City of Lake Worth Beach, Florida

Request for Power Supply Proposals

City Commission Update

October 28, 2025

nFront Consulting

Agenda

- Bid Summaries
- Bid Evaluation Process and Assumptions
- Bid Evaluation Results
- Conclusions

Bid Summaries

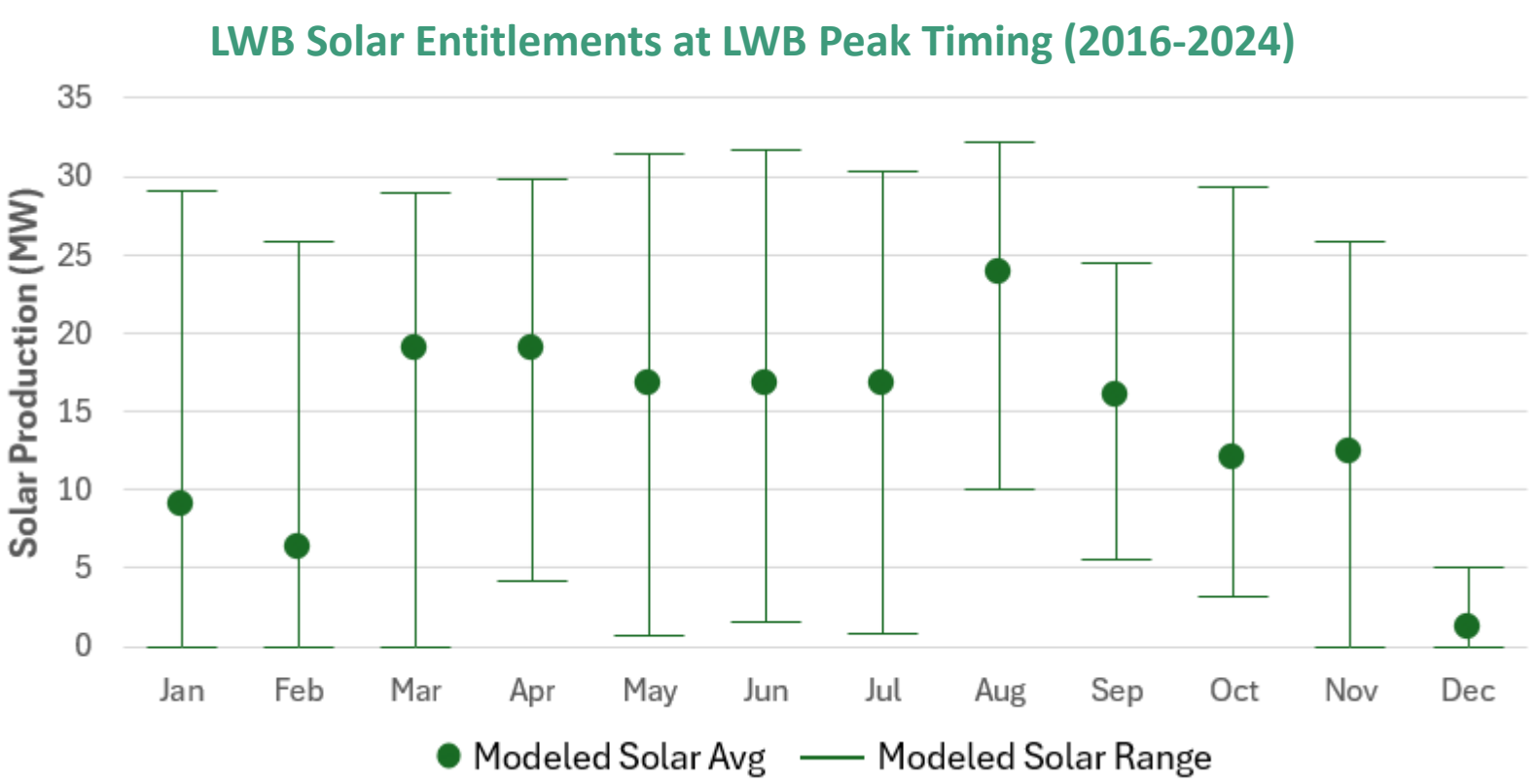
	Bid 1	Bid 2	Bid 3
Term	4-7 years	4-7 years	4-7 years
Capacity	Base – up to 40 MW monthly Intermediate – All other	Net requirements above resources	Net requirements above resources
Capacity Determination	Base/Intermediate – Nominated monthly, by the first day of prior month	Net demand requirements (monthly)	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
Special Considerations		Requires LWB to give up its FPL transmission rights	

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

Bid Evaluation Process

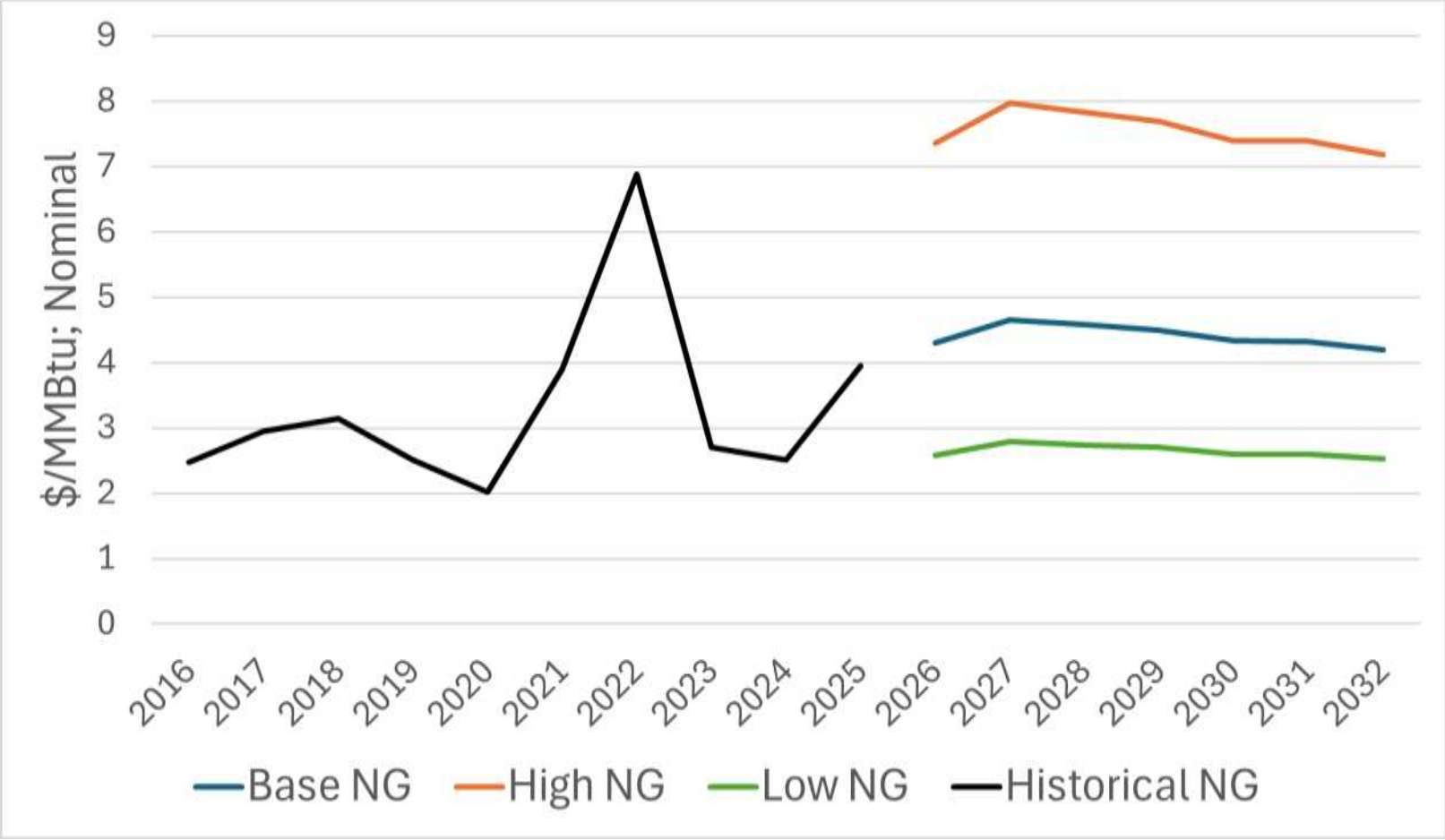
- Comparison of projected annual and net present value (NPV) costs under each bid
- Net demand requirement/billing demand determination
  - Bid 1: Monthly nominations reflect exactly sufficient base and intermediate capacity to meet reserves
  - Bid 2 & 3: Monthly capacity computed based on net LWBU Peak Demand (Bid 2) or maximum net hourly requirements (Bid 3; vs. preceding 12 months)
- Energy costs reflect simplified hourly dispatch
- Base Case – Reflecting recent LWB load shape and solar production profile (CY 2024), expected natural gas prices, and typical operation of LWB resources (i.e., no major outages)
- Sensitivities
  - Higher/lower NG prices
  - Differing LWB load and solar production profiles
  - Outages of LWB's GT2 resource
  - Additional LWB solar capacity

Solar Production During LWB Peak Hours



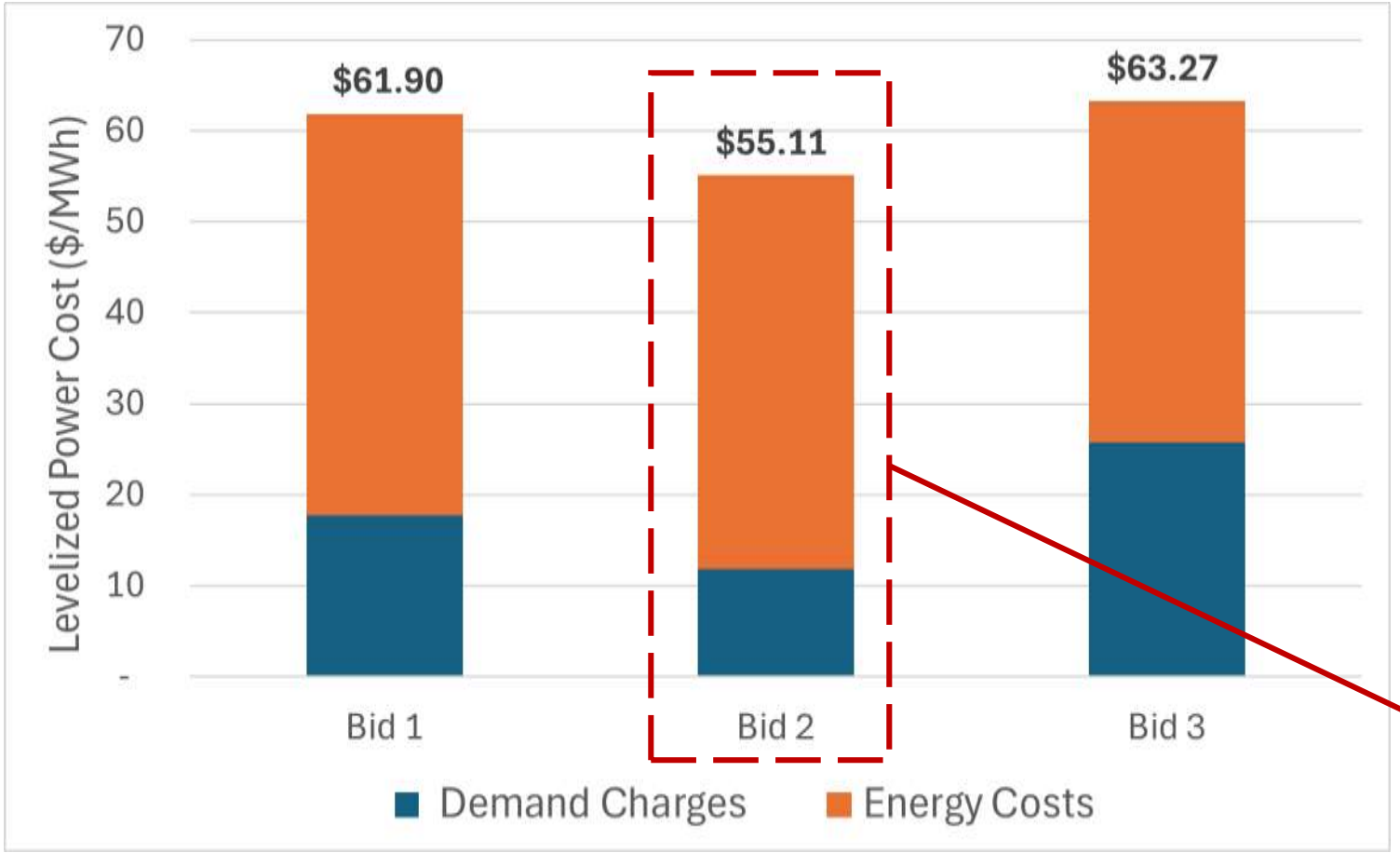
- Data reflects sum of:
  - LWB solar
  - FMPA Rice Creek
  - FMPA Whistling Duck
- Rice Creek & Whistling Duck simulated based on NREL data for 2016-24
- Solar output at the time of LWB peak is highly uncertain and low during early evening and morning peaks
- Solar intermittency has a large impact on power costs under all three bids

Natural Gas Forecast



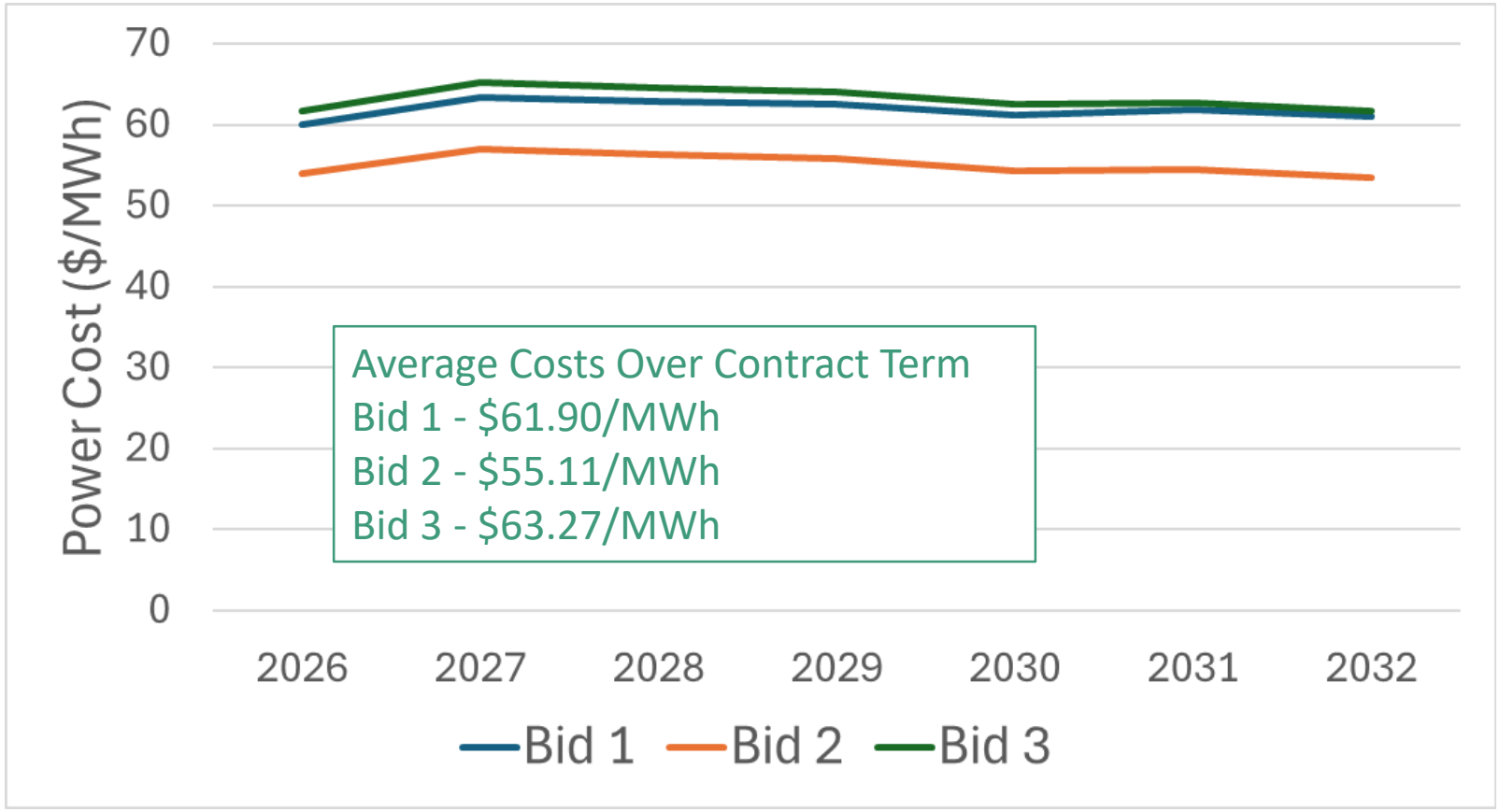
- Base Case NG pricing based on recent forward prices and historical basis differentials
- High and Low NG sensitivities:
  - High NG: 180%
  - Low NG: 60%
  - Historical variation of average annual prices shown is 60% to 210%
- High and Low Cases reflects very low probability, particularly on a sustained basis

Base Case Results
Average Power Costs (2026-32)



- Average cost of partial requirements energy by year under the Base Case
- Bid 2 reflects lower demand and energy rates than Bid 1
- Bid 3 reflects higher demand costs due to the 12-month ratchet but generally lower energy rates
- Average annual costs:
  - Bid 1: $15.5M
  - Bid 2: $13.8M
  - Bid 3: $15.9M
- Note: Bid 2 requires LWB to surrender its FPL transmission rights

Base Case Results
Annual Average Power Costs



- Cost trends generally follow NG prices higher from 2026 to 2027 and then slightly lower over 2028-2032
- Bid 2 has the lowest costs in all years (but requires LWB to give up transmission rights)
- Bid 1 costs are slightly below Bid 3 in all years
- Note:
  - Assumes the same load and solar production profiles each year

Evaluation Conclusions

Category	Bid 1	Bid 2	Bid 3
Projected Power Costs	2nd lowest cost bid under the Base Case and most sensitivities	Lowest cost bid under the Base Case and all sensitivities	Highest cost bid under the Base Case and most sensitivities
Transmission Rights	Allows LWB to maintain its FPL transmission rights	Requires LWB to give up its FPL transmission rights	Allows LWB to maintain its FPL transmission rights
Key Risk Considerations	• Relies on LWB capacity nominations to manage demand costs and supply risk • Most sensitive to NG prices	• Re-establishing FPL transmission rights after term-end may be costly • More sensitive to NG prices	• Low solar output or GT2 outages during peak hours causes higher costs for up to 12 months • Additional solar or a battery resource would be less economic due to demand determination (billing demand hour would simply shift later)

THANK YOU

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Appendix – Analysis Details

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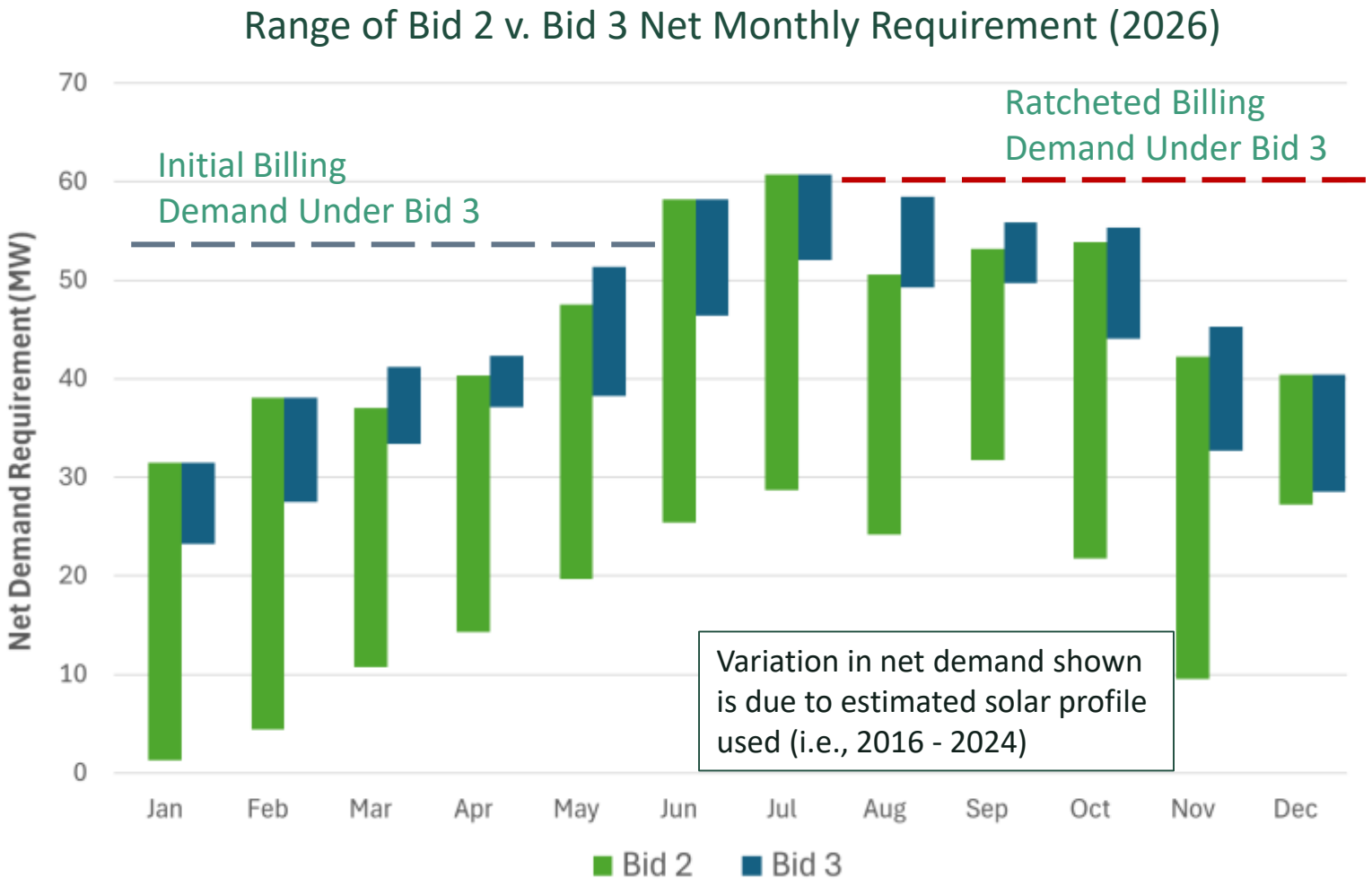
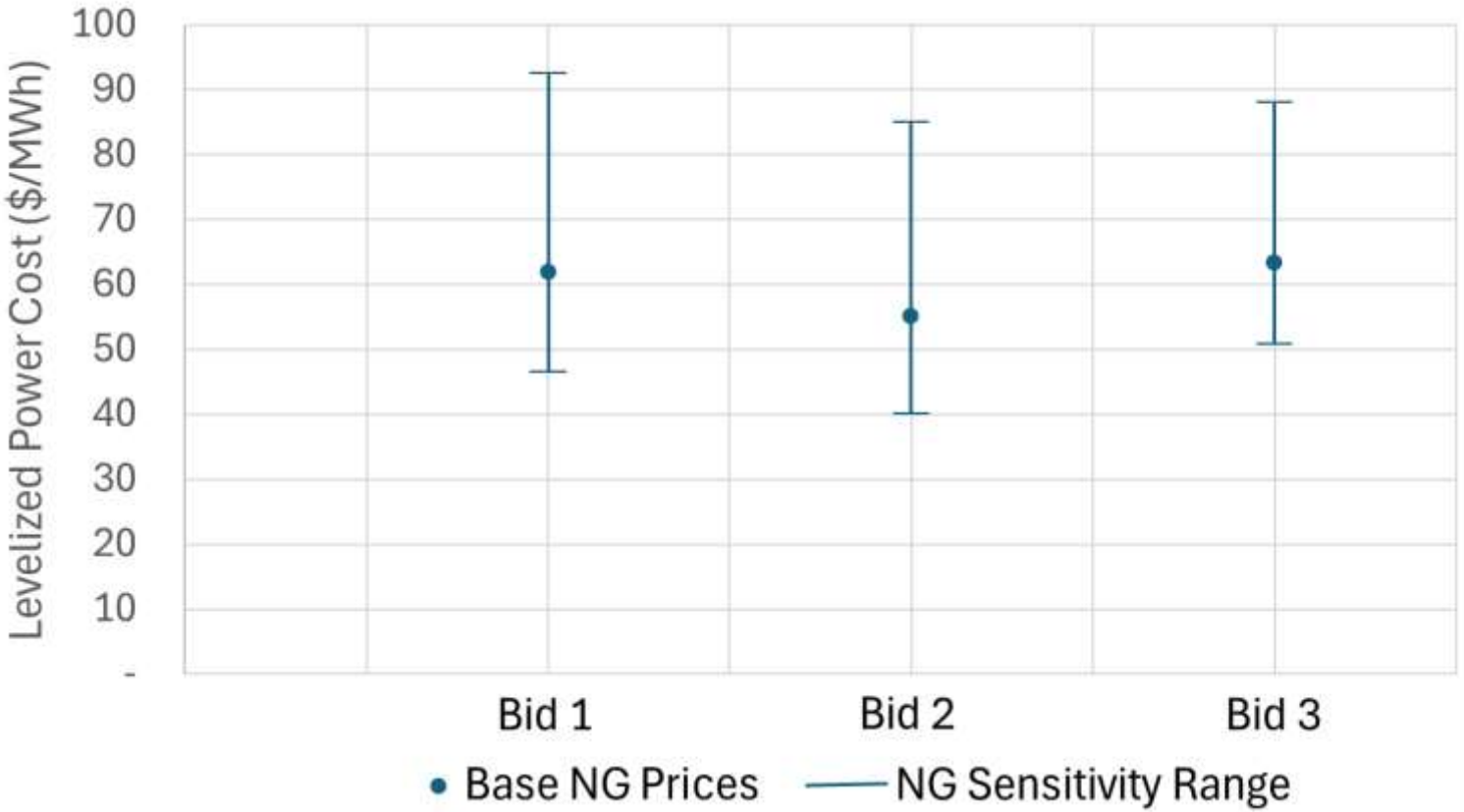
Billing Demand Methodology Comparison

- **Bid 1** – LWB nominates Base and Intermediate Capacity Amounts
- **Bid 2** – Sets monthly Billing Demand based on peak demand net of LWB resources (at the time of peak)
- **Bid 3** – Sets monthly Billing Demand based on maximum demand net of LWB resources for any hour in the month and reflects a 12-month ratchet

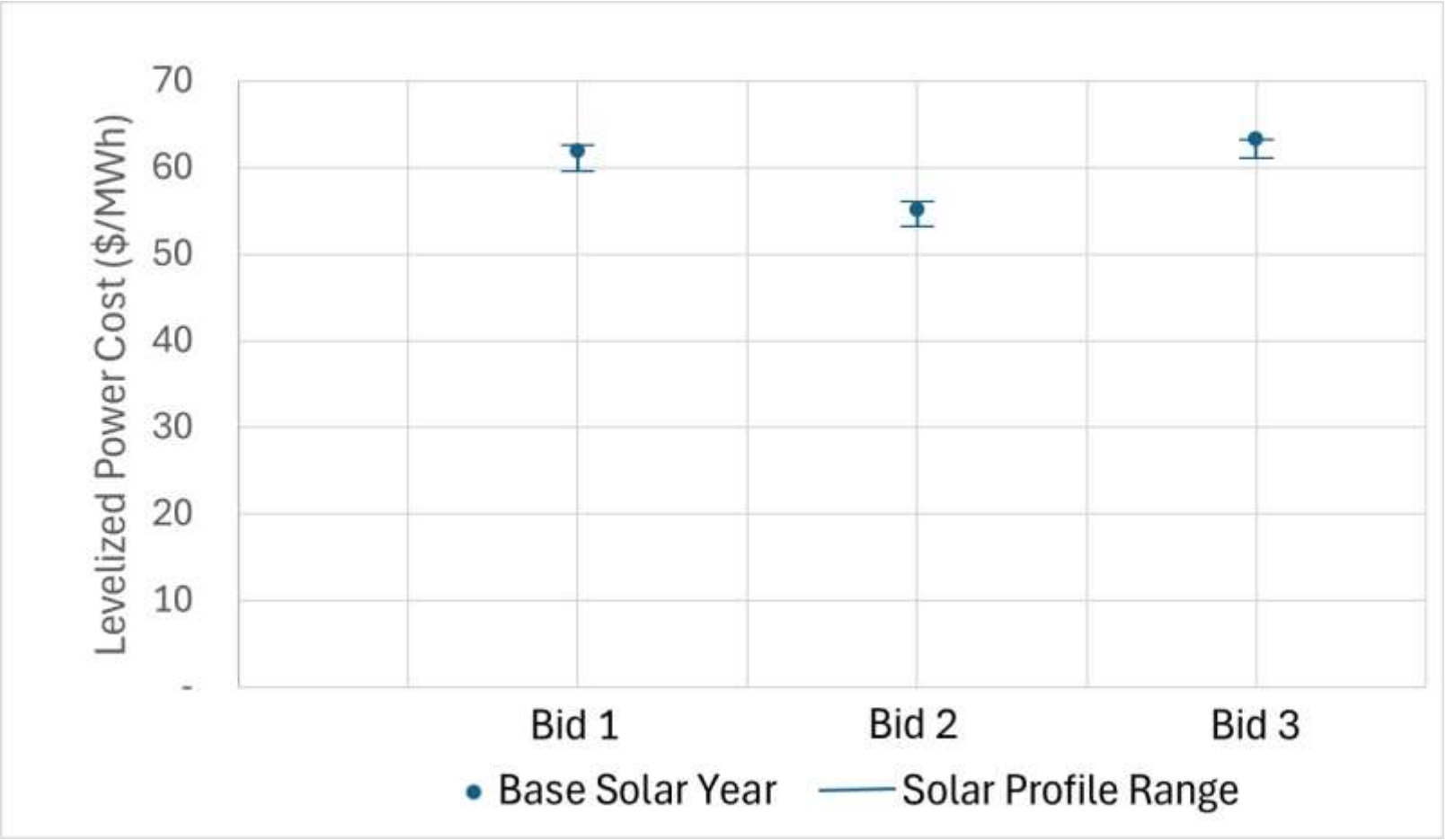


Sensitivity Results
Natural Gas Price Variation



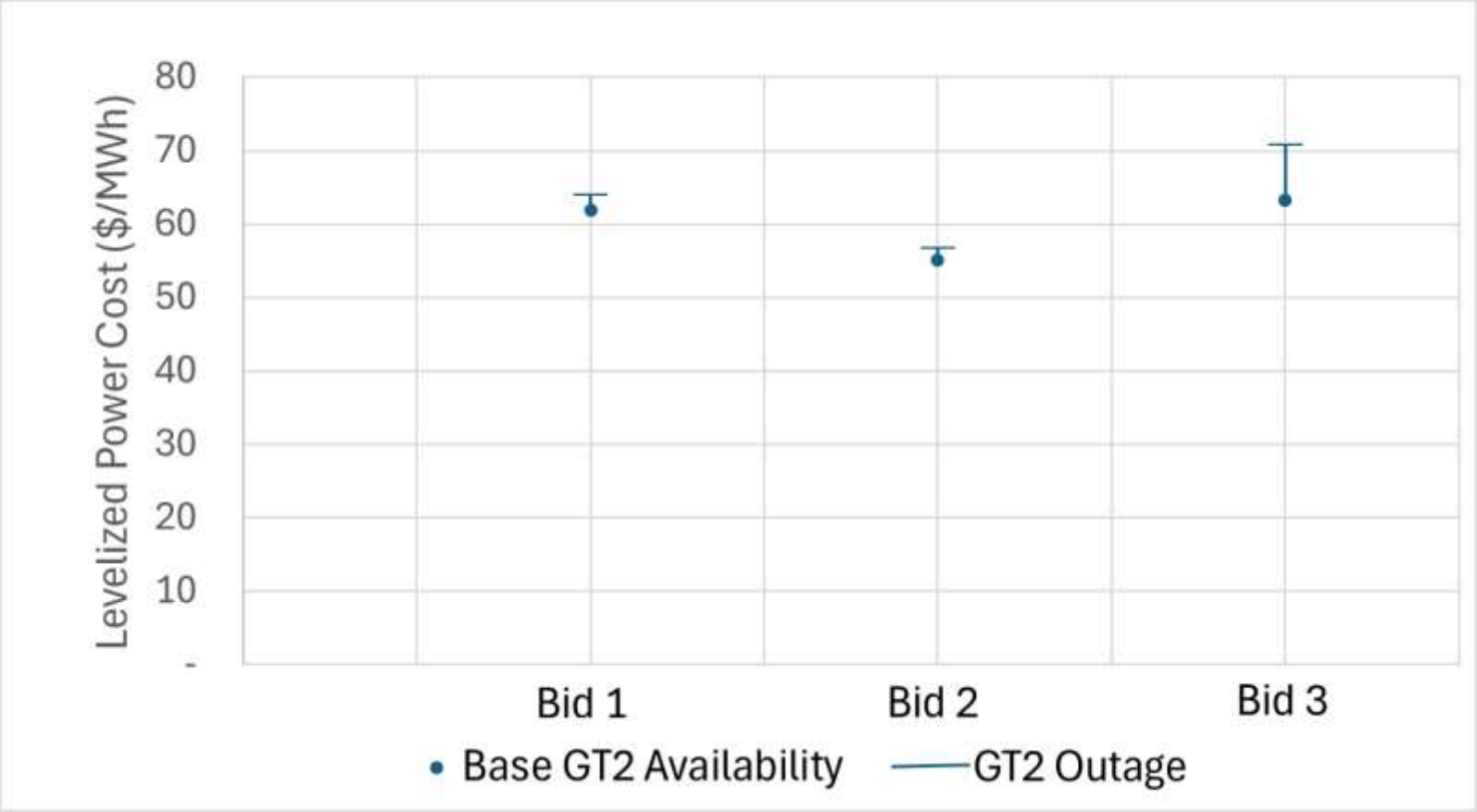
- Average natural gas price over 7-year term
  - Base: $4.40
  - High: $8.00
  - Low: $2.60
- Bid 1 and 2 reflect higher heat rates and hence are more sensitive to NG price variations

Sensitivity Results
Load and Solar Production Profile Variations



- Evaluated power costs using load and solar profiles from 2016 – 2024
- Bid 3 is less sensitive to these variations due to (i) the ratchet and (ii) at least one relatively poor solar production hour being typical during peak hours
- LWB's typical peak demand timing in summer months has generally been trending to later in the day (hour ending 5-6pm)
- Note: Assumes the same profile every year, which is unlikely

Sensitivity Results
GT2 Availability



- Modeled outage of GT2 under three bids
  - June – August (all years)
  - Assumes no coverage by GT1
- NPV cost increases
  - Bid 1: $3.1M
  - Bid 2: $2.4M
  - Bid 3: $11.0M
- Bid 3 reflects the largest increase due to 12-month ratchet (even a single summer month outage would have a similar impact)