# FMPA Strategic Planning Session

Board of Directors and
Executive Committee

Feb. 12, 2025

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# What is your role for the city/utility?

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# Session Outline

## *What We've Achieved and What's on the Horizon*

1. Review of Vision, Mission and Values
2. Review of February 2023 Strategic Priorities
3. Review Strategic Planning Material and Identify Potential Priorities
   - A. Drivers of FMPA and Member Business (Natural Gas Stability)
   - B. 2025 IRP Refresh – 20 Year Baseline Assumptions – Load Growth/Data Centers and Generation (New Nuclear)
   - C. Existing Units Life Extension Competitive Option
   - D. Potential Value of Balancing Authority Alternative and/or FMPP Services Expansion
   - E. KEYS Energy Reliability Plan
   - F. FMPA and Fleet Succession Planning
   - G. Asset Capital Plan and Rate Projections
   - H. Member Services - Rates Competitive – Enhance Distribution Reliability and Other Services
   - I. Review Overall Electric and Natural Gas Market Outlook (Background Information)
4. Lunch
5. Review and Categorize Identified Potential Strategic Priorities
6. Develop Consensus on Top Strategic Priorities for Next Two Years

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# Review of Vision, Mission and Values

# FMPA Vision and Mission

## Vision

- To sustainably be the lowest cost, and a reliable and clean wholesale power provider in Florida.

## Mission

- To provide low-cost, reliable and clean power plus value-added services for FMPA's owner-customers that benefit their communities and customers.

# Seeking Feedback on Vision and Mission

- Resources within portfolio supporting lower emissions in environmentally responsible manner
- Resources tagged as “clean” may have aspects of mining, processing and delivery that are less so
- “Clean” could be displaced with intent to balance environmental responsibility and lower emissions with costs and reliability
- Suggest alternatives “environmentally responsible,” “lower emissions,” or "responsibly generated" to add clarity to Vision and Mission

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# We Want Your Feedback

How much do you agree or disagree with this Mission and Vision for FMPA from an overall perspective? Please provide your feedback in the first poll.

Should the notion of “clean” be evolved to add clarity to the Mission and Vision? Please provide your feedback in the 2nd poll.

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# To what extent do you agree with FMPA's Mission and Vision statements?

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# Should FMPA clarify the term “clean” in its Mission and Vision statements?

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# FMPA Values

- A culture that values both our employees and operating agents and their safety
- Teamwork among our employees and our public power member-owner-customers
- Trust built through honesty, integrity, transparency, open communication and respect
- Employee development, recognition, reward and empowerment
- Low-cost electricity for all customers
- Environmentally-responsible operations that consider impacts of raw materials and transportation resources for generation
- Member and employee diversity and inclusion
- Innovation and excellence
- The individual needs and desires of FMPA's owner-customers shall be given the strongest consideration, consistent with the best interests of all owner-customers

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# Review of February 2023 Strategic Priorities

# We've Made Good Progress Since 2023

*Priority Efforts Support Low-Cost Power For Member Value*

| Rank | Strategic Priority | Steps Taken |
|---|---|---|
| 1 | Advocate for Abundant Natural Gas Supply and Pipeline Expansions to Keep Costs Low | • FMPA comments to EPA on GHG rule for nat. gas CCs & CTs<br>• Led FRCC comments on EPA's on GHG rule for nat. gas CCs & CTs<br>• Support of proposed permit reform Legislation from Senate<br>• Significant CEO social media reach on affordability and reliability<br>• Active Participation in FCG/APPA/FRCC commentary highlighting FL's natural gas dependence to quantify reliability impacts of rule |
| 2 | Begin Engaging in Discussions to Explore Viable Nuclear Resource Opportunities | • Lead role in FCG Next Generation Nuclear Workgroup<br>• Supported PSC workshop on nuclear opportunities and impacts on FL's fuel diversity – state study process underway<br>• Direct executive discussions on nuclear expansion w/FPL & Duke |
| 3 | Explore Expanding Membership in the Florida Municipal Power Pool | • FMPP Service Expansion Study completed estimating ~$24M in benefits per year w/o transformational BA expansion<br>• "Walk-first" services desired by broader group for early-stage work via existing BAs<br>• Initiated Alternative BA study and negotiations to add value to FMPA and other participant |

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# We've Made Good Progress Since 2023

*Priority Efforts Support Low-Cost Power For Member Value*

| Rank | Strategic Priority | Steps Taken |
|---|---|---|
| 4 | Evaluate Capital Funding Strategies That Align Debt Utilization With Competitive Rates | • Approved Debt guidelines for projects > $500k and 5-year useful life<br>• Solar pre-pays pursued with at least 8% anticipated benefits<br>• Financing targeted for FY 25 & 26 balanced with $20M annual deposits to R&R fund to smooth rate impacts of capital needs<br>• Expanded capital expectations review for plants to 10 yr horizon |
| 5 | Continue Gradual Pursuit of Solar and Battery Opportunities | • Finalized renegotiated Solar Phase II/Phase III agreements with Origis, allowing for right-sized go forward allocations<br>• Rice Creek online Q4 2024, Whistling Duck development ongoing<br>• REC sale opportunities presented; Members desire to keep RECs<br>• Continuing alternative site exploration work with S&L on two plausible BESS options to support KEYS transmission congestion |
| 6 | Identify Retail Customer's Priorities Regarding Electricity Needs | • ARP solar feedback supports gradual, cost-effective additions<br>• Member REC workshop resulted in no go-forward sale of RECs<br>• Member Satisfaction Survey Conducted in FY 2024<br>• Support for several PCA efforts with Members |

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# ARP Priorities Focused on Price Stability, Cost Savings

*Good Success Addressing Price Stability Risk, More Work to Do*

| Rank | Strategic Priority | Steps Taken |
|---|---|---|
| 1 | Develop Systematic Approach to Reducing Exposure to Natural Gas for Power Cost Stability | • FGU and FMPA team coordination on strategy<br>• EC approved programmatic targets approach in FY '24<br>• Margining needs flow through rates<br>• Ongoing tracking of program performance and costs<br>• Price stability program updates for EC on recurring basis |
| 2 | Continue High Availability for FMPA's Low-Cost Generating Resources | • Base, intermediate, and peaking assets EAF above industry average for both FY '23 and FY '24<br>• Stock Island dispatch trending higher with >90% success rate on starts to support load & transmission<br>• Goals for fleet for 90% completion of reliability focused capital projects<br>• Weatherization projects implemented at CI and TCEC |

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# ARP Priorities Focused on Price Stability, Cost Savings

*Good Success Addressing Price Stability Risk, More Work to Do*

| Rank | Strategic Priority | Steps Taken |
|---|---|---|
| 3 | Maximize Asset Value/Minimize Costs With Significant Expansion of the FMPP | • FMPP Service Expansion Study completed estimating ~$24M in benefits per year w/o BA expansion<br>• "Walk-first" services desired by broader group for early-stage work under existing BAs structures<br>• Initiated Alternative BA study and negotiations to add value to FMPA and other participant |
| 4 | Pursue More Municipal Third-Party Sales That Add Value to ARP and Municipal Customers | • CFTOD extension secured for excess capacity value<br>• Seasonal strike with TEA to further optimize reserves<br>• Active capacity sales (e.g. TECO & JEA) when long<br>• Cumulative benefit of third-party sales including FMPP and residual ~$18.7M or ~$1.60/MWh in cost reduction for ARP Participants over last 2 fiscal years |

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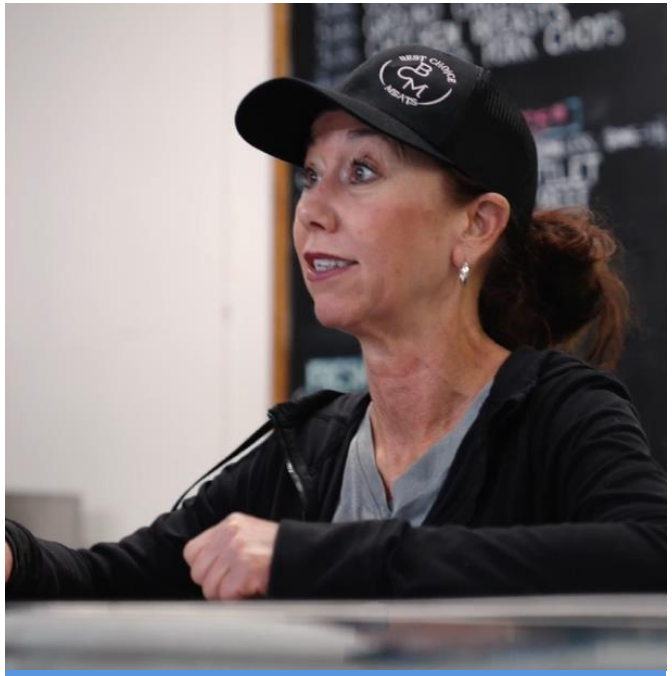
# Drivers of FMPA and Member Business (Natural Gas Stability)

# FMPA's Mission Important for Floridians

*Lower Wages, Less Disposable Income, Higher Consumption*

**LOW-COST POWER**

Customers Need It



**RELIABLE POWER**

Customers Expect It

**LOWER EMISSIONS**

Customers Want It

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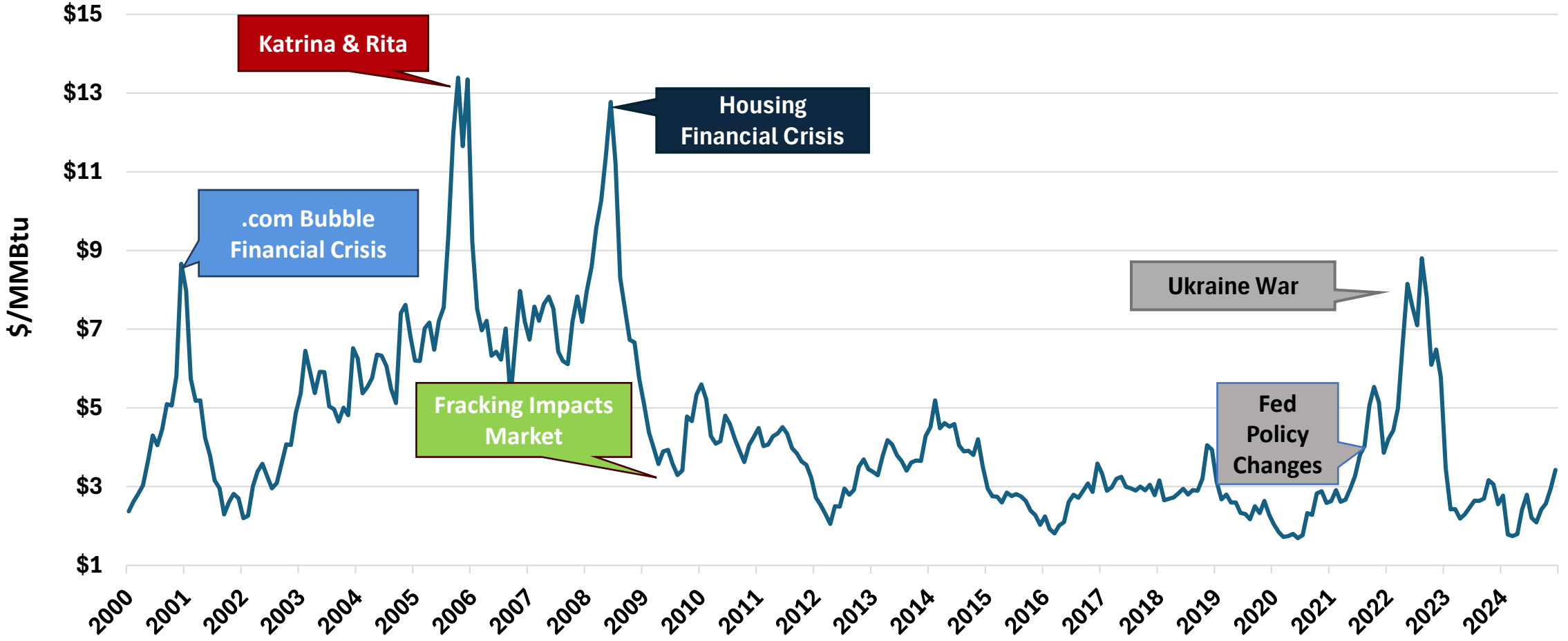
# Natural Gas Price Spikes Lead to Significant FL Costs

*Weather, Financial Crisis, and Russia/Ukraine War Key Drivers for Pricing*

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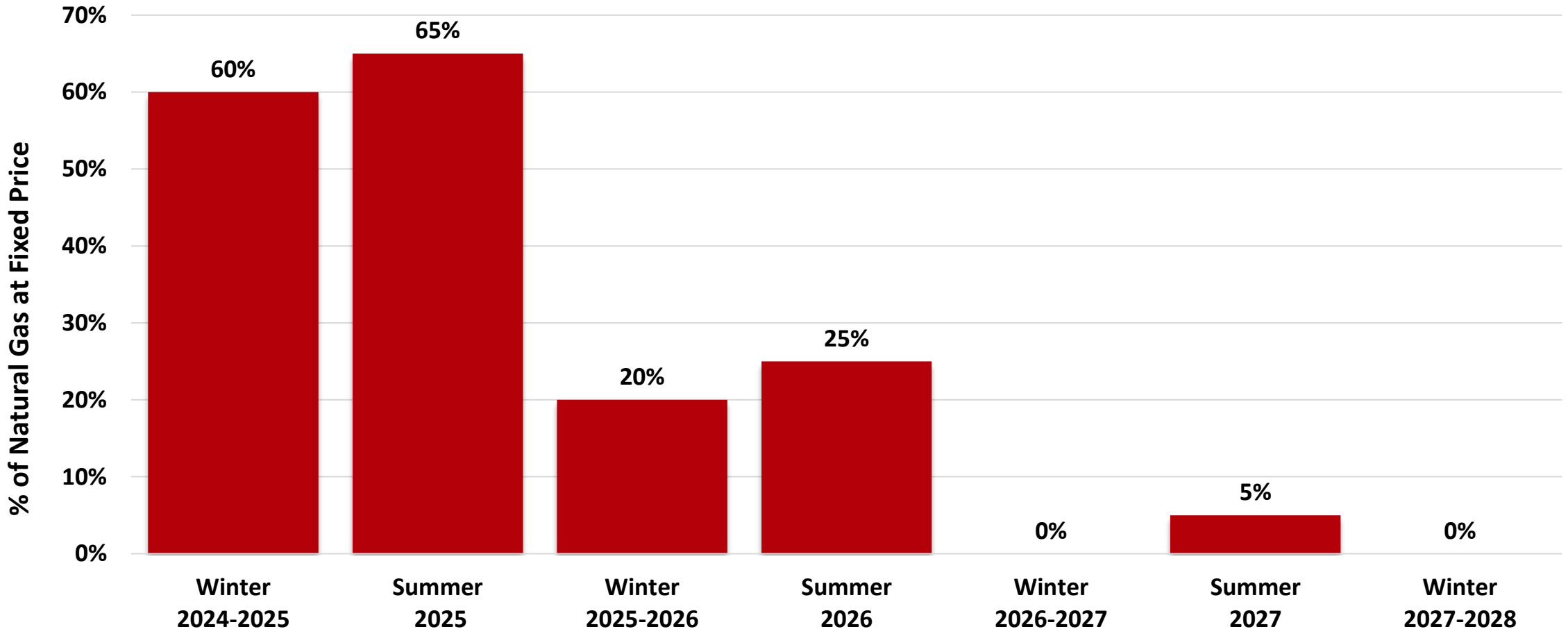
# Approved Rate Stability Program Now In Place

*Current Market Trends Prevent Further Opportunities*

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# Other Significant Challenges Since 2023

*Large Policy Swings Expected With Election Outcome*


- Election outcome favoring abundance and affordability with policy uncertainty with EPA GHG and IRA
- Data Center/ AI accelerating power demand growth
- Markets across the country facing capacity shortfalls
- Price inflation for distribution equipment moderated slightly, but generation and transmission getting tighter
- Supply lead times for critical parts/combustion turbines of 2-4 years jeopardizing reliability
- Significant gas turbine, solar and battery cost increases/delays, due to raw material shortages
- Significant increase in nuclear interest
- Focused on plant availability, managing plant capital spend
- Generation succession plan, SI reliability high priority

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# Long-Term Muni Opportunities & Challenges Remain

*More to Achieve While Working to Optimize Resources*

- Power costs lower and stabilized and with opportunity to actively communicate advantage
- Load growth from Data Centers & EVs lead to higher market value of reliable generation capacity
- Continued improvement in emissions reductions while keeping prices affordable
- Working for balanced long-term portfolio beyond gas & solar – with potential new nuclear
- Continuing to improve reliability of power system and managing member staffing retention
- Handling increased workloads with efficiency opportunities in staff orientation and AI tools
- Goal of increasing the member electric utilities' value to each of their communities and proactively communicating value to key stakeholders

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# We Want Your Feedback

What do you feel are the biggest long-term Municipal electric challenges?

What do you feel are the biggest long-term municipal electric challenges you expect FMPA to assist on?

Please provide your feedback in the polls.

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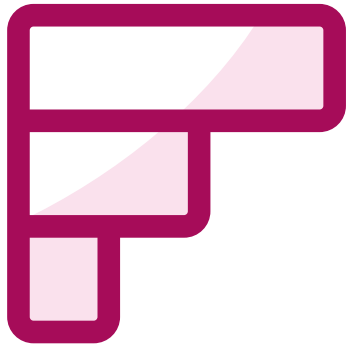

# What are the top three challenges facing municipal electric utilities?

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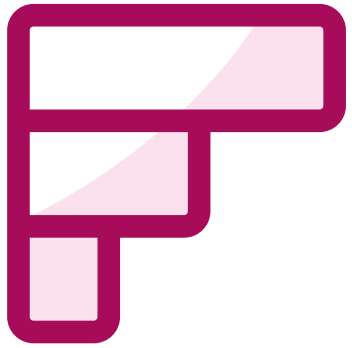

# What are the top three opportunities for FMPA to assist?

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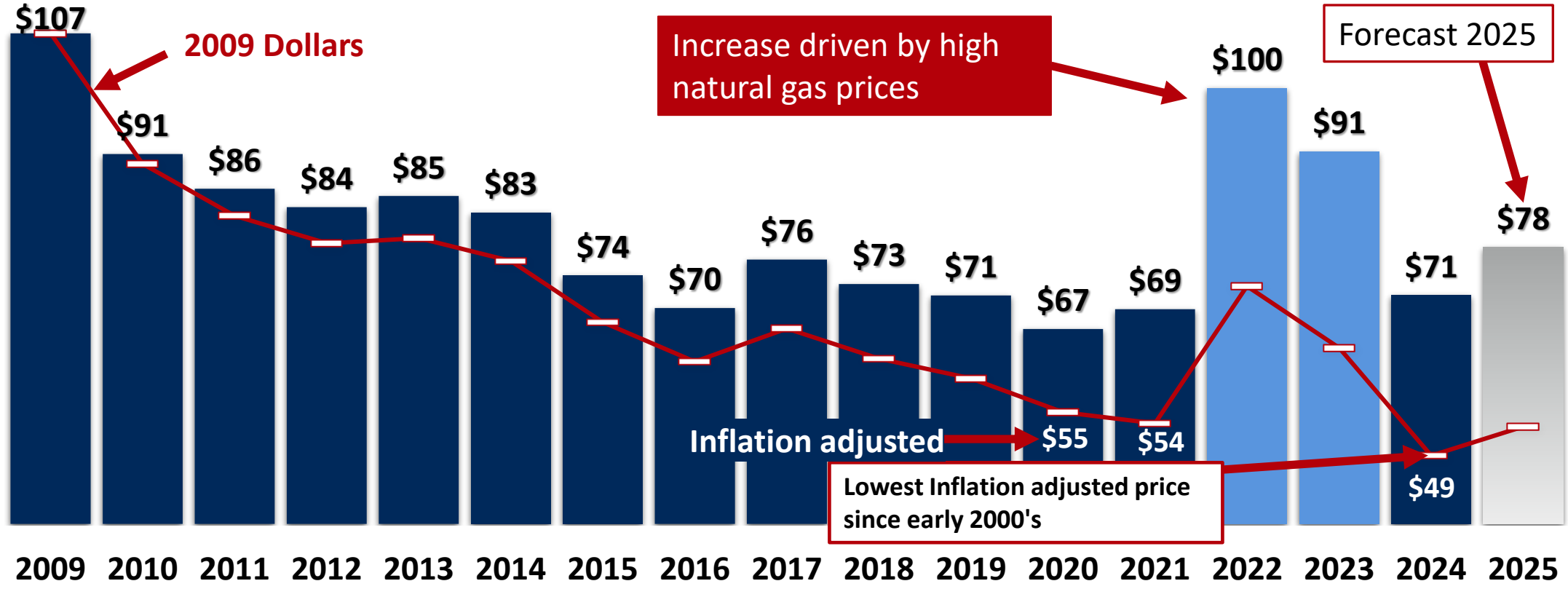
# FMPA Power Costs Coming Back to 2015-2021 Levels

*Inflation Adjusted: 2024 Wholesale Prices Lowest Since 2000's*

## All-Requirements Project Power Costs

Actual cost incurred $/MWh



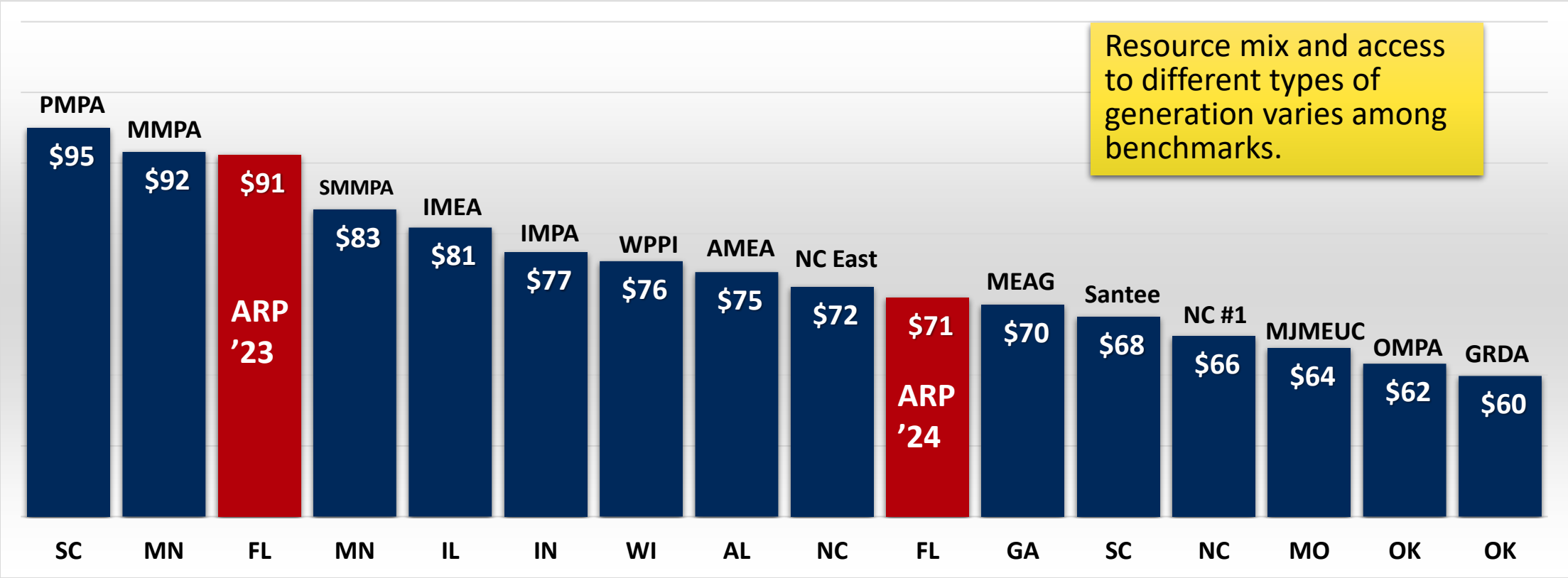

Source: Inflation adjustment: https://data.bls.gov/cgi-bin/cpicalc.pl?

# ARP Rates Competitive With Other JAAs

*'23 Prices Elevated With Gas, '24 Prices Decreased to Lower Half*

## Annual Average Power Supply Costs by JAA (2023*)

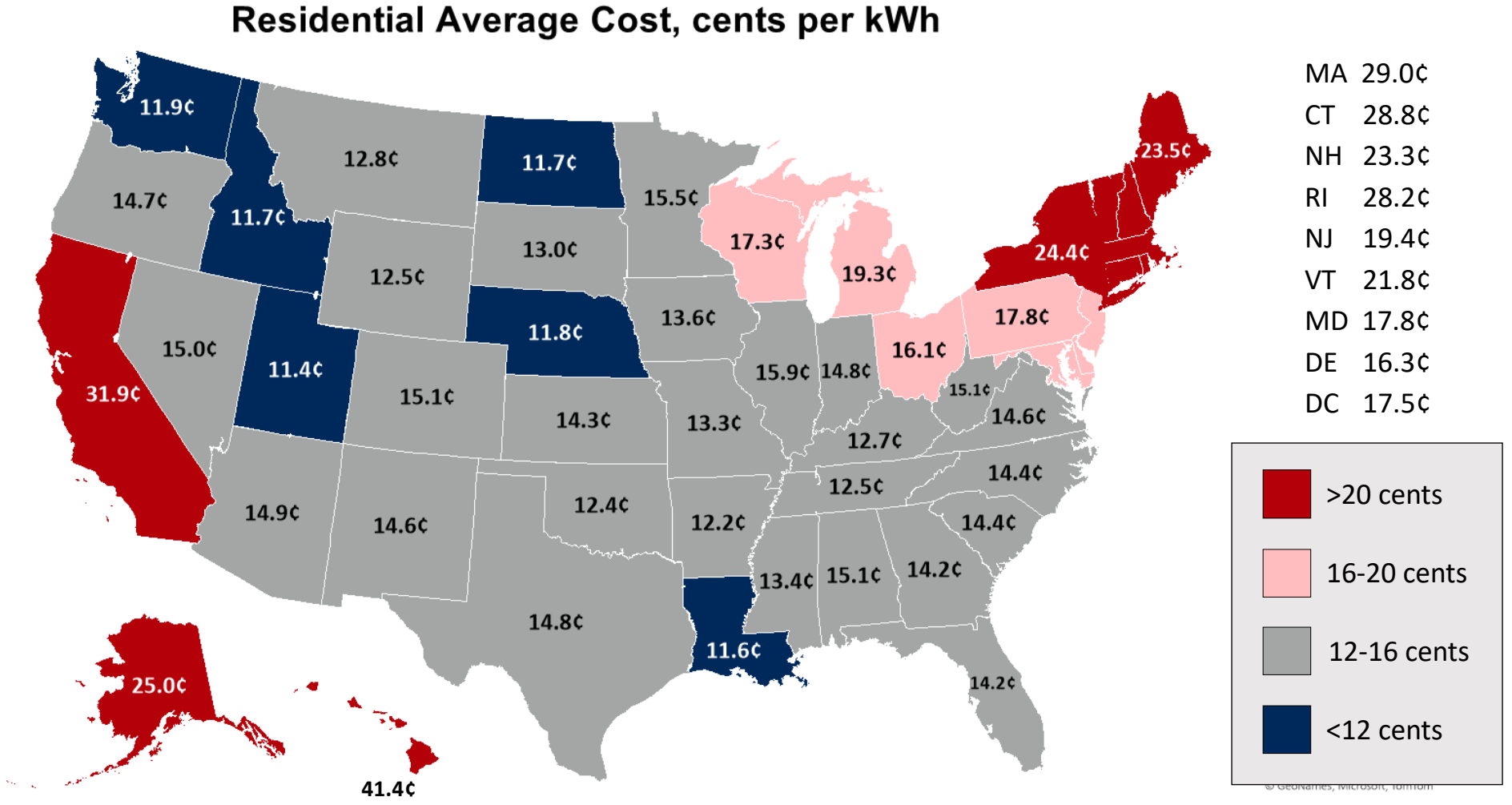
Average cost per 1,000 kWh billed. Source: PFM Financial, FMPA




*WPPI serves portions of MI, IA.

# Florida's Residential Electric Cost 17th Lowest in U.S.

*Our High Electric Use Depends On Low-Cost Power*

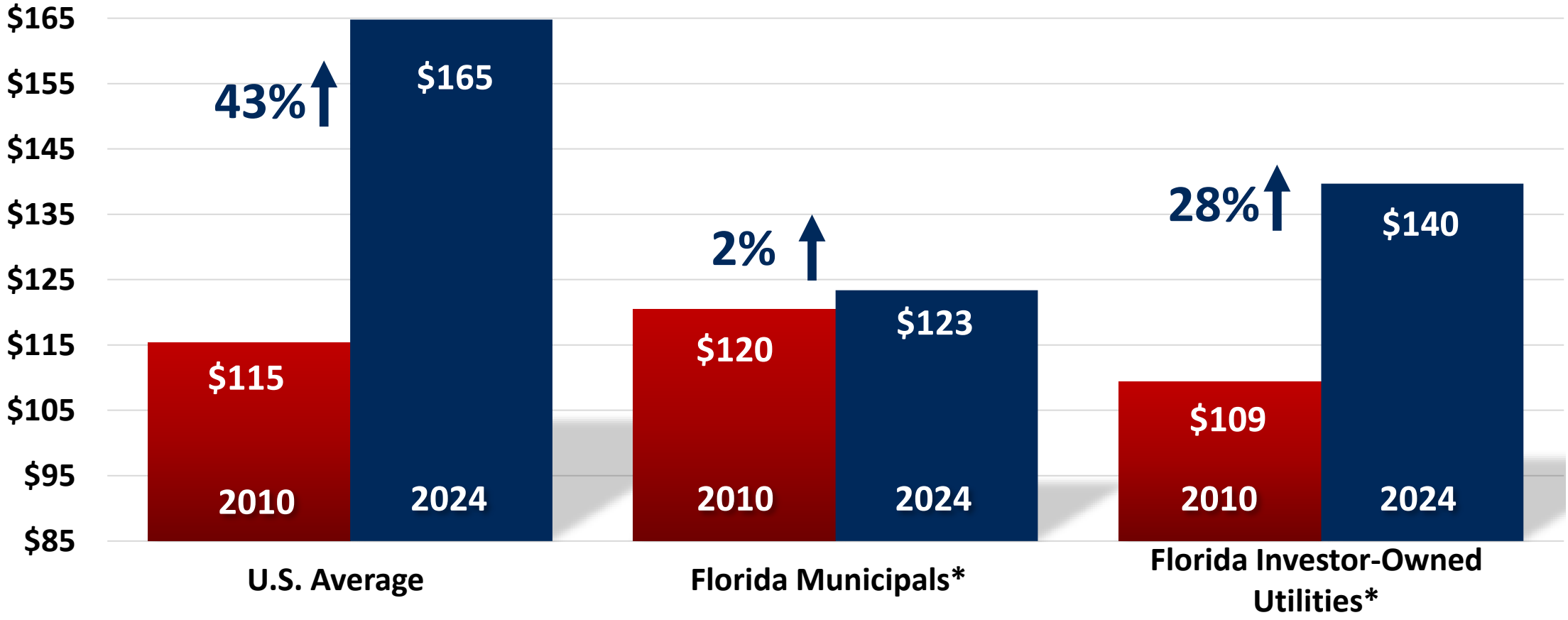



SOURCE: U.S. Energy Information Administration, 2024 year-to-date thru October average

# Florida's Municipals Competitive

*Municipal Rates 2% Higher than in 2010, U.S. Rates Up ~40%*

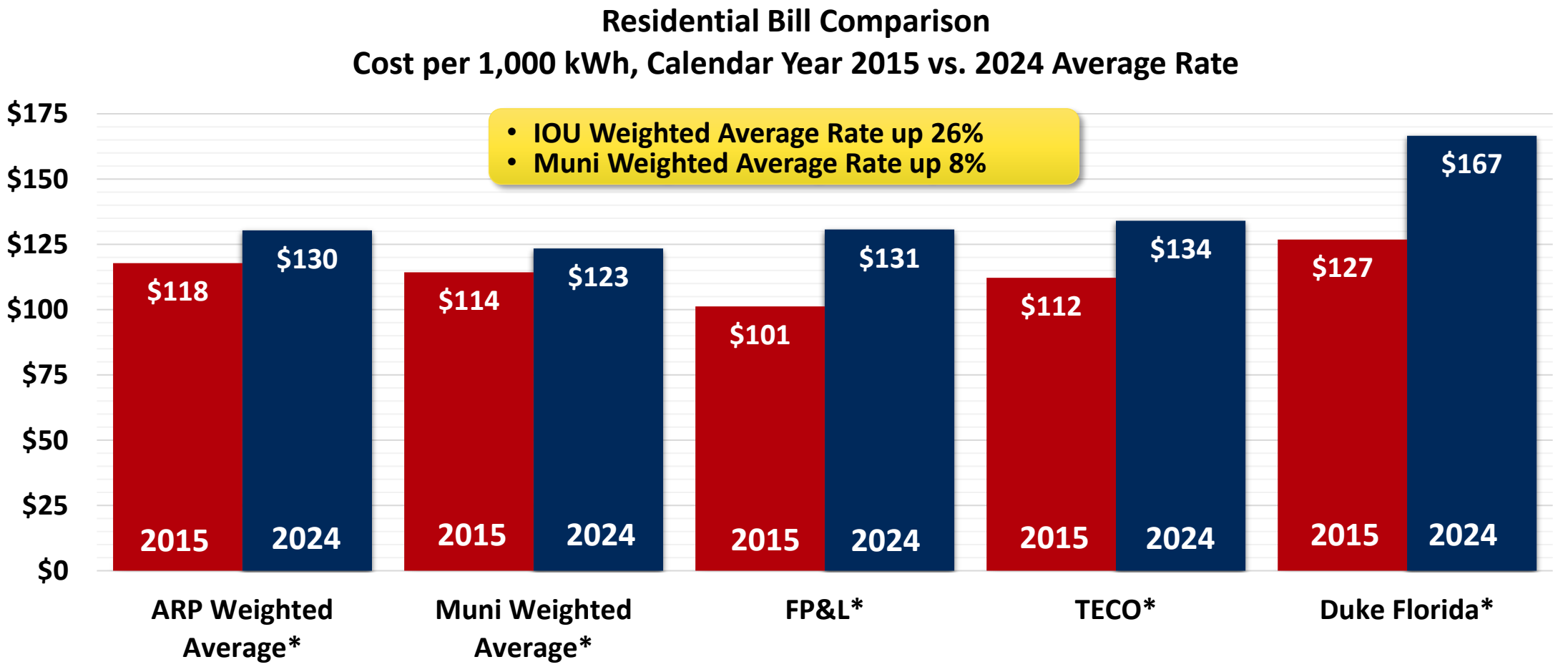
## 1,000 kWh Residential Bill Comparison




*IOU and Muni rates weighted by 2010 & 2023 annual load.

# Muni Competitive, IOU's 10–20% Storm Charges In ‘25

*Municipals Below IOU's, ARP Members on Average Below FPL*




*Weighted average of rates by 2015 and 2023 annual load.

# NERC Highly Focused on U.S. Electric Market Load Shed Risks

*Risk Shifting to Winter – Limited Wind & Solar, Gas Intricacies*

- NERC identifies elevated & high-risk regions
- Load growth and retirements outpace capacity additions
- Reduced reliable capacity driving capacity prices higher
- Lead times for turbines up materially
- Delayed generator retirements reducing near term risk slightly

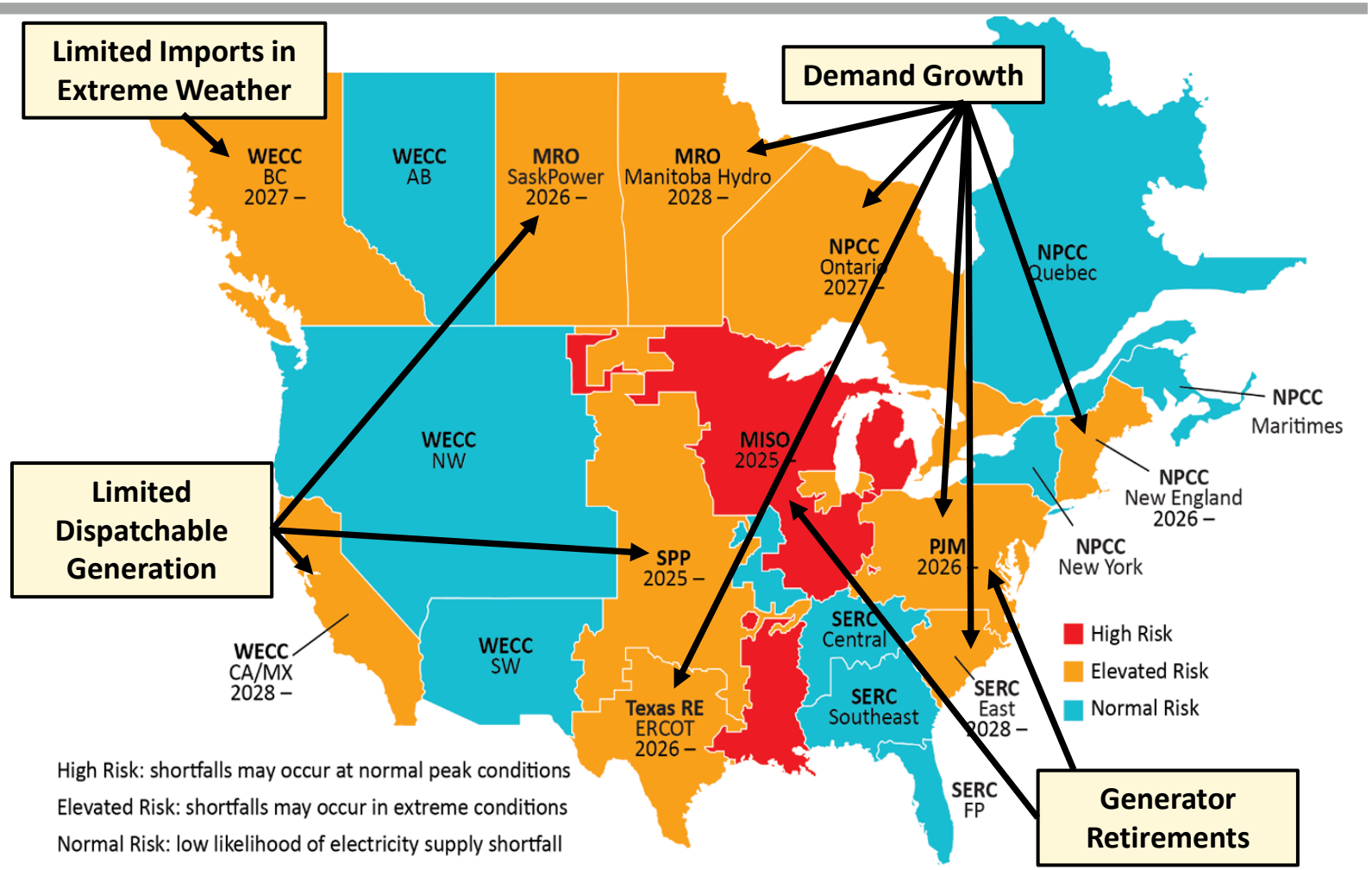



**Figure 1: Risk Area Summary 2025–2029**

Source: NERC Long Term Assessment Dec 2024

# Florida Has Robust and Resilient Transmission Except
*Central Florida Transmission Challenged Similar to I-4*

- FPL and Duke doubled transmission investment over 5 – 7 years for resilience
- Statewide transmission reliability continues to improve
- Notable exception - lack of investment in Central Florida Corridor (CFC) – equivalent of I-4
- CFC comprised of 9 major generating utilities – FPL, Duke, TECO, Seminole, FMPA/KUA, OUC, Lakeland and CFTOD
- One of the fastest growing areas in the state with counties up ~70% since 2000
- CFC has had numerous transmission constraints affecting FMPA generation at Cane Island, Stanton, Sand Lake and possibly Mulberry and Bartow Energy Centers
- Planning at "county" vs 'state" level – need robust state solution with all participating
- FRCC proper forum to push for statewide solution with joint action/ownership

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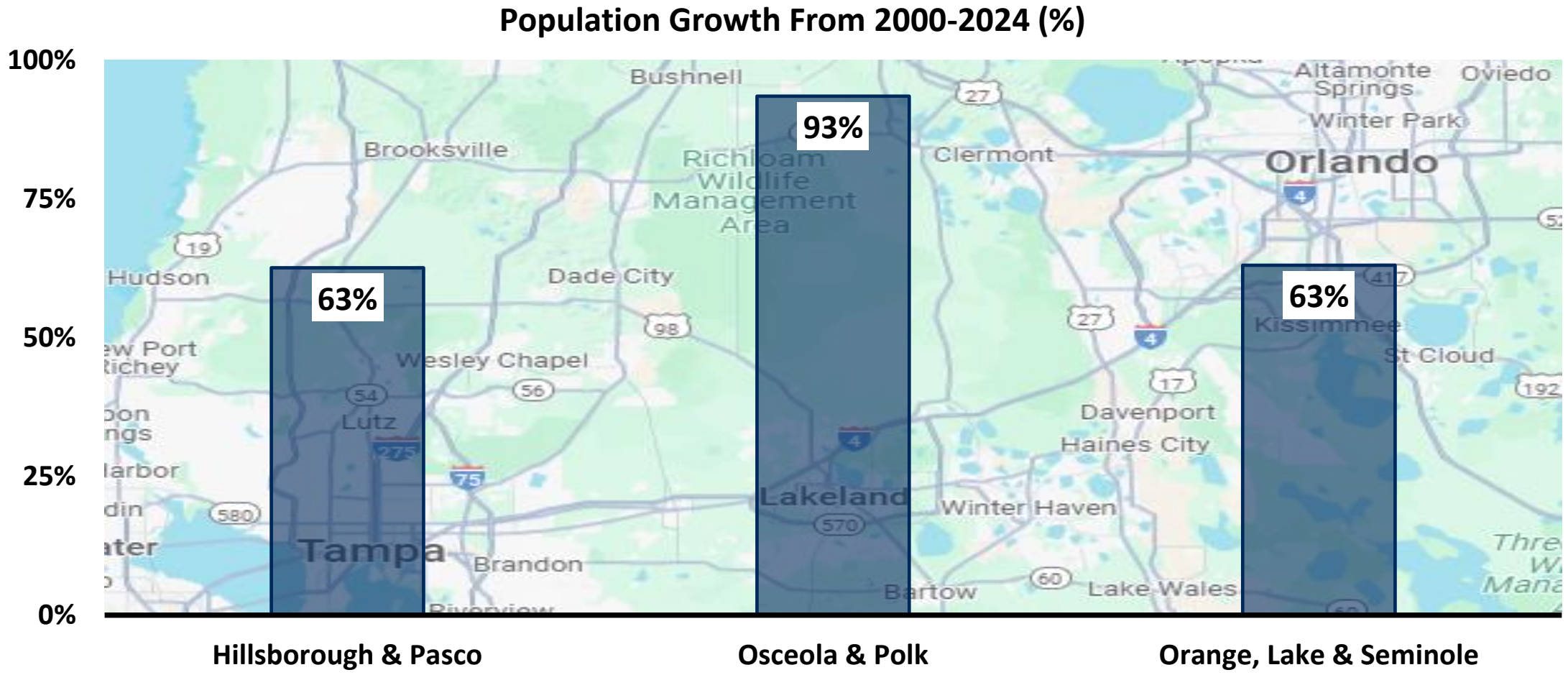
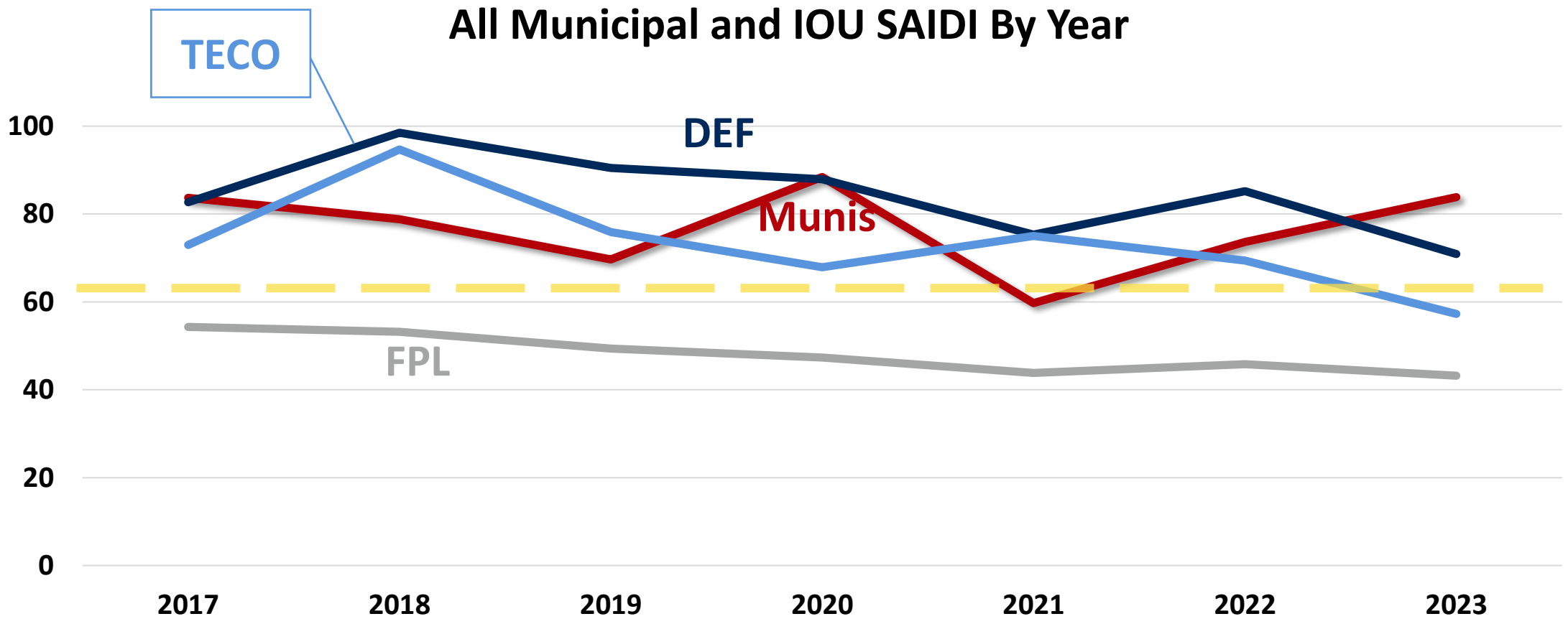
# C. FL Corridor Counties Growth at 60 - 90% Since 2000

*Transmission Congestion and Operational Issues To Persist*



# Municipal SAIDI Losing Ground to Goal and IOUs

*Low-Cost Wholesale Power Supports Low Rates & Reliability Investment*



# Members Below 60 Minute Outage Goal (SAIDI)

*Some Members Providing Best Reliability in State*

- Alachua
- Bartow
- Beaches Energy*
- GRU
- Havana
- Keys Energy
- KUA*
- Lakeland
- Newberry
- OUC
- Starke
- Wauchula*
- Winter Park*

**Brian Horton, KUA President and General Manager**

*Indicates Utilities with Lowest Outage Duration in Their Size Class

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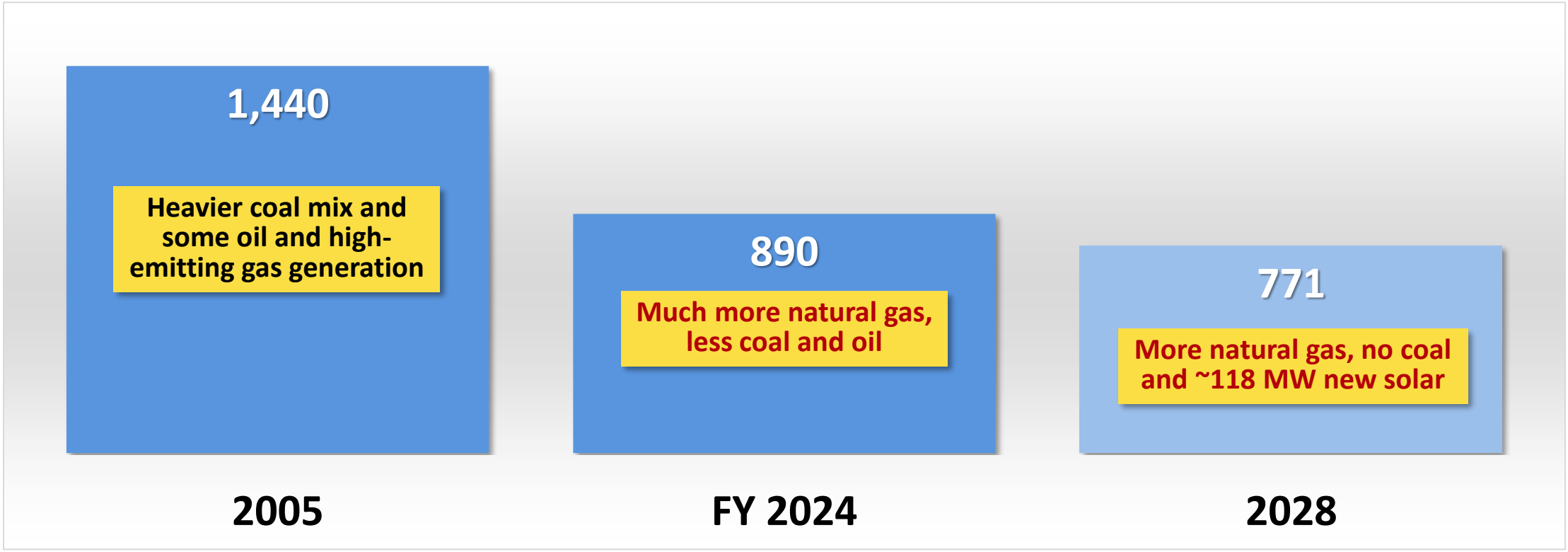
# FMPA $CO_2$ Projected to Decline Significantly by 2028*

*~50% Decline from 2005 to 2028: More Gas and Solar, No Coal*

## $CO_2$ Emissions for FMPA's All-Requirements Project Generation

Pounds per Megawatt hour, historic and projected




*Reflects emissions relative to total estimated generation w/renewables. Based on current resource plan and publicly available information.

# We Want Your Feedback

Which do you believe is the highest priority for FMPA:

Low cost, reliable or lower emissions?

Please provide your feedback in the poll (ranking).

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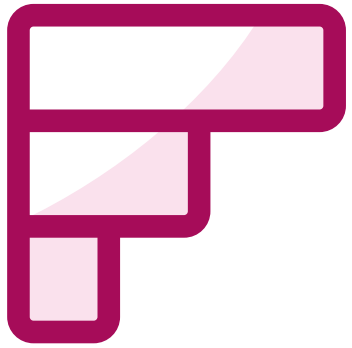

# Rank the following attributes from 1 (highest priority) to 3 (lowest priority).

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# FMPA Focused on Lowering Costs, Advocacy

*Are Any Other Priorities Rising to the Strategic Level?*

- FMPA's and Florida's costs down with lower prevailing natural gas prices
- Munis rates competitive, IOUs rates slightly up as storm charges offset lower gas
- FMPA price stability program implemented to lower year-over-year volatility
- Continue policy advocacy for more abundant natural gas supplies and pipelines
- Distribution reliability investments needed for gains while low power costs exist
- Potential ways to lower power costs on annual basis:
  - Continue high availability of low-cost units ~$8-10M
  - Maximize asset value by implementing pool service expansion or alternative ~$3 - 10M
  - Pursue more 3rd party capacity sales that bring added value to FMPA ~$10 - 20M
  - Stanton 2 minimize exposure to coal dispatch costs ~$3 - 5M
- Are any other priorities rising to the strategic level?

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# 2025 IRP Refresh – 20 Year Baseline Assumptions – Load Growth/Data Centers and Generation (New Nuclear)

# Energy Market Landscape

# Post Election Focus on Abundancy, Low Cost

## *Reliability and Affordability Hopefully Take Center Stage*

- Increased access to drill for gas and oil in West where Feds controls ~80% of reserves
- Expedite natural gas and oil pipeline permitting process
- EPA GHG challenge good chance to prevail, avoiding premature retirements of reliable generation
- Uncertainty in Federal support for new wind and solar with incoming administration
- Reliable, dispatchable generation close to load far less costly than large scale transmission expansion for intermittent energy supplies
- Data Center load growth challenging U.S. power supply – retirements slowing and reactivations of coal, gas and nuclear starting
- Gas turbine backlog at 5 years with bubble larger than early 2000's – prices high
- Next generation nuclear efforts underway with Big Tech financial support
- EV incentives waning

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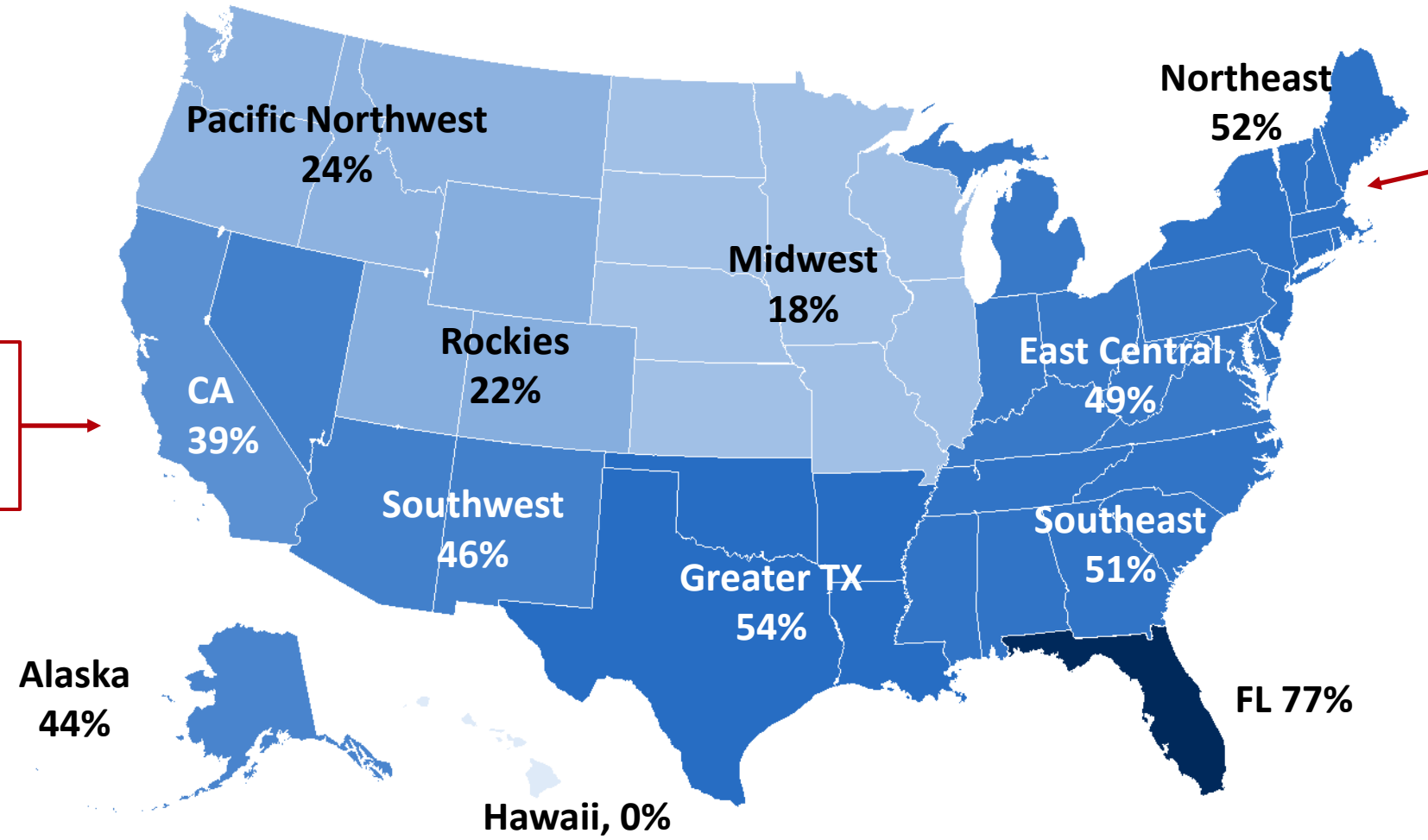
# Florida is Most Gas-Dependent State in the Country

*As Natural Gas Prices Goes, So Goes Florida Power Costs*

**Regional Electricity Generation from Natural Gas as Percentage of Total Generation (2024[1])(%)**



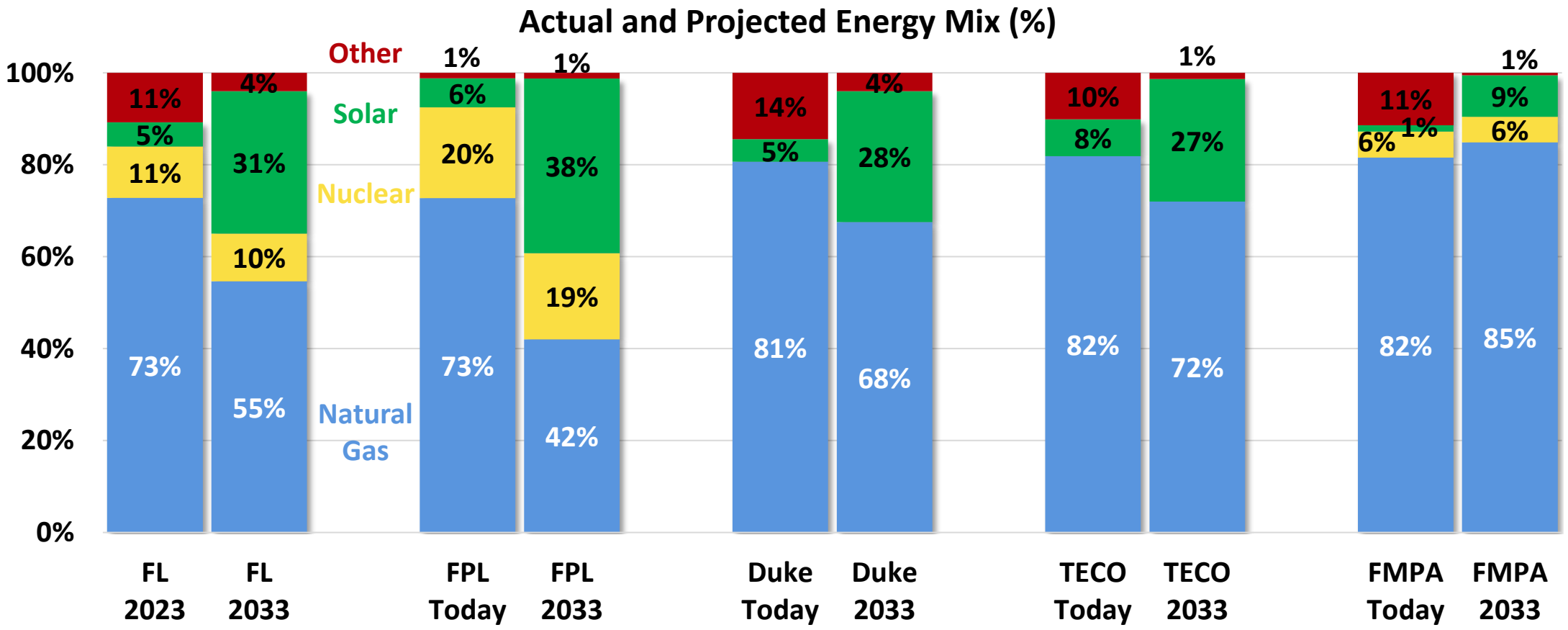

CA imports 12% of electricity consumed.

Northeast imports 12% of electricity consumed.

1 – EIA state level generation data through YTD October 2024.

# FMPA is More Gas Exposed Than Others In Florida

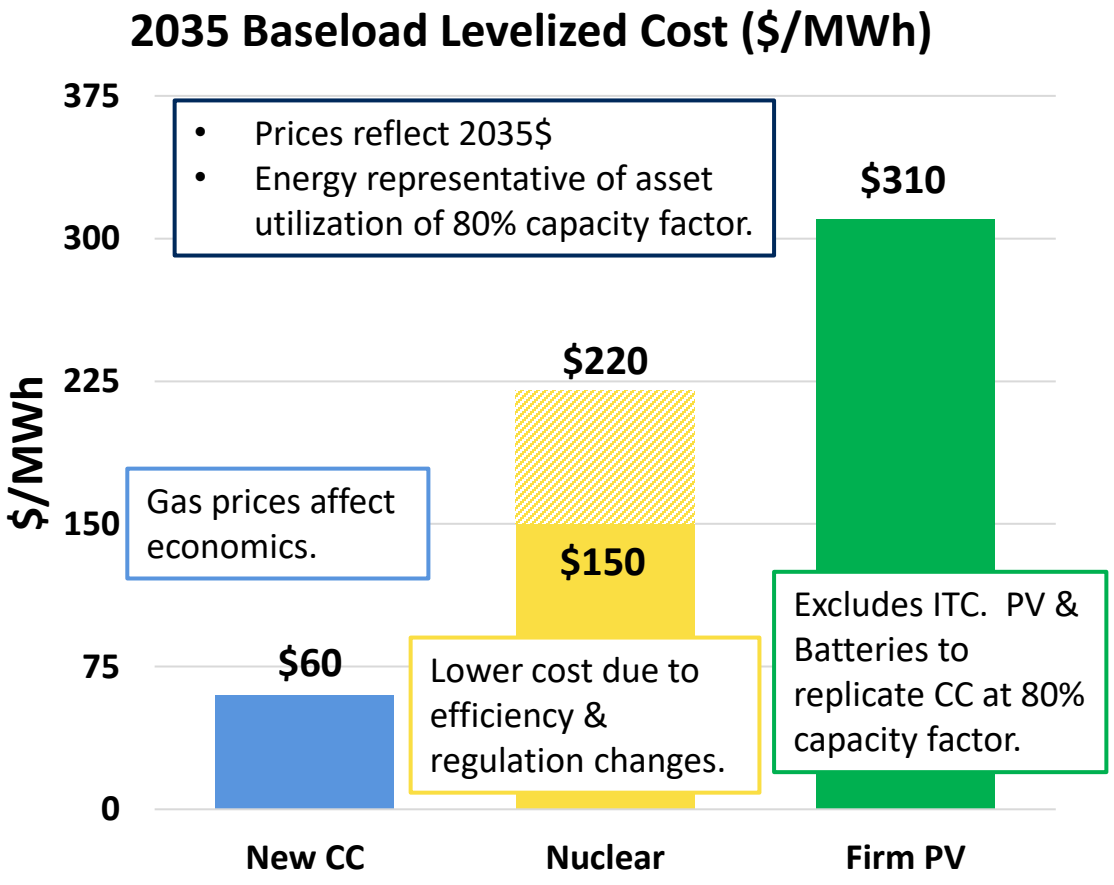
*Utilities Adding Solar, Storage and Some Gas, Solar Pace May Slow*

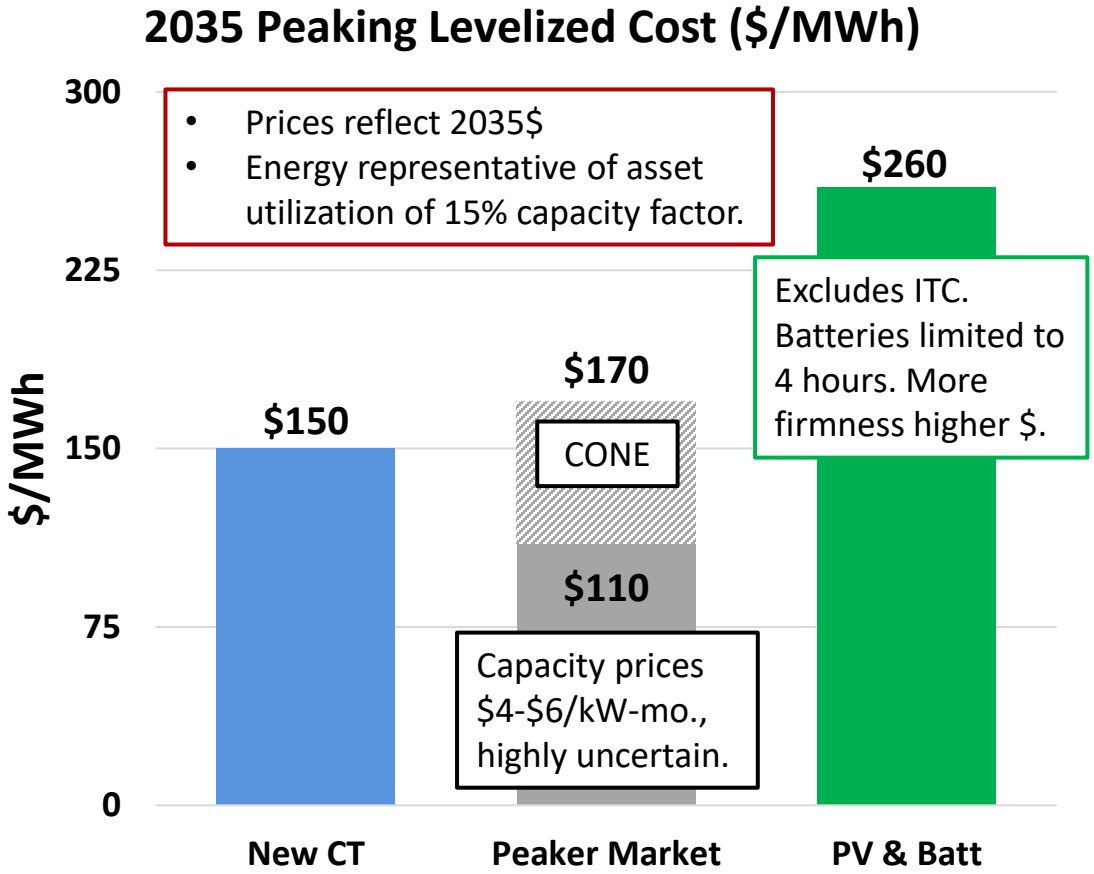



Sources: FL 2023 represents state generation from the FRCC Load and Resource Database. FMPA 2023 represents actual generation from the ARP fleet. IOU data derived from 2024 Ten-Year Site Plan filings with most recent historical year (2023) shown.

# 2023 IRP – CCs & CTs Most Reliable & Low Cost in ‘35

*Inflation Expected, Refine Numbers in ’25, Peaking Need Focus*

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# Existing and New Nuclear Getting Significant Attention

*Data Centers and AI Looking for Reliable and Lower Carbon Power*

- Data Centers looking for large amounts reliable power with preference for zero carbon
- Nuclear plants fill that need – Retired, Existing and New
- Several retired nuclear plants potentially coming back – Reliability and/or data centers
- Data Centers negotiating with operating nuclear plants for power sales - 3-MIle Island
- Amazon & Google financing and take development risk on 300 - 500 MW of SMR's
- Challenge for new nuclear – 10 – 15-year timeline vs 2 – 4 year Data Center need
- Data Centers needs in 2 – 4 year or sooner, very large sites – 1 – 3 GWs in one place
- ***Strategic question – extent of resources to dedicate by FMPA to support FL nuclear expansion***

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# We Want Your Feedback

Should FMPA consider dedicated human resources (e.g. portion of FTE) to further foster FL nuclear expansion?

Please provide your feedback in the poll.

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**Should FMPA explore next generation nuclear and allocate more human resources (portion of an FTE) to the effort to partner with entities on projects that advance Florida's nuclear energy expansion?**

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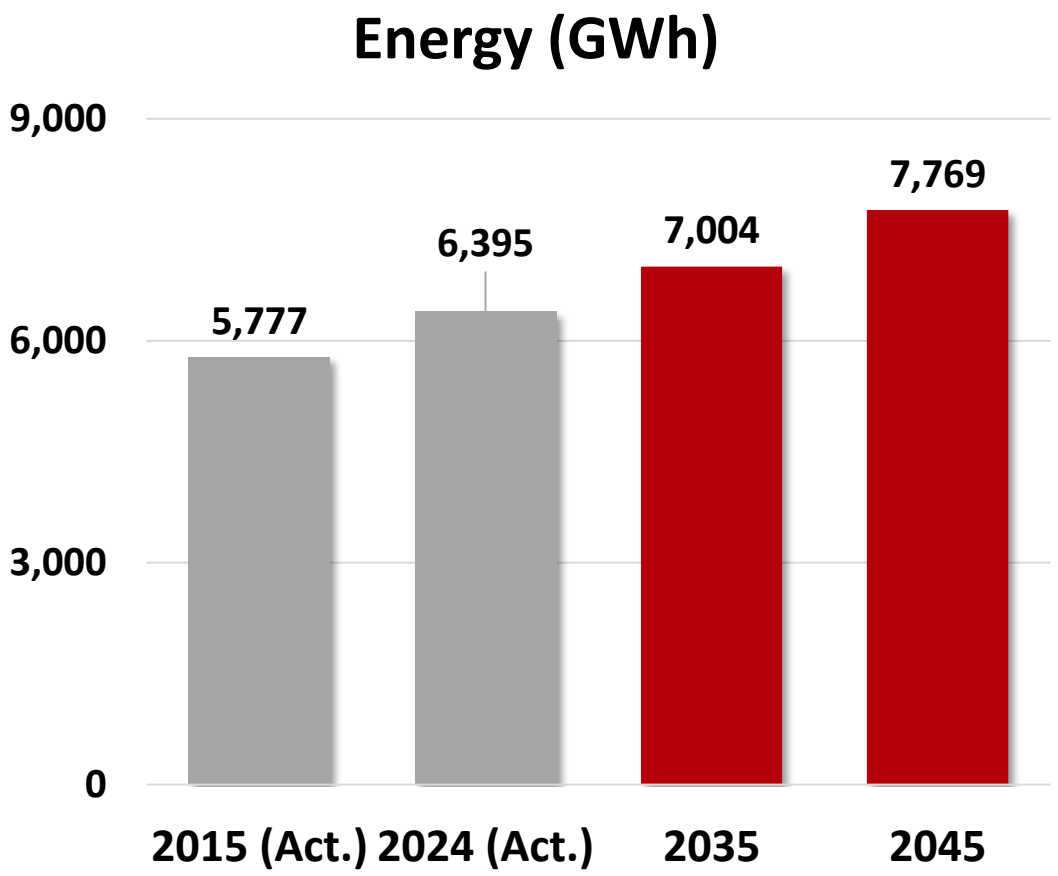
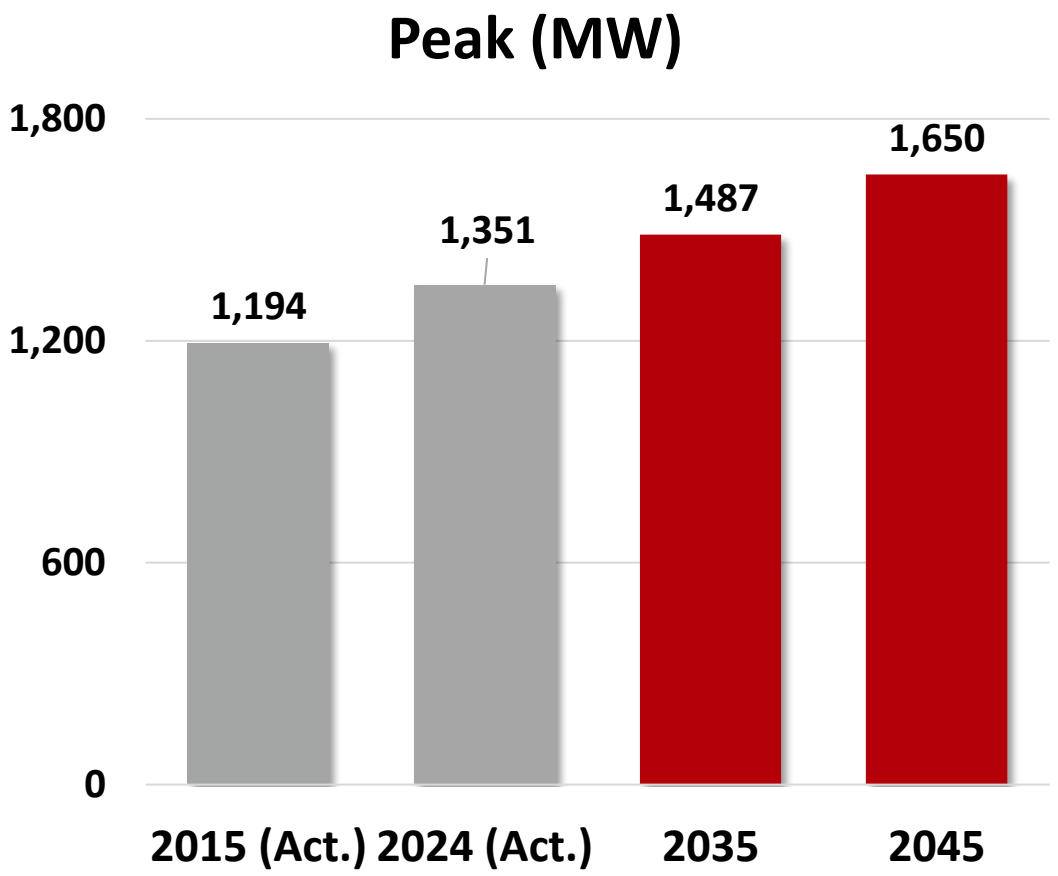
# Future Load Growth

# ARP Energy and Peak Grow ~1% Per Year[1]

*Last 10-Years ('15-'24) Load Growth At ~1.1% Per Year*




1 – Reflects current All Requirements Project Participants. Excludes other wholesale sales.

# Some Members Growing, Some Not, Population Growth

*Counties w/ Developable Land Growing – Alachua, Osceola, Lake, Polk, Volusia*

ARP Members

| Member | Actual Growth ('15-'24) FY | FY 2024 Actual NEL (GWh) |
|---|---|---|
| Newberry | 3.3% | 48 |
| Kissimmee | 2.4% | 1,862 |
| Bushnell[1] | 1.9% | 61 |
| Ocala | 1.0% | 1,412 |
| Leesburg | 1.0% | 522 |
| Ft. Pierce | 0.9% | 607 |
| Ft. Meade | 0.7% | 45 |
| Green Cove Springs | 0.4% | 116 |
| Keys | 0.1% | 788 |
| Clewiston | 0.0% | 106 |
| Jacksonville Beach | -0.1% | 735 |
| Starke | -0.5% | 69 |
| Havana | -1.0% | 24 |

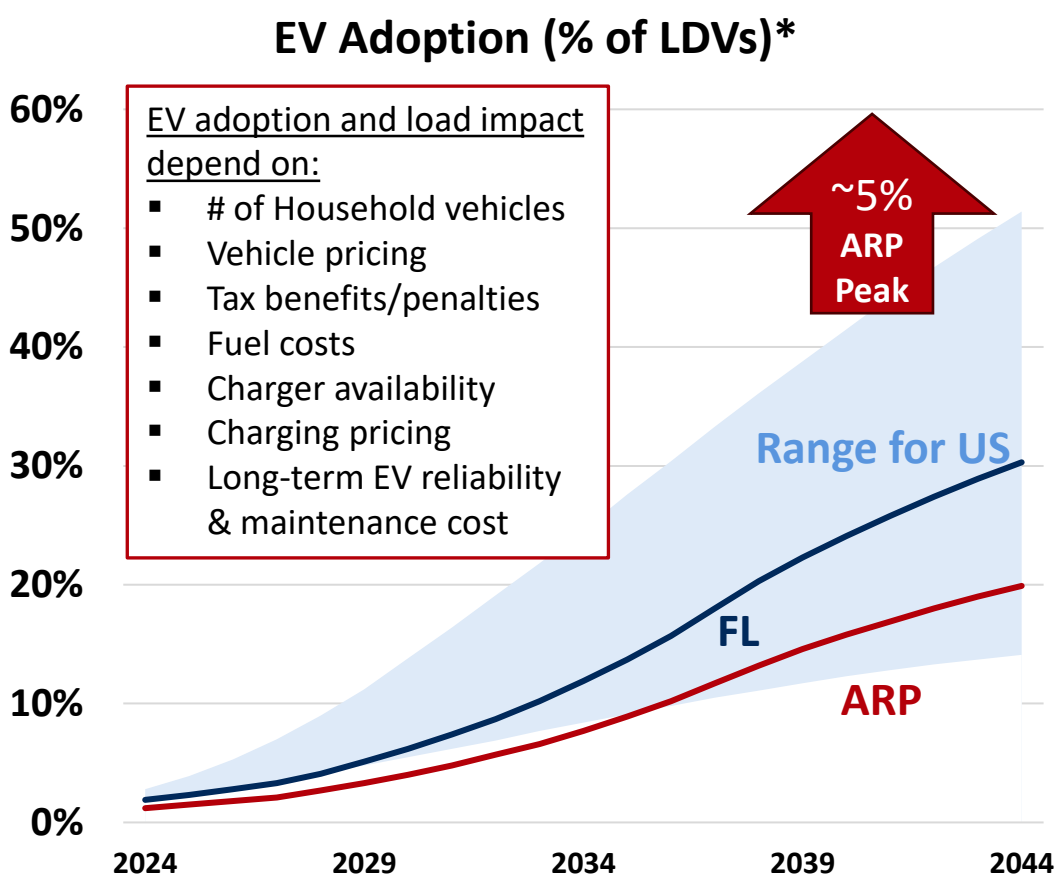
Other FMPA Members[2]

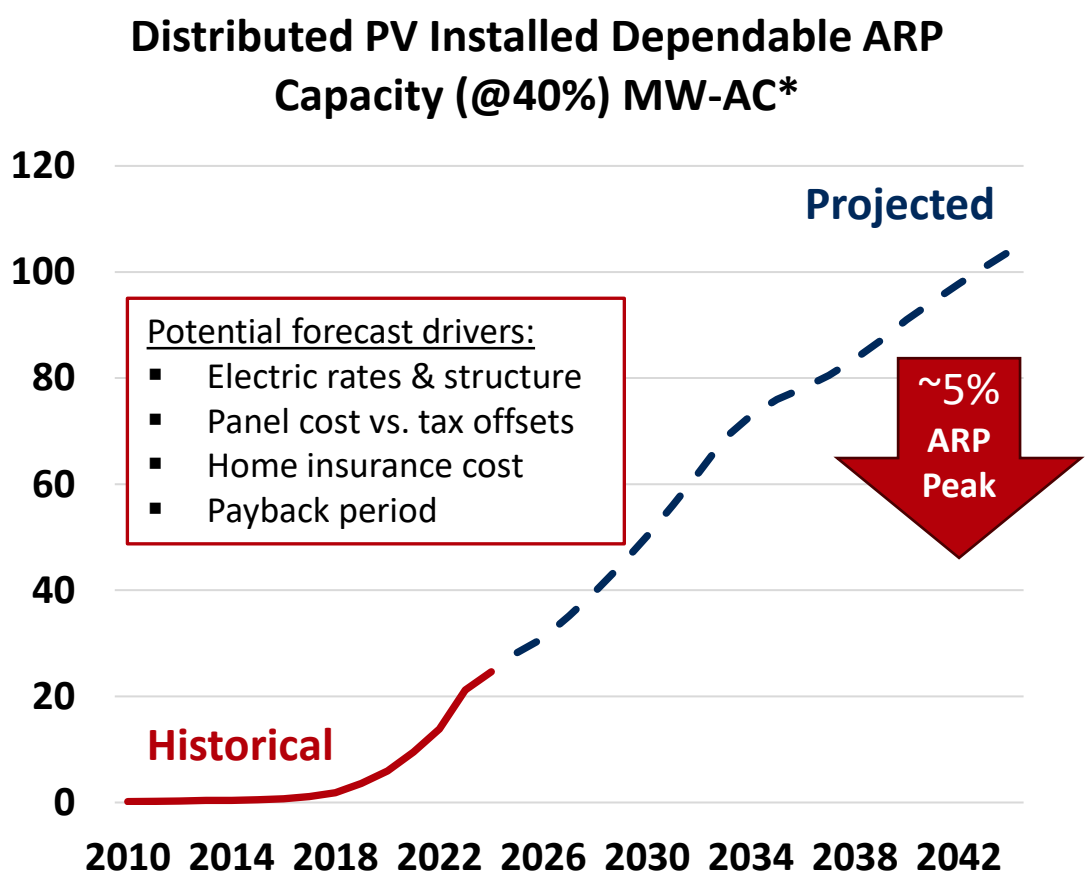
| Utility | Sales Growth CY 2015-23 |
|---|---|
| Alachua | 2.6% |
| Bartow | 1.7% |
| New Smyrna Beach | 1.7% |
| Homestead | 1.6% |
| Lakeland | 1.4% |
| Orlando | 1.2% |
| Lake Worth Beach | 1.1% |
| Mount Dora | 1.0% |
| Williston | 0.8% |
| Jacksonville (JEA) | 0.4% |
| Quincy | 0.4% |
| Moore Haven | 0.4% |
| Gainesville | 0.3% |
| Tallahassee | 0.1% |
| CFTOD | 0.0% |
| Winter Park | -0.1% |
| Wauchula | -0.4% |
| Chattahoochee | -0.5% |
| Blountstown | -1.5% |

1 – Bushell growth rate reflects weighted growth before and after SECO customer acquisition.
2 – For reference. Seminole grew (w/o Lee) at 2.2%, Duke Energy Florida grew at 0.7% and FPL w/Gulf grew at 0.7%.

# EVs Could Be Offset by Distributed PV in Next 20 Years

*Incentives and Market Drive Adoption & Charging Preference*

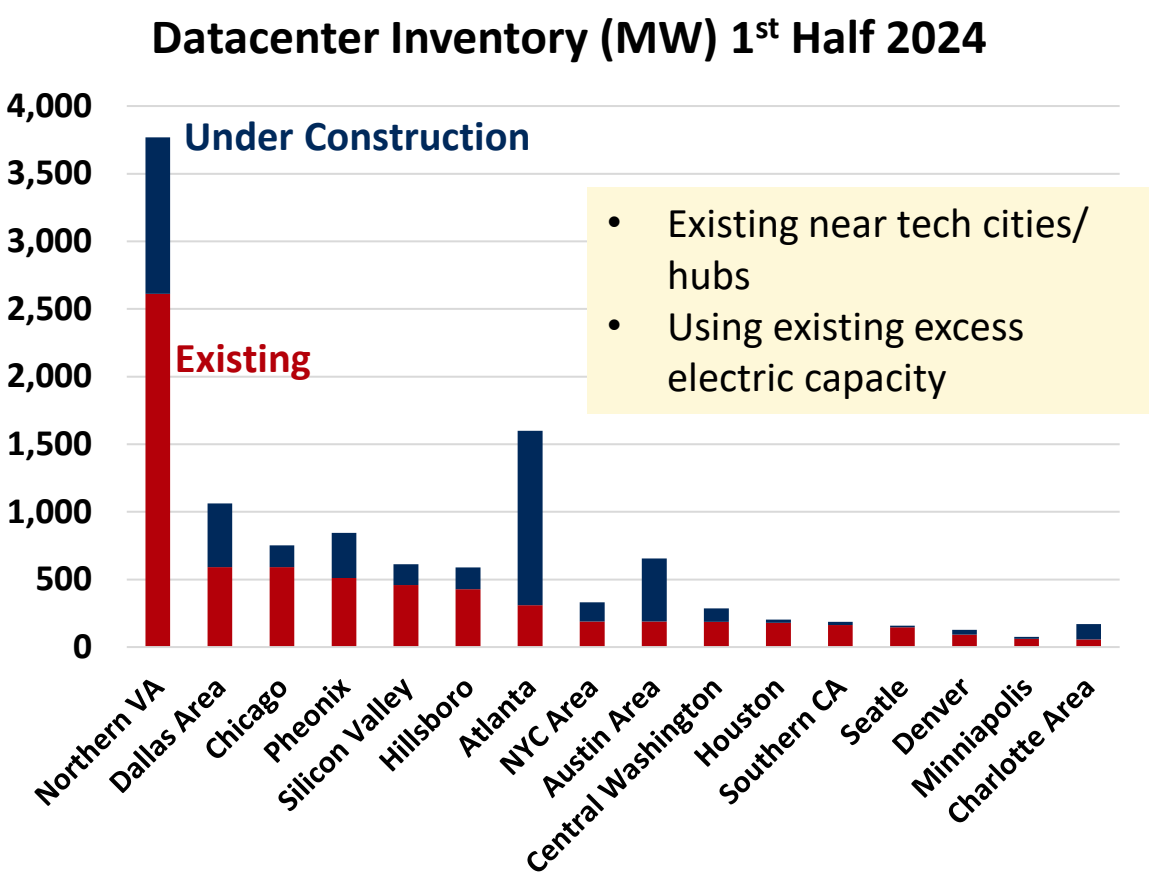



*SOURCE: nFront Consulting LLC

# Data Centers/AI Driving Power Demand Nationally

*Turn Watts Into Much Higher Value Bits, FL Not Prime Target*




- Demand growth from Data Centers/AI is just beginning
- Average U.S. home has 21 connected devices
- AI search uses 10x power as Google search
- Turns Watts into Bits, much higher value so power costs less relevant
- Industrial Power cost $100/MWh reasonable
- Shortage of power not chips to run Data Centers
- 4 Majors - Amazon, Apple, Google & Microsoft – 1,000 MW site/cluster
- Low carbon desired, but gas is acceptable
- Speed to get facility served with power biggest concern

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# Main Criteria for Data Centers

## *Speed for Power, Land, Labor & Community Support*

- Main criteria is speed to quickly provide:
  - Power – 1,000 MW generation & transmission
  - Land - hundreds to thousands of acres
  - Expeditious zoning and permitting – significant community support
  - Access to skilled labor for construction and technical support thereafter
- Hurricane risk makes Florida unfavorable, new build gas lower cost than nuclear restart, which brings with it expectation of lower bulk power cost delivered to new load
- Main areas of growth:
  - Northern Virginia; Eastern Oregon; Columbus, OH, Georgia, Indiana and Mississippi
- Cluster multiple facilities in 50-mile radius for support
- ***Strategic issue – ensuring Member costs do not increase for chance to attract a data center on promise of lower retail cost or other benefits***

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# We Want Your Feedback

Should FMPA adopt position that Member costs should not increase when attracting data centers ?

Please provide your feedback in the poll.

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Please download and install the Slido app on all computers you use

# Should FMPA adopt the position that Member costs should not increase when attracting data centers?

ⓘ Start presenting to display the poll results on this slide.

# Supply and Demand Balance

# ARP Expected To Require New Resources in Mid ’30s

## *ARP Workhorse Plants Should Operate 40 Years*

- Acquisitions of Sand Lake, Mulberry and soon Bartow fulfill ARP capacity needs through ~2035
- ARP fleet well managed, efficient and low emitting resources, less regulatory intervention, should operate 40+ years, provide great value as majority of legacy ARP debt paid off in 2032
- St. Lucie nuclear licensure extension would extend life beyond 2050
- ARP does not have unilateral control over certain jointly owned peaking resources
- Capacity needs in 2035 and on are peaking and/or for fuel diversity
- In the mid-term horizon, ARP focus areas include:
  - Investigate extending the life of existing assets and low-cost peaking PPA extensions
  - Optimizing investment in existing units to increase capacity, maximize value and life
  - Look for opportunities to partner in new nuclear developments
  - Capture higher value for remaining surplus capacity as market tightens

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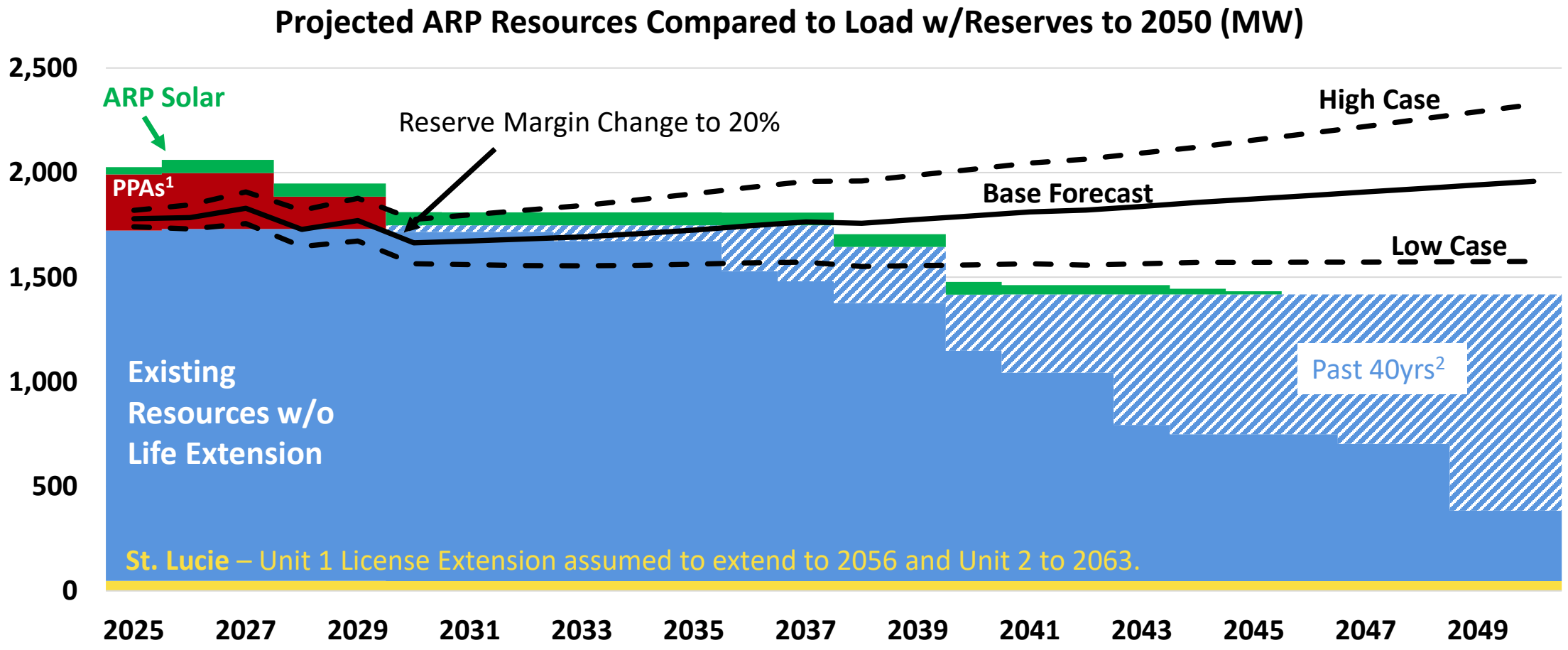
# ARP Resource Need Appears in ~2035

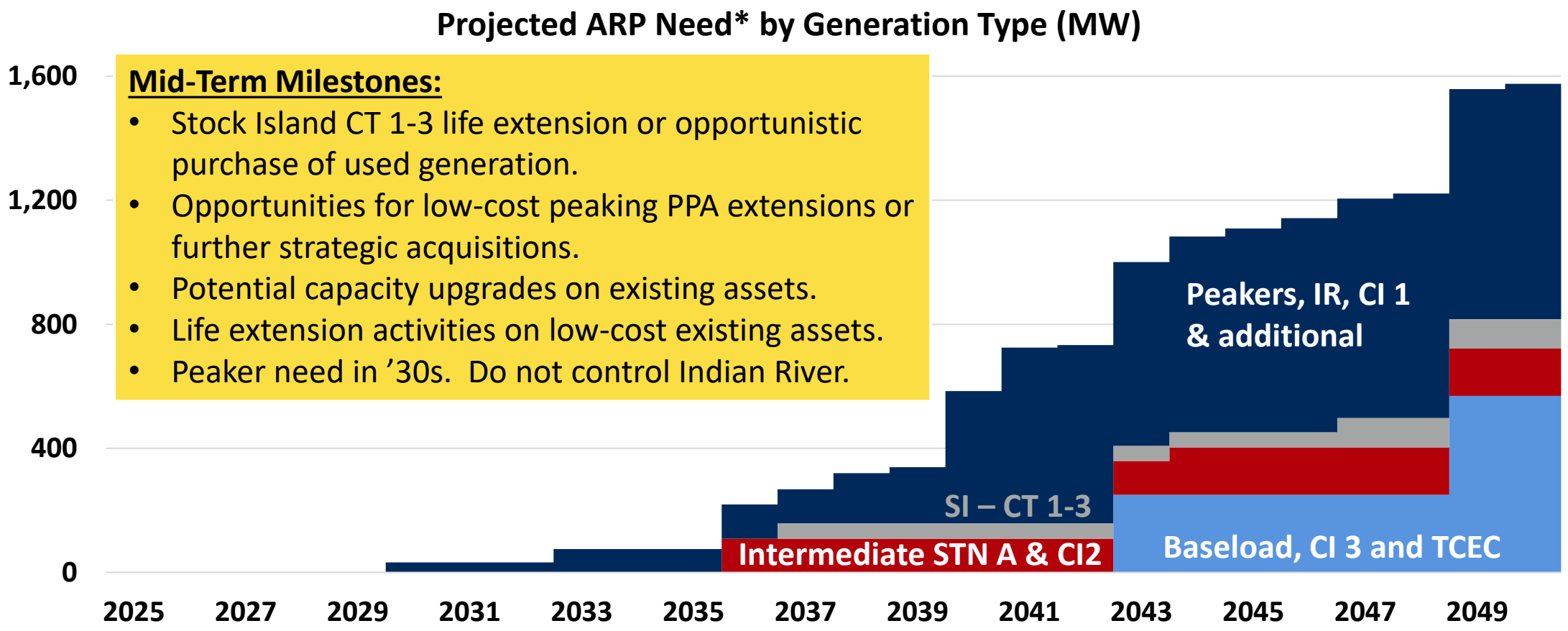
*Extension of Peaking PPAs In Mid-Term Could Reduce Need*




1 – 2025 – 2027 option for additional 49 MW of Rainbow PPA not represented above.
2 – Stock Island CTs included in shaded area.

# ARP Workhorse Assets Still Have Long Life Ahead

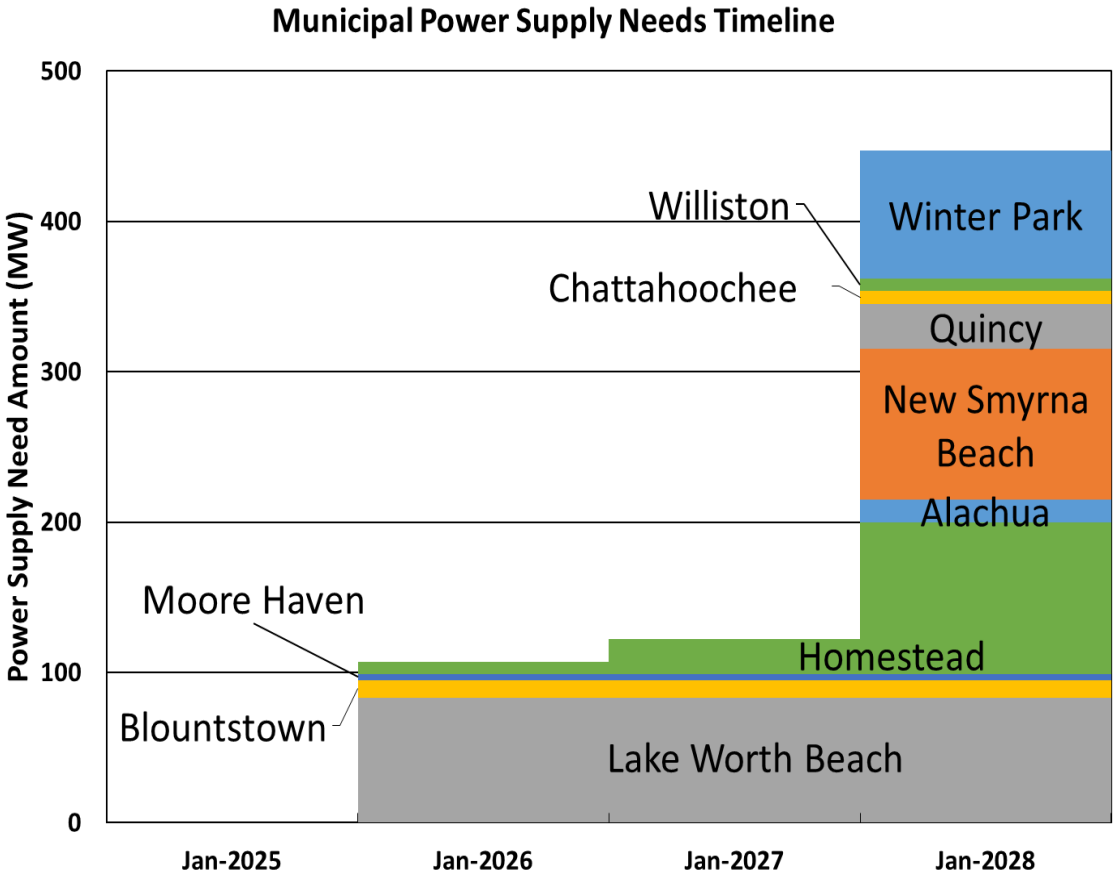
*Key Incremental Decisions through 2035 to Be Explored*




*Need represented based on asset age and current expectations. Life extension efforts may adjust timing.

# Municipals Will Seek Nearly 500 MW by 2028

## *Could Influence Resource Decisions in Mid-Term*



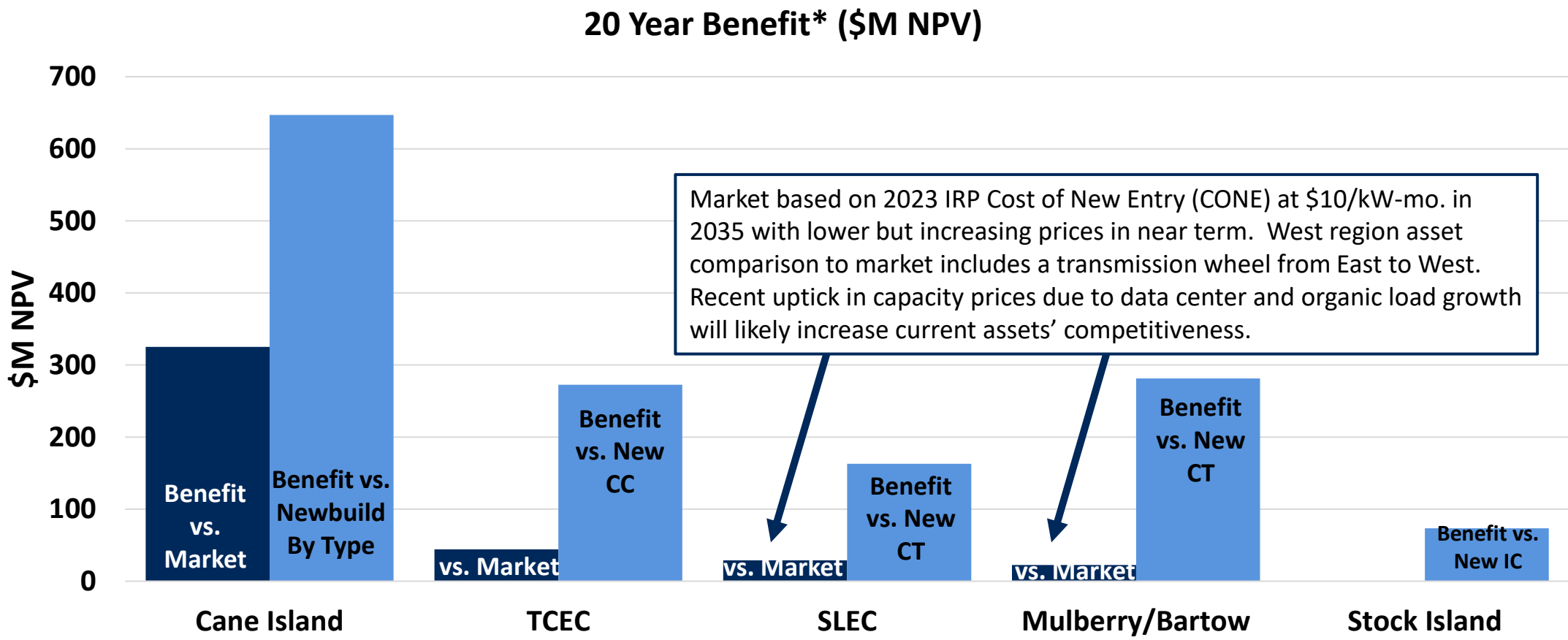

- Municipals' existing arrangements with ARP/others begin to expire by mid-decade
- Other generators looking for reliable capacity – TECO, Seminole, JEA, GRU[1]
- Opportunistic purchases limited as existing capacity becoming scarce
- Growth in demand raising cost & extending timeline for new resources
- Opportunity to sell excess capacity at higher values as market tightens
- Open to resources several years before need if cost offsets are available

1 – Excluding intermittent and uneconomical generation, there could be additional municipal power supply needs of almost 300 MW in the next few years. Firm dispatchable municipal resources available to meet needs beyond FMPA est. ~150 MW.

# Existing Units Life Extension Competitive Option

# 20-Year Site NPV Competitive to Alternatives

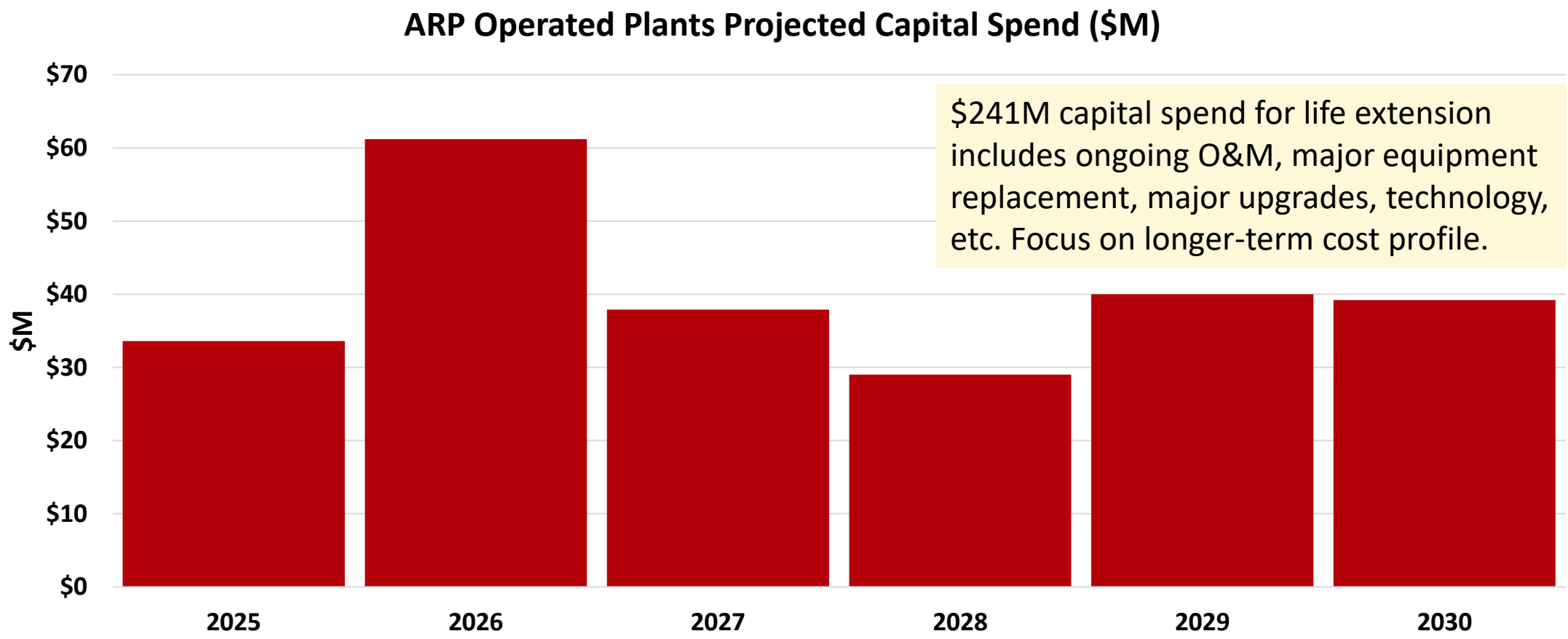
*Supports Operating Resources Generally To 40 Year Useful Life*




*Newbuild comparisons are to a similar sized generator on a pro-rata share basis. Stock Island local generation cannot be served with market alternatives.

# Plant Capital Spending Directly Affects R&R & Debt

*FY26 Capital Planning Focusing on Prudent Life Extension Investment*



# 2025 IRP Focused on Existing Asset Assessment

*Support on Investments, Unit Condition and Technology Evaluation*

Life Extension Analysis

- Technology Characterization (cost and performance assumptions) for upgrades and enhancements, refresh new build assumptions
- Refine 20 Year Existing Resource Competitiveness

Production Cost Simulations (Only As Needed)

- Least cost expansion scenario given updated assumptions (only if changes warrant)

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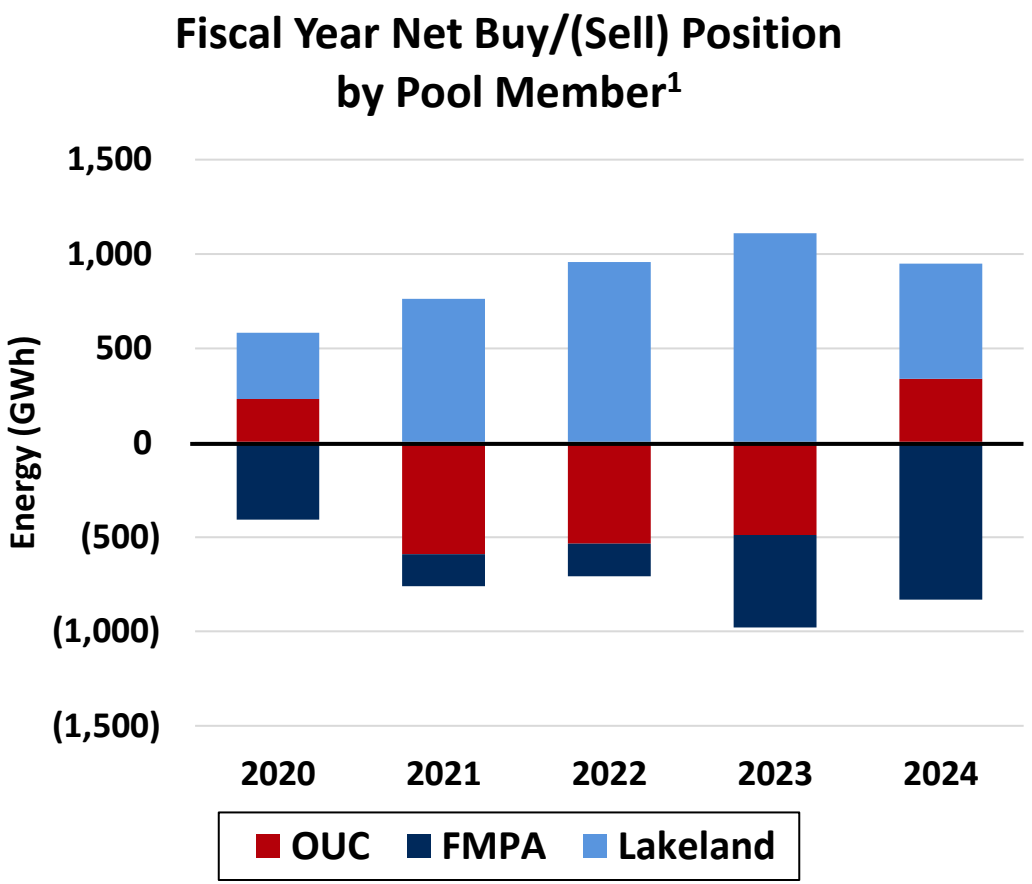
# Potential Value of Balancing Authority Alternative and/or FMPP Services Expansion

# FMPP Generation Mix and Rules Under Adjustment

## *FMPA Increasingly a Net Seller in Pool*

- Fundamental change in resource mix changing Pool dynamics – coal going away and large solar additions
- FMPA reduce Pool sales exposure since 2018 but remains significant seller - expect trend to continue
  - 2024 a preview of post-2025 SEC1 Closure
- Current rules provide minimal seller margins – studies underway on balancing buyer/seller interest
- Ancillary services under development for last 2 years – would benefit those supporting solar "swings"
- Large EMS upgrade in next 3-5 years
- Studies happening, but improvements are a ways out




1 – External market transactions excluded; totals do not net to zero.

# Potential Value New Balancing Authority $3 – 10M/Yr

## *Better Aligns With Needs, Lower Cost Units, & Increases Scale*

- New Balancing Authority (BA) alternative potential for ~$3 – 10M in annual value to FMPA
- Better aligns with FMPA current and future needs:
  - Dispatches units and serves load in Duke and FPL areas
  - Immediate redundancy for events in each transmission area and shared transmission dependencies
  - Transmission cost savings potential to direct serve a few Members
- Lower cost units with new very large, highly efficient combined cycle
- Open to reasonable value share of buys and sells – not biased to buyer gets most value
- BA alternative already operational – no need for new build and limited added staff needed
- FMPA's ~$3M per year for existing Pool balancing authority (BA) used as cost offset in Alternative
- Alternative has needs our resources provide
- Alternative scale 40% larger than existing BA more geographically diverse

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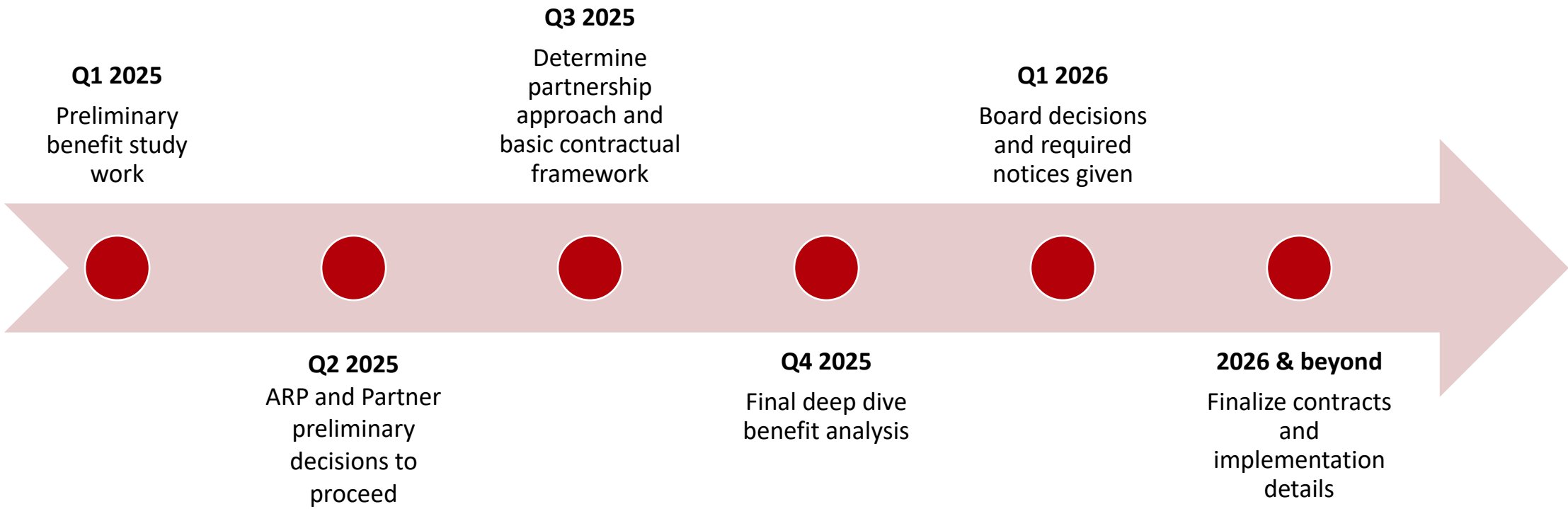
# Analysis & Discussions With Potential BA Partner Proceeding

*Both Parties Committed To Concept & Review of Potential Value*



# Continue FMPP Service Expansion Effort in Parallel

*Study Showed ~$2.6M/Yr. ARP Benefit, Middle of Expectation*

**Collective agreed to move forward "walk first" services and pause further studies on a full BA arrangement.**

- FMPP Optimizer expanded to all assets

**Maintenance Coordination**

- Liquid, pre-EEA energy market transparency

**Post FRSG Reserve Share**

- Scope out day-ahead joint dispatch & bilaterals

**FMPP + 1 Joint Dispatch**

**Highly complex, multi-year, multi-lateral engagement required to bring "walk-first" services to fruition.**

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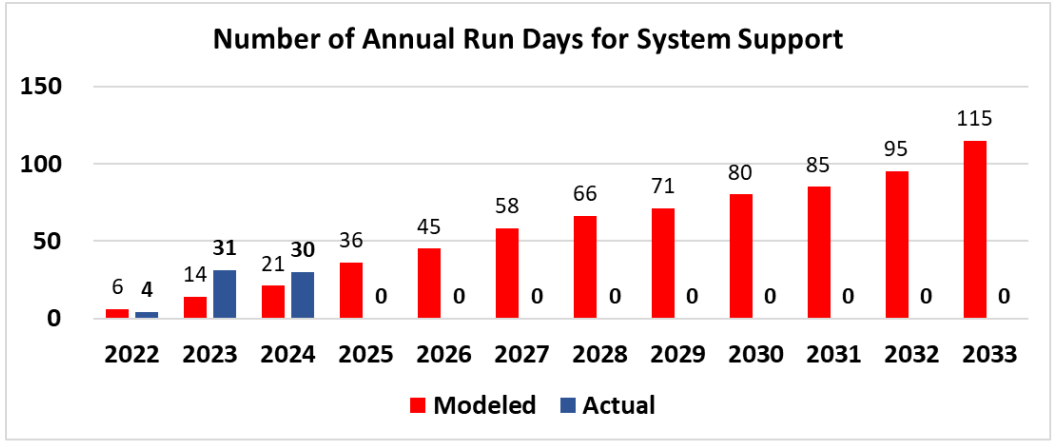
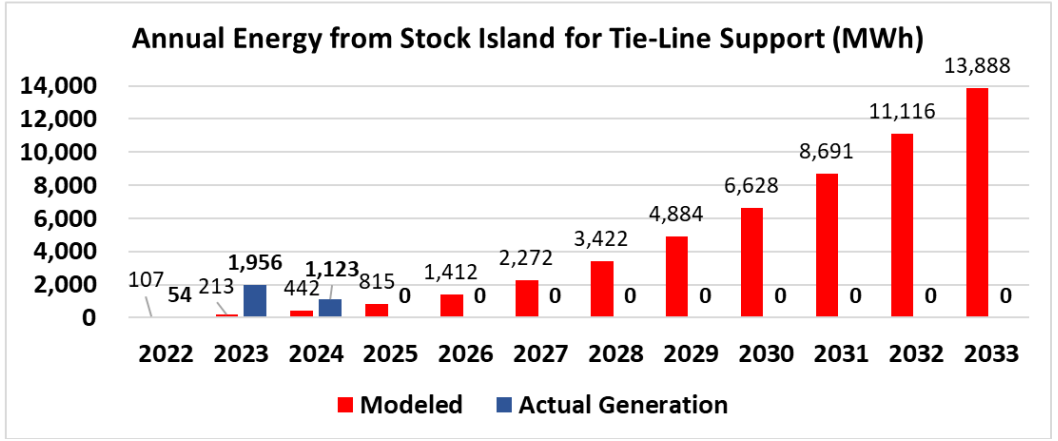
# KEYS Energy Reliability Plan

# Overall Unit Operation Outpacing Expectations

*Weather, FMPP and Other Factors Increase Unanticipated Ops*

- Stock Island generated 1,123 MWh for tie-line support in 2024 over 30 days
- 2024 units called for operation 44 days,
  - Transmission maintenance: 5
  - Forced outages/emergency: 4
  - Reserve calls/FMPP: 2
- Continued warmer, earlier summer patterns will outpace base projections
- Generation levels very challenging by 2030 - 2032

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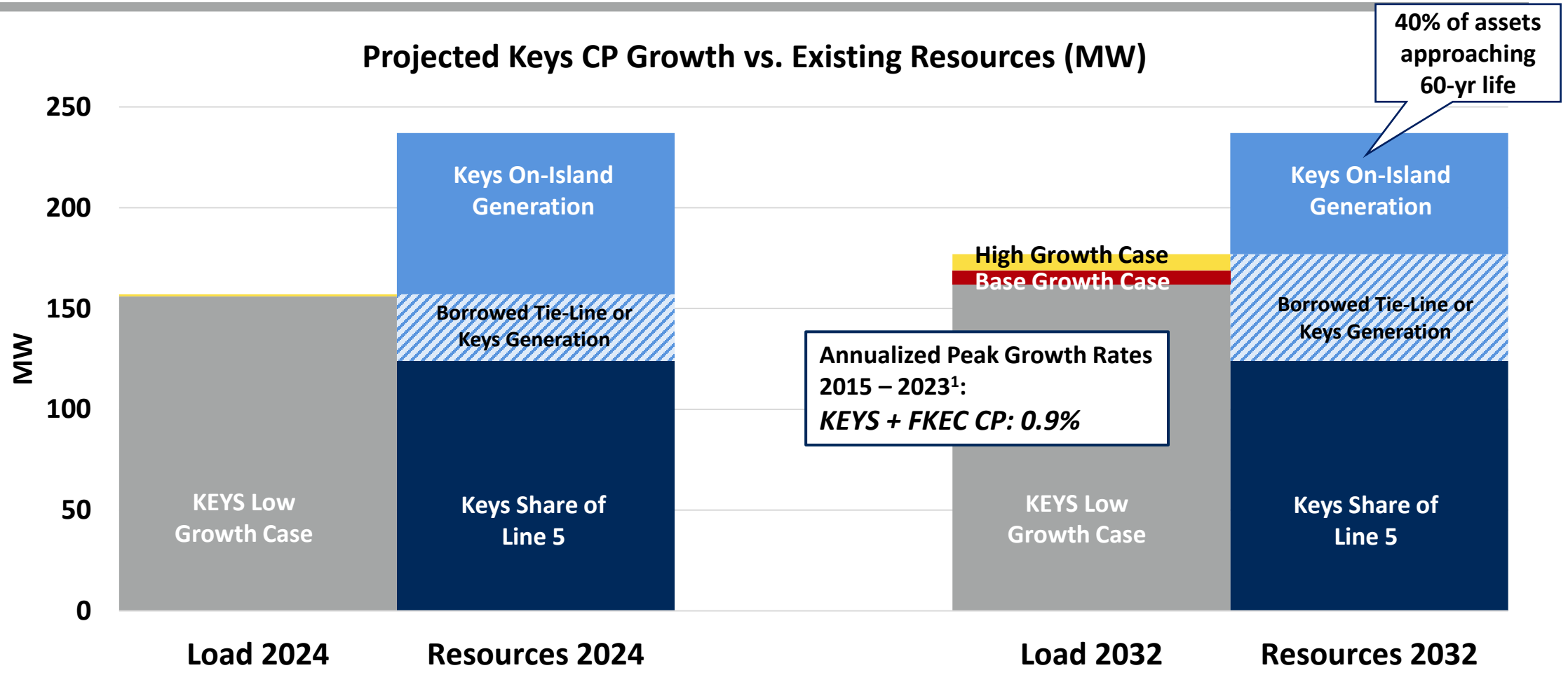
# Keys Energy & Keys Coop Coincident Peak Growth Accelerating

*Utilization of SI Generation Dependent on Coincident Peak*




1 – Non weather adjusted. 2023 abnormally hot summer significant factor in growth rate since 2015.

# Used & Existing Gen Lowest Cost to Meet Capacity Goals

*Higher Coop & Keys Energy Growth Require Additional Generation*

- 20-yr NPV evaluation of replacement assets suggest used peaking generation most optimal economic solution that meets 20-year need
  - LM6000:  Already in use within FMPA fleet
  - TM2500:  Smaller units with similar capabilities of LM6000s
- Current demand for peaking generation may impact availability of resources over next 5 years
- Battery storage pricing currently makes the alternative less attractive
  - Staff monitoring pricing and has completed feasibility study on technology and siting
- Absent finding specific opportunity, life extension investment in existing CTs 1-3 next best alternative
  - Potential insufficient capacity in base and high load growth cases

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# FMPA Agency and Generation Fleet Succession Planning

# Succession Planning Critical to Business Operations

*Prepare for Uncertainties and Ensure Leadership Continuity*

- Reduce operational disruptions so gaps aren't left when key team members leave
- Retaining top talent by providing opportunities from within for professional growth and development
- Employee engagement and job satisfaction increases by providing opportunities for career growth
- Develops a strategic mindset to equip the team with key competencies to be confident people leaders

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# Agency Succession Status

*Team Members Reaching Retirement Age*

- Number of positions out of ~70 in window for potential change

| | Leadership/Director | Manager/SME |
|---|---|---|
| 3-5 years | 3 | 6 |
| 5-10 years | 2 | 4 |
| Total | 5 | 10 |

# ***Most Positions Have Succession Potentials***
## *Progress Being Made On Placing Succession Roles*

- Most Leadership/Director positions have succession potentials in 2 – 3 years
- Two Leadership/Director positions have longer development curves
- Several Leadership/Director potential moves last year for succession growth
- Manager/SME successions identified for most positions
- More Leadership development for strong technical talent
- More development at Manager level for Director/VP/Officer potential

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# Many Gen Leadership Roles Eligible to Retire in 3-5 Years

*All Generation Sites Expected to Have Some Level of Turnover*

- ~15-20 Positions of 60 Retiring Within Next 5 Years at TCEC, SLEC, Stock Island and Mulberry
- Develop Generation Team So Most Leadership Positions Can Be Filled Internally
- Cane Island has 45 team members and has a similar process through KUA
- All plant sites and FMPA office-based team contributing to fill succession roles
- Potential rotation across FMPA plant sites provide training opportunities
- Several candidates identified as high potentials for Manager/Supervisor roles
- Various hiring options for FMPA fleet
- Development of high performers consistent among all plants

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# Next Steps Training, Development and Mentoring

*On The Job and Structured Training To Enhance Readiness*

- Collaboration with Leadership on appropriate training for high potential candidates
- Job shadowing and mentoring to better understand broader roles of leadership
- Cross training to better understand different areas
- General Leadership, Supervision and Team Development skills
- Customized training programs to develop soft skills and technical skills
- Ongoing tracking of progress and quarterly HR updates

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# Opportunities Related to Filling Succession Roles

*Adjusting to New Needs for Training*

- Roles that have decades of institutional knowledge may require more overlap in training
- Ensure adequate training to prepare for transition for operational roles
- Higher investment in training
- Leverage all available talent for smooth succession transitions
- Potential to scale up staff and then scale back down

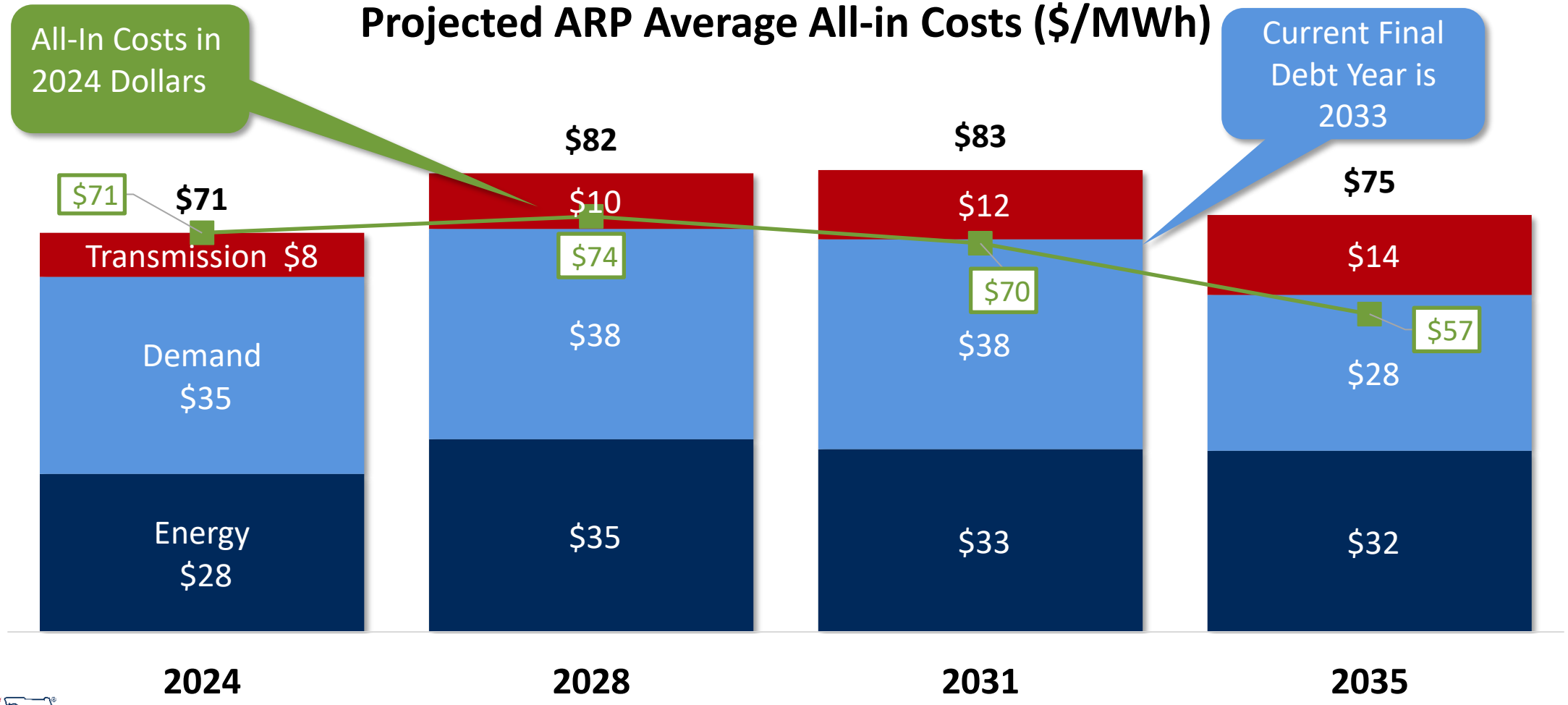
# Asset Capital Plan and Rate Projections

# Summary of Financial Positions for FMPA Projects

- ARP fixed costs projected stable over next several years, with gas prices driving overall ARP costs
  - Pending plant acquisitions fill ARP capacity needs at low cost
- Stanton 1 retirement assumed in 2025; Stanton 2 gas conversion assumed in 2027
  - Stanton 1 ongoing post-retirement costs still to be determined but goal is no billings to Stanton and Tri-City project participants after retirement
  - Stanton 2 expected to reduce fixed cost post-conversion and operate more as peaking resource, with current debt payoff in 2027
- St. Lucie Project costs projected to remain stable
  - St. Lucie 2 operational license extension to 2063 pending
  - Current debt payoff is 2031 but capital costs to achieve 80-year life not yet known

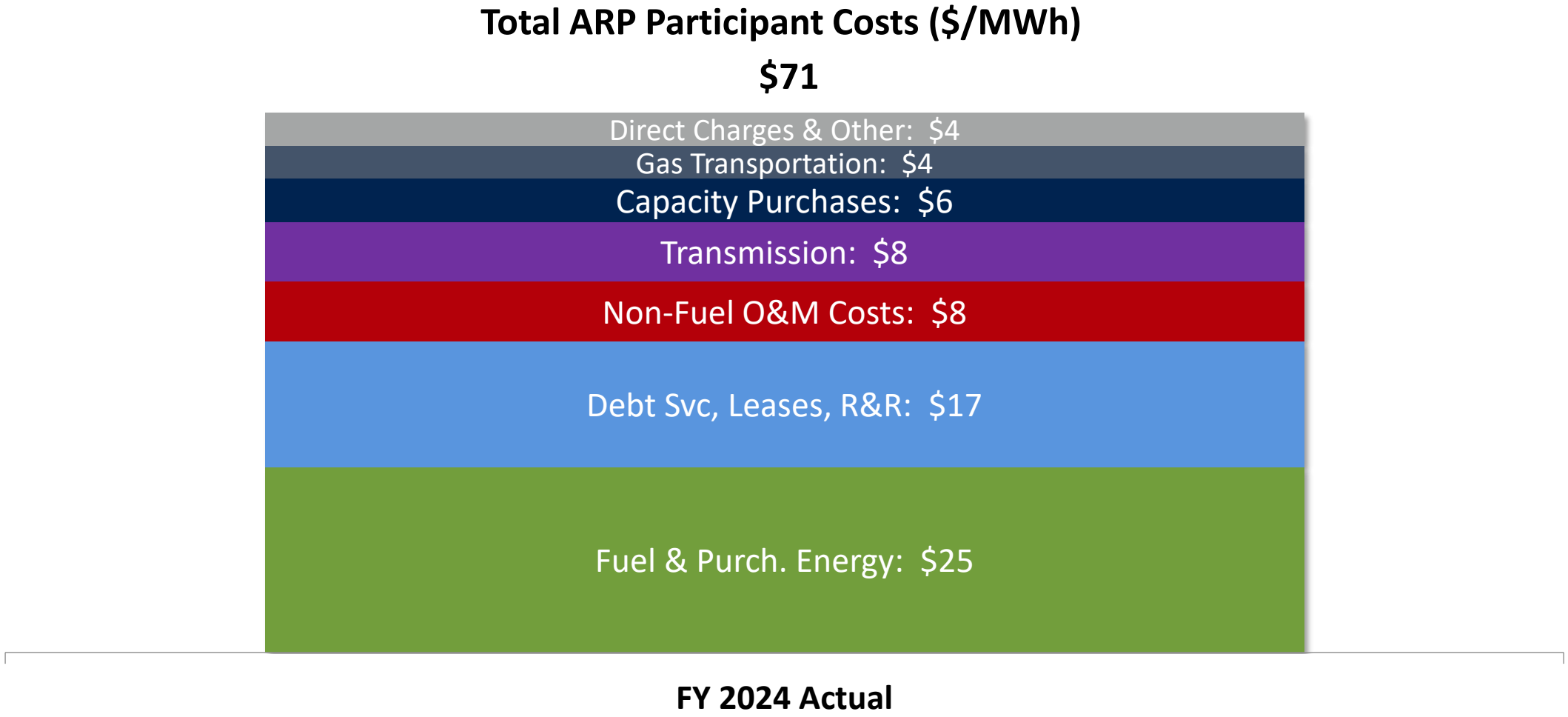
# ARP Costs Projected < $85/MWh

*Projected < $77/MWh on Inflation-Adjusted Basis*



# Natural Gas Prices Largest Driver of ARP Costs

*Non-Fuel Costs Relatively Stable*

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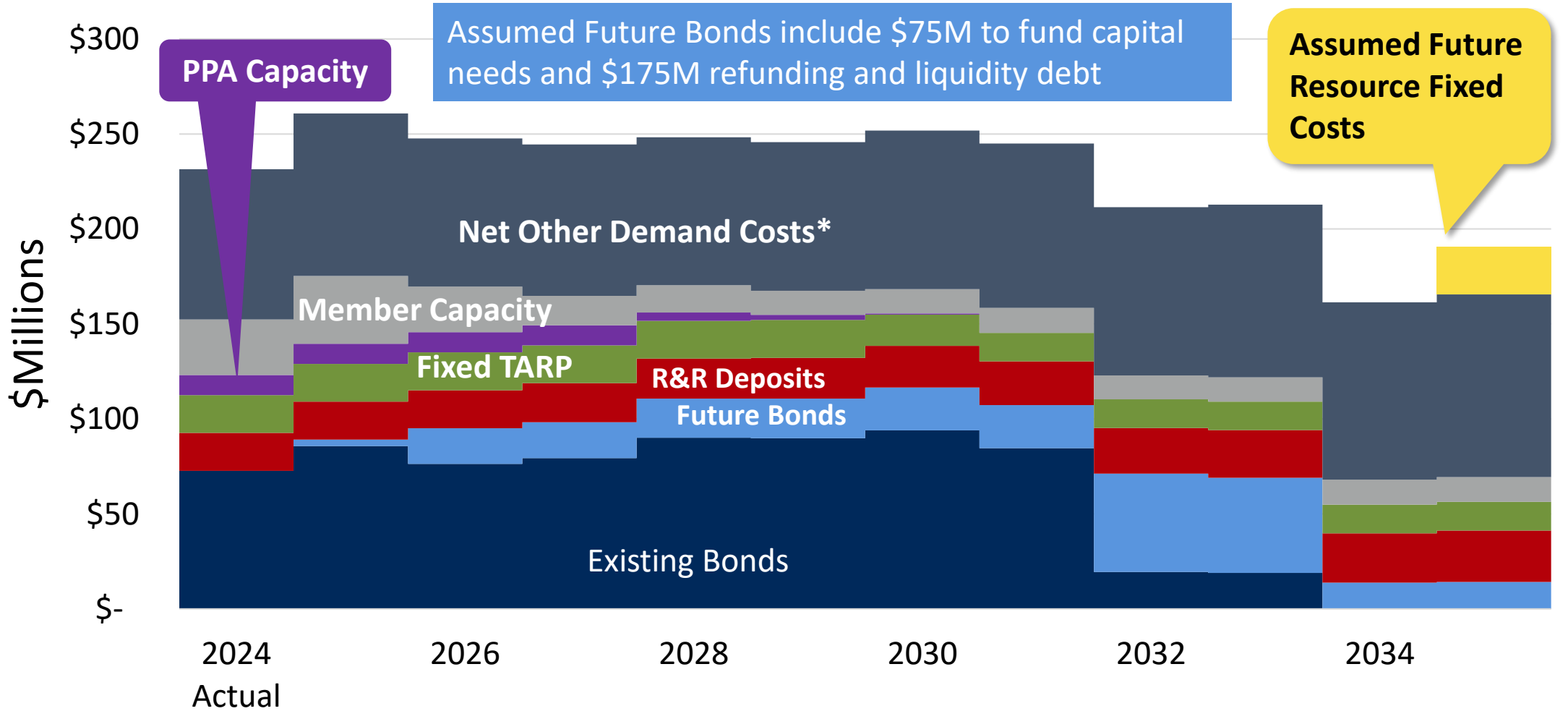
# ARP Demand Costs Projected to Remain Stable

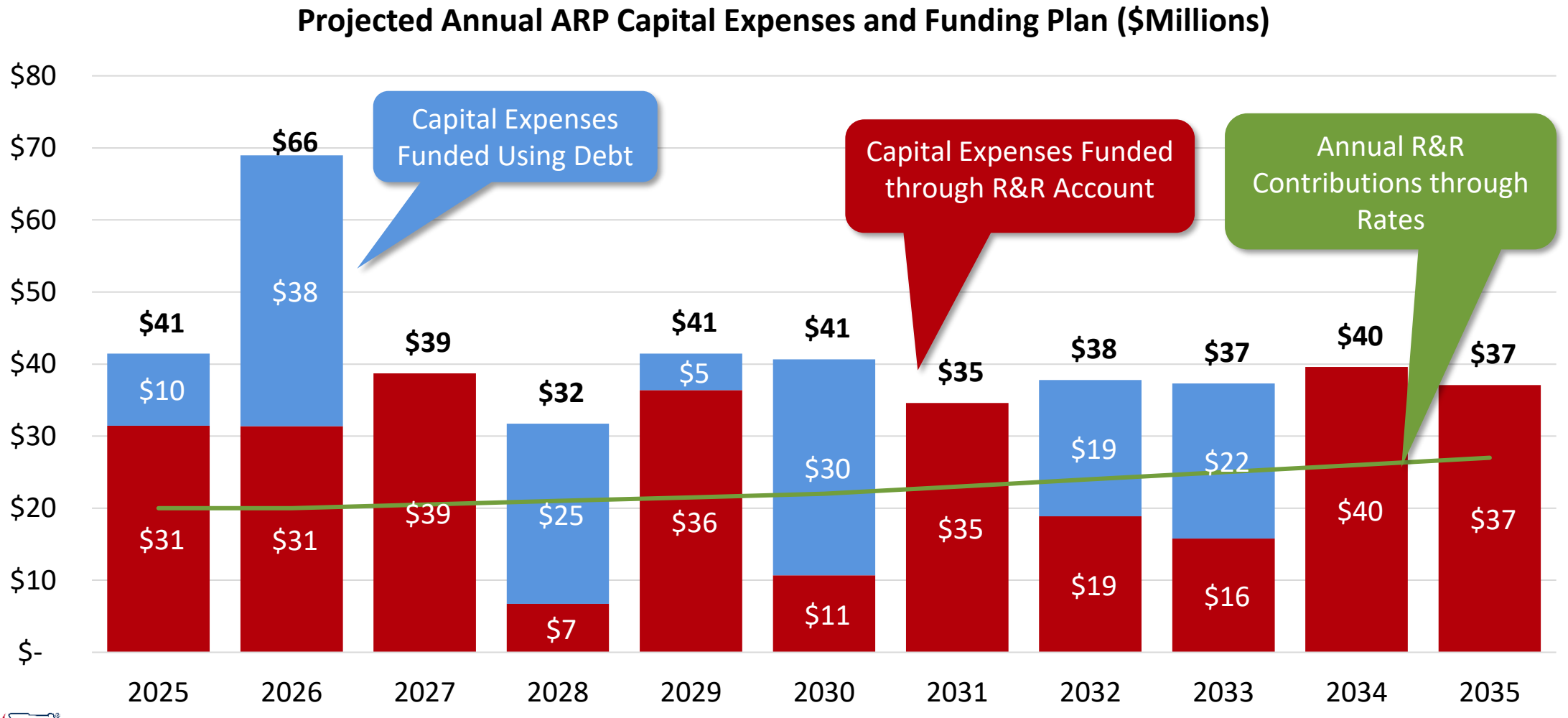
*Debt Service Declines After 2031*




* Primarily includes fixed O&M costs, gas transportation costs, and allocated Agency costs.

# ARP Capital Spending ~$40M/Year Avg. through 2035

*Debt Funding Will Be Needed to Support Continued Reliability*

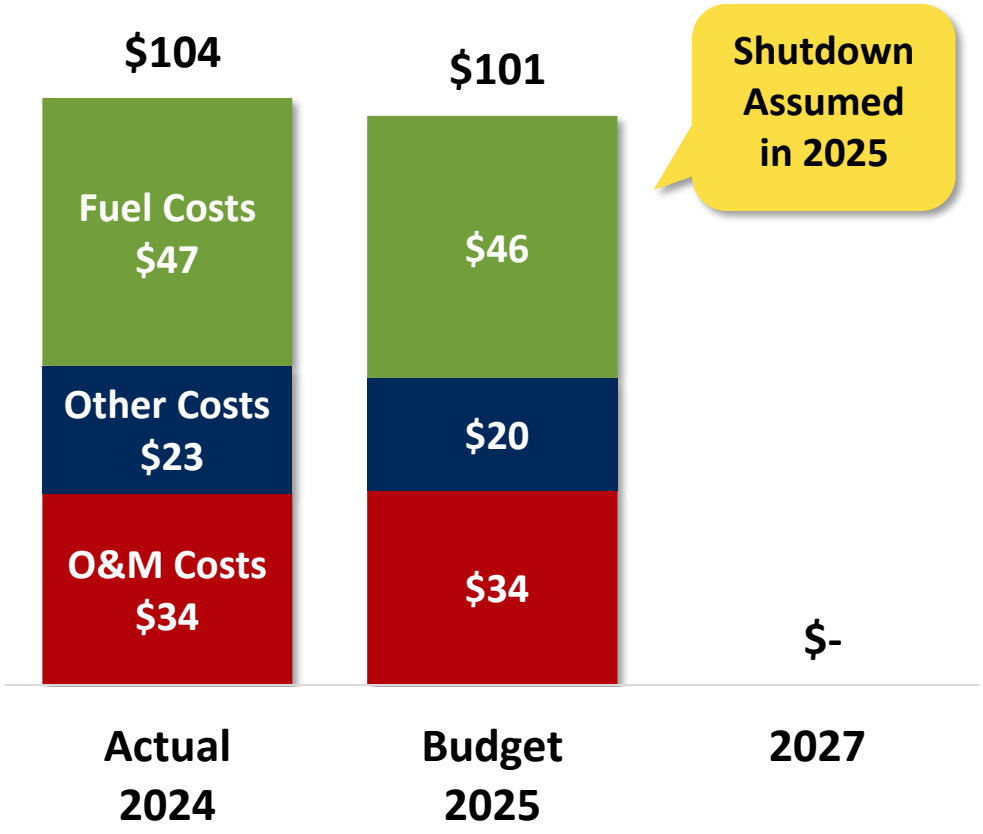



NOTE: Reflects Bartow (Orange) acquisition in FY 2026, but does not include construction or acquisition costs for future resources

# Stanton 1 Effectively Retired by End of 2025

*Building Funds to Cover Post-Shutdown Costs, No Debt Today*

**Projected Stanton Project Participant Costs ($/MWh)**




- OUC has committed to shut down Stanton 1 no later than end of 2025
- Working with OUC to minimize post-shutdown costs
- Some costs ongoing, including pond and landfill maintenance
- Building reserves in Stanton & Tri-City Projects to avoid billing participants for post-retirement costs

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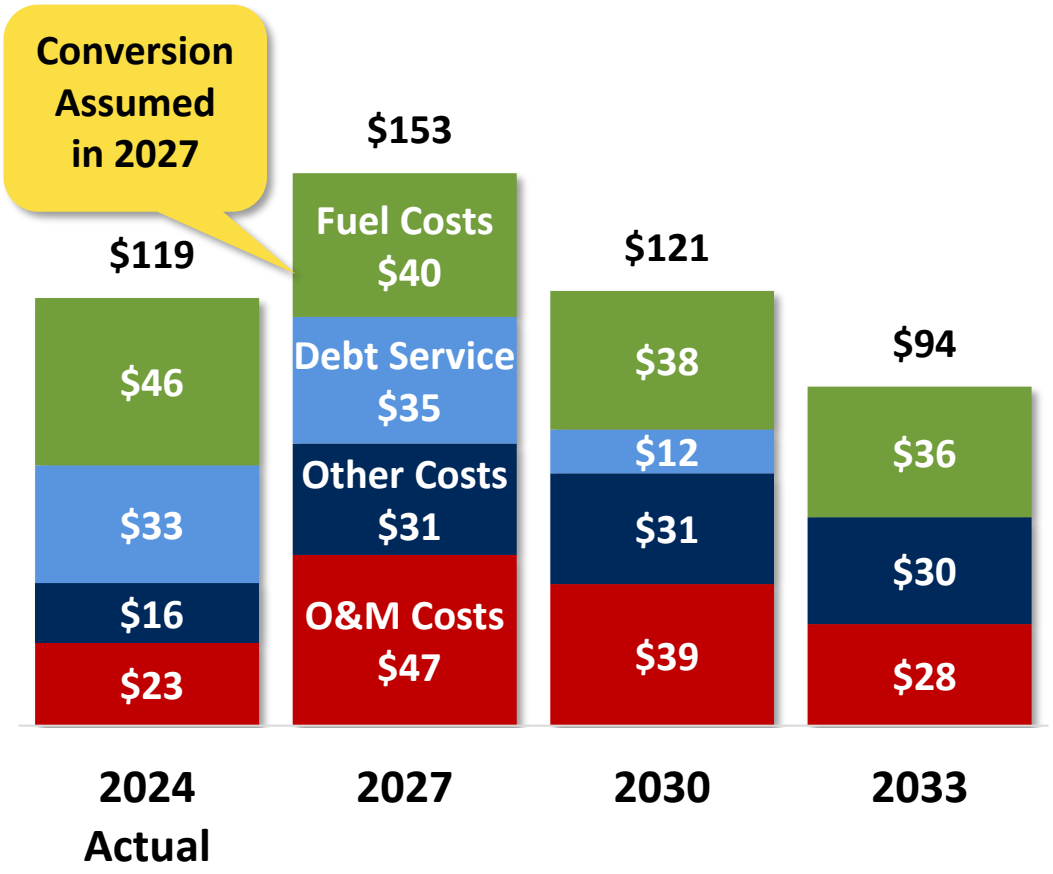
# Stanton II Remains Highest Cost Project

*Scheduling Drives $/MWh Costs Higher, ~$60M Debt Remains*

**Projected Stanton II Project Participant Costs ($/MWh)**



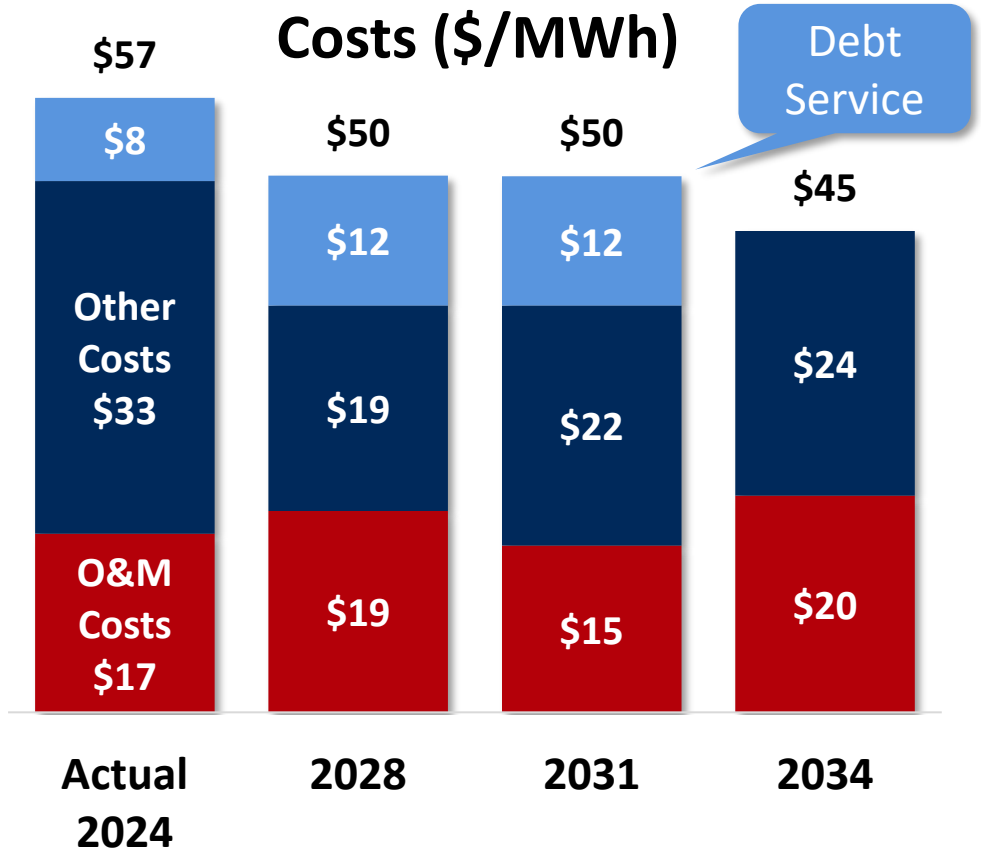

- OUC announced plan remains conversion to gas no later than 2027, but currently performing new IRP
- Working to implement scheduling rights to reduce exposure to high-cost coal energy
- Continuing to work towards limiting FMPA cost exposure to Stanton 2
- 2027 is current final debt year for Stanton II; $50M existing debt, assuming $10M conversion debt

Projections reflect implementation of scheduling at assumed annual capacity factor of ~20%.

# St. Lucie Costs Expected to Remain Stable

*Extending Debt Life Allowed For Lower Participant Costs*

**Projected St. Lucie Project Participant Costs ($/MWh)**




- St. Lucie nuclear facility is cost competitive with no carbon emissions
- Debt extension to 2031 facilitated rate decrease to ~$50/MWh
- FPL has applied for 20-year license extension to operate until 2063
- Future capital needs to accommodate life extension still unknown
- $48M existing debt remaining

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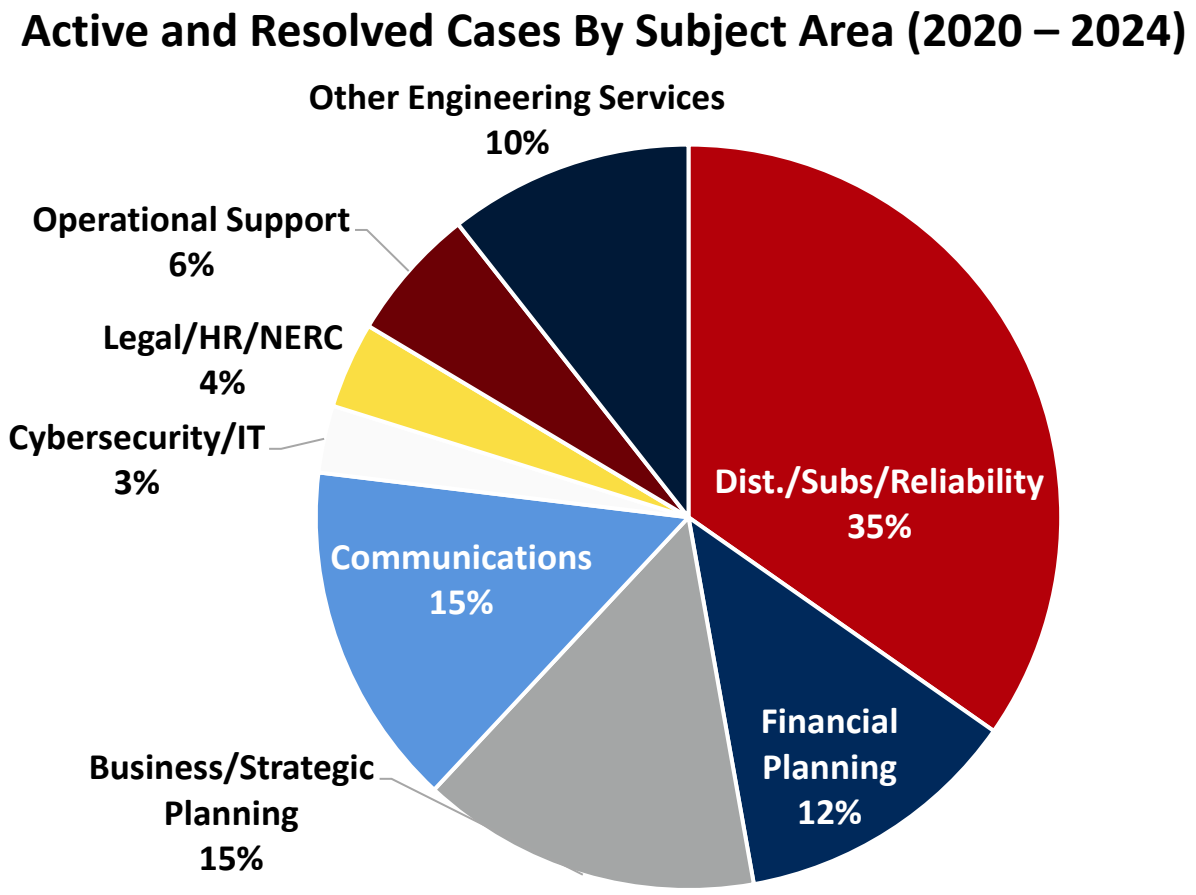
# Member Services - Rates Competitive – Enhance Distribution Reliability and Other Services

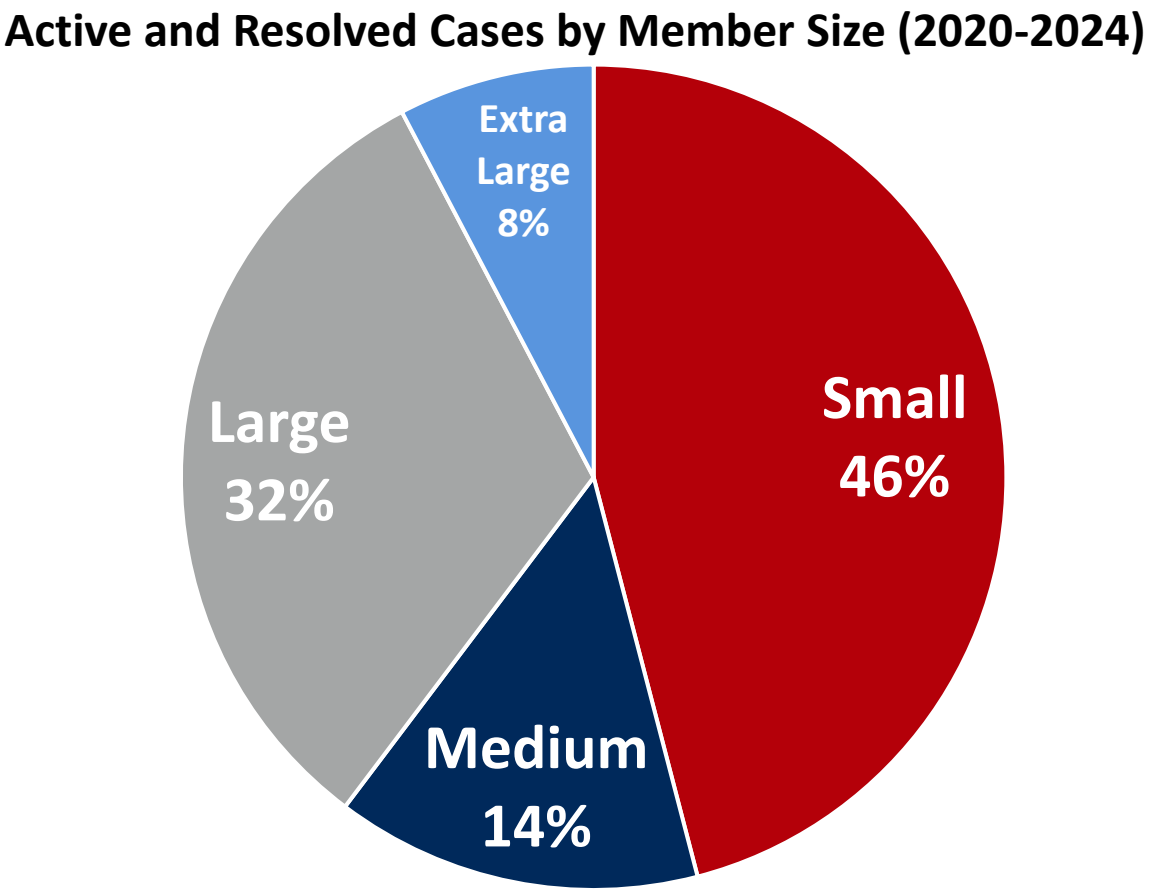
# Member Services Now Intrinsic to Entire Agency

*5 Years of Project Data Reveals Activity Across All Key Areas*



# FMPA Services Provided to Members of All Sizes

*Services By Utility Size Similar to Member Mix*

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# FMPA Service Satisfaction Very High

*Services/Programs From Across The Organization Valued*

| Service Offering | Survey Size | "Excellent" or "Good" |
|---|---|---|
| Conservation Fund | 25 | **100%** |
| Legal Support | 31 | **100%** |
| Accounting, Finance, Pooled Loan | 20 | **100%** |
| Lineworker Safety Program | 40 | **97.5%** |
| Joint Procurement | 38 | **97.4%** |
| Peer Review | 36 | **97.2%** |
| Master Services Agreements | 35 | **97.1%** |
| NERC Compliance | 33 | **97.0%** |
| Energy Policy Advocacy | 26 | **96.2%** |
| Distribution Planning Support | 21 | **95.2%** |

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# FMPA Service Satisfaction Very High

*Services/Programs From Across The Organization Valued*

| Service Offering | Survey Size | "Excellent" or "Good" |
|---|---|---|
| Engineering and Technical Services | 41 | **95.1%** |
| Lineworker and Technical Training | 38 | **94.7%** |
| Communications & Public Relations Support | 36 | **94.4%** |
| Supervisor and Other Soft Skills Training | 44 | **93.2%** |
| Reliability Support & Tracking | 40 | **92.5%** |
| HR Support & Salary Surveys | 26 | **92.3%** |
| Substation Asset Management | 21 | **90.5%** |
| Rates and Revenue Sufficiency Support | 20 | **90.0%** |
| Cybersecurity & IT Assistance | 20 | **90.0%** |
| System Mapping Support | 14 | **85.7%** |

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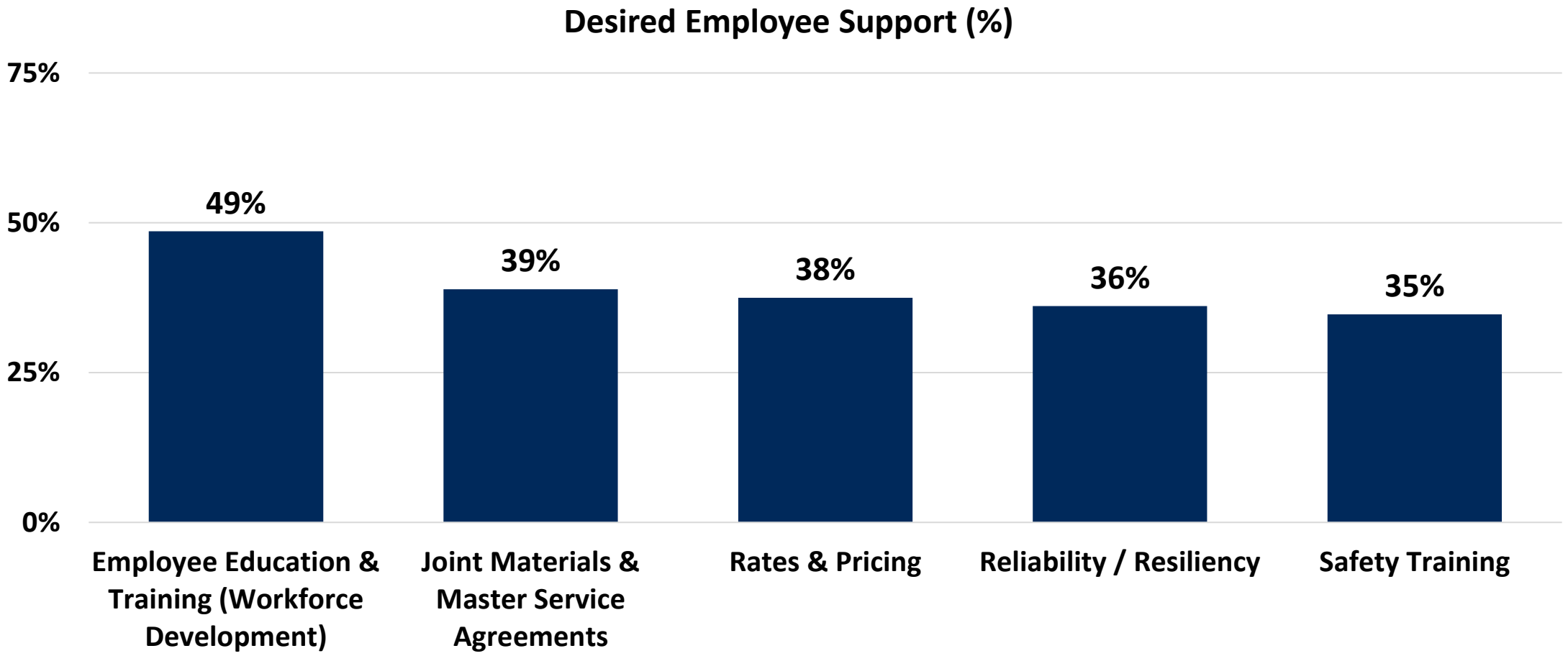
# Members Enjoy Joint Training, Desire Employee Support

*Joint Materials & Master Services Agreements Avoid Long City Procurement*

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# We Want Your Feedback

Are there any strategic service areas missing from FMPA's Member Service offerings?

Please provide your feedback in the poll.

slido

Please download and install the Slido app on all computers you use

**Do you believe there are any strategic service areas that should be added to FMPA's Member Service offerings? Check any that apply.**

ⓘ Start presenting to display the poll results on this slide.

# Conclusions

# In Good Position in Near Term

## *Work Ahead for Mid and Long Term Success*

- Long term rates exposed to gas prices, but price stability program reduces mid-term risk – more exposed to gas vs. FL IOUs long-term
- Diversify from gas and solar with nuclear – dedicate more human and financial capital towards supporting nuclear expansion?
- Continued exploration of much larger pool and imbalance markets to offset cost increases from integration of solar and bring scale to operations
- ARP capacity needs through ~2035 resolved; ability to optimize capacity position with member sales and mid-term opportunities
- 2025 IRP focused on understanding capital needs of existing fleet for life-extension
  - Asset life extensions vs PPA renewals and market opportunities in mid-term
  - Stock Island opportunistic purchase preferred path w/BESS site option maintained
- Human resources focused on significant potential retirements drives proactive succession planning with targeted developed plans & training well ahead of needs

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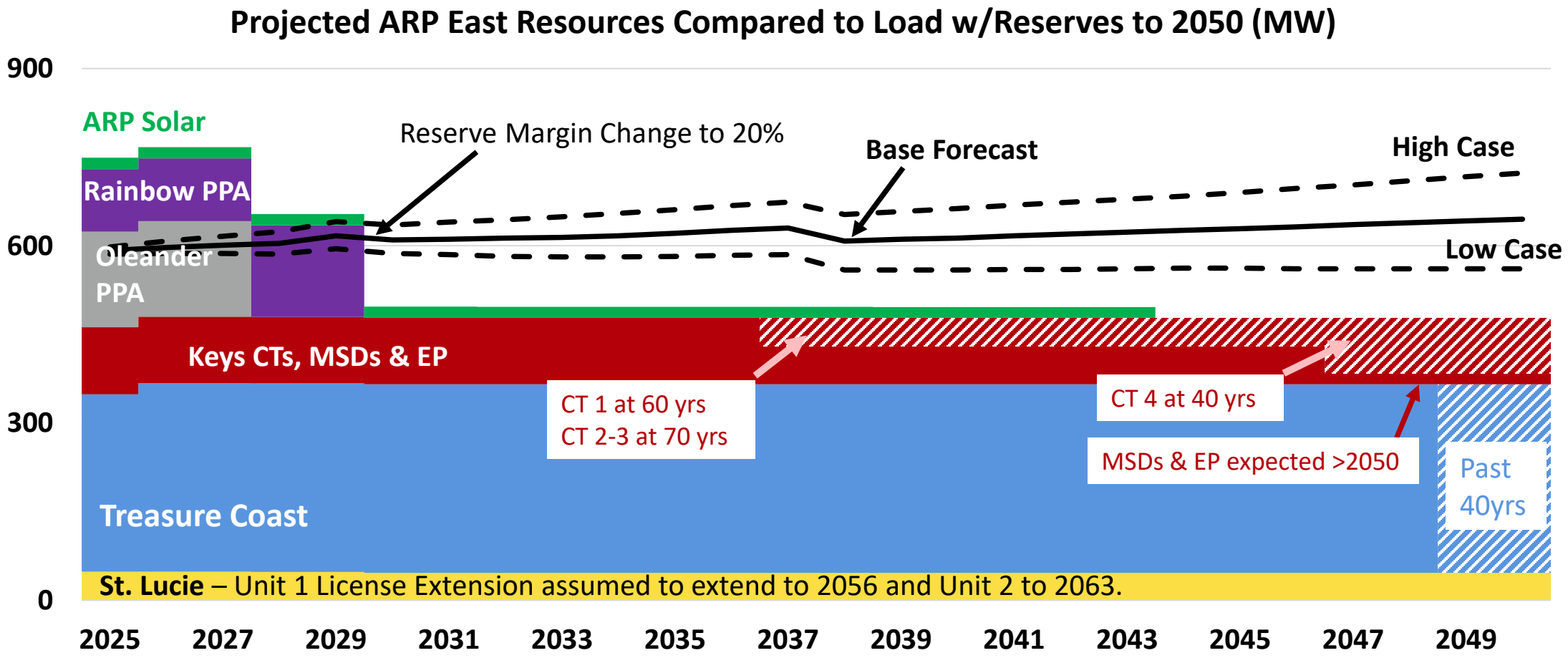
# Appendix A – Area Load And Resource Balance and KEYS Resource Plan Backup Materials

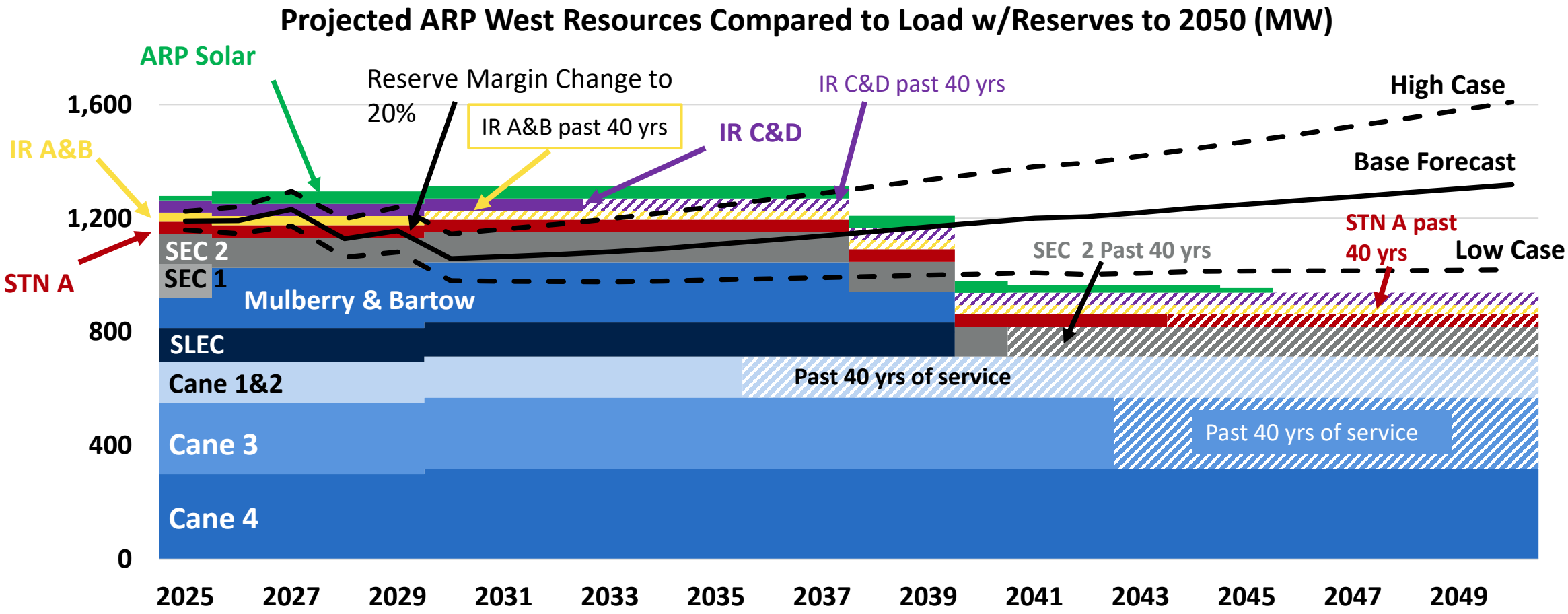
# ARP East Projected Position through 2050

*Second Half of Period Baseload CC and Keys CT Near EOL*



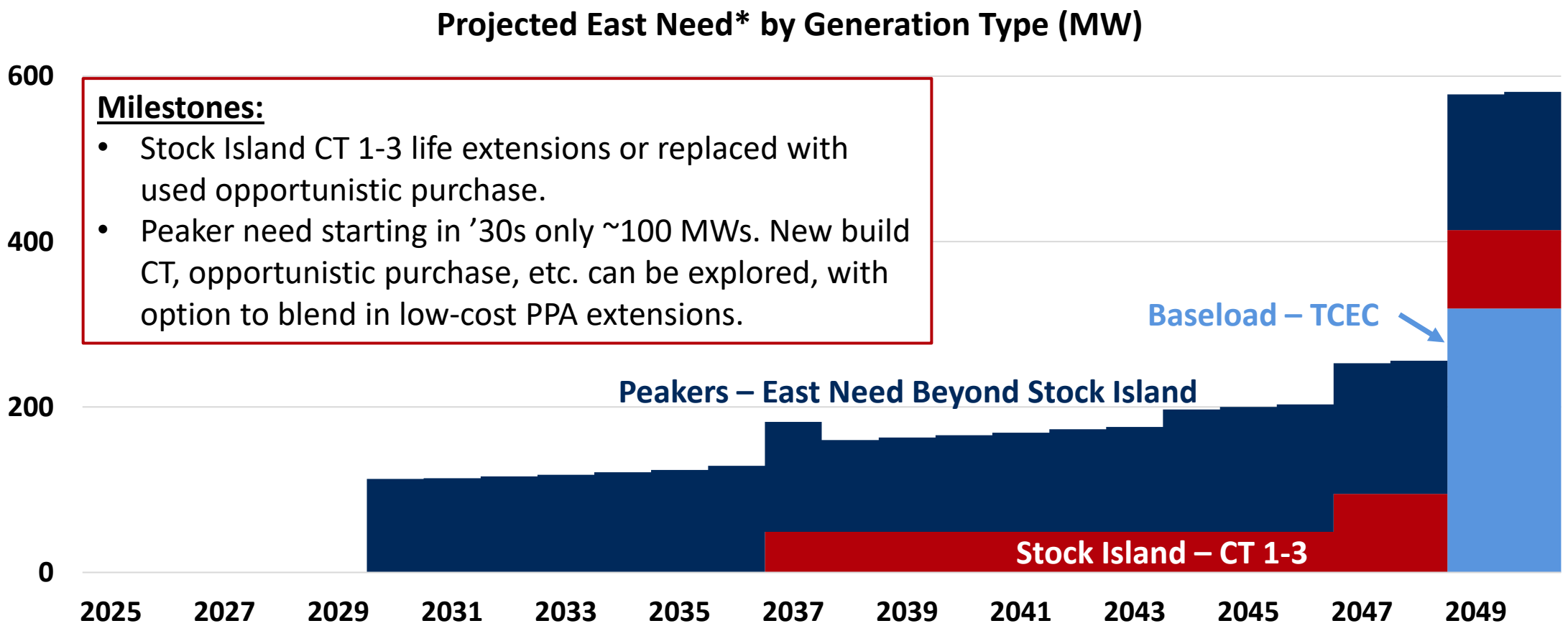
# ARP West Projected Position through 2050

*Peakers Near EOL Sooner Than Baseload CCs*



# East Needs Driven by Peaker PPA Expirations

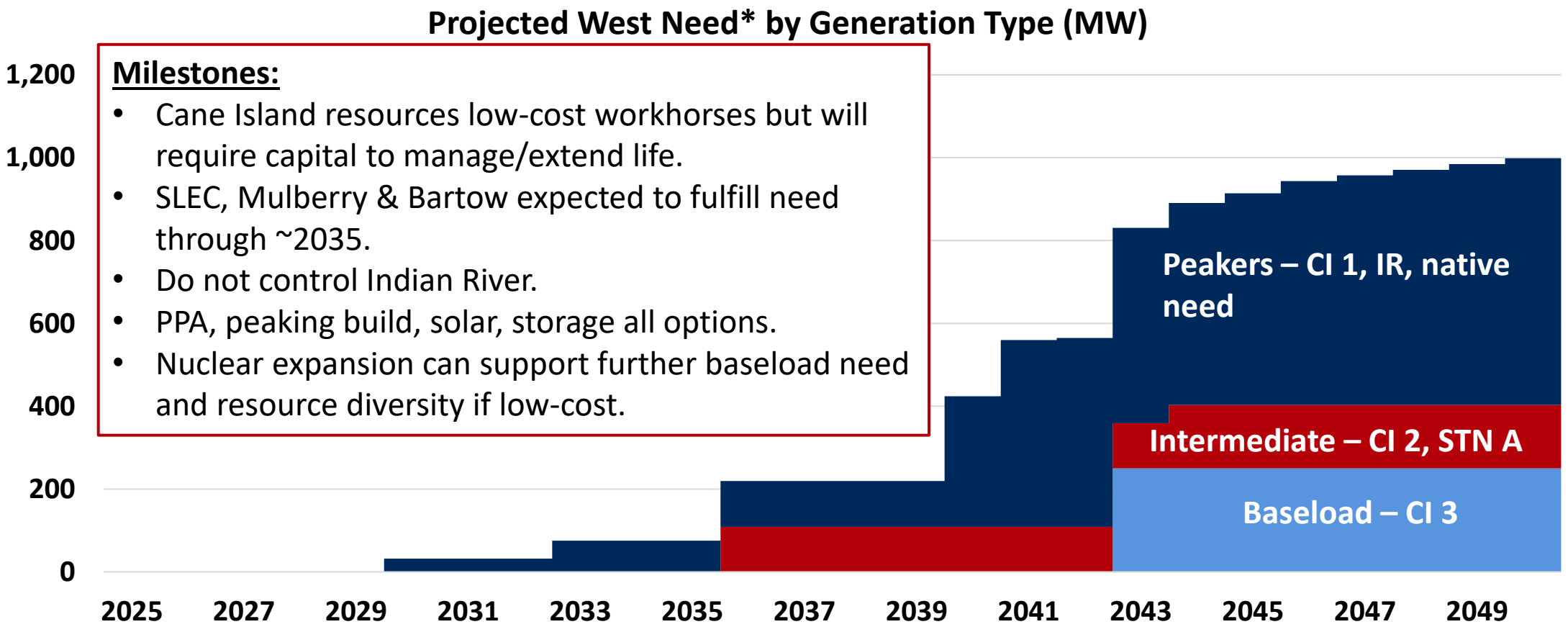
*Capacity Needed with Units Retiring at EOL and PPA Expirations*




*Need represented based on asset age and current expectations. Life extension efforts may adjust timing.

# West Needs Driven by EOL and Load Growth

*Capacity Needed with Units Retiring at EOL and PPA Expirations*




**Milestones:**

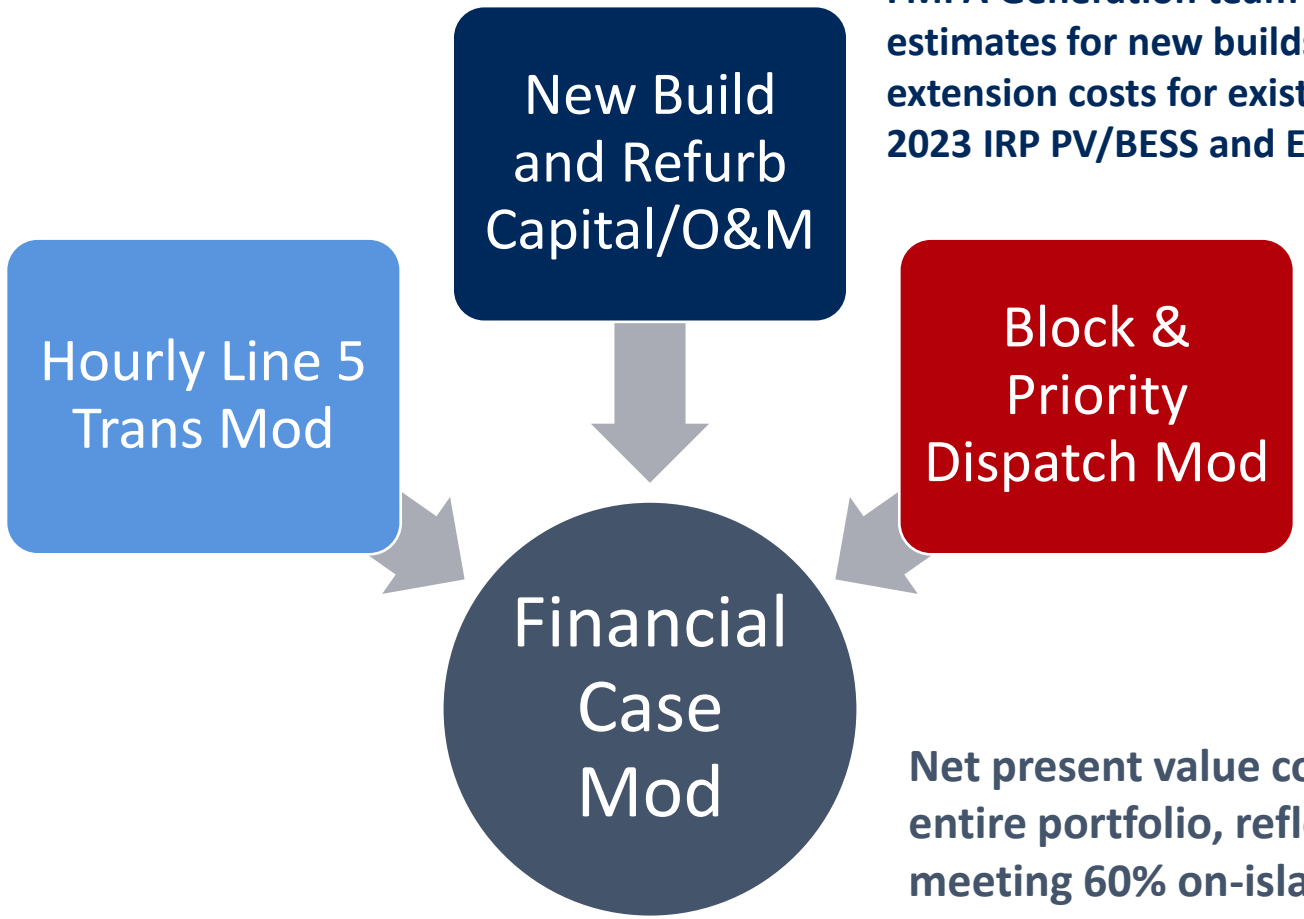
- Cane Island resources low-cost workhorses but will require capital to manage/extend life.
- SLEC, Mulberry & Bartow expected to fulfill need through ~2035.
- Do not control Indian River.
- PPA, peaking build, solar, storage all options.
- Nuclear expansion can support further baseload need and resource diversity if low-cost.

*Need represented based on asset age and current expectations. Life extension efforts may adjust timing.

# Replicable Modeling Framework Built for KEYS Plan

*Load, Resource, and Financial Parameters Fully Integrated*

KEYS' load paired with FKEC load south of Tavernier to estimate 20-year hourly demand for local generation inclusive of appropriate loss adjustments. Each growth case and/or investment alters projected local MWhs.




FMPA Generation team and vendor estimates for new builds, casings and life extension costs for existing fleet. 1898 2023 IRP PV/BESS and EIA add estimates.

Based on current merit order and/or merit order with new builds in a given case, estimates energy by asset and starts by asset. More efficient new/used units displace older units as appropriate in a given case.

Net present value cost over 20 years for entire portfolio, reflective of both meeting 60% on-island requirement and additional investments that apply to a given case.

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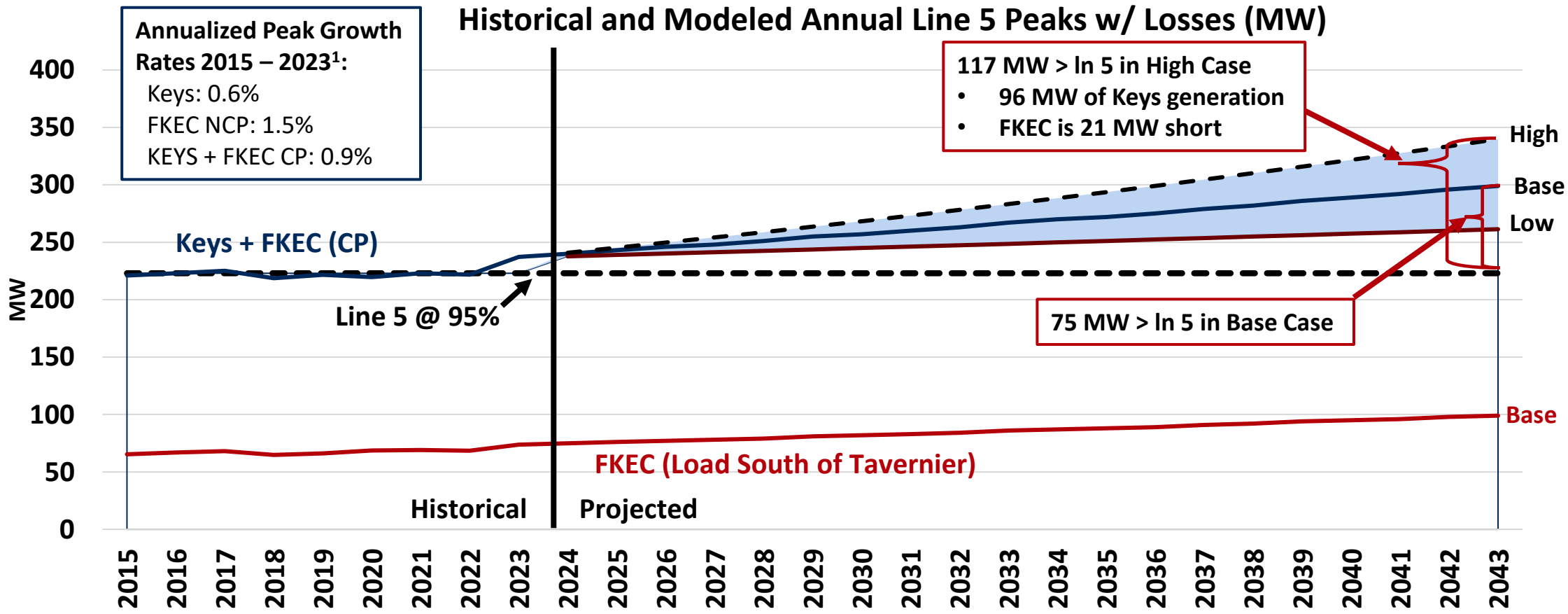
# Post Covid KEYS/FKEC Peak Faster Growth Than Individually

*Utilization of SI Generation Dependent on Coincident Peak*

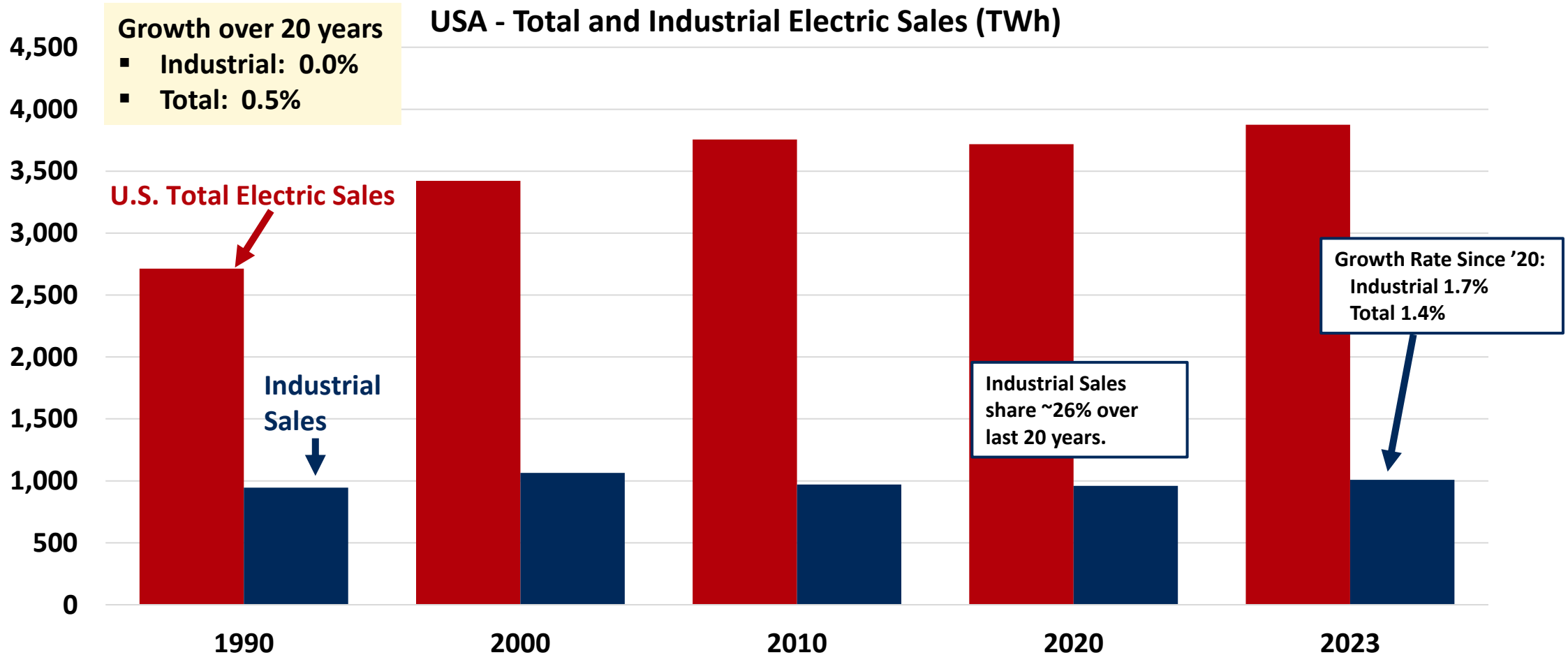



1 – Non weather adjusted. 2023 abnormally hot summer significant factor in growth rate since 2015.

# Appendix B - Electric Demand, Supply and Generation Mix Changes and Natural Gas Market Expectations

# Total U.S. Electric Sales Have Remained Flat Since ‘10

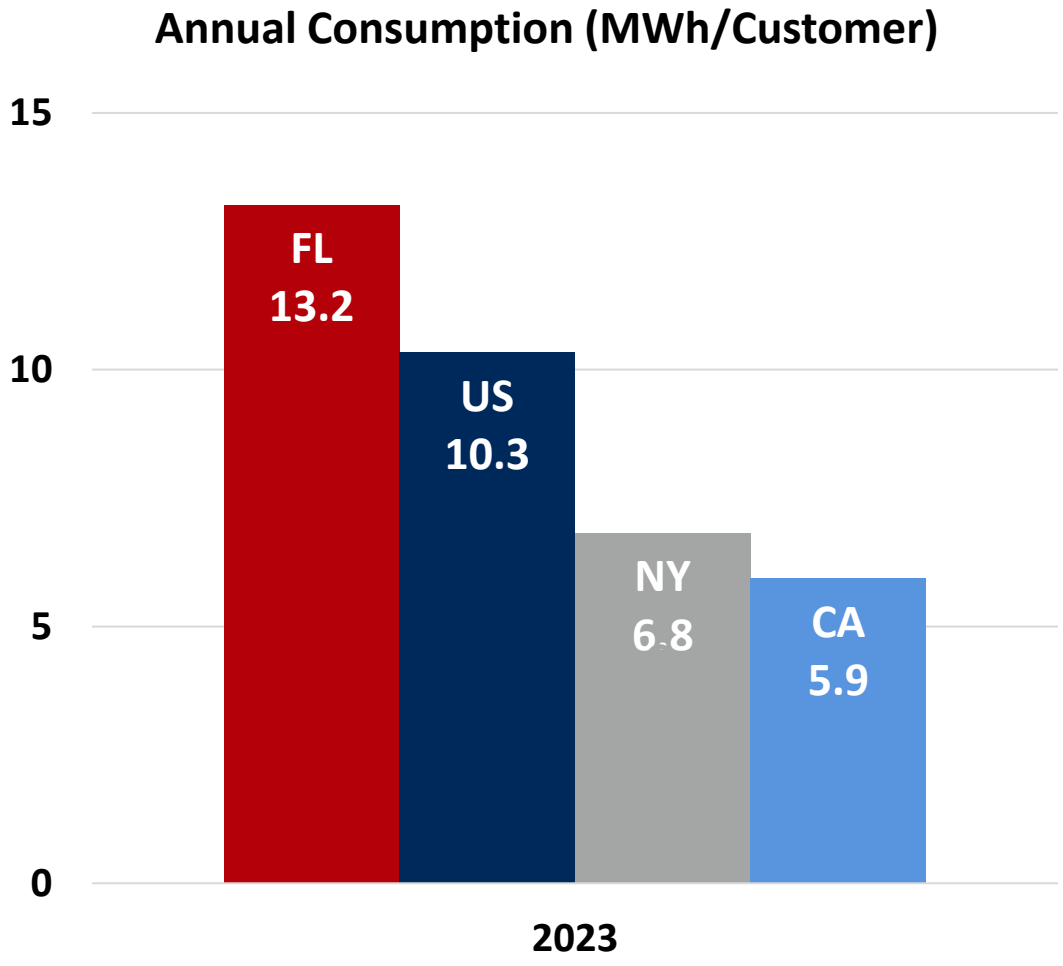
*Growth Rate of ~0.5% Per Year Over Last 20 Years*

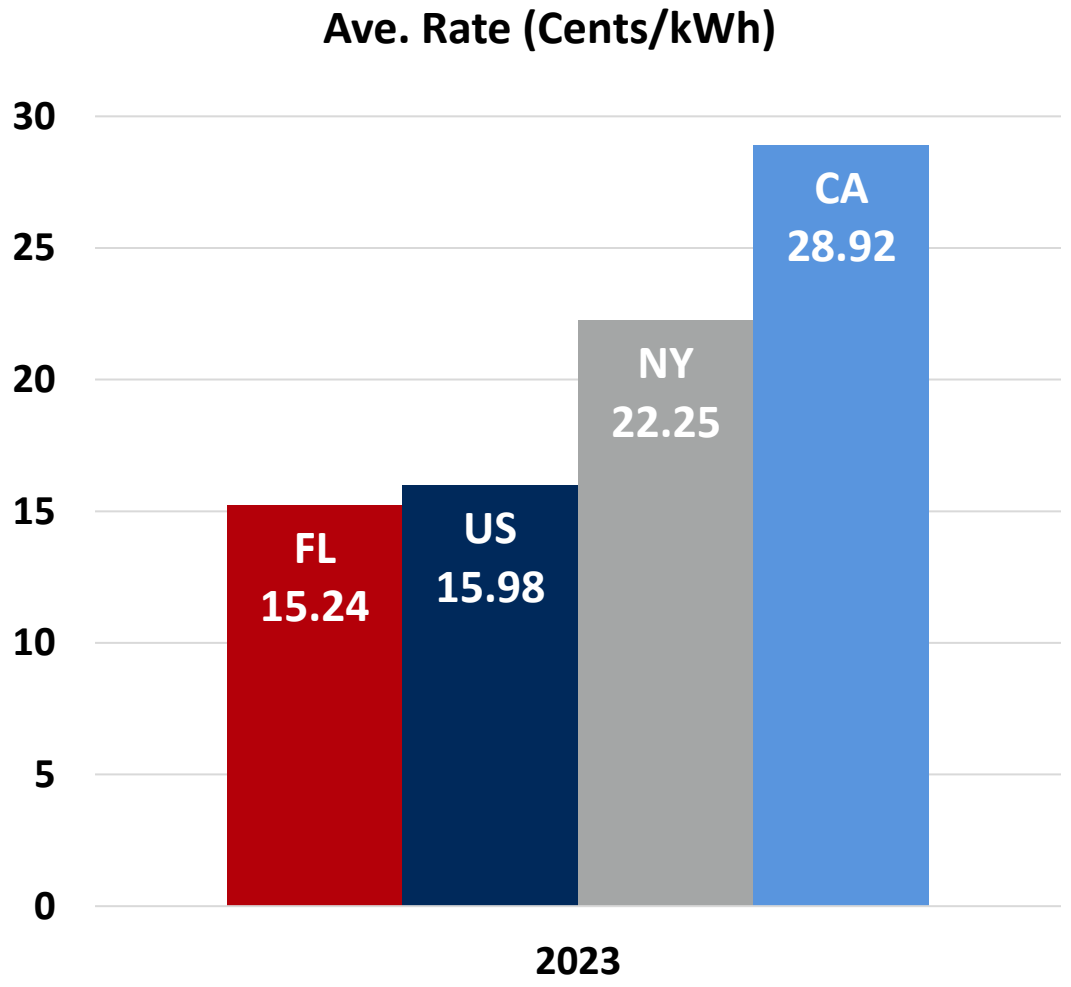



SOURCE: EIA State Profiles (2022)

# Florida Uses More Electricity Per Customer

*Cooling Load Drives Higher Residential Need*

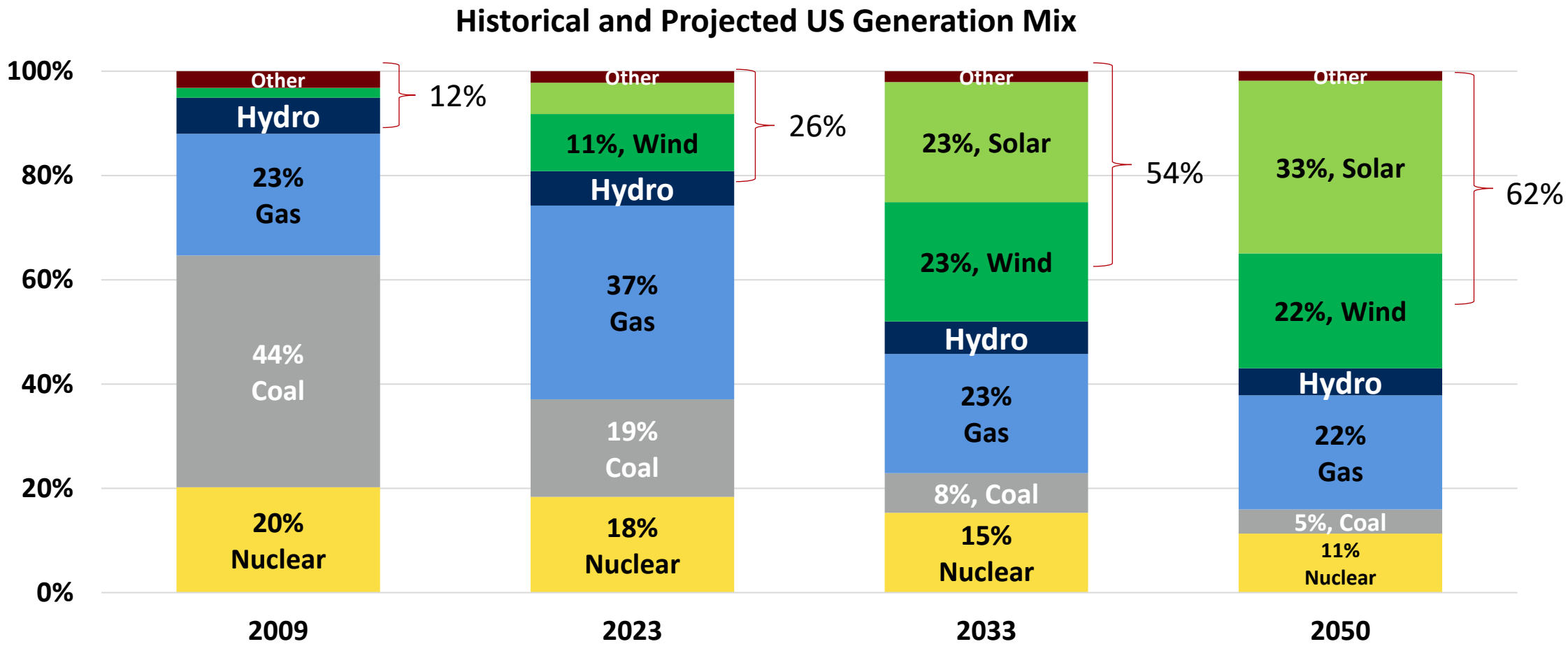



SOURCES: EIA

# U.S. Far More Balanced Overall than Florida

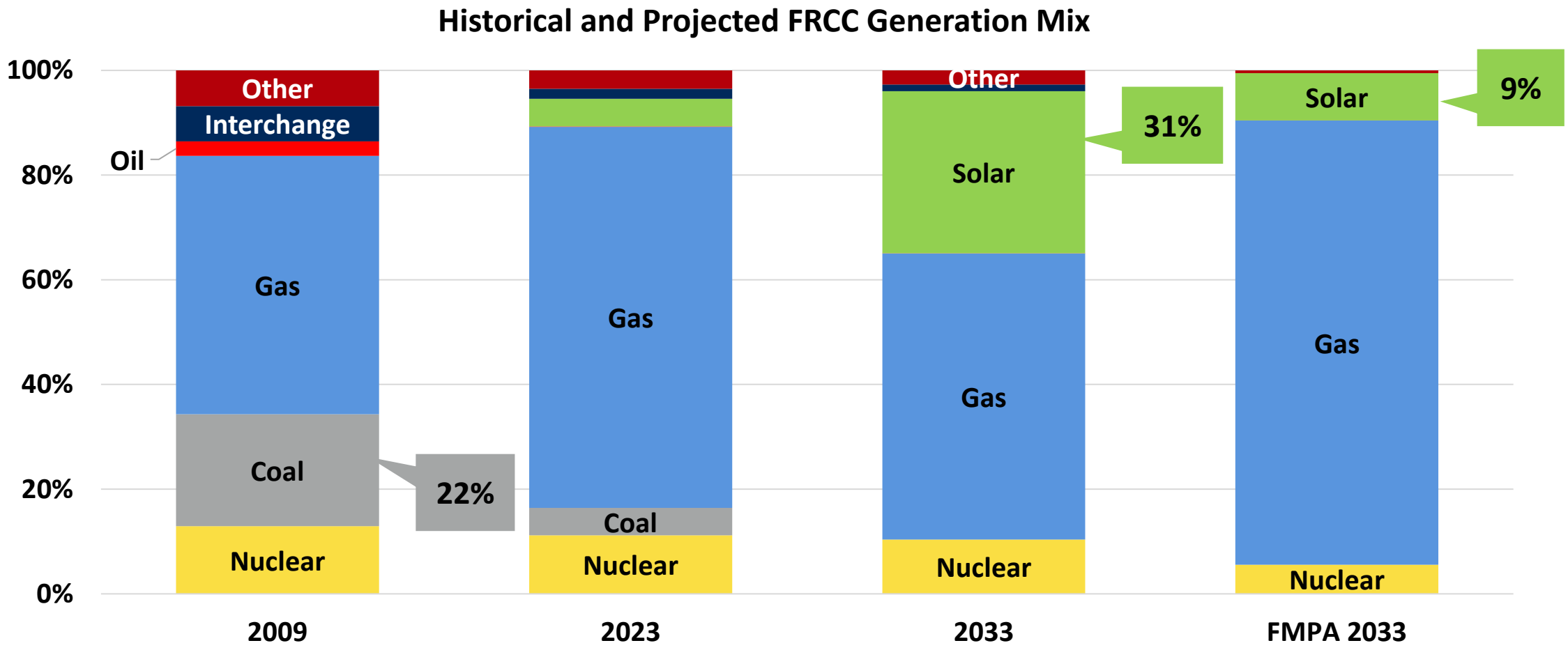
*EIA Views Solar and Wind As Growth Path, Nuclear Flat*




SOURCE: EIA 2023 AEO. Next expected AEO release in April 2025.

# Gas Drives Florida Generation Mix

*Coal Expected to Be Displaced by Solar and Gas by 2033[1]*

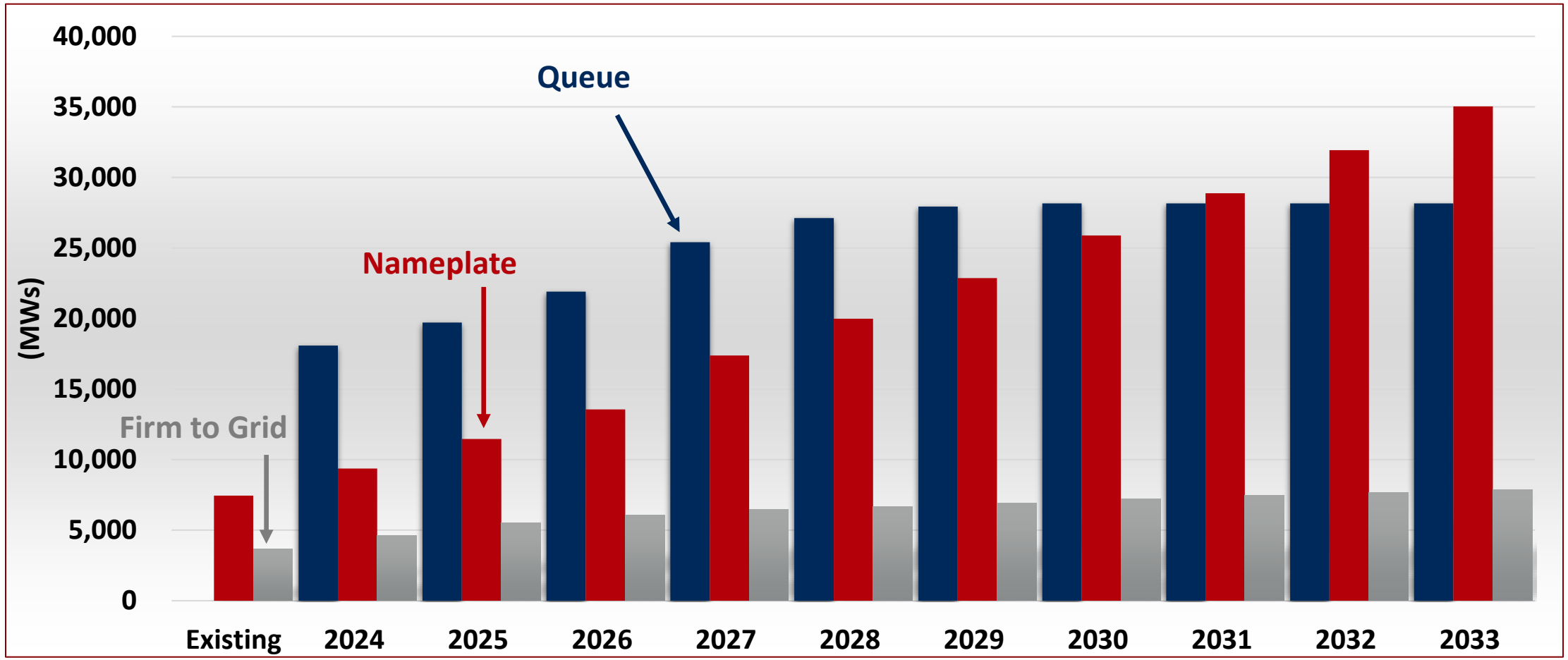



SOURCE: FL PSC (2024 TYSPs)

1 – FMPA expects all FL coal to be retired or converted to gas by 2033.

# Florida Utility Solar Grows to ~28 GW by 2033

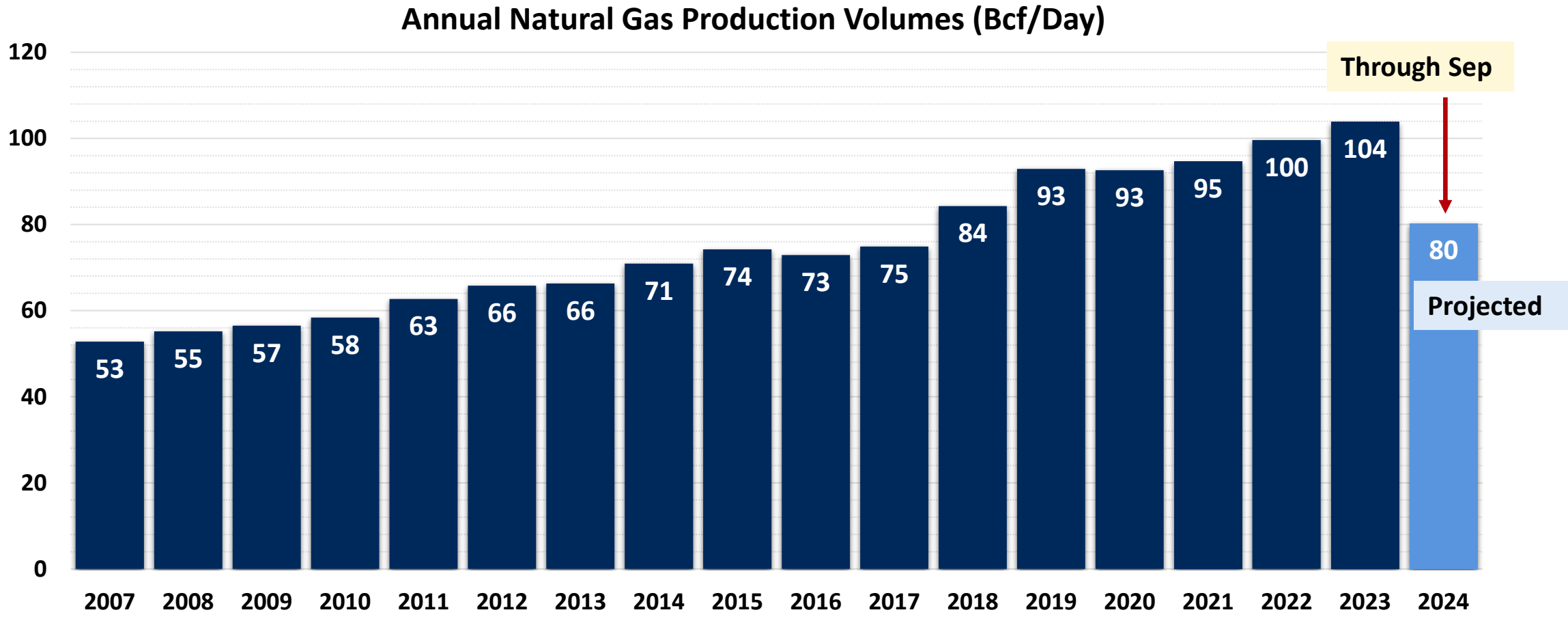
*Transmission Queue Far Exceeds Site Plans*




SOURCE: FRCC Load and Resource Plan (2024)

# Shale Gas Rapidly Increased Production

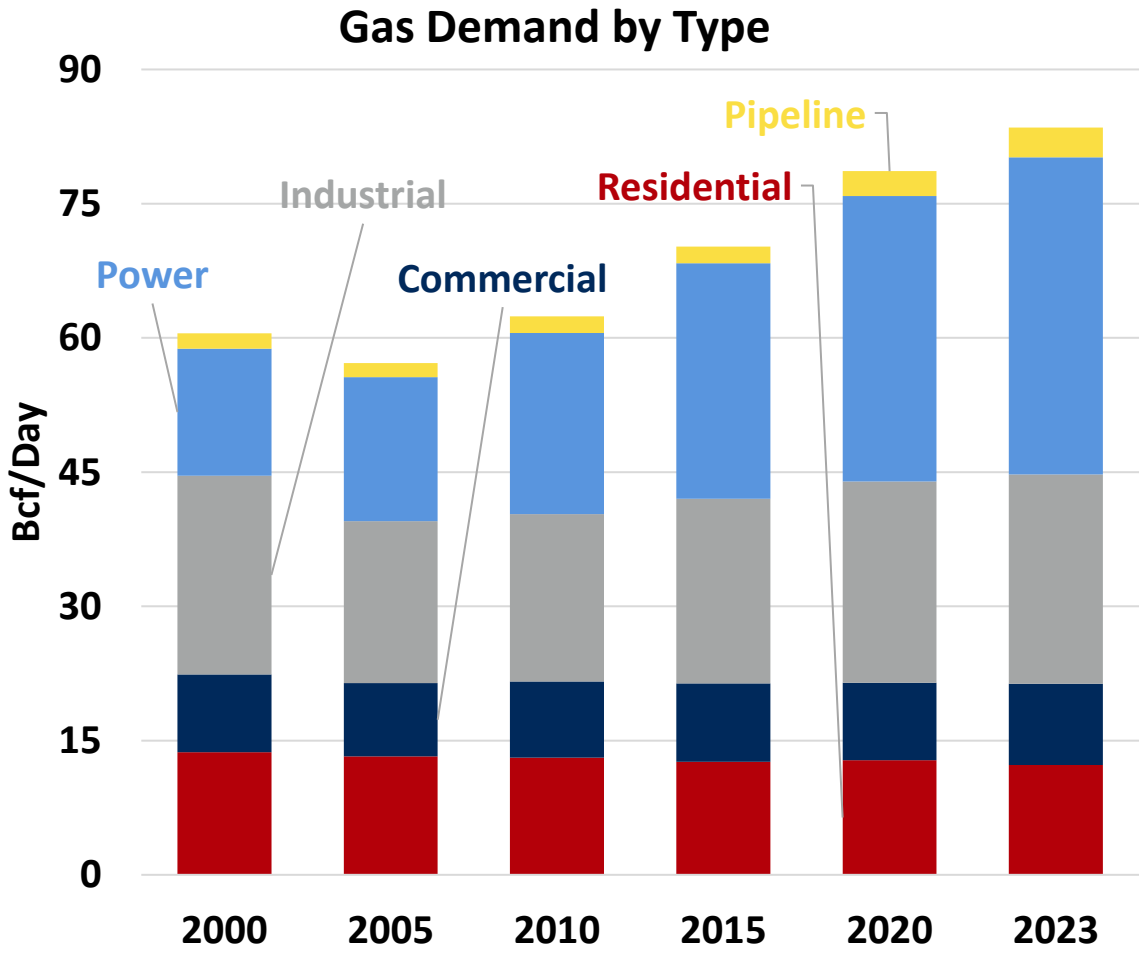
*Regulation Uncertainty & Recession Risks Could Shape Future*

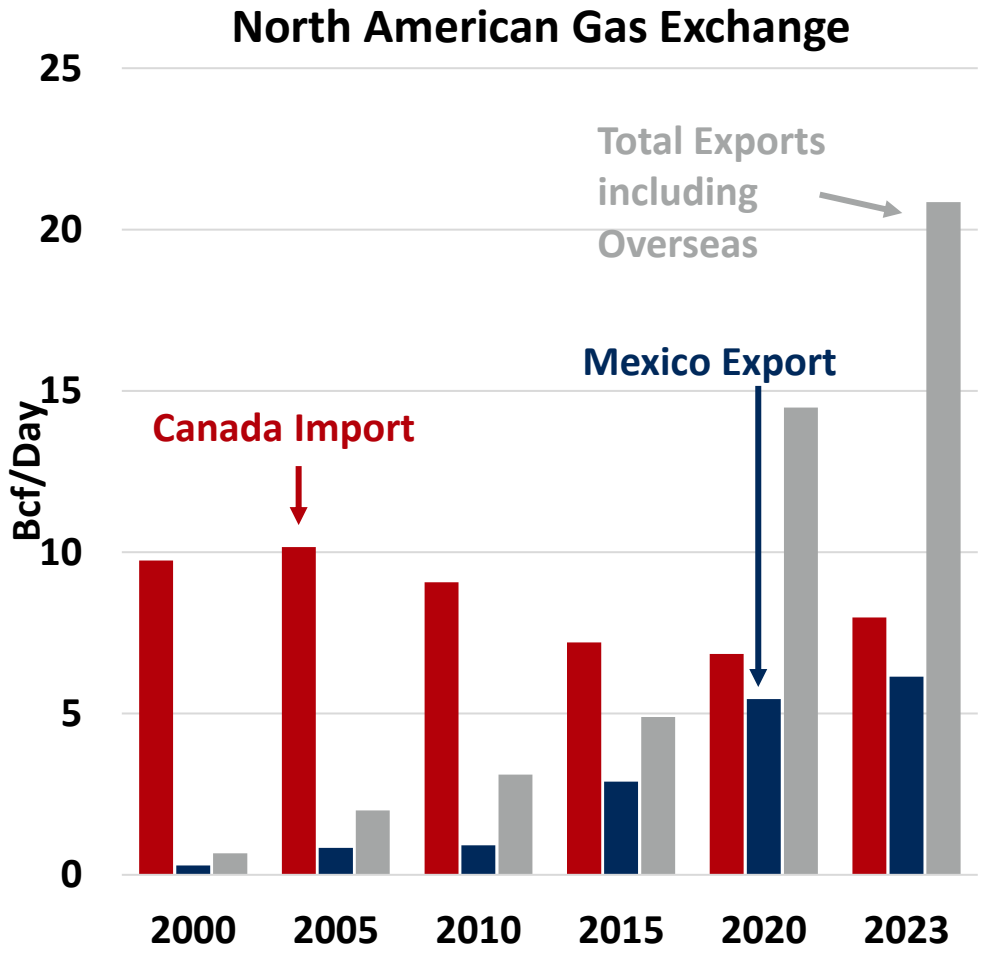



Source: EIA

# Gas Power Demand & US Exports Both Increasing

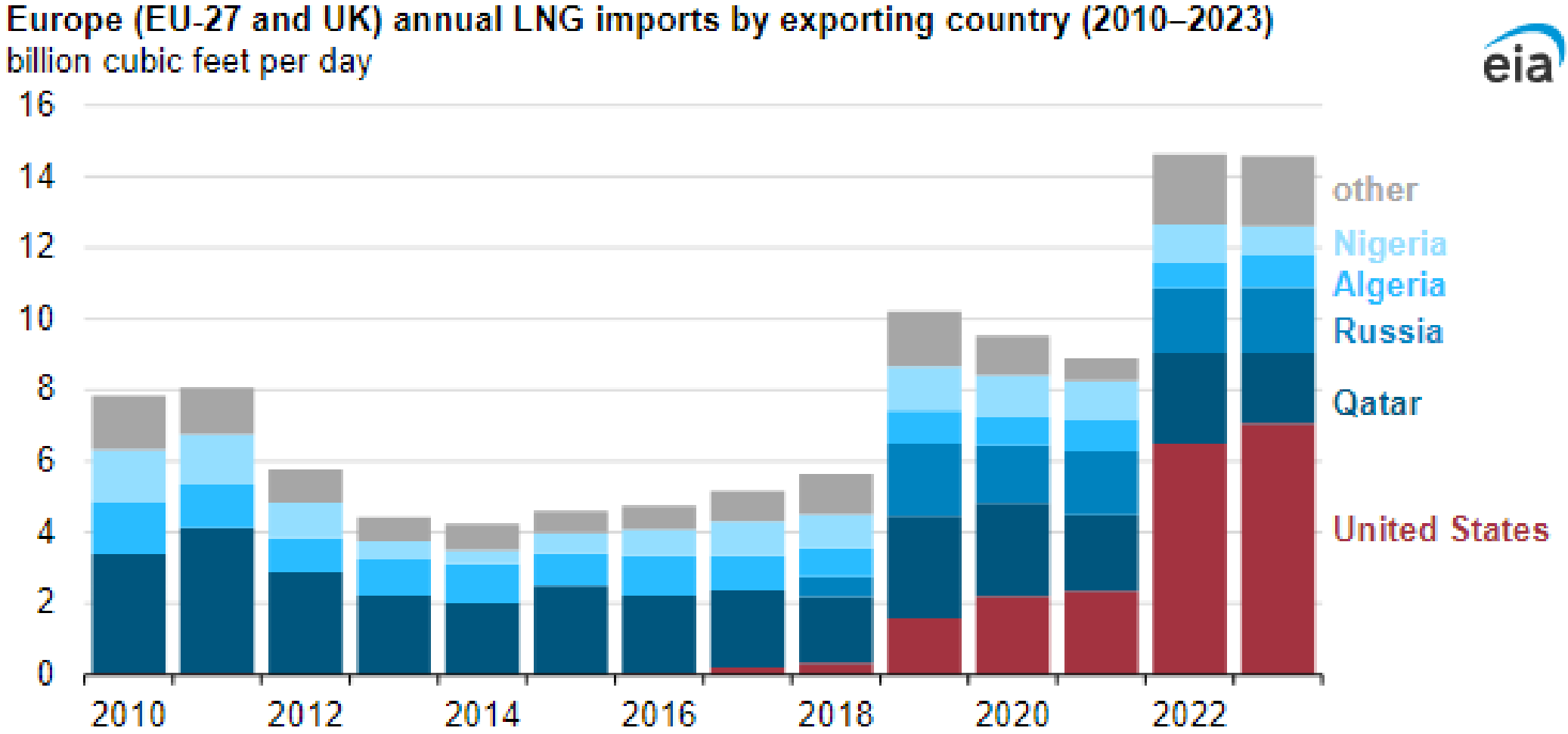
*Power Demand For Gas Has Outpaced Industrial Demand*



# United States LNG Exports Have Grown Significantly

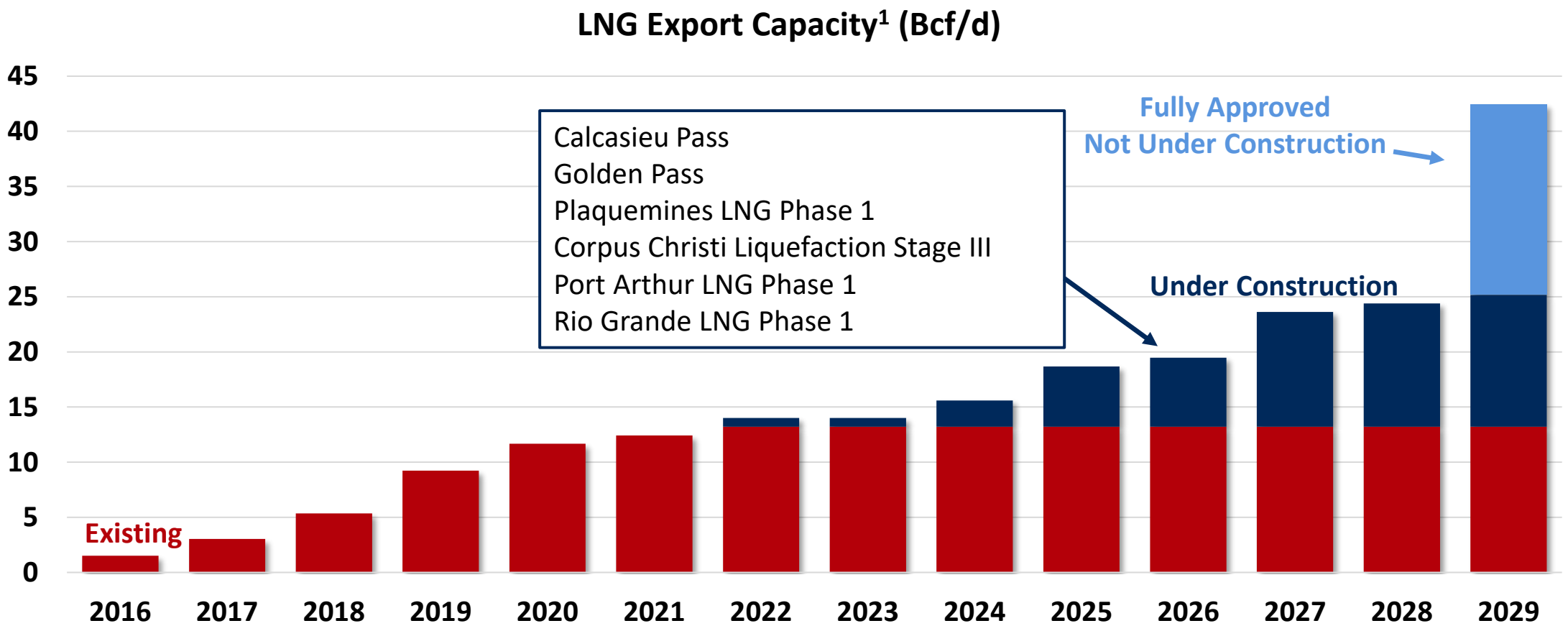
*Global Economic Uncertainty & EU Policy Could Alter Imports*




Source: EIA Today in Energy February 2024.

# Approved Natural Gas Exports Set to Double

*Higher Margins Abroad Expected to Drive LNG Expansion*

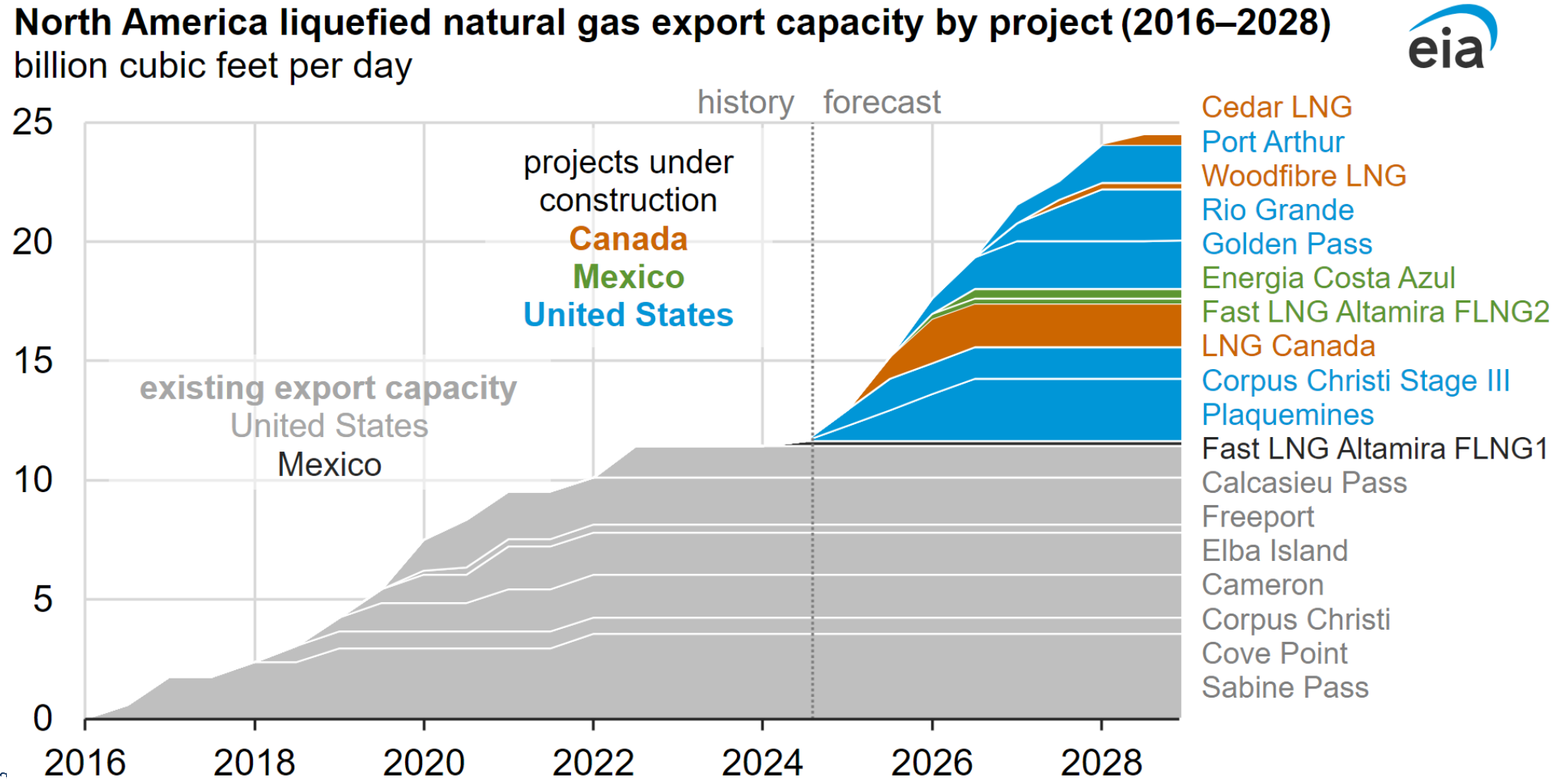



Source: EIA - US Liquefaction Capacity.

1 – Peak Nameplate Capacity per Train shown. Approved LNG for export varies from nameplate by ~0.3%.

# LNG Export Capacity in 2024-28 Projected to Double

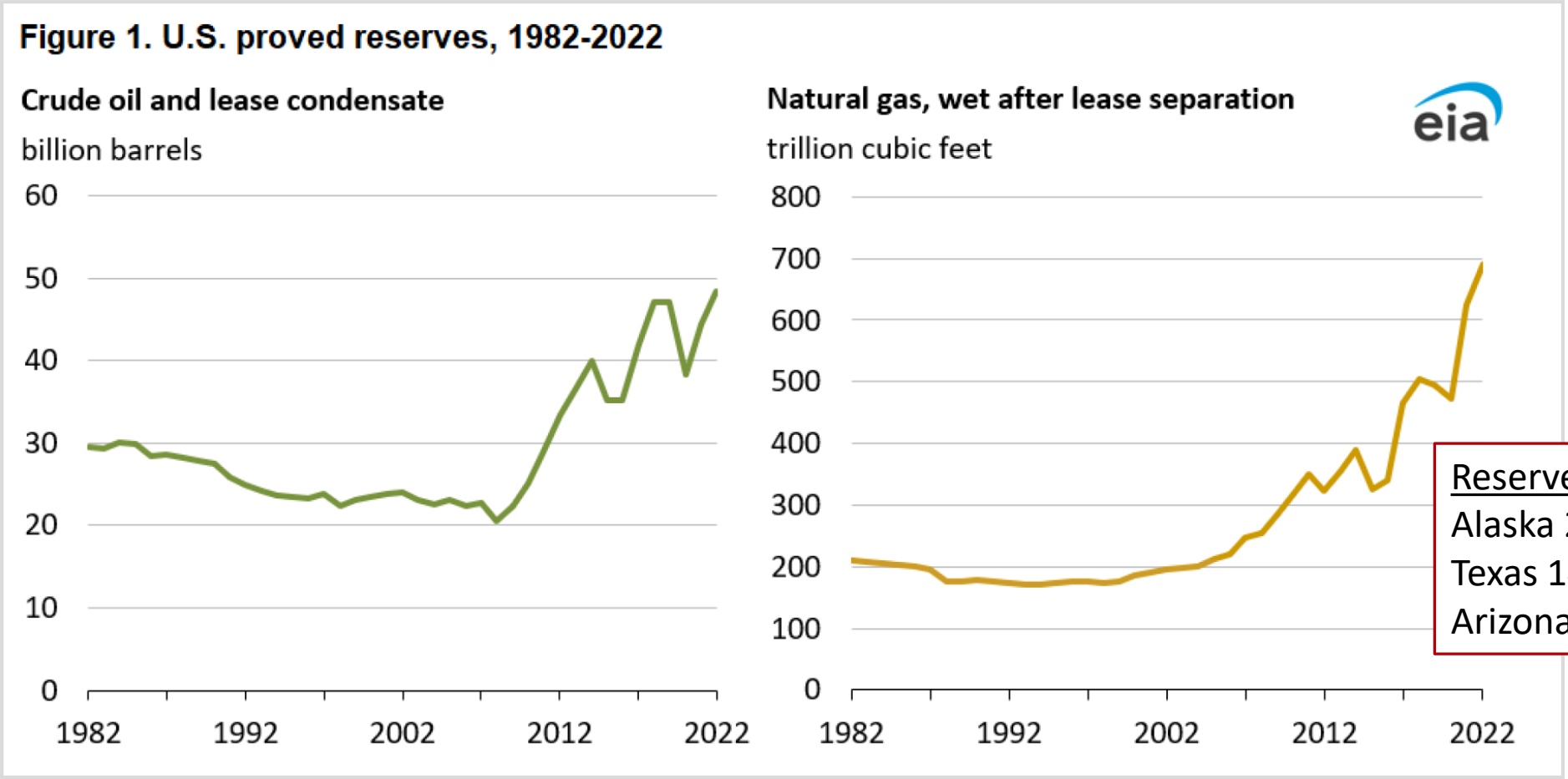
*Global Economic Uncertainty Clouds Growth Projections*




Source: EIA Today in Energy September 2024.

# Natural Gas Proved Reserves Increase ~10% From ‘21

*New Record Volumes for Second Year in a Row*




Reserve Increases
Alaska 25%
Texas 14%
Arizona 27%

Note: Proved reserves are operator estimates of the volumes of oil and natural gas that geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

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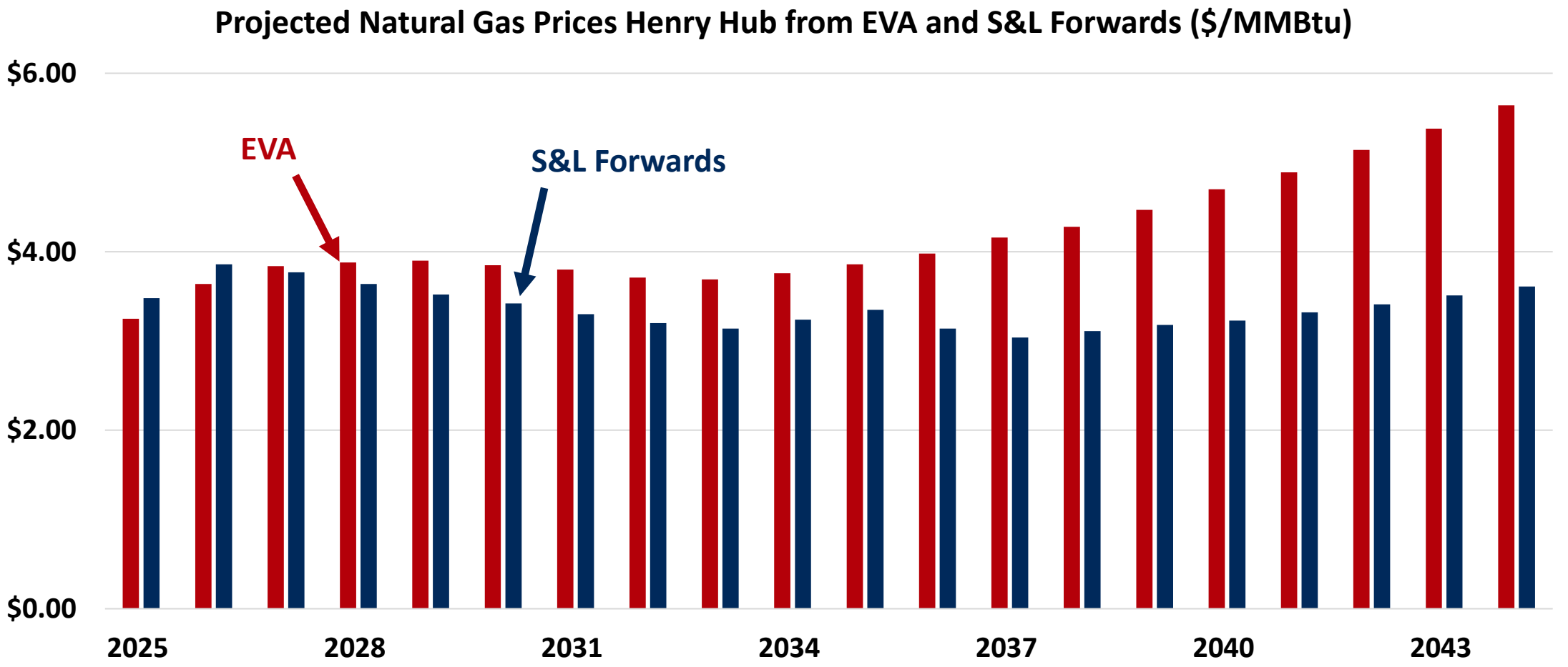
# EVA Projects Steady Gas Price Growth

*FGT Z3 Basis Has Increased In Recent History*

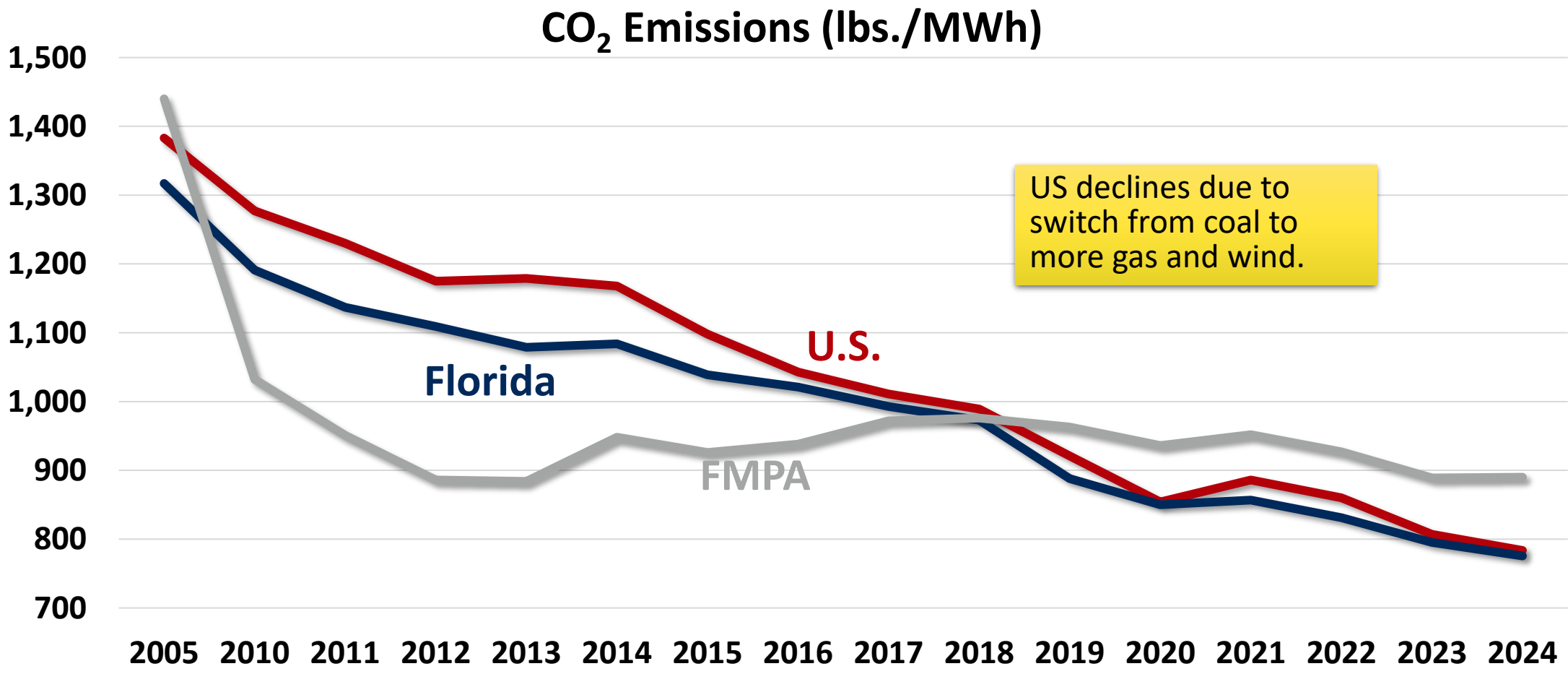



Sources: EVA Q3 2024 Natural Gas Price Forecast, SNL Financial January 2025.

# Appendix C – Environmental Responsibility

# Power Sector $CO_2$ Declined ~43% Over Last ~20 Years

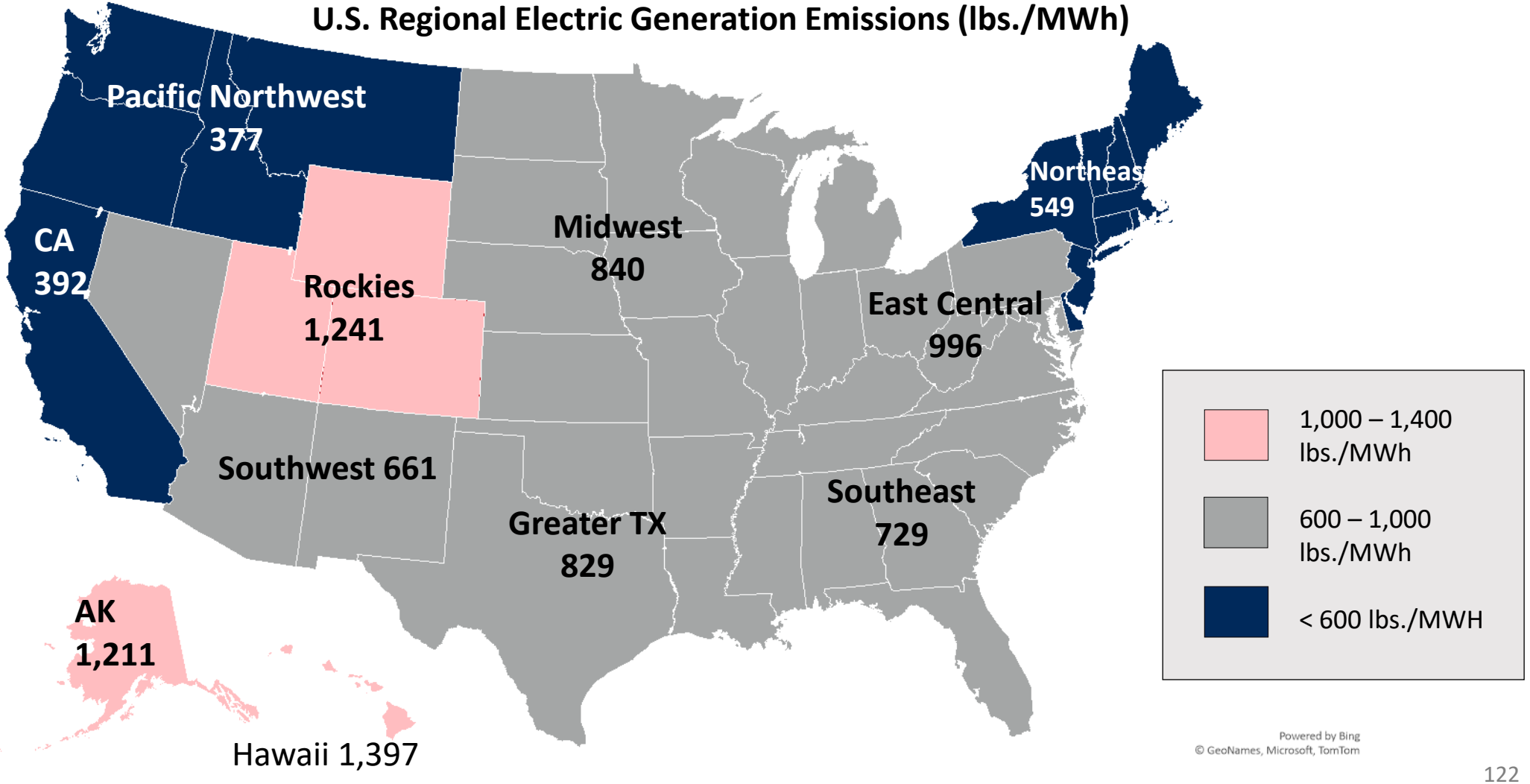
*FL/FMPA Emissions Declined by Switching from Coal/Oil to Gas*




SOURCES: EIA and EPA's Acid Rain Program database. Reflects emissions relative to total estimated generation w/renewables. US and FL 2024 are preliminary through October 2024. ARP 2024 is Fiscal year.

# Emissions Relate To Regional Resource Availability

*One Size Fits All Approach Tough With Vastly Different Baselines*

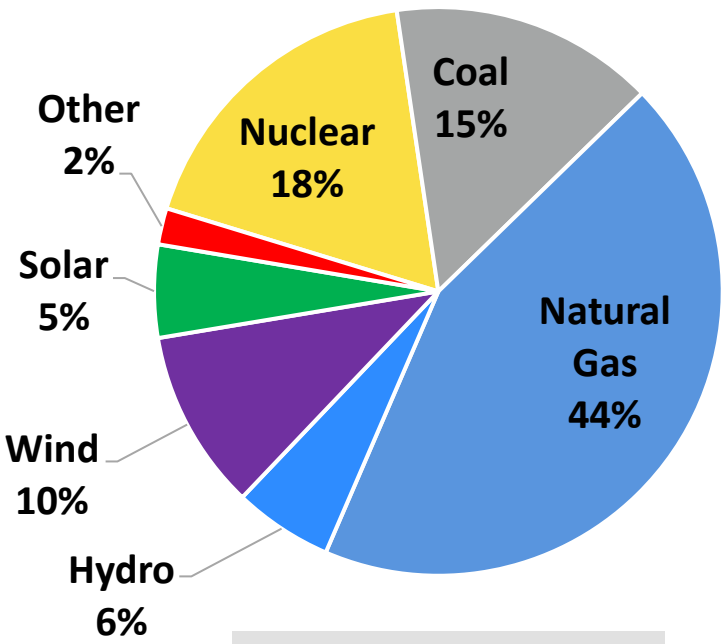



Source: EIA YTD through October 2024 Preliminary.

# U.S. Energy Mix ~39% $CO_2$ Free, 15% Coal Remaining

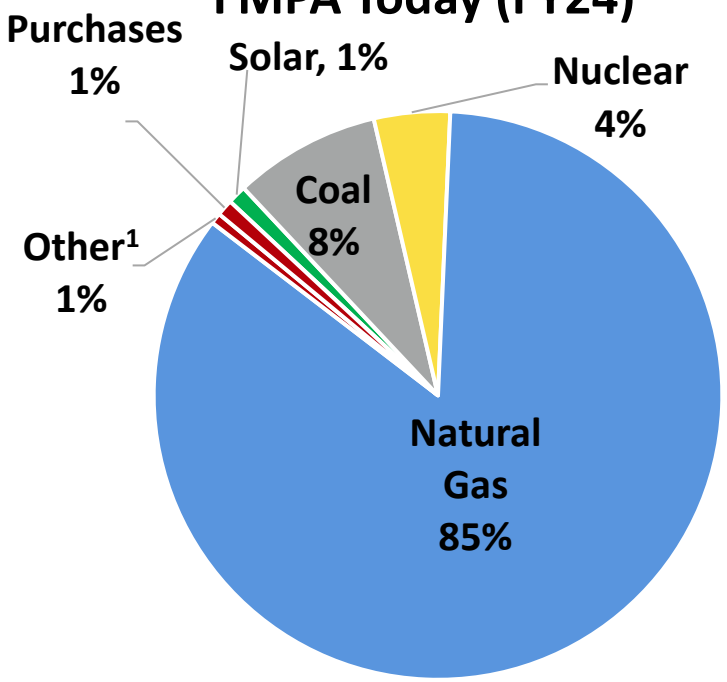
*FMPA Growing to 10% $CO_2$ Free by 2028, No Coal/More Solar*

## U.S. Today[3]



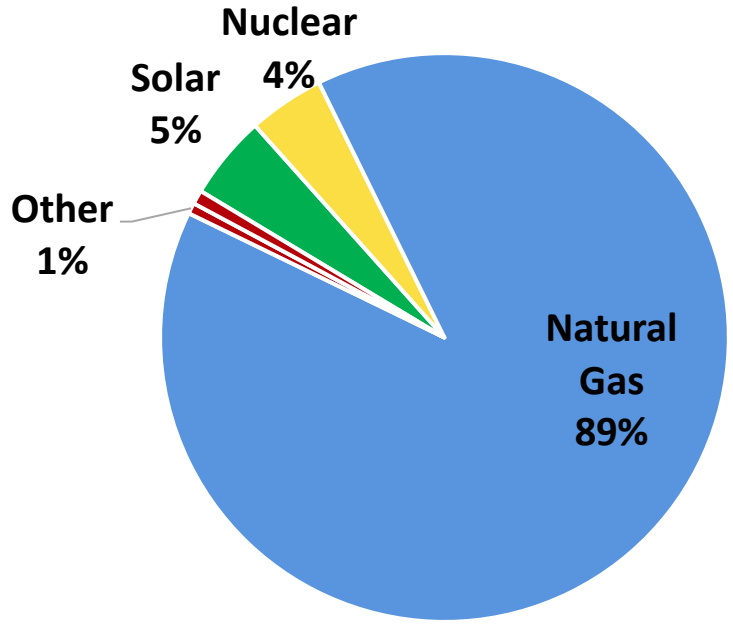

**4,183,270 GWh**

## FMPA Today (FY24)




**8,410 GWh**

## FMPA 2028 (Est.)

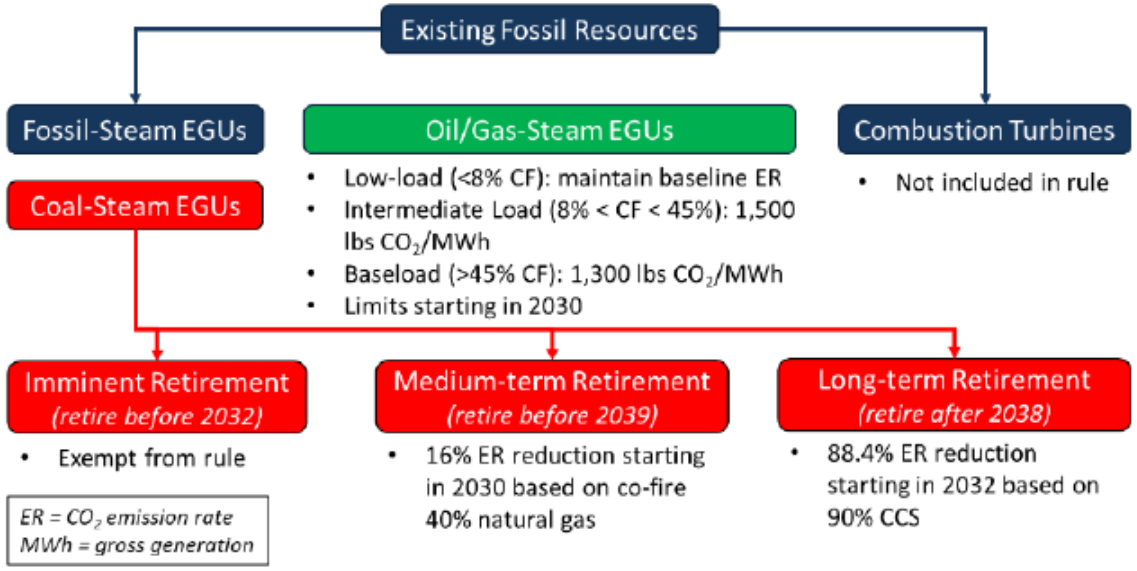


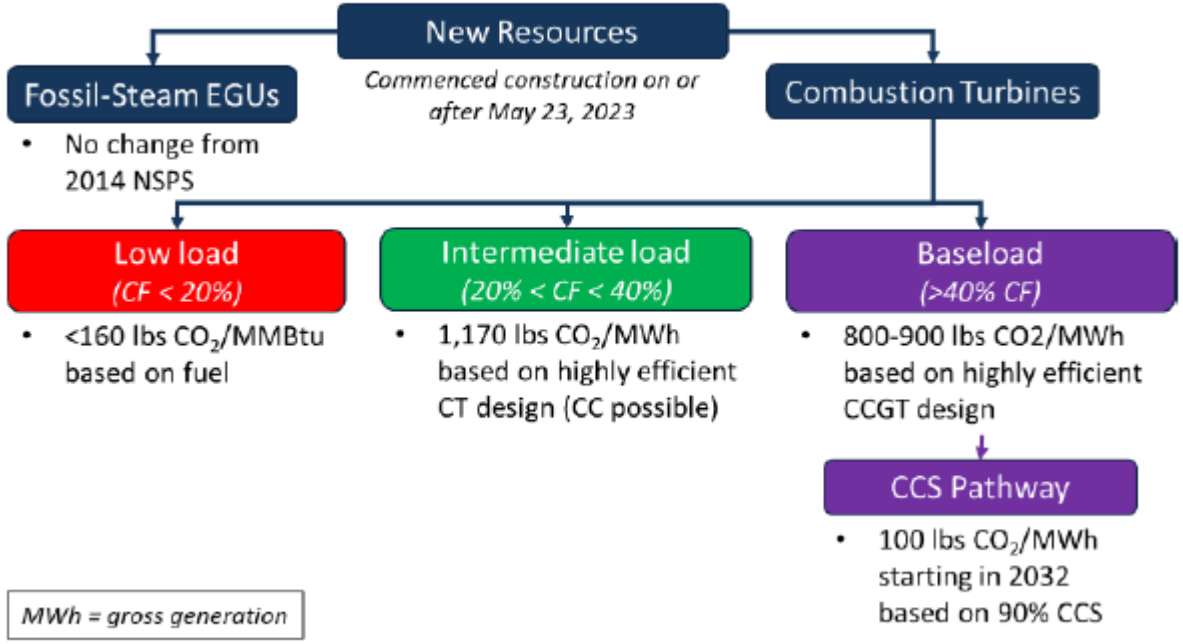

**8,410 GWh[2]**

1 – Includes US Sugar, residual and distillate fuel oil.
2 – Assumes same level of generation.
3 – EIA preliminary YTD through October 2024.

# EPA Rule* Spared Existing CTs For Now

*Legal Challenges, State Plan, and Fate Remain Uncertain*




In October 2024, Supreme Court left EPA rule in place as legal challenges at Federal appeals court continues. State Plans theoretically due June 2026.

*SOURCE: EVA

# Strategic Planning Session