City of Lake Worth Beach, Florida

Request for Power Supply Proposals

City Commission Update

September 30, 2025



Agenda

- Bid Summaries
- Impacts from Differences in Monthly Net Demand Determination
- Bid Evaluation Process
- Additional Considerations
- Next Steps

nFront Consulting

Bid Summaries

	Bid 1	Bid 2	Bid 3
Term	4-7 years	4-7 years	4-7 years
Capacity	Base – up to 40 MW monthly Intermediate – All other	Net requirements above resources	Net requirements above resources
Capacity Determination	Base/Intermediate – Nominated monthly, by the first day of prior month	Net demand requirements (monthly)	Maximum hourly net demand for the month with a 12-month ratchet (i.e., maximum net demand for preceding 12 months)
Capacity Pricing	Escalating rate (\$/kW-month) by tier (i.e., Base v. Intermediate)	Escalating rate (\$/kW-month)	Fixed rate (\$/kW-month), higher for extension period (years 5-7)
Energy Pricing Basis	Heat Rate Index* by tier + Variable O&M (VOM) Adder	Heat Rate Index + VOM Adder	Heat Rate Index + VOM Adder (also allows for economy energy to replace GT2 at cost + mark-up)

^{*} Heat Rate Index – An energy price that is "indexed" to natural gas prices (i.e., NG price x HR)

Bid Summaries – Key Takeaways

- Bid 1 is most similar to the current OUC arrangement
 - Provides flexibility to LWBU on nominating base/intermediate capacity
 - Allows LWBU to determine its resource mix and level of reserves
 - Involves risk if nominations are greater or less than needs
- Bid 2 provides for requirements service with capacity credit for LWBU resources
 - o For St. Lucie and GT2 based on "dependable capacity" (unless in outage for the entire month)
 - For FMPA Solar based on output at the time of the peak demand
- Bid 3 provides for requirements service with capacity credit to the extent of generation during peak hours, as monthly net requirement is based on maximum hourly net demand
- Bid 3 reflects a 12-month ratchet, such that billing demand will reflect the annual peak demand, even in lower load months, resulting in LWBU paying significant demand charges year-round

Monthly Net Demand Determination

- One bid (Bid 2) calculates monthly net demand requirement by subtracting solar production at the time of the peak demand
 - Solar production is highly volatile and may be low during a peak demand event, causing a high monthly net demand requirement
 - As billing demand is separately determined each month, such variations tend to even out over the year
 - LWBU's peak demand is tending to occur later in the day (e.g., hour ending 6 PM), with reduced solar production, resulting in higher net demand
- Another bid (Bid 3) calculates monthly net demand requirement based on the maximum hourly net demand
 - As solar production is likely to be poor during some peak demand hours, the resulting monthly net demand requirement will be generally higher but less volatile
 - As a result of the ratchet, poor solar performance and/or any LWBU resource outages in a month could affect billing demand over next 12 months

Range of Monthly Net Demand Requirements for a Sample Year Under Bid 2 v. Bid 3



- Bars show the range of monthly net demand requirements under Bid 2 and Bid 3 given variations in load and solar output
- Green bars (Bid 2) are more volatile due to variations in solar output at the time of LWBU peak demand
- Blue bars (Bid 3) are less volatile but generally higher as some peak demand hours are likely to have poor solar output
- Note that Bid 3 reflects a 12month ratchet for billing demand

Bid Evaluation Process

- Develop Projected Capacity and Energy Costs under Each Proposal
- Compare Annual and NPV Power Costs and Average Energy Costs
- Evaluate Sensitivity of Power Costs to:
 - Fuel prices
 - Load and solar production profiles
 - LWBU resource outages
 - Additional solar resources
- Evaluate Impact on LWBU's Total System Power Costs

Additional Considerations

- One bid involves LWBU giving up its FPL NITS arrangement
 - This would require LWBU reapplying with FPL for NITS after the contract term and being responsible for the cost of required network upgrades (which would be credited back over time)
- One bid involves a change in balancing authority control area, which will take several months to complete and may result in additional costs to LWBU
- LWBU is also asking bidders to consider whether they would be willing to sell a longterm base- or intermediate-load resource entitlement to offset a portion of LWBU requirements

Next Steps

- Review additional information to be provided by bidders (draft contract, estimated annual charges, willingness to sell a long-term resource entitlement)
- Refine draft contract(s) (if needed)
- Select winning bidder/bid
- Negotiate final contract
- Initiate service (1/1/26)

nFront Consulting

THANK YOU



nFront Consulting LLC 4767 New Broad Street Orlando, FL 32814