



U.S. Virgin Islands Water and Power Authority

Presentation to the Committee on Government Operations and Consumer Protection

October 19, 2022



U.S. Virgin Islands Water and Power Authority

Preliminary Draft – Work in Process / Subject to Material Change

Information contained herein has not been independently verified and is subject to material change based on continuing review. Accordingly, the information contained herein is not intended to be and should not be relied upon by any third party or as legal, auditing, or accounting advice.

The analyses, assumptions and underlying data herein are the product of U.S. Virgin Islands Water and Power Authority ("WAPA") and its management ("Management") and consist of information obtained solely from WAPA. The information contained does not purport to be complete nor to contain all the information that may be considered, or may be necessary in appropriately evaluating, such information or potential transactions. In addition, we have no responsibility to update this analysis for events or circumstances occurring after the date of this analysis. Any activities undertaken to evaluate the reliability or completeness of the information received by us from the Company in the context of our preparing this analysis are identified herein. No other evaluations of reliability or completeness were performed.

With respect to prospective financial information relative to WAPA, there has not been any examination, compilation or application of agreed upon procedures to such information in accordance with attestation standards established by the AICPA. Consequently, no assurance of any kind is given with respect to, or on, the information presented. It is WAPA's responsibility to make its own decision based on the information available to it. Management has the knowledge, experience and ability to form its own conclusions related to WAPA's analyses. There will usually be differences between forecasted and actual results because events and circumstances frequently do not occur as expected and those differences may be material. As a result, no responsibility for the achievement of forecasted results is made. Accordingly, reliance on this report is prohibited by any third party as the projected financial information contained herein is subject to material change and may not reflect actual results.

Many of numbers set forth herein are estimates or based on assumptions which are subject to change. Such changes may be material and can materially affect the calculation of other amounts reflected herein.



Executing the Strategy

Current Financial Situation



Fuel, payroll and debt service payments prioritized to maintain operations; payments can only be made by delaying payments to most other vendors



All working capital facilities are fully drawn; ~\$50 million in lines of credit have been maxed for over 3 years



Authority owes **money to every major vendor** (e.g., Vitol, Seven Seas, Aggreko)

- **\$40 million in past due** balances to various vendors, not including Vitol



Authority is **not current on remittance of employee withholdings** for retirement benefits to GERS

- New management team **implemented corrective action**
- Expect to be **current by April 2023** with employee payments



The Authority **is maintaining its rates** with financial support from the GVI to shield customers from high fuel prices

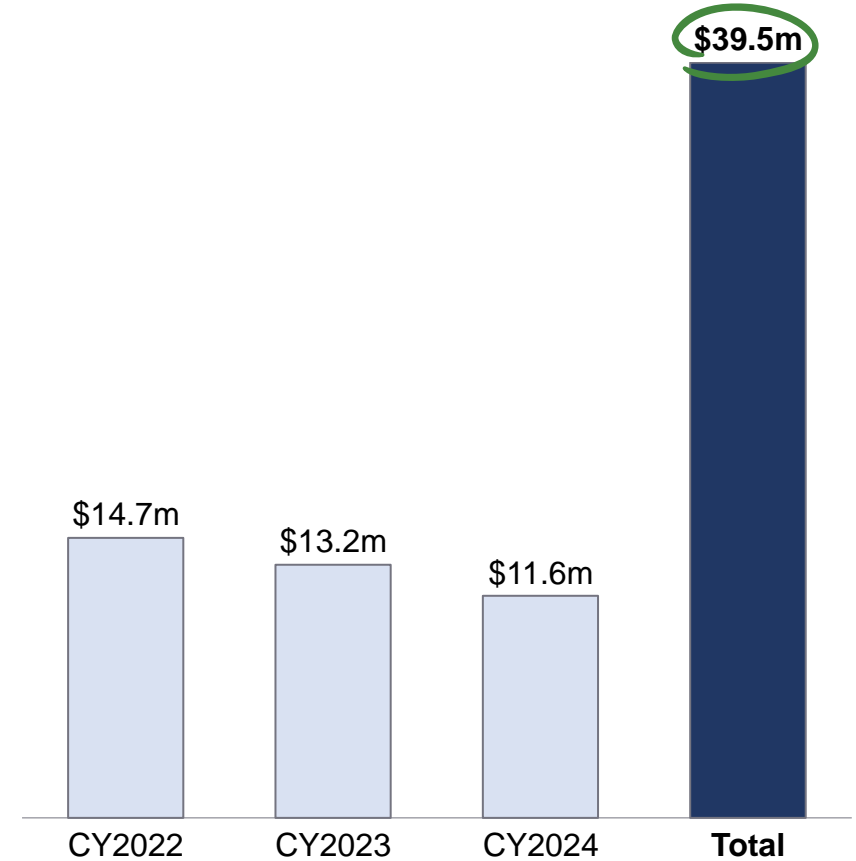
The Authority is in a dire financial situation but is executing its turnaround plan

Accomplishments to Date - Financial



Executed Transformational Initiatives		CY2022	CY2023	CY2024	Total
Savings Achieved					
(1a)	Purchase GE Unit 27 - Avoided Lease Payments	\$ 5,714,853	\$ 8,784,029	\$ 8,784,029	\$ 23,282,912
(1b)	Purchase GE Unit 27 - Past Due Lease Payments	5,124,017	-	-	5,124,017
(1c)	Purchase GE Unit 27 - Buyout Cost	5,200,000	-	-	5,200,000
(2a)	2022 BANS - Avoided Cash Interest ¹	1,525,000	3,250,000	1,625,000	6,400,000
(2b)	2022 BANS - Eliminated Advisor Costs	100,000	-	-	100,000
(3)	Hiring Freeze - Only Critical Roles Filled	854,000	854,000	854,000	2,562,000
(4)	DOI Lineman Safety Training Grant	750,000	-	-	750,000
(5)	Fuel switching during Ukraine Invasion	500,000	-	-	500,000
(6)	Cancelled rate design consultant	500,000	-	-	500,000
(7)	Cancelled Bolongo Lease (Net Savings)	120,000	120,000	120,000	360,000
(8)	Received DOI Grant for Hybrid Bucket Trucks	353,000	-	-	353,000
(9)	Avoided Interim CFO Salary	38,245	152,981	152,981	344,207
(10)	Tesla - fuel savings	84,000	84,000	84,000	252,000
(11)	Cancellation of Muni Advisor Contract	240,000	-	-	240,000
(12)	Avoided Strategic Plan Costs	175,000	-	-	175,000
(13)	Line of Credit Fee Savings	117,000	-	-	117,000
(14)	Reduced Insurance Premium and Deductible ²	98,584	-	-	98,584
(15)	Cancellation of Plexos consultant contract	60,000	-	-	60,000
Total Savings Achieved		\$ 21,553,699	\$ 13,245,010	\$ 11,620,010	\$ 46,418,720
Cost to Achieve					
(1)	Purchase GE Unit 27 - Implementation Cost	\$ (6,895,000)	\$ -	\$ -	\$ (6,895,000)
Total Cost to Achieve		\$ (6,895,000)	\$ -	\$ -	\$ (6,895,000)
Total Net Savings		\$ 14,658,699	\$ 13,245,010	\$ 11,620,010	\$ 39,523,720

Annual Net Savings, CY2022-2024



The Authority has implemented multiple transformational initiatives; achieving \$39.5 Million of net savings through 2024

1. 2022 BANS – Avoided Cash Interest: Redeployed unused proceeds from prior series
 2. Deductible cut in half

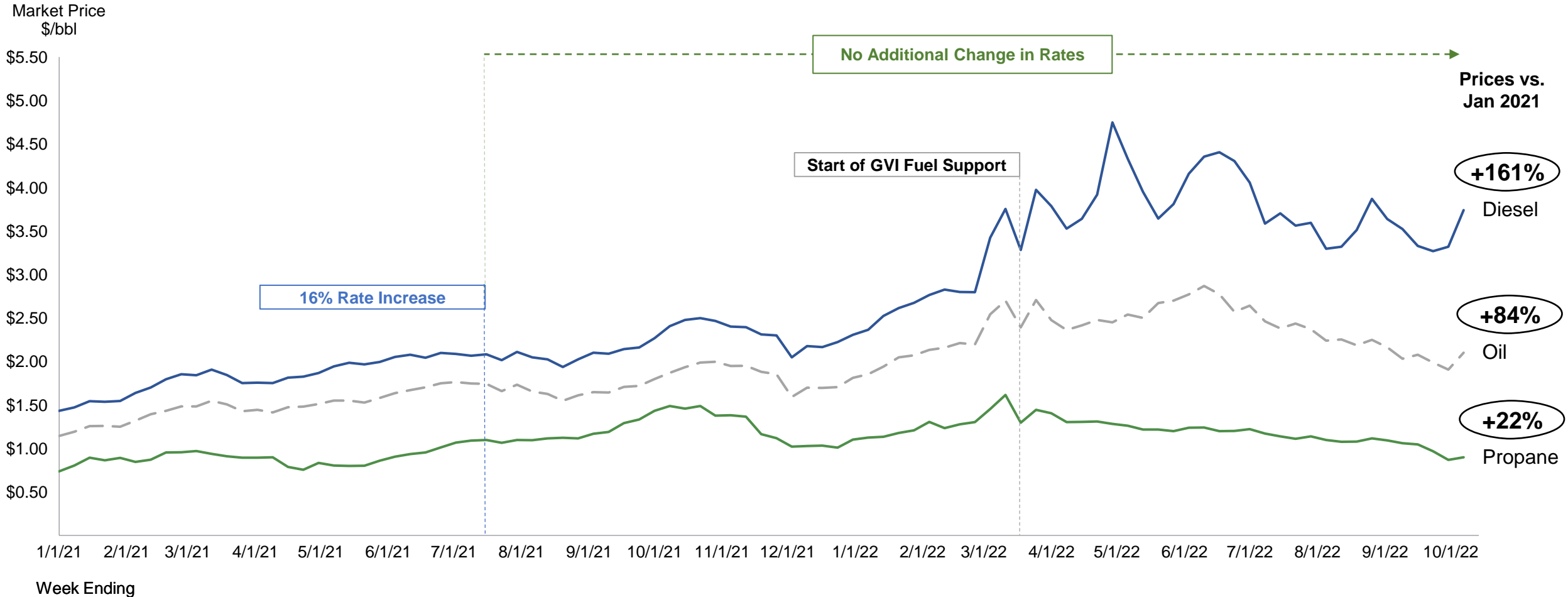
Accomplishments to Date - Operational



1. **Redesigned and secured approval of FY2023 Budget** prior to the start of FY2023
2. Finalized 2020 audit; accelerated schedule for FY21 and FY22 audits to become current and fully transparent
3. **Established weekly Critical Payments Process**
 - a. SRMC implementing same process modeled after WAPA
4. **Advanced negotiations to switch gasoline providers**; delivers automated fuel tracking and fuel savings
5. Aggressively responded to sargassum influx before engaging with federal assistance
6. **Secured FEMA funding of \$1+ billion** for prudent replacement of water infrastructure on STX; assessment for STT in process
7. Anticipate prudent replacement filing for electric generation at end of month
8. **Removed onerous new customer requirements** to increase connections and base rate revenue
9. Engaged with leading engineering firms to solve propane conversion challenges, converting units previously thought unable to be converted
10. Secured 1 hybrid and 2 conventional bucket trucks in highly scarce market
11. Implemented process to **increase capture of reimbursable management costs** for federal projects
12. **Aggressively countered VITOL's early threat** to shut off fuel supply
 - a. No payment to VITOL to resolve the threat; prior VITOL threats resulted in payment from the Authority
13. New leadership over the garage, warehouse, and real estate
 - a. Originally ~50% of vehicles out of service; only 1 of 6 bucket trucks in operation on STT and STX
 - b. **Increased vehicles in service by ~65%**; all bucket trucks now in service on STX
 - c. STT truck maintenance was not gaining traction; set money aside & recently signed purchase agreement for 2 new trucks
14. Staffed the COO and CFO roles with deeply experienced professionals; COO started 4/11 and CFO started 4/19
15. Identified and executed process to truck fuel to STX Richmond plant when weather conditions prevented waterborne deliveries
16. **Safety glasses now mandatory** inside plant fence
17. Reorg of operations team to effectively carry out the WAPA mission
18. **Creation of Data and Organization team** to effectively capture and analyze data; limited data or analysis existed previously, if any
19. Re-based PSC relationship

Numerous meaningful improvements implemented in a short period of time

Fuel Prices (January 2021 – Present)

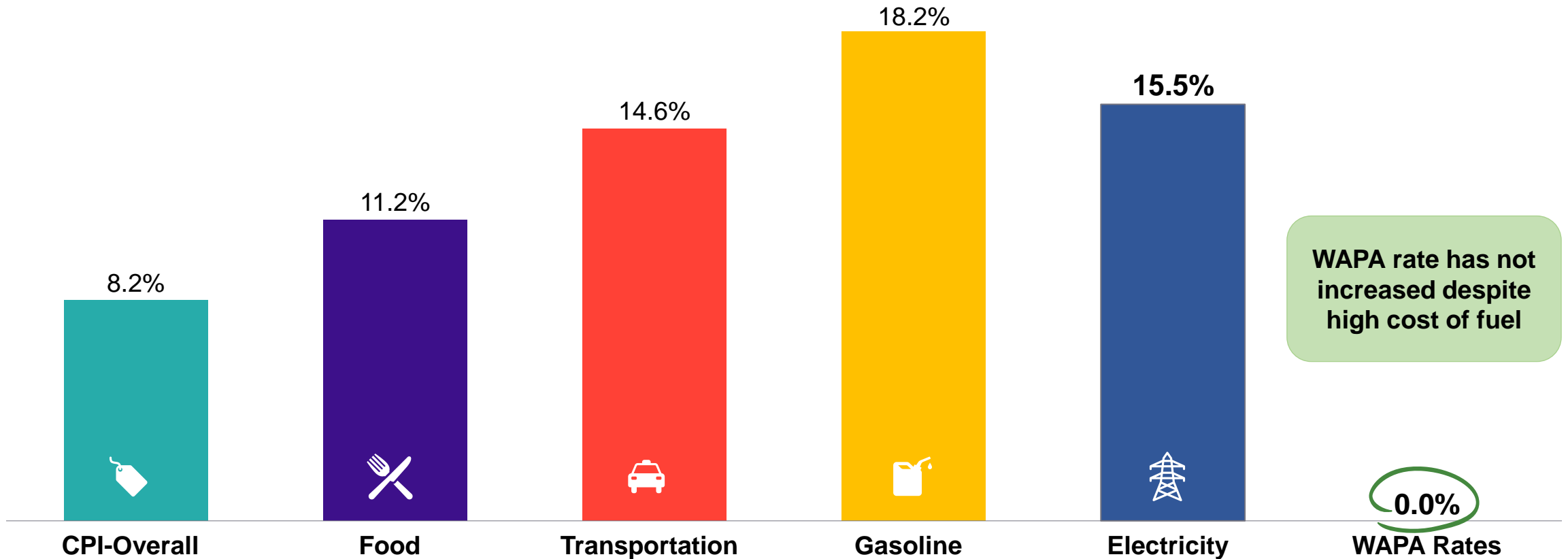


All-time high fuel prices being absorbed by WAPA to protect customers

Rising Prices Across the Economy Versus the WAPA Rate

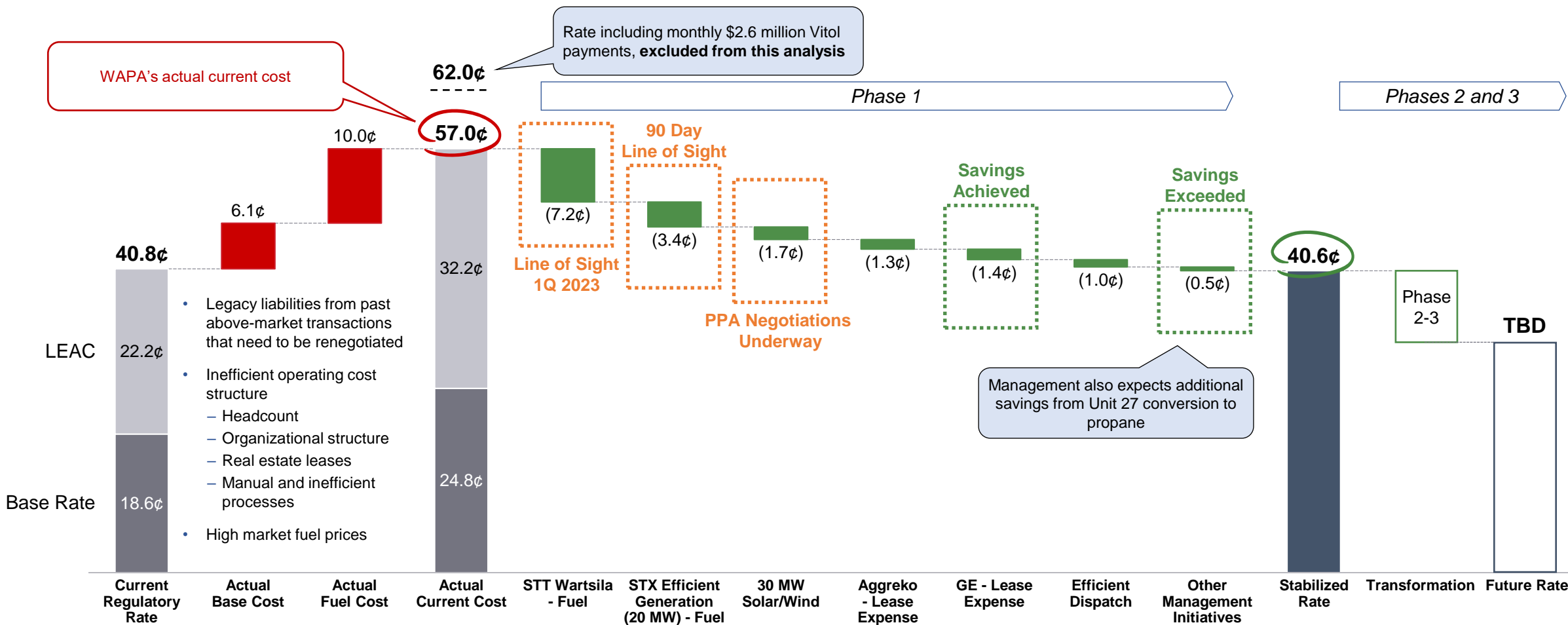


Change in WAPA Rate vs. Change in Consumer Price Index (CPI), Sept 2021- Sept 2022



WAPA absorbing the high cost of energy to protect customers who are experiencing higher costs for all other goods and services

Rate Bridge to Financial Sustainability (¢ per kWh)¹ – Strategic Update



WAPA executing on its strategy to get off support from GVI

1. Savings are versus current fuel prices.



Bringing Significant Renewable Energy to the Territory

Why Solar and Battery Storage?



- A large solar development with storage achieves two objectives:
 - Fulfills an initiative announced in early 2022 by the Governor of the US Virgin Island, the Honorable Governor Albert Bryan,, Jr. to transition St. Croix to 100% solar energy
 - Successfully executes an internal Authority strategic initiative to displace expensive and volatile fossil-fuel generation with lower, more stable, solar energy cost
- Less dependence on fossil fuel helps customers by insulating them from spikes in commodity prices
- Solar without battery storage destabilizes the grid when cloud cover disrupts solar production
- Focus is on St. Croix initially because it has more favorable land conditions; St. Thomas and St. John solar also under consideration
- The Authority's rates are a Territory-wide rate, so the Territory receives the benefits from solar regardless of where the project is built
- The Authority intends to contract for solar and storage through a Power Purchase Agreement, or PPA
 - The Authority will not build, own, or operate the system

Solar is transformative for the Territory because it reduces dependence on volatile, imported fossil fuel



- The Authority proactively reached out to developers with both a local presence and international solar developers for indications of interest in terms of price and project scope starting in April
- Two proposals were requested:
 - A proposal based on standardized key assumptions
 - A proposal the developer optimized in terms of scale and combination of storage
 - The Authority provided the same dataset to all counterparties and provided supplemental data when requested and appropriate
 - The Authority engaged with the participating counterparties in a robust discussion about the proposals, how the proposals could be refined and improved, and how the various systems are designed to work
- The process was not intended to result in a PPA contract to sign at this stage, but rather to identify the leading counterparty, or counterparties, to enter more extensive negotiations to reach an executable PPA
- The Authority has presented this same information to both the Public Services Commission (PSC) and its Governing Board, both in public forums
- The Authority intends to return to the PSC as well as its Governing Board in public forums with an executable PPA

Maintaining open communication with the PSC and the Governing Board to ensure transparency



Key Factors Drove Selection of Counterparties for PPA Negotiation

- Price
 - Notional price
 - Fixed price vs. escalating price
 - Cost to the Authority's customers over the life of the contract
- Counterparty's performance capability
 - Financial backing
 - Development track record
 - Access to solar panels and battery storage
- Buyout options
 - The Authority may not be able to execute a buyout of the contract to avoid the PPA cost; however, the Authority wants to retain the option

Price is a major driver but ability to successfully execute the project also key

Solicitations for St. Croix Solar and Storage



Opportunity to Install Significant Solar and Battery Capacity for St. Croix Quickly

- Solicited offers from seven developers, some with global presence and some with Virgin Islands presence
- Developed under a Power Purchase Agreement; no material capital cost for the Authority
- The Authority's weak credit may be a gating item

Global Vendors

- NextEra Energy – largest renewable owner/operator in the world
- Invenergy – Largest private solar developer in the world
- Leeward Energy (purchased FirstSolar's development portfolio) – 2,500 MW in operation; developed over 20,000 MW

Vendors With Virgin Islands Presence

- Haugland VI
- VIElectron LLC
- Core Development
- West Indies Solar

Leeward Energy appears to have provided most attractive indicative offer based on initial proposal

Lowest Price of Utility Scale Solar Companies

Serve Significant Annual Load

Panels and Storage in Inventory

Potential to be In Service in 12 Months

Transformational opportunity to install solar and battery capacity on St. Croix

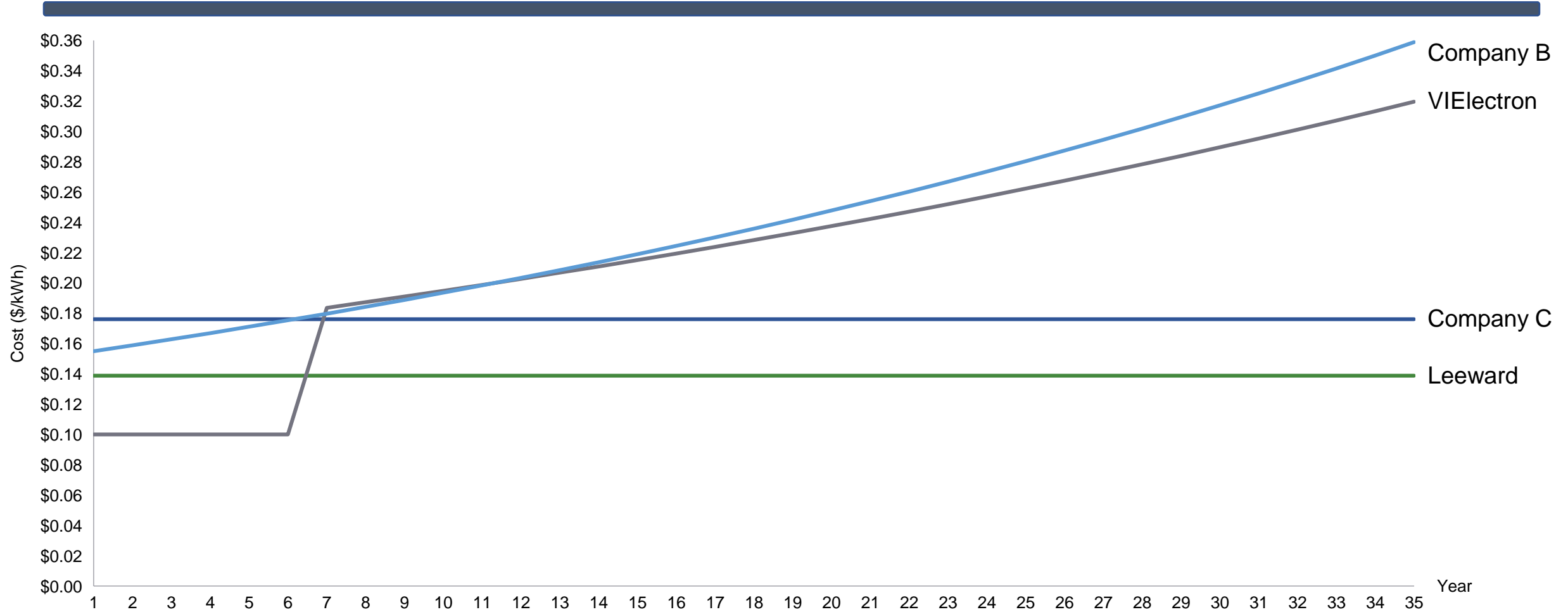
Company Participation



Company	Status	Comments
NextEra Energy	Participated	Required \$200 million+ cash guarantee
Invenergy	Participated	Indicative offer
Leeward Energy	Participated	Indicative offer
Core Development	Participated	Indicative offer
VIElectron	Participated	Indicative offer
Haugland VI	Participated	No proposal received
West Indies Solar	Participated	Withdrew

Some companies provided proposals, others exited the process

Notional Price Over Term of PPA – Initial Submissions



Price escalation is not an attractive structure



Levelized Cost of Energy

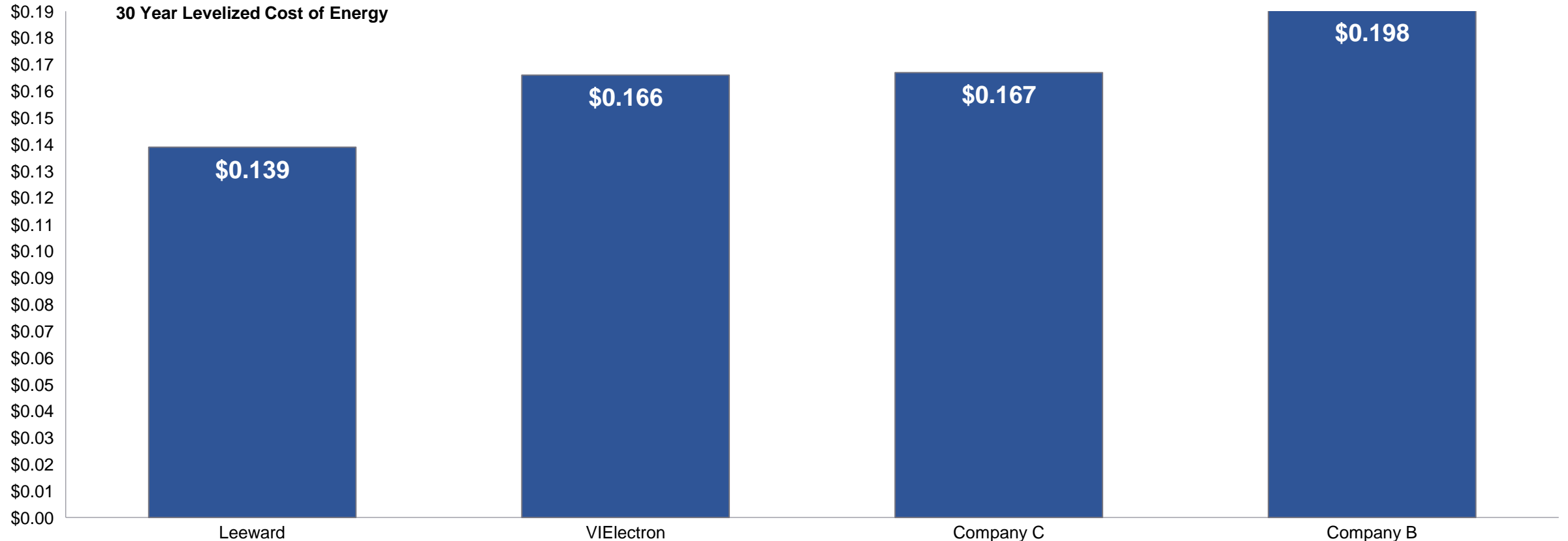
- Comparing a proposal that has a fixed price versus an escalating price or two proposals that have different price escalation profiles requires additional analysis
- Calculating the Levelized Cost of Energy (LCOE) facilitates that comparison; the calculation entails:
 - 1 Calculate the notional monthly cost of the PPA based on contract pricing and projected kWh production
 - 2 Choose a discount rate (we are using 8%) and calculate the Net Present Value (NPV) of the stream of payments over the life of the PPA
 - 3 Calculate the non-escalating monthly payment that results in the NPV calculated in Step 2
 - 4 Divide the resulting payment by the projected kWh of production to calculate the LCOE per kWh
- The LCOE for a fixed-price PPA will be the same as the PPA contract price
- The LCOE for an escalating-price PPA will be higher than the PPA price in the early years of the PPA

Levelized Cost of Energy facilitates comparison of proposals with different structures

Levelized Cost of Energy – Initial Submissions



Levelized Cost of Energy Facilitates Comparison of Proposals with Different Structures



Ensuring the lowest cost for our customers