through April 2, 2022; and

**WHEREAS**, the CITY and CONTRACTOR wish to increase the total maximum costs to be paid by the CITY under this Amendment to a not to exceed amount of One Million Eighty Thousand Dollars (\$1,080,000.00) and all other terms and conditions remain the same; and

**WHEREAS**, the CITY finds amending the Agreement as set forth herein is in the best interest of the CITY and serves a valid public purpose.

**NOW, THEREFORE**, in consideration of the mutual promises contained herein, the sufficiency of which is hereby acknowledged by each party hereto, the CITY and the CONTRACTOR agree to amend the Agreement, as follows:

1. **Recitals.** The above recitals are true and correct and are incorporated herein by reference.
2. **Maximum Cost.** The total amount not to exceed under this Amendment shall be \$1,080,000.00 (One Million Eighty Thousand Dollars).
3. **Entire Agreement.** The CITY and the CONTRACTOR agree that the Agreement (as previously amended) and this Amendment set forth the entire agreement between the parties, and that there are no promises or understandings other than those stated herein. None of the provisions, terms and conditions contained in this Amendment may be added to, modified, superseded or otherwise altered, except by written instrument executed by the parties hereto. All other terms and conditions of the Agreement (except as previously amended and amended herein) remain in full force and effect.
4. **Counterparts.** This Amendment may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument. Either or both parties may sign this Amendment via facsimile, email or electronically and such signature is as valid as the original signature of such party.

IN WITNESS WHEREOF, the parties hereto have made and executed this Second Amendment to the Contractor Agreement for 38 KV Reclosers on the day and year first above written.

**CITY OF LAKE WORTH BEACH, FLORIDA**

By: \_\_\_\_\_  
Betty Resch, Mayor

ATTEST:

By: \_\_\_\_\_  
Melissa Ann Coyne, City Clerk

APPROVED AS TO FORM AND  
LEGAL SUFFICIENCY:

APPROVED FOR FINANCIAL  
SUFFICIENCY

By: \_\_\_\_\_  
Glen J. Torcivia, City Attorney

By: \_\_\_\_\_  
Bruce T. Miller, Financial Services Director

**G&W ELECTRIC COMPANY.**

By: John Gounaris

Print Name: John Gounaris

Title: Vice President Marketing

[Corporate Seal]

STATE OF IL  
COUNTY OF Kendall

THE FOREGOING instrument was acknowledged before me by means of • physical presence or • online notarization on this 19 day of October 2021, by John Gounaris, as the VP of Marketing [title] of G&W Electric Company, an Illinois Corporation, who is personally known to me or who has produced \_\_\_\_\_ as identification, and who did take an oath that he or she is duly authorized to execute the foregoing instrument and bind the CONTRACTOR to the same.

Sara J. Ponto  
Notary Public Signature

Notary Seal:



# EXECUTIVE BRIEF

## ELECTRIC UTILITY MEETING

**AGENDA DATE:** November 30, 2021

**TITLE:**

Second Amendment to Agreement with ABB Inc. for the purchase of magnetically actuated 38kV vacuum circuit breakers

**SUMMARY:**

Second Amendment to Agreement with ABB Inc. (ABB), authorizes ABB to provide magnetically actuated 38kV vacuum circuit breakers for use at the City's electrical substations at a cost not to exceed \$450,000. The magnetically actuated 38kV vacuum circuit breakers have been identified as critical components for the City's electric utility System Hardening and Reliability Improvement Projects (SHRIP) and for which bonds were sold in November 2020.

**BACKGROUND AND JUSTIFICATION:**

In 2018, the City issued Request for Proposals (RFP 18-213) for the procurement of magnetically actuated 38kV vacuum circuit breakers for use on the City's electrical substations.

On, September 13, 2018, the City awarded the Agreement based on the competitive solicitation to ABB Inc. to provide magnetically actuated 38kV vacuum circuit breakers. The Term of the Agreement was for two (2) years, with two (2) single-year renewal options with a not-to-exceed value of \$200,000 per Fiscal Year for Fiscal Years 2018 & 2019.

On April 7, 2021, the City exercised its first option to renew the G&W Agreement extending the terms of the Agreement through September 13, 2021. The not to exceed value was increased to \$300,000 for Fiscal Year 2021 under this First Amendment.

The magnetically actuated 38kV vacuum circuit breakers will be installed in City's substations as they are rebuilt and updated with new, technologically advanced equipment, including the 7th Avenue North substation, which is currently in construction, the upcoming Canal 8-Bay distribution substation and the new 6th Avenue South substation. The breakers serve as electric system protection devices on the 26.4 kV feeders and sub-transmission loops in order to increase service and reliability to thousands of customers.

The ABB R-Mag breakers operate in similar fashion to breakers found in a household breaker panel. When a fault on the power line is experienced, the breaker will open and disrupt power based on voltage and current thresholds programmed in the breaker relay device. This function is critical in life-safety protection as well as protecting system equipment when a fault is experienced.

The R-MAG® is truly the next generation in medium voltage vacuum circuit breaker technology. ABB is the first to combine the unique benefits of vacuum interrupter technology with a magnetic actuator designed to exploit these capabilities. Using a flux-shifting device with integral permanent magnets, the R-MAG mechanism has only one moving part. With simple open and close coils, an electronic controller and capacitors for energy storage, the R-MAG circuit breaker mechanism is capable of 10,000 load operations. These are a few of the features that mark a departure from the conventional spring-operated mechanism, introducing new capabilities and

benefits for a smarter distribution system. To continue with the SHRIP program, the City is requesting the purchase of additional magnetically actuated 38kV vacuum circuit breakers and is requesting a not-to-exceed increase in the Agreement with ABB.

This Second Amendment to the Agreement with ABB, authorizes ABB to provide magnetically actuated 38kV vacuum circuit breakers for use on the City’s electrical distribution systems and substations at a cost not to exceed \$450,000 for Fiscal Year 2022.

**MOTION:**

Move to approve/disapprove Agreement with ABB Inc. for the purchase of magnetically actuated 38kV vacuum circuit breakers at a cost not to exceed \$450,000 for Fiscal Year 2022.

**ATTACHMENT(S):**

Fiscal Impact Analysis  
Second Amendment

**FISCAL IMPACT ANALYSIS**

**A. Five Year Summary of Fiscal Impact:**

<b>Fiscal Years</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Capital Expenditures	\$450,000	0	0	0	0
Operating Expenditures	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income	0	0	0	0	0
In-kind Match	0	0	0	0	0
<b>Net Fiscal Impact</b>	<b>\$450,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
No. of Addn'l Full-Time Employee Positions	0	0	0	0	0

**B. Recommended Sources of Funds/Summary of Fiscal Impact: Funds have been identified in account No. 421-6034-531-6315.**

Account Number	Account Description	Project Number	FY22 Budget	Current Balance	Agenda Expenditure	Balance
421-6034-531-63.15	Improve Other than Build / Infrastructure	Multiple	\$43,120,563	\$31,076,222	\$450,000	\$30,626,222



**SECOND AMENDMENT TO AGREEMENT FOR GOODS AND SERVICES  
(Magnetically Actuated 38kV 12/2000A Outdoor Vacuum Circuit Breaker)**

THIS SECOND AMENDMENT (“Amendment”) is made as of November 15, 2021, by and between the **City of Lake Worth Beach**, Florida, a municipal corporation of the State of Florida (“CITY”) and **ABB, Inc.** (“CONTRACTOR”).

**WHEREAS**, on September 13, 2018, the CITY and CONTRACTOR entered into an Agreement for Goods and Services (Magnetically Actuated 38kV 12/2000A Outdoor Vacuum Circuit Breaker) (“Agreement”); and

**WHEREAS**, the term of the Agreement was for two (2) years with option for two (2) one (1) year renewal options that may be exercised by the City Manager; and

**WHEREAS**, on April 7, 2021 the City exercised its first option to renew the Agreement through September 13, 2021 (“First Amendment”); and

**WHEREAS**, the CITY and the CONTRACTOR wish to amend the Agreement to extend the term of the Agreement for one (1) additional year; and

**WHEREAS**, the CITY has reviewed the CONTRACTOR’s proposed increased rate schedule, which is attached hereto as Exhibit “A”, and determined that the increase is fair and reasonable; and

**WHEREAS**, the CITY finds amending the Agreement as set forth herein is in the best interest of the CITY and serves a valid public purpose.

**NOW, THEREFORE**, in consideration of the mutual promises contained herein, the sufficiency of which is hereby acknowledged by each party hereto, the CITY and the CONTRACTOR agree to amend the Agreement, as follows:

1. **Recitals.** The above recitals are true and correct and are incorporated herein by reference.
2. **Term of Agreement.** The parties agree that the term of the Agreement is hereby extended to September 12, 2022 unless earlier terminated as stated in the Agreement.
3. **Compensation.** The parties agree that the compensation to be paid by the CITY to the CONTRACTOR under this Amendment is set forth in **Exhibit “A”**, which is attached hereto and incorporated herein.
4. **Amount Not To Exceed.** The maximum amount to be paid by the CITY to the CONTRACTOR under this Amendment shall not exceed \$450,000.00 (Four Hundred Thousand Fifty Thousand Dollars).

5. **Entire Agreement.** The CITY and the CONTRACTOR agree that the Agreement, First Amendment and this Amendment set forth the entire agreement between the parties, and that there are no promises or understandings other than those stated herein. None of the provisions, terms and conditions contained in this Amendment may be added to, modified, superseded or otherwise altered, except by written instrument executed by the parties hereto. All other terms and conditions of the Agreement and First Amendment, except as amended herein, remain in full force and effect.

6. **Counterparts.** This Amendment may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument. Either or both parties may sign this Amendment via facsimile, email or electronically and such signature is as valid as the original signature of such party.

**REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK**  
**SIGNATURE PAGE FOLLOWS**

IN WITNESS WHEREOF, the parties hereto have made and executed this Second Amendment to the Agreement for Goods and Services (Magnetically Actuated 38kV 12/2000A Outdoor Vacuum Circuit Breaker) on the day and year first above written.

**CITY OF LAKE WORTH BEACH, FLORIDA**

By: \_\_\_\_\_  
Betty Resch, Mayor

ATTEST:

By: \_\_\_\_\_  
Melissa Ann Coyne, City Clerk

APPROVED AS TO FORM AND  
LEGAL SUFFICIENCY:

APPROVED FOR FINANCIAL  
SUFFICIENCY

By: \_\_\_\_\_  
Glen J. Torcivia, City Attorney

By: \_\_\_\_\_  
Bruce T. Miller, Financial Services Director

**CONTRACTOR: ABB, INC.**

[Corporate Seal]

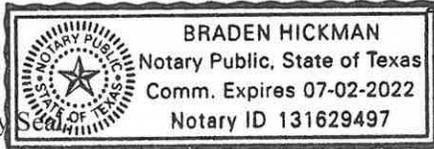
By: Nathaniel Meredith

Print Name: Nathaniel Meredith

Title: Complex Proposals Manager - ELDS Products

STATE OF Texas )  
COUNTY OF Collin )

THE FOREGOING instrument was acknowledged before me by means of • physical presence or • online notarization on this 15 day of November 2021, by Nathaniel Meredith, as the Manager [title] of ABB, Inc., a Florida Corporation, who is personally known to me or who has produced Drivers License as identification, and who did take an oath that he or she is duly authorized to execute the foregoing instrument and bind the CONTRACTOR to the same.



Notary Seal

[Signature]  
Notary Public Signature

**Exhibit "A"**  
(Contractor's rate proposal, 12 Pages)



**Commercial and Technical Tender**  
ABB Negotiation Number:QT-21-01887510.A  
Equipment: R-MAG® Outdoor Dead Tank Breaker

1/27/2021

This proposal offers the market leading circuit breaker, the ABB R-MAG. ABB's R-MAG has over 10 years of field proven experience and over 16,000 installations. ABB is the only company to offer a full medium voltage portfolio with magnetic actuation, from 15 to 38 kV. The R-MAG is designed to provide the most reliable breaker in the market, minimizing downtime, improving SAIDI measurements, and significantly decreasing maintenance costs over the lifetime of the product. ABB's R-MAG delivers quantifiable value in the following areas:

**Increased reliability**

- Optimized durability with the ability to achieve 10,000 operations, five times greater than the ANSI requirement, over a temperature range of -50 to +70°C
- Minimized potential points for failure by having only one moving part in the magnetic actuator operating system, as opposed to spring-charged mechanisms that house over 100 moving parts
- Unparalleled performance of internal components
  - ABB magnetic actuator is rated for 100,000 operations for the 15 and 27 kV R-MAGs and 50,000 operations for the 38 kV R-MAG
  - ABB's world leading vacuum interrupters are rated for 30,000 full load operations

**Reduced O&M**

- NO MAINTENANCE is required on the magnetic actuator, as opposed to spring-charged mechanisms that are dependent on periodic maintenance to ensure proper operation.
  - Minimal maintenance is required every 2,000 operations, four times the ANSI standard of 500 operations between servicing
  - Shorter maintenance times as there are no coils or motors to replace and there is no gas or oil used
  - Easy plug and play design of the ED2 electronic control board for rapid replacement in the field
-



**Average maintenance costs savings over an estimated 30 year service life <sup>1</sup>**

Spring mechanism breaker

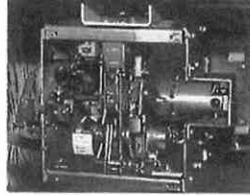
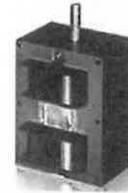


ABB R-MAG breaker



Operating mechanism maintenance cost	\$6,850.00	\$0.00
General maintenance costs	\$475.00	\$142.50
Electronic control replacement costs	\$7,290.00	\$3,915.00
Lifetime maintenance costs	\$14,615.00	\$4,057.50
Lifetime O&M savings per R-MAG Breaker	\$10,557.50	

ABB's R-MAG has over 10 years of proven experience with over 16,000 installations. The R-MAG comes with a 5-year comprehensive warranty and 24 hour / 7 day a week customer service.

ABB is ready to support this proposal with technical application experts, spare parts, training, and support services to ensure the ease of installation and the reduction of the total cost of ownership. Thank you in advance for considering this proposal. Please do not hesitate to contact ABB with any questions

Best Regards,

Ismael Castillo  
ABB Inc.  
655 Century Point  
Lake Mary, , 32746-2137 United States  
Phone:  
Email: ismael.castillo@us.abb.com

<sup>1</sup> For additional information on cost savings calculations, see the 'Example R-MAG Cost Savings' section below.



## Commercial and Technical Tender

**ABB Inc.**  
655 Century Point  
Lake Mary, FL 32746  
Tel: 407-732-2000

<b>Date:</b>	10/29/2021
<b>Tender ID:</b>	QT-21-01887510.A5
<b>Account manager:</b>	
<b>Valid through:</b>	10/29/2022
<b>Specifications:</b>	
<b>Revision:</b>	A5

**Prepared for:**  
CITY OF LAKE WORTH BEACH  
  
7 N Dixie Hwy  
Lake Worth Beach Florida, 33460-3725

**Prepared by:**  
Ismael Castillo  
ABB Inc.  
655 Century Point  
Lake Mary,  
32746-2137  
United States  
Email: [ismael.castillo@us.abb.com](mailto:ismael.castillo@us.abb.com)



## Pricing

### Standard Line Item:

Item	Qty	Image	Product Type	Net Price Each (USD)	Item Total (USD)
2	1		<b>ANSI Dead Tank Vacuum Magnetic Circuit Breaker R-MAG</b>	<b>36,724.00</b>	<b>36,724.00</b>

ABB Product ID:  
MB3015DMMSH5KBZ4

Key ratings:  
ANSI outdoor magnetically actuated vacuum circuit breaker R-MAG®  
Customer Product ID:  
Primary Voltage: 38  
Current: 1250A  
BIL: 200  
Interrupting current: 31.5

Standard lead time\*  
• 20 weeks with approval drawings  
• 15 weeks without approval drawings and an existing bill of material  
\*See full details in the Delivery section in the Terms and Conditions

3	1		<b>ANSI Dead Tank Vacuum Magnetic Circuit Breaker R-MAG</b>	<b>38,998.00</b>	<b>38,998.00</b>
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ABB Product ID:  
MB3025DUUSH5KBZ4

Key ratings:  
ANSI outdoor magnetically actuated vacuum circuit breaker R-MAG®  
Customer Product ID:  
Primary Voltage: 38  
Current: 2000A  
BIL: 200



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Interrupting current: 31.5

Standard lead time\*

- 20 weeks with approval drawings
- 15 weeks without approval drawings and an existing bill of material

\*See full details in the Delivery section in the Terms and Conditions

**Total sale price (USD)**

**75,722.00**



## Technical Data Sheet

### Item 2 (Standard Line Item)

ABB Product ID: MB3015DMMSH5KBZ4

Type	R-MAG
Types Rating	MB3015 - 38 kV 1250 Amp 200 kV BIL 31.5 kA
Voltage	38 kV
BIL	200 kV BIL
Current	1250A
Interrupting Current	31.5
Power Frequency	60 Hz
Auxiliary Switches	D - (2) 16 deck snap action rotary switch
CTs 1-3-5	M - 2 Set 1200/5 C400 TR 2.00 (8.24")
CTs 2-4-6	M - 2 Set 1200/5 C400 TR 2.00 (8.24")
Material Type	Stainless Steel
Enclosure Material	S-SSTL Cab (38kV 1250/2000A)
BCT Shorting Type	Standard shorting type terminal blocks
BCT Wiring	#10 AWG; All taps wired to term block
ED2.0 board	H - 85-264 VAC or 77-280 VDC High Voltage Board (38 kV)
Control Voltage	5 - 125 VDC Operating Voltage
Circuit Protection	K - Fused knife switches provided for control circuits
Bushing Creep	Standard Creep Bushing
Bushing Type	Standard Bushing (38 kV, 1200/1250 Amp, 200 kVBIL)
Bushing Terminal Connectors	4 - 4 Hole NEMA Pad (1200/1250 Amp)
Control Type	B - Basic Unit
Panel Configuration	Z - Special panel
Control Wiring	#14 AWG; Control Wire (Standard)
Control Wiring Lugs	Insulated Lugs (Standard)
Control Terminal Blocks	Standard terminal blocks as required.
Heaters	Special Heater Two 100W, 230 VAC continuously operated cabinet heaters
Local/Remote Switch	(1) Standard local/remote switch provided
Test Switches	No test switches provided
Digital Meters	No digital meters provided
Thermostats	(1) Standard thermostat included. Operating Range: 70°F to 80°F
Wire Markers	Brady wire marker sleeves as required.
Control Switch	No Control Switch Provided
Legacy Material	No
Special Final Assembly	Special Final Assembly None
Shipping Special	Special Shipping Requirements No
Seismic Option	None

#### DYNAMIC ACCESSORIES

Dynamic Accessories	120 VAC relay cabinet light mounted inside relay control cabinet
---------------------	--



	(Qty 1)
Dynamic Accessories	120 VAC, 1 phase GFI utility outlet mounted inside the relay control cabinet. (Qty 1)
Dynamic Accessories	Ground Clamps (#4 - 4/0) (Qty 1)
Dynamic Accessories	Device Nameplates (Qty 1)
Dynamic Accessories	External Bushing Identification Stickers (Qty 1)
Dynamic Accessories	Cap discharge switch (Qty 1)
Dynamic Accessories	No vented door

#### Accessories

#### ABB Internal Order Entry Information

CID Code: 9AAC30400486  
Source Location Code: 9AAE315900

#### Item 3 (Standard Line Item)

ABB Product ID: MB3025DUUSH5KBZ4

Type	R-MAG
Types Rating	MB3025 - 38 kV 2000 Amp 200 kV BIL 31.5 kA
Voltage	38 kV
BIL	200 kV BIL
Current	2000A
Interrupting Current	31.5
Power Frequency	60 Hz
Auxiliary Switches	D - (2) 16 deck snap action rotary switch
CTs 1-3-5	U - 2 Sets 2000/5 C400 TR 2.00(4.76")
CTs 2-4-6	U - 2 Sets 2000/5 C400 TR 2.00(4.76")
Material Type	Stainless Steel
Enclosure Material	S-SSTL Cab (38kV 1250/2000A)
BCT Shorting Type	Standard shorting type terminal blocks
BCT Wiring	#10 AWG; All taps wired to term block
ED2.0 board	H - 85-264 VAC or 77-280 VDC High Voltage Board (38 kV)
Control Voltage	5 - 125 VDC Operating Voltage
Circuit Protection	K - Fused knife switches provided for control circuits
Bushing Creep	Standard Creep Bushing
Bushing Type	Standard Bushing (38 kV, 2000 Amp, 200 kVBIL)
Bushing Terminal Connectors	4 - 4 Hole NEMA Pad (2000 Amp)
Control Type	B - Basic Unit
Panel Configuration	Z - Special panel Provide cutout only for Qty. 1 (One) SEL-351S relay 3U and Qty. 2 (Two) FT style isolation switches
Control Wiring	#14 AWG; Control Wire (Standard)



Control Wiring Lugs	Insulated Lugs (Standard)
Control Terminal Blocks	Standard terminal blocks as required.
Heaters	Special Heater Two 100W, 230 VAC continuously operated cabinet heaters
Local/Remote Switch	(1) Standard local/remote switch provided
Test Switches	No test switches provided
Digital Meters	No digital meters provided
Thermostats	(1) Standard thermostat included. Operating Range: 70°F to 80°F
Wire Markers	Brady wire marker sleeves as required.
Control Switch	No Control Switch Provided
Legacy Material	Yes 1VAS000742-0001
Special Final Assembly	Special Final Assembly None
Shipping Special	Special Shipping Requirements No
Seismic Option	None

#### DYNAMIC ACCESSORIES

Dynamic Accessories	Cap discharge switch (Qty 1)
Dynamic Accessories	120 VAC, 1 phase GFI utility outlet mounted inside the relay control cabinet. (Qty 1)
Dynamic Accessories	External Bushing Identification Stickers (Qty 1)
Dynamic Accessories	Ground Clamps (#4 - 4/0) (Qty 1)
Dynamic Accessories	Device Nameplates (Qty 1)
Dynamic Accessories	120 VAC relay cabinet light mounted inside relay control cabinet (Qty 1)
Dynamic Accessories	No vented door

#### Accessories

#### ABB Internal Order Entry Information

CID Code: 9AAC30400486  
Source Location Code: 9AAE315900



### Clarifications

ABB provides quotation based on the specifications provided by CITY OF LAKE WORTH BEACH.

### Revision History

Rev #	Date	Description of Change	Handled By
2	1/27/2021	Quantity updated to 1 (one), L/R switch added in ITEM#1 and ITEM#2	IC
4	9/15/2021	Validity date has been extended	MM
5	11/01/2021	No vented door Note	MM

### Example R-MAG Cost Savings

#### Operating mechanism maintenance cost savings

		Mechanism	
		Spring charged <sup>2</sup>	Magnetic actuator
<b>Estimated service life (years)<sup>3</sup></b>		<b>30</b>	<b>30</b>
<b>Number of years between maintenance</b>		<b>2</b>	<b>Not applicable</b>
<b>Cost per maintenance event</b>		<b>\$685.00</b>	<b>Not applicable</b>
Cost per event	Labor cost per hour	\$85	Not applicable
	Switching time (hrs)	2	Not applicable
	# of workers required for switching	2	Not applicable
	Time to complete maintenance (hrs)	2	Not applicable
	# of workers required for maintenance	2	Not applicable
Material costs		\$5.00	Not applicable
<b>Lifetime maintenance costs</b>		<b>\$10,275.00</b>	<b>\$0.00</b>

**Lifetime operating mechanism maintenance cost savings: \$10,275.00**

<sup>2</sup> The values used for the spring charged mechanism breaker referred to in the 'Example R-MAG Cost Savings' are based on ABB's R-breaker that utilizes a spring charged mechanism.

<sup>3</sup> The Estimated Service Life refers to the normally observed useful service life for a product. The estimated service life will vary based on the environment, maintenance and usage of the breaker; ABB offers a standard 5 year limited warranty for its R-Mag product line.



**General breaker maintenance costs**

		Mechanism	
		Spring charged	Magnetic actuator
<b>Estimated service life (years)</b>		<b>30</b>	<b>30</b>
<b>Number of years between maintenance</b>		<b>5</b>	<b>5</b>
<b>Cost per maintenance event</b>		<b>\$47.50</b>	<b>\$47.50</b>
Cost per event	Labor cost per hour	\$85	\$85
	Time to complete maintenance (hrs)	0.5	0.5
	# of workers required for maintenance	1	1
	Material costs	\$5.00	\$5.00
<b>Lifetime maintenance costs</b>		<b>\$285.00</b>	<b>\$285.00</b>

Lifetime general maintenance cost savings: \$0.00

**ED2.0 electronic control board cost savings**

		Spring mechanism change-out cost	R-MAG ED2 board change-out cost
		<b>Estimated service life (years)</b>	
<b>Number of years between replacement</b>		<b>10</b>	<b>10</b>
<b>Cost per replacement event</b>		<b>\$2,780.00</b>	<b>\$1,655.00</b>
Cost per event	Labor cost per hour	\$85.00	\$85.00
	Time to complete replacement (hrs)	9 (coil and motor)	1.5 (ED2 board)
	# of workers required for replacement	2	2
	Material cost	\$1,250.00 (coil and motor)	\$1,400.00 (ED2 board)
<b>Lifetime maintenance costs</b>		<b>\$8,340.00</b>	<b>\$4,965.00</b>

Lifetime change-out cost savings: \$3,375.00



## **Optional Services**

ABB can support its customers with hands-on, factory authorized training for all new installations. This training is intended for up to 10 technicians on-site to train them on the proper operation and safety requirements of their new gear. The duration and content of the class can be customized based on the experience and background of the attending technicians. The classes are led by a highly skilled, factory trained field service technician. Additional training courses are available based on customer need, such as preventive maintenance, complete refurbishment, relay coordination, etc. ABB will design the program around customer requirements.

ABB offers installation and commissioning, utilizing its factory trained service team, for all its products at competitive rates. ABB works with its customers to determine the level of support and installation schedule to fit their specific needs. ABB will waive the fee for a one day hands-on training when the ABB service team is used to support installation.

ABB also offers a preventive maintenance program at factory recommended intervals to increase the reliability and service life of your new gear. Choosing an ABB preventive maintenance program may allow ABB to extend the warranty on your equipment.



#### **Approval Drawings**

Approval drawings, if requested or required, will be supplied within 4 weeks ARO. Manufacturing lead time is based upon timely return of approval drawings from customer within two (2) weeks of receipt of drawings. On orders requiring "hold for release to manufacturing until receipt of approval drawings", the quoted lead time commences on the date ABB receives the approved drawings.

#### **Shipment Schedule**

Contract drawings, information submittals, manufacturing, and shipment schedules will follow the outline below and is contingent on customer approval in the time frame indicated:

- I. Orders with Drawing Approval
  - Approval Drawings – 3 weeks after receipt of ABB approved order
  - Customer drawing approval time – 2 weeks to keep order timeline on schedule
  - Product ready for shipment – 15 weeks after return of all approval drawings with customer release for manufacture
  - Delivery – 1-2 weeks
  - Total lead time: 20-21 weeks
  
- II. Orders with existing bill of material, no bill of material changes and no approval drawings (duplicate orders)
  - Manufacturing time – 15 weeks after receipt of ABB approved order
  - Delivery – 1-2 weeks
  - Total lead time: 16-17 weeks

All customer provided data and requirement must be finalized at the time of purchase order placement. Revision to contract requirements may result in schedule changes and delays. All lead-times are subject to change based on prior sales and loaded factory capacity, please contact factory for actual lead-times at time of order placement.

# EXECUTIVE BRIEF

## ELECTRIC UTILITY MEETING

**AGENDA DATE:** Enter Date Here, 2021

**TITLE:**

Agreement with Trench Limited for the purchase of 138kV Coupling Capacitor Voltage Transformers

**SUMMARY:**

The Agreement with Trench Limited (Trench), authorizes Trench to provide 138kV Coupling Capacitor Voltage Transformers (CCVT's) for use at the City's new 138kV Canal Transmission Switchyard at a cost not to exceed \$119,925. The CCVT's have been identified as critical components for the City's electric utility System Hardening and Reliability Improvement Projects (SHRIP) and for which bonds were sold in November 2020.

**BACKGROUND AND JUSTIFICATION:**

In 2021, the City issued Invitation to Bid (IFB 21-211) for the procurement of 138kV CCVT's for use at the City's new 138kV Canal Transmission Switchyard. A total of two (2) bids were received and evaluated. Trench was found to be the most responsive and responsible bidder and was recommended for the award. The Term of the Agreement is for three (3) years, with two (2) single-year renewal options with a not-to-exceed value of \$119,925.

Over the past year the Electric Utility has been working with engineering teams from Power Engineers and FP&L on the design and material procurement for the new 138kV Canal Transmission Switchyard. The capacitive voltage transformers are used to convert high transmission line voltage to a standardized low and easily measurable values, which will be used for metering, protection and control of the high voltage system. As such, the need for accurate and reliable voltage transformation is essential. The reliability and security of Trench capacitive voltage transformers is based on over 50 years of innovation with units operating under a wide range of environmental conditions. Capacitive voltage transformers also ensure suitable electrical insulation between high voltage and low voltage measuring equipment.

To continue with the SHRIP program, the City is requesting the purchase of fifteen (15) CCVTs to be installed at the new 138kV Canal Transmission Switchyard.

**MOTION:**

Move to approve/disapprove the Agreement with Trench Limited for the purchase of 138kV Coupling Capacitor Voltage Transformers at a cost not to exceed \$119,925.

**ATTACHMENT(S):**

Fiscal Impact Analysis  
Trench Agreement

**FISCAL IMPACT ANALYSIS**

**A. Five Year Summary of Fiscal Impact:**

<b>Fiscal Years</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Capital Expenditures	\$119,925	0	0	0	0
Operating Expenditures	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income	0	0	0	0	0
In-kind Match	0	0	0	0	0
<b>Net Fiscal Impact</b>	<b>\$119,925</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
No. of Addn'l Full-Time Employee Positions	0	0	0	0	0

**B. Recommended Sources of Funds/Summary of Fiscal Impact: Funds have been identified in account No. 421-6034-531-63.16, Project SH2001.**

Account Number	Account Description	Project Number	FY22 Budget	Current Balance	Budget Transfer	Agenda Expenditure	Balance
421-6034-531-63.16	Improve Other than Build / Infrastructure	SH2001	\$7,000,000	\$5,771,503		\$119,925	\$5,651,578

**AGREEMENT FOR GOODS AND SERVICES  
(138kV Coupling Capacitor Voltage Transformers)**

**THIS AGREEMENT** ( "Agreement") is made this 17/11/21 day, between the **City of Lake Worth Beach**, a Florida municipal corporation ( "CITY"), with its office located at 7 North Dixie Highway, Lake Worth Beach, Florida 33460, and **Trench Limited** with its principal office located at 1865 Clements Road Pickering, Ontario L1W 3R8 Canada, ("CONTRACTOR").

**RECITALS**

WHEREAS, the CITY is a municipal corporation organized and existing pursuant to the Charter and the Constitution of the State of Florida; and

WHEREAS, the CITY issued Invitation for Bid #21-211 for 138kV Coupling Capacitor Voltage Transformers ("IFB"), which IFB is not attached but incorporated by the reference into this Agreement; and

WHEREAS, the City received two (2) responses to the IFB; and

WHEREAS, the CONTRACTOR was found to be the lowest, responsive and responsible bidder and was recommended for the award; and

WHEREAS, the CITY desires to accept the CONTRACTOR's bid prices in order for CONTRACTOR to provide the goods and services to the CITY as set forth herein pursuant to the terms and conditions of this Agreement; and

WHEREAS, the CONTRACTOR further warrants that it is experienced and capable of performing the tasks hereunder in a professional and competent manner; and

WHEREAS, the CITY finds entering this Agreement with the CONTRACTOR as described herein serves a valid public purpose.

NOW THEREFORE, the CITY hereby engages the CONTRACTOR, and in consideration of the mutual promises herein contained, the sufficiency of which is hereby acknowledged by both parties, the parties agree as follows:

**1. TERM**

1.1 The term shall commence upon the approval of this Agreement by the City Commission. The CONTRACTOR agrees to provide all goods and services required under this Agreement for the period of up to three (3) consecutive years for the delivery of the 138kV Coupling Capacitor Voltage Transformers as further described in the IFB. The City reserves the right if agreed to with CONTRACTOR to renew this Agreement for two (2) additional one (1) year periods dependent on annual appropriation of the funds by the City Commission. During the renewal option(s), the CITY may utilize this

Agreement to purchase additional 138kV Coupling Capacitor Voltage Transformers unit(s). The CONTRACTOR agrees to provide all goods and services required under this Agreement as per the terms and timelines provided in the IFB.

## **2. SCOPE OF SERVICES/WORK**

2.1 The scope of services/work (specifications) set forth in the IFB details the supply and delivery of 138kV Coupling Capacitor Voltage Transformers for the City's Electric Utility. All goods shall be delivered in accordance with this Agreement and the IFB. Quantities of the materials are indicated in the IFB (including the IFB's "Scope of Services/Work") and shall be used for the furnishing and delivery of 138kV Coupling Capacitor Voltage Transformers units. The CITY may request additional units and modifications to additional units the CITY desires to purchase and the CITY will seek a proposal from the CONTRACTOR based on such modifications.

2.2 The CONTRACTOR represents to the CITY that all goods provided and services performed under this Agreement shall be in accordance with accepted and established trade practices and procedures recognized in the CONTRACTOR's trade in general and that the materials shall conform to the highest standards and in accordance with this Agreement.

2.3 The CONTRACTOR represents that it is licensed to do business in the State of Florida and holds and will maintain all applicable licenses required for the goods and services to be completed under this Agreement. The CONTRACTOR further warrants its capability and experience to perform the services provided for herein in a professional and competent manner.

2.4 The services shall be performed by the CONTRACTOR or under its supervision and all personnel engaged in performing the services shall be fully qualified and, if required, authorized or permitted under the state and local law to perform such services. All of the CONTRACTOR's personnel (and all subcontractors), while on CITY premises, shall comply with all CITY requirements governing safety, conduct and security.

2.5 The goods shall be provided and the services shall be completed in accordance with the terms and conditions set forth in this Agreement.

## **3. INDEPENDENT CONTRACTOR; USE OF AGENTS OR ASSISTANTS**

3.1 The CONTRACTOR is and shall be, in the performance of the services under this Agreement, an independent contractor, and not an employee, agent, or servant of the CITY. All persons engaged in any of the services performed pursuant to this Agreement shall at all times, and in all places, be subject to the CONTRACTOR's sole direction, supervision, and control. The CONTRACTOR shall exercise control over the means and manner in which it and its employees perform the services.

3.2 To the extent reasonably necessary to enable the CONTRACTOR to perform the scope of services/work, the CONTRACTOR shall be authorized to engage the services of any agents or assistants which it may deem proper, and may further employ, engage, or retain the services of such other persons or corporations to aid or assist in the proper

performance of its duties. All costs of the services of, or expenses incurred by, such agents or assistants shall be paid by the CONTRACTOR.

#### **4. MATERIALS**

4.1 The CONTRACTOR shall provide all materials as more specifically set forth in the Scope of Services/Work or as reasonably necessary to accomplish the services unless otherwise specified in writing by the CITY.

#### **5. FEE AND ORDERING MECHANISM**

5.1 The CITY shall utilize a City Purchase Order for the ordering of the 138kV Coupling Capacitor Voltage Transformers unit(s) under this Agreement (not to exceed 15 units during the initial three (3) year term); however, the terms and conditions of the City Purchase Order shall not apply.

5.2 Should the CITY require additional 138kV Coupling Capacitor Voltage Transformers Unit(s), the CITY and CONTRACTOR will prepare and execute a written amendment to this Agreement setting forth the additional materials and/or services and the total cost for the same prior to any such additional materials or services being provided by the CONTRACTOR.

5.3 CONTRACTOR shall not exceed amounts expressed in any CITY issued Purchase Order or amendment to this Agreement for the purchase of the 138kV Coupling Capacitor Voltage Transformer Unit(s). The CITY's Fiscal Year ends on September 30th of each calendar year. Except for purchases authorized in a prior fiscal year and fully appropriated and funded, the CITY cannot authorize the purchase of additional goods or services beyond September 30th of each calendar year, prior to the annual budget being approved by the CITY's City Commission.

#### **6. MAXIMUM COSTS**

6.1 The CITY shall compensate the CONTRACTOR in accordance with the CONTRACTOR's bid prices, which are attached hereto as **Exhibit "A"**. The total cost to be paid by the CITY to the CONTRACTOR if the CITY orders the initial fifteen (15) 138kV Coupling Capacitor Voltage Transformer units shall not exceed \$119,925.00 (One Hundred Nineteen Thousand Nine Hundred Twenty Five Dollars). If the CITY purchases any additional unit(s) from the CONTRACTOR, the not to exceed amount for those additional units shall be by an amendment(s) to this Agreement.

#### **7. INVOICE**

7.1 The CONTRACTOR shall submit an itemized invoice to the CITY upon delivery and final acceptance of the 138kV Coupling Capacitor Voltage Transformer unit(s). Final acceptance occurs when all goods and services have been provided and completed by the CONTRACTOR and accepted by the CITY. The CONTRACTOR shall be paid by the

CITY within thirty (30) days of receipt of an approved invoice for all goods and services for the 138kV Coupling Capacitor Voltage Transformer unit(s). Invoicing for additional units shall be addressed for each additional unit(s) in the amendment to this Agreement.

7.2 If the CITY disputes any invoice or part of an invoice, CITY shall notify the CONTRACTOR within a reasonable time after receipt of the invoice. CITY reserves the right to off-set, reduce or withhold any payment to the CONTRACTOR until the dispute is resolved.

## **8. AUDIT BY CITY**

8.1 The CONTRACTOR shall permit the CITY, or any authorized representatives of the CITY, at all reasonable times, access to and the right to examine all records, books, papers or documents related to the CONTRACTOR's performance under this Agreement including, but not limited to, expenses for sub-contractors, agents or assistants, direct and indirect charges for services performed and detailed documentation for all such services performed or to be performed under this Agreement.

## **9. COPIES OF DATA/DOCUMENTS**

9.1 Copies or original documents prepared by the CONTRACTOR in relation to services associated with this Agreement shall be provided to the CITY. Data collected, stored, and/or provided shall be in a form acceptable to the CITY and agreed upon by the CITY.

## **10. OWNERSHIP**

10.1 Each and every report, draft, work product, map, record, and other document reproduced, prepared, or caused to be prepared by the CONTRACTOR pursuant to or in connection with this Agreement shall be the exclusive property of the CITY.

## **11. WRITTEN AUTHORIZATION REQUIRED**

11.1 The CONTRACTOR shall not make changes in the Scope of Services/Work or good or services to be provided or perform any additional services or provide any additional goods under this Agreement without first obtaining written authorization from the CITY for such additional services or goods. Additional services or goods provided without written authorization shall be done at the CONTRACTOR's sole risk and without payment from the CITY.

## **12. DEFAULTS, TERMINATION OF AGREEMENT**

12.1 If the CONTRACTOR fails to timely provide the goods and/or perform the services or has failed in any other respect to satisfactorily perform in accordance with this Agreement; or, is in material breach of a term or condition of this Agreement, the City Manager or designee may give written notice to the CONTRACTOR specifying the

default(s) to be remedied. Such notice shall set forth a reasonable timeframe for correcting the default(s) and any suggested corrective measures. If the CONTRACTOR does not remedy the default(s) within the timeframe provided in the CITY's notice or commence good faith steps to remedy the default to the reasonable satisfaction of the CITY, the CITY may take such action to remedy the default and all expenses related thereto shall be borne by the CONTRACTOR including, without limitation, utilization of another contractor to provide for such services and all of the CITY's legal fees; and/or, the CITY may withhold any money due or which may become due to the CONTRACTOR for such expense and/or services related to the claimed default. Alternatively, or in addition to the foregoing, if after three (3) business days the CONTRACTOR has not remedied defaults or commenced good faith steps to remedy defaults to the satisfaction of the CITY, the CITY may elect to terminate this Agreement. No cancellation fee or other compensation shall be paid by the CITY for de-mobilization, take-down, disengagement, wind-down, lost profits, or other costs incurred due to termination of this Agreement under this paragraph.

12.2 Notwithstanding paragraph 12.1, the CITY reserves the right and may elect to terminate this Agreement at any time, with or without cause. At such time, the CONTRACTOR would be compensated only for the goods and/or services which have been satisfactorily completed to the date of termination. No compensation shall be paid for de-mobilization, take-down, disengagement, wind-down, lost profits, or other costs incurred due to termination of this Agreement under this paragraph.

12.3 If the CITY fails to timely perform in accordance with this Agreement; or, is in material breach of a term or condition of this Agreement, the CONTRACTOR may give written notice to the CITY specifying the default(s) to be remedied. Such notice shall set forth a reasonable timeframe for correcting the default(s) and any suggested corrective measures. If the CITY does not remedy the default(s) within the timeframe provided in the CONTRACTOR's notice or commence good faith steps to remedy the default to the reasonable satisfaction of the CONTRACTOR, the CONTRACTOR may take such action to remedy the default and all expenses related thereto shall be borne by the CITY; and/or, the CONTRACTOR may withhold any services. Alternatively, or in addition to the foregoing, if after three (3) business days the CITY has not remedied defaults or commenced good faith steps to remedy defaults to the satisfaction of the CONTRACTOR, the CONTRACTOR may elect to terminate this Agreement.

### **13. INSURANCE**

13.1. Prior to commencing any services, the CONTRACTOR shall provide certificates evidencing insurance coverage as required hereunder. All insurance policies shall be issued by companies authorized to do business under the laws of the State of Florida. The Certificates shall clearly indicate that the CONTRACTOR has obtained insurance of the type, amount, and classification as required for strict compliance with this Section and that no material change or cancellation of the insurance shall be effective without thirty (30) days' prior written notice to the CITY. Failure to comply with the foregoing requirements shall not relieve the CONTRACTOR of its liability and obligations under this

Contract. All insurance, other than Workers' Compensation, required hereunder shall specifically include the "City of Lake Worth Beach" as an "Additional Insured" on a primary, non-contributing basis, and the CONTRACTOR shall provide additional insured endorsements section of Certificates of Insurance.

13.2. The CONTRACTOR shall maintain, during the life of this Contract, commercial general liability, including contractual liability insurance in the amount of \$1,000,000 per occurrence (\$2,000,000 aggregate) to protect the CONTRACTOR from claims for damages for bodily and personal injury, including wrongful death, as well as from claims of property damages which may arise from any operations under this Contract, whether such operations be by the CONTRACTOR or by anyone directly employed by or contracting with the CONTRACTOR.

13.3. The CONTRACTOR shall maintain, during the life of this Contract, comprehensive automobile liability insurance in the minimum amount of \$1,000,000 combined single limit for bodily injury and property damages liability to protect the CONTRACTOR from claims for damages for bodily and personal injury, including death, as well as from claims for property damage, which may arise from the ownership, use, or maintenance of owned and non-owned automobiles, including rented automobiles whether such operations be by the CONTRACTOR or by anyone directly or indirectly employed by the CONTRACTOR.

13.4. The CONTRACTOR shall maintain, during the life of this Contract, Workers' Compensation Insurance and Employer's Liability Insurance for all employees as required by Florida Statutes.

#### **14. WAIVER OF BREACH**

14.1 The waiver by either party of any breach of any provision of this Agreement shall not operate or be construed as a waiver of any subsequent breach of that same or any other provision.

#### **15. INDEMNITY**

15.1 The CONTRACTOR shall indemnify, defend and hold harmless, to the maximum extent permitted by law, the CITY and its officers, agents, employees and representatives, from and against any and all liability, suit, actions, proceedings, judgments, claims, losses, liens, damages, injuries (whether in contract or in tort, including personal injury, accidental death, patent infringement or property damage, and regardless, of whether the allegations are false, fraudulent or groundless), costs and expenses (including attorney's fees, litigation, arbitration, mediation, appeal expenses) to the extent arising out of or alleged to have arisen out of the acts, omissions or neglect of the CONTRACTOR or any of its agents, employees, subcontractors or by anyone the CONTRACTOR directly or indirectly employed.

15.2 The CONTRACTOR's obligation to indemnify, defend and hold harmless shall remain in effect and shall be binding upon the CONTRACTOR whether such injury or damage shall accrue, or may be discovered, before or after termination of this Agreement.

15.3 Compliance with any insurance requirements required elsewhere in this Agreement shall not relieve CONTRACTOR of its liability and obligation to defend, hold harmless and indemnify the CITY as set forth in this section.

15.4 Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the CITY or CONTRACTOR. Further, nothing contained in this Agreement shall be construed or interpreted as consent by the CITY to be sued, nor as a waiver of sovereign immunity beyond the waiver provided in section 768.28, Florida Statutes, as amended from time to time.

15.5 The CONTRACTOR's failure to comply with this section's provisions shall constitute a material breach upon which the CITY may immediately terminate or suspend this Agreement.

## **16. ENTIRE AGREEMENT AND ORDER OF PRECEDENCE**

16.1 This Agreement consists of the terms and conditions provided herein; the IFB (including all specifications, exhibits and addenda attached thereto or referenced therein); and, the CONTRACTOR's bid prices (Exhibit "A"). To the extent that there exists a conflict between this Agreement and the remaining documents, the terms, conditions, covenants, and/or provisions of this Agreement shall prevail with the IFB (including all specifications, exhibits and addenda attached thereto) next taking precedence; however, the CONTRACTOR's bid prices (Exhibit "A") shall take precedence over the IFB. Wherever possible, the provisions of such documents shall be construed in such a manner as to avoid conflicts between provisions of the various documents.

16.2 This Agreement supersedes any and all other Agreements, either oral or in writing, between the parties hereto with respect to the subject matter hereof, and no other Agreement, statement, or promise relating to the subject matter of this Agreement which is not contained herein shall be valid or binding. This Agreement may be executed electronically.

## **17. ASSIGNMENT**

17.1 Nothing under this Agreement shall be construed to give any rights or benefits to any party other than the CITY and the CONTRACTOR. All duties and responsibilities under this Agreement shall be for the sole and exclusive benefit of the CITY and the CONTRACTOR and not for the benefit or any other party. The CONTRACTOR shall not assign any right or interest in this Agreement, and shall not delegate any duty owned, without the CITY's prior written consent. Any attempted assignment or delegation shall be void and totally ineffective for all purposes and shall constitute a material breach upon which the CITY may immediately terminate or suspend this Agreement.

17.2 In the event the CITY consents to an assignment or delegation, the assignee, delegate, or its legal representative shall agree in writing to personally assume, perform, and be bound by this Agreement's covenants, conditions, obligations and provisions.

## **18. SUCCESSORS AND ASSIGNS**

18.1 Subject to the provision regarding assignment, this Agreement shall be binding on the heirs, executors, administrators, successors, and assigns of the respective parties.

## **19. WAIVER OF TRIAL BY JURY**

19.1 TO ENCOURAGE PROMPT AND EQUITABLE RESOLUTION OF ANY LITIGATION, EACH PARTY HEREBY WAIVES ITS RIGHTS TO A TRIAL BY JURY IN ANY LITIGATION RELATED TO THIS AGREEMENT.

## **20. GOVERNING LAW AND REMEDIES**

20.1 The validity of this Agreement and of any of its terms or provisions, as well as the rights and duties of the parties hereunder, shall be governed by the laws of the State of Florida and venue shall be in Palm Beach County, Florida.

20.2 No remedy herein conferred upon any party is intended to be exclusive of any other remedy, and each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise. No single or partial exercise by any party of any right, power, or remedy hereunder shall preclude any other or further exercise thereof.

## **21. TIME IS OF THE ESSENCE**

21.1 Time is of the essence in the completion of the Scope of Services/Work as specified herein.

## **22. NOTICES**

22.1 All notices hereunder must be in writing and, unless otherwise provided herein, shall be deemed validly given on the date when personally delivered to the address indicated below; or on the third (3<sup>rd</sup>) business day following deposit, postage prepaid, using certified mail, return receipt requested, in any U.S. postal mailbox or at any U.S. Post Office; or when sent via nationally recognized overnight courier to the address indicated below. Should the CITY or the CONTRACTOR have a change of address, the other party shall immediately be notified in writing of such change, provided, however, that each address for notice must include a street address and not merely a post office box. All notices, demands or requests from the CONTRACTOR to the CITY shall be given to the CITY address as follows:

City Manager  
City of Lake Worth Beach  
7 North Dixie Highway  
Lake Worth Beach, Florida 33460

All notices, demands or requests from the CITY to the CONTRACTOR shall be given to the CONTRACTOR address as follows:

Trench Limited  
Attn: Gustavo Lopez-Benitez  
1885 Clements Road  
Pickering, Ontario  
Canada L1W 3R8

### **23. SEVERABILITY**

23.1 Should any part, term or provision of this Agreement or any document required herein to be executed be declared invalid, void or unenforceable, all remaining parts, terms and provisions hereof shall remain in full force and effect and shall in no way be invalidated, impaired or affected thereby.

### **24. DELAYS AND FORCES OF NATURE**

24.1 The CONTRACTOR shall not be considered in default by reason of a delay in timely performance if such delay and failure arises out of causes reasonably beyond the control of the CONTRACTOR or its subcontractors and without their fault or negligence. Upon the CONTRACTOR's request, the CITY shall consider the facts and extent of any such delay and failure to timely perform the services for reason beyond the control of the CONTRACTOR and, if the CONTRACTOR's delay and failure to timely perform was without it or its subcontractors' fault or negligence, as determined by the CITY in its sole discretion, the time of completion shall be extended for any reasonable time that the CITY, in its sole discretion, may decide; subject to the CITY'S rights to change, terminate, or stop any or all of the services at any time. If the CONTRACTOR is delayed at any time in the progress of the services by any act or neglect of the CITY or its employees, or by any other contractor employed by the CITY, or by changes ordered by the CITY or in an unusual delay in transportation, unavoidable casualties, or any causes beyond the CONTRACTOR'S control, or by delay authorized by the CITY pending negotiation or by any cause which the CITY, in its sole discretion, shall decide justifies the delay, then the time of completion shall be extended for any reasonable time the CITY, in its sole discretion, may decide. No extension of time shall be made for any delay occurring more than five (5) days before a claim therefore is made in writing to the CITY. In the case of continuing cause of delay, only one (1) claim is necessary. The CONTRACTOR's sole remedy for a delay in completion of the services for any reason will be an extension of time to complete the services and CONTRACTOR specifically waives any right to seek any monetary damages or losses for a delay in completion of the services, including, but not limited to, waiving any right to seek monetary amounts for lost profits, additional

overhead, salaries, lost productivity, efficiency losses, or any other alleged monetary losses which may be allegedly suffered by CONTRACTOR due to a delay in completion of the services.

24.2 Neither party shall be considered in default in the performance of its obligations hereunder or any of them, if such obligations were prevented or delayed by any cause, existing or future beyond the reasonable control of such party which include but are not limited to acts of God, labor disputes or civil unrest.

## **25. COUNTERPARTS**

25.1 This Agreement may be executed in counterparts, each of which shall be an original, but all of which shall constitute one and the same document. Each of the parties shall sign a sufficient number of counterparts, so that each party will receive a fully executed original of this Agreement.

## **26. LIMITATIONS OF LIABILITY**

26.1 Under no circumstances shall either party be liable to the other for any consequential, incidental, special, punitive, or any other form of indirect or non-compensatory damages. There shall be no other limitation of liability between the parties or under this Agreement.

## **27. PUBLIC ENTITY CRIMES**

27.1 CONTRACTOR acknowledges and agrees that a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public services; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform services as a contractor, supplier or sub-contractor under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, Florida Statutes, for CATEGORY TWO for a period of 36 months following the date of being placed on the convicted vendor list. CONTRACTOR will advise the CITY immediately if it becomes aware of any violation of this statute.

## **28. PREPARATION**

28.1 This Agreement shall not be construed more strongly against either party regardless of who was more responsible for its preparation.

## **29. PALM BEACH COUNTY INSPECTOR GENERAL**

29.1 In accordance with Palm Beach County ordinance number 2011-009, the CONTRACTOR acknowledges that this Agreement may be subject to investigation and/or audit by the Palm Beach County Inspector General. The CONTRACTOR has reviewed Palm Beach County ordinance number 2011-009 and is aware of its rights and/or obligations under such ordinance.

### **30. ENFORCEMENT COSTS**

30.1 All parties shall be responsible for their own attorneys' fees, court costs and expenses if any legal action or other proceeding is brought for any dispute, disagreement, or issue of construction or interpretation arising hereunder whether relating to the Contract's execution, validity, the obligations provided therein, or performance of this Contract, or because of an alleged breach, default or misrepresentation in connection with any provisions of this Contract.

### **31. PUBLIC RECORDS**

CONTRACTOR shall comply with Florida's Public Records Laws, Chapter 119, Florida Statutes, and, if it is acting on behalf of the CITY as provided under section 119.011(2), the CONTRACTOR specifically agrees to:

- (a) Keep and maintain public records required by the CITY to perform the services under this Agreement.
- (b) Upon request from the CITY's custodian of public records, provide the CITY with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in this Chapter 119, Florida Statutes, or as otherwise provided by law.
- (c) Ensure that said public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the Agreement term and following completion of the Agreement, if the CONTRACTOR does not transfer the records to the CITY.
- (d) Upon the completion of the Agreement, transfer, at no cost, to the CITY all public records in possession of the CONTRACTOR or keep and maintain public records required by the CITY to perform the services. If the CONTRACTOR transfers all public records to the CITY upon completion of the Agreement, the CONTRACTOR shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the CONTRACTOR keeps and maintains public records upon completion of the Agreement, the CONTRACTOR shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the CITY, upon request from the CITY's custodian of public records, in a format that is compatible with the information technology systems of the City.

**IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (561) 586-1660, [CITYCLERK@LAKEWORTHBEACHFL.GOV](mailto:CITYCLERK@LAKEWORTHBEACHFL.GOV), OR 7 NORTH DIXIE HIGHWAY, LAKE WORTH BEACH, FLORIDA 33460.**

**32. COPYRIGHTS AND/OR PATENT RIGHTS**

32.1 CONTRACTOR warrants that there has been no violation of copyrights and/or patent rights in the manufacturing, producing or selling of the goods, shipped or ordered, as a result of this Agreement and the CONTRACTOR agrees to hold the City harmless from any and all liability, loss, or expense occasioned by any such violation.

**33. COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH**

33.1 CONTRACTOR certifies that all material, equipment, etc., contained in this bid meets all OSHA requirements. CONTRACTOR further certifies that, if the material, equipment, etc., delivered is subsequently found to be deficient in any OSHA requirements in effect on date of delivery, all costs necessary to bring the material, equipment, etc. into compliance with the aforementioned requirements shall be borne by the CONTRACTOR.

**34. FEDERAL AND STATE TAX**

34.1 The CITY is exempt from Federal Tax and State Tax for Tangible Personal Property. The Procurement Official will provide the CONTRACTOR with a signed exemption certificate submitted by the CONTRACTOR. CONTRACTOR shall not be exempted from paying sales tax to their suppliers for materials to fulfill contractual obligations with the CITY, nor shall CONTRACTOR be authorized to use the City's Tax Exemption Number in securing such materials.

**35. PROTECTION OF PROPERTY**

35.1 The CONTRACTOR shall at all times guard against damage or loss to the property of the CITY or of other vendors or contractors and shall be held responsible for replacing or repairing any such loss or damage. The CITY may withhold payment or make such deductions as deemed necessary to insure reimbursement or replacement for loss or damage to property through negligence of the successful CONTRACTOR or its agents. The CONTRACTOR shall be responsible to safeguard all of their property such as tools and equipment while on site. The CITY will not be held responsible for any loss of CONTRACTOR property due to theft or vandalism.

**36. DAMAGE TO PERSONS OR PROPERTY**

36.1 The responsibility for all damage to person or property arising out of or on account of services done under this Contract shall rest upon the CONTRACTOR, and he/she shall save the CITY and political unit thereof harmless from all claims made on account of such damages.

### **37. WARRANTY**

37.1 CONTRACTOR warrants and guarantees to the CITY that goods provided and services performed under this Agreement shall be in accordance with the Agreement and the other documents specifically included in this Agreement. CONTRACTOR warrants that all goods, materials, and parts supplied under this Agreement shall be free from defects for a minimum of 18 months from the final acceptance of the services. CONTRACTOR guarantees that all services performed under this Agreement will be free from defects for a minimum of 18 months from the final acceptance of the services. CONTRACTOR shall provide to the CITY any and all manufacturers' warranties for the goods and services being provided under this Agreement. CONTRACTOR agrees to pay for all transportation and handling costs of returning any equipment or the unit(s), if required, for repair or replacement. If a unit(s) must be returned, CONTRACTOR, shall provide a replacement unit(s) for the duration.

### **38. SCRUTINIZED COMPANIES**

38.1 Contractor certifies that it and its subcontractors are not on the Scrutinized Companies that Boycott Israel List and are not engaged in the boycott of Israel. Pursuant to section 287.135, Florida Statutes, the City may immediately terminate this Agreement at its sole option if the Contractor or any of its subcontractors are found to have submitted a false certification; or if the Contractor or any of its subcontractors, are placed on the Scrutinized Companies that Boycott Israel List or is engaged in the boycott of Israel during the term of this Agreement.

38.2 If this Agreement is for one million dollars or more, the Contractor certifies that it and its subcontractors are also not on the Scrutinized Companies with Activities in Sudan List, Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or engaged in business operations in Cuba or Syria as identified in Section 287.135, Florida Statutes. Pursuant to Section 287.135, the City may immediately terminate this Agreement at its sole option if the Contractor, or any of its subcontractors are found to have submitted a false certification; or if the Contractor or any of its subcontractors are placed on the Scrutinized Companies with Activities in Sudan List, or Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or are or have been engaged with business operations in Cuba or Syria during the term of this Agreement.

38.3 The Contractor agrees to observe the above requirements for applicable subcontracts entered into for the performance of services under this Agreement.

38.4 The Contractor agrees that the certifications in this section shall be effective and relied upon by the City for the term of this Agreement, including any and all renewals.

38.5 The Contractor agrees that if it or any of its subcontractors' status changes in regards to any certification herein, the Contractor shall immediately notify the City of the same.

38.6 As provided in Subsection 287.135(8), Florida Statutes, if federal law ceases to authorize the above-stated contracting prohibitions then they shall become inoperative.

**39. E-VERIFY**

Pursuant to Section 448.095(2), Florida Statutes, beginning on January 1, 2021, CONTRACTOR shall:

39.1 Register with and use the E-Verify system to verify the work authorization status of all newly hired employees and require all subcontractors (providing services or receiving funding under this Agreement) to register with and use the E-Verify system to verify the work authorization status of all the subcontractors' newly hired employees;

39.2 Secure an affidavit from all subcontractors (providing services or receiving funding under this Agreement) stating that the subcontractor does not employ, contract with, or subcontract with an "unauthorized alien" as defined in Section 448.095(1)(k), Florida Statutes;

39.3 Maintain copies of all subcontractor affidavits for the duration of this Agreement and provide the same to the City upon request;

39.4 Comply fully, and ensure all of its subcontractors comply fully, with Section 448.095, Florida Statutes;

39.5 Be aware that a violation of Section 448.09, Florida Statutes (Unauthorized aliens; employment prohibited) shall be grounds for termination of this Agreement; and,

39.6 Be aware that if the City terminates this Agreement under Section 448.095(2)(c), Florida Statutes, CONTRACTOR may not be awarded a contract for at least one (1) year after the date on which the Agreement is terminated and will be liable for any additional costs incurred by the City as a result of the termination of the Agreement.

**40. SURVIVABILITY**

40.1 Any provision of this Agreement which is of a continuing nature or imposes an obligation which extends beyond the term of this Agreement shall survive its expiration or earlier termination.

**REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK**  
**SIGNATURE PAGE FOLLOWS**

IN WITNESS WHEREOF the parties hereto have made and executed this Agreement for Goods and Services (138kV Coupling Capacitor Voltage Transformers) on the day and year first above written.

**CITY OF LAKE WORTH BEACH, FLORIDA**

By: \_\_\_\_\_  
Betty Resch, Mayor

ATTEST:

By: \_\_\_\_\_  
Melissa Ann Coyne, City Clerk

APPROVED AS TO FORM AND  
LEGAL SUFFICIENCY:

APPROVED FOR FINANCIAL  
SUFFICIENCY

By: \_\_\_\_\_  
Glen J. Torcivia, City Attorney

By: \_\_\_\_\_  
Bruce T. Miller, Financial Services Director

CONTRACTOR: **Trench Limited**

By: Selim Hostut

[Corporate Seal]

Print Name: Selim Hostut

Title: TCI General Manager

~~STATE OF~~ Province of Ontario )  
~~COUNTY OF~~ City of Pickering Scarborough

THE FOREGOING instrument was acknowledged before me by means of • physical presence or •✓online notarization on this 17 day of November 2021, by Selim Hostut, as the General Manager Trench Limited, principle office located at 1865 Clements Road, Pickering, Ontario L1W3R8, Canda, who is personally known to me or who has produced driver's licence as identification, and who did take an oath that he or she is duly authorized to execute the foregoing instrument and bind the CONTRACTOR to the same.

*Danny Hua*

Danny Hua  
Ontario Paralegal, Notary Public & Commissioner  
Law Society of Ontario Licensee P17118

Notary Public Signature

Declared remotely and virtually commissioned using secure electronic signatures via online video conference before me in Scarborough, ON, on the date herein, while the declarant was in Pickering, ON, in accordance with O. Reg 431/20, Administer Oath or Declaration Remotely, to the Ontario Commissioner for Taking Affidavits Act.



**Exhibit "A"**  
**Contractor's Bid Prices**

**(B4)**

**IFB # 21-211 138kV COUPLING CAPACITOR VOLTAGE TRANSFORMERS**

**SCHEDULE OF UNIT PRICES**

In order to evaluate the total bid amount, each Bidder must identify the unit prices for the materials set forth in the Scope of Services. The quantities below are estimated quantities. City does not guarantee a minimum order and reserves the right to adjust these quantities as considered in the best interest of the City. Prices shall be delivered FOB destination, City of Lake Worth Beach. The City will not accept bids that have no shipping prices included in their unit price. The bidder acknowledges that no additional payment will be made for adjustments in the quantities.

Unit firm price as specified, (F.O.B. destination, freight allowed and prepaid):

Description	Qty	Unit Price	Total
138kV Coupling Capacitor Voltage Transformer	15	<b>7,995 USD</b>	<b>119,925 USD</b>

**DELIVERY**

Delivery of the items shall be no later than April 8, 2022. Bidder shall provide delivery details below:

Shipping is scheduled after receipt of order. 22 Weeks

Shipping is scheduled after drawing approval. 18 Weeks

**COUPLING CAPACITOR VOLTAGE TRANSFORMERS Details:**

<u>Manufacturer</u>	<u>Trench Limited</u>
<u>Type and Catalog No.</u>	<u>TEVP145</u>
<u>Weight, pounds</u>	<u>585 LBS</u>
<u>Height, inches</u>	<u>80 inches</u>

## Document History

SignNow E-Signature Audit Log

All dates expressed in MM/DD/YYYY (US)

**Document name:** IFB 21-211 Trench Limited agreement 11.4.2021 clg 710596576 Selim Hostut  
**Document created:** 11/17/2021 15:02:59  
**Document pages:** 16  
**Document ID:** 800d87a650ca42e9ac04712e2271624f84f57be5  
**Document Sent:** 11/17/2021 15:31:38 UTC  
**Document Status:** Signed  
 11/17/2021 18:34:21UTC

**Sender:** online@notarypro.ca  
**Signers:** notary@notarypro.ca (NotaryPro), selim.hostut@siemens-energy.com (NotaryPro)  
**CC:**

Client	Event	By	Server Time	Client Time	IP Address
NotaryPro	Uploaded the Document	online@notarypro.ca	11/17/2021 15:02:59 pm UTC		13.71.170.133
NotaryPro	Viewed the Document	online@notarypro.ca	11/17/2021 15:25:41 pm UTC	11/17/2021 15:25:40 pm UTC	174.89.216.191
NotaryPro	Added a Checkbox	online@notarypro.ca	11/17/2021 15:31:28 pm UTC	11/17/2021 15:31:27 pm UTC	174.89.216.191
NotaryPro	Added a Text	online@notarypro.ca	11/17/2021 15:31:28 pm UTC	11/17/2021 15:31:27 pm UTC	174.89.216.191
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NotaryPro	Document Saved	online@notarypro.ca	11/17/2021 15:31:28 pm UTC	11/17/2021 15:31:27 pm UTC	174.89.216.191
NotaryPro	Viewed the Document	notary@notarypro.ca (NotaryPro)	11/17/2021 18:31:55 pm UTC	11/17/2021 18:31:54 pm UTC	174.89.216.191
NotaryPro	Viewed the Document	selim.hostut@siemens-energy.com (NotaryPro)	11/17/2021 18:32:06 pm UTC	11/17/2021 18:32:06 pm UTC	165.225.208.221
NotaryPro	Signed the Document, Signature ID: 34b25048c6214f10af68	selim.hostut@siemens-energy.com (NotaryPro)	11/17/2021 18:33:56 pm UTC	11/17/2021 18:33:56 pm UTC	165.225.208.221
NotaryPro	Added a Text	selim.hostut@siemens-energy.com (NotaryPro)	11/17/2021 18:33:56 pm UTC	11/17/2021 18:33:56 pm UTC	165.225.208.221
NotaryPro	Embedded Invite Completed (auth: None)	selim.hostut@siemens-energy.com (NotaryPro)	11/17/2021 18:33:56 pm UTC	11/17/2021 18:33:56 pm UTC	165.225.208.221
NotaryPro	Document Saved	selim.hostut@siemens-energy.com (NotaryPro)	11/17/2021 18:33:56 pm UTC	11/17/2021 18:33:56 pm UTC	165.225.208.221
NotaryPro	Viewed the Document	notary@notarypro.ca (NotaryPro)	11/17/2021 18:34:05 pm UTC	11/17/2021 18:34:04 pm UTC	174.89.216.191
NotaryPro	Signed the Document, Signature ID: 19e0053965a143e39bc3	notary@notarypro.ca (NotaryPro)	11/17/2021 18:34:21 pm UTC	11/17/2021 18:34:20 pm UTC	174.89.216.191
NotaryPro	Signed the Document, Signature ID: c0c4e6e91d79459cb96d	notary@notarypro.ca (NotaryPro)	11/17/2021 18:34:21 pm UTC	11/17/2021 18:34:20 pm UTC	174.89.216.191
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NotaryPro	Document Saved	notary@notarypro.ca (NotaryPro)	11/17/2021 18:34:21 pm UTC	11/17/2021 18:34:20 pm UTC	174.89.216.191