



BOD 9b EC 9c – Estimated Impact of CLEAN Future Act Draft Legislation

Board of Directors and Executive Committee

April 15, 2021

CLEAN Futures Increase Cost ~30-80% vs. Base by 2035

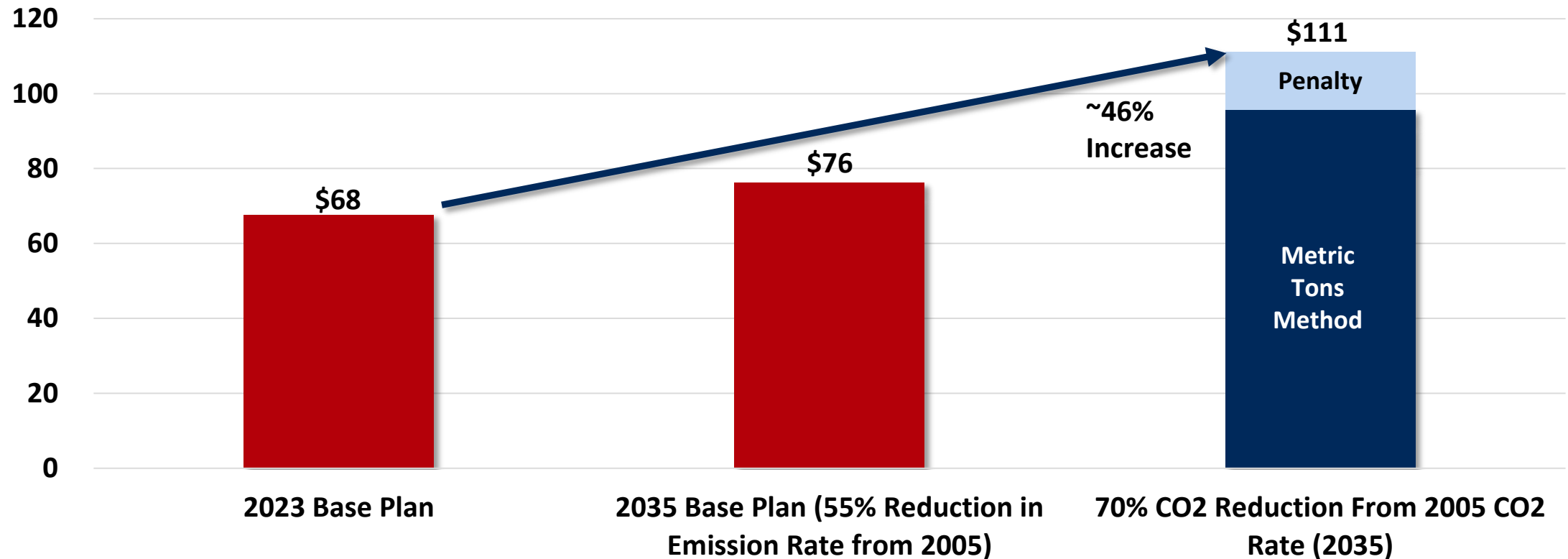
Costs After 2040 Increase 200%–300% as Net-Zero Must Be Reached

- Proposed CLEAN Futures Act sets Clean Electricity Standard of 80% by 2030 and 100% by 2035, with Alternative Compliance Payments (ACP) for non-compliance ending 2040
- ACP set at \$40/Mton* of CO2 in 2023 (~\$10/MWh to gas generation costs), escalating to \$70-90/Mton by 2035 depending on inflation
- ARP could achieve 70% CO2 reduction vs. 2005 rates with significant ACP purchases for the remainder in 2035. ARP costs would increase ~30%-80% above base case as a function of:
 - Adding ~1,200 MW of solar to generate majority of daily energy
 - Retaining gas capacity as backup for reliability, operating very inefficiently and increased transmission
- Post 2040, with no ACP available, cost would increase by 200%-300% from 2023 levels in order to achieve net-zero emissions
- Numerous uncertainties in Act need clarification and could have significant impacts
- ~1,000-page legislation – much detail to review

3% Inflation Likely Given Recent Trends

Money in Circulation Could Raise Inflation Materially

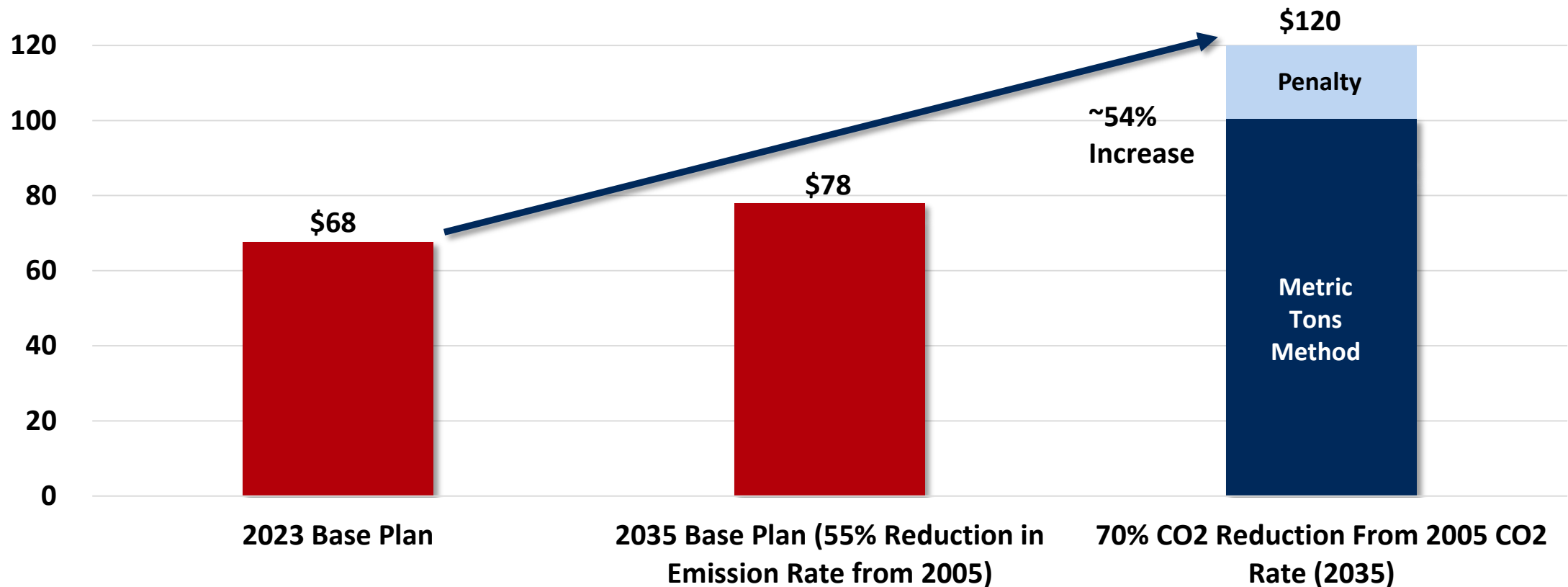
Estimated ARP Wholesale Power Rate (\$/MWh)



5% Inflation Sensitivity Increases Cost

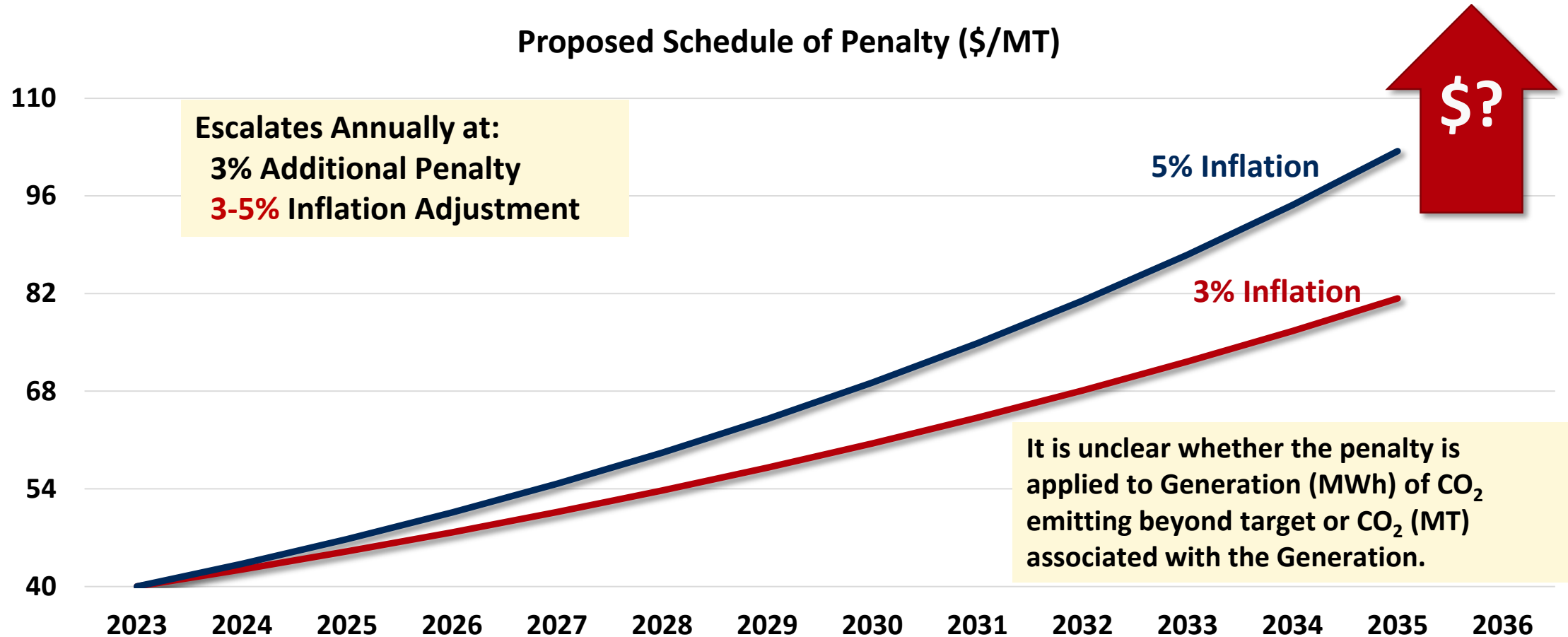
Money in Circulation Could Raise Inflation Materially

Estimated ARP Wholesale Power Rate (\$/MWh)



ACP Implementation Critical to Capping Cost Increase

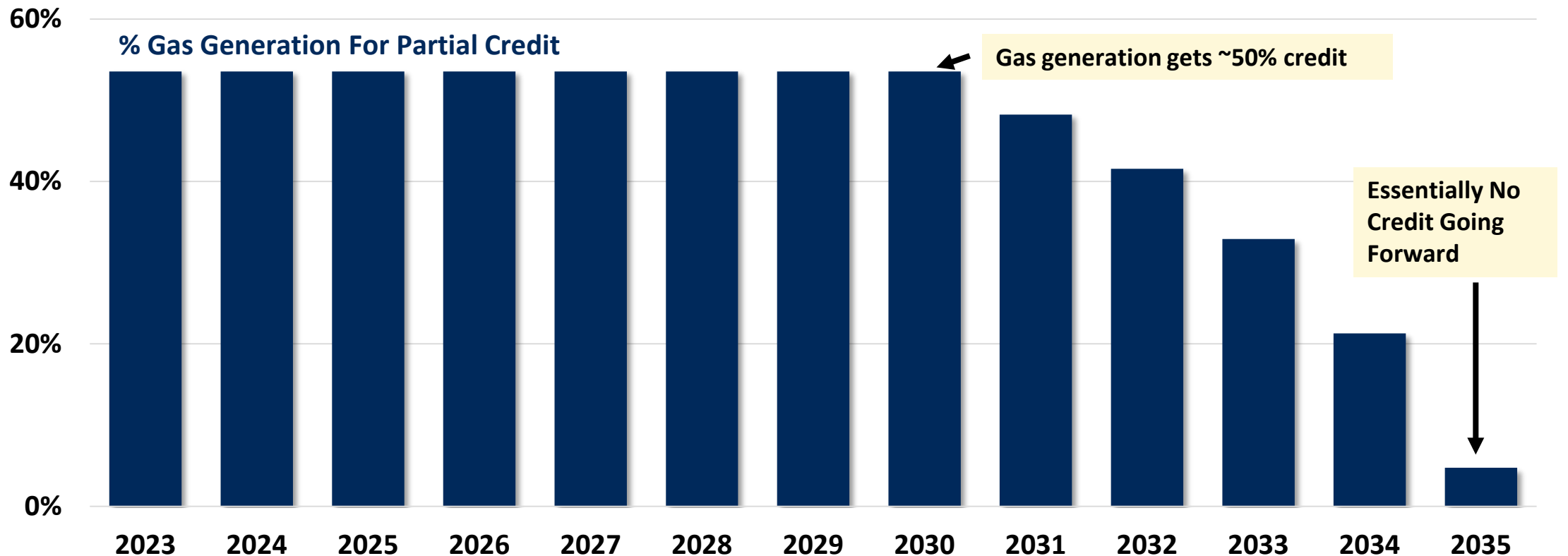
Significant Risk with High Inflation Potential over Next Decade



Gas Resources Receive Partial Credit During Transition

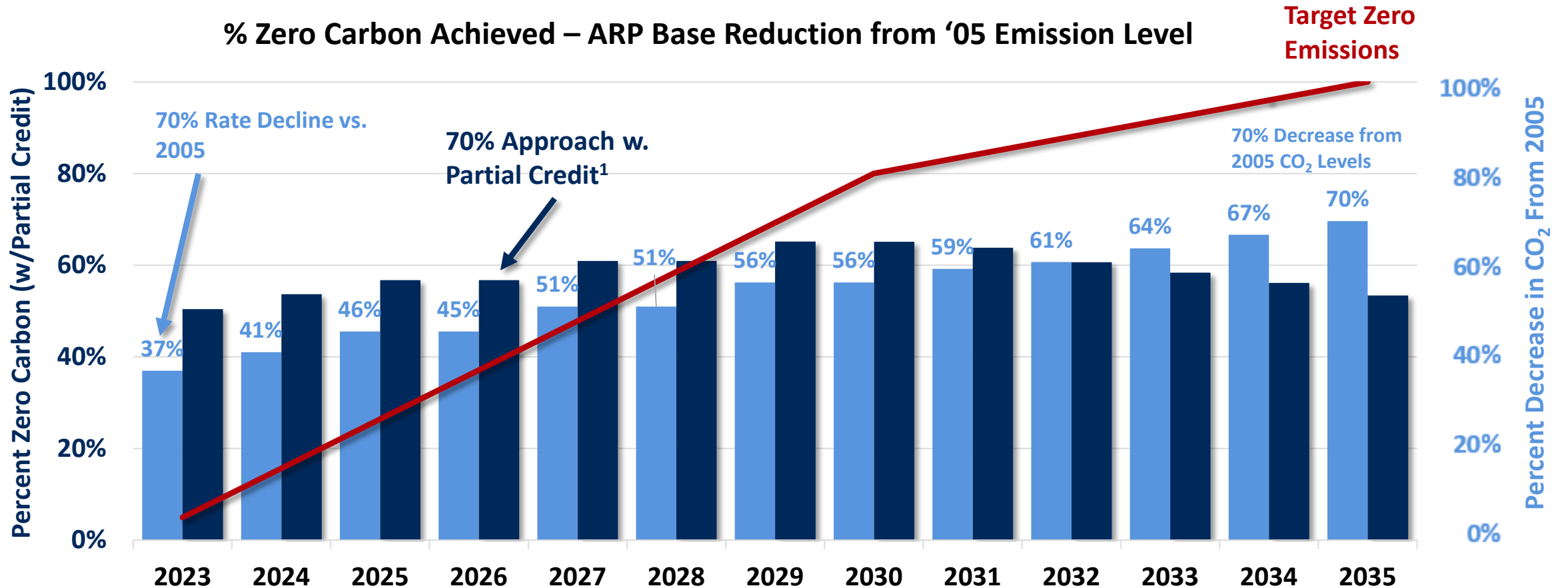
Clean Gas Credit Ramps Down Materially After 2030

Estimated Clean Gas Credit (% of Generation)



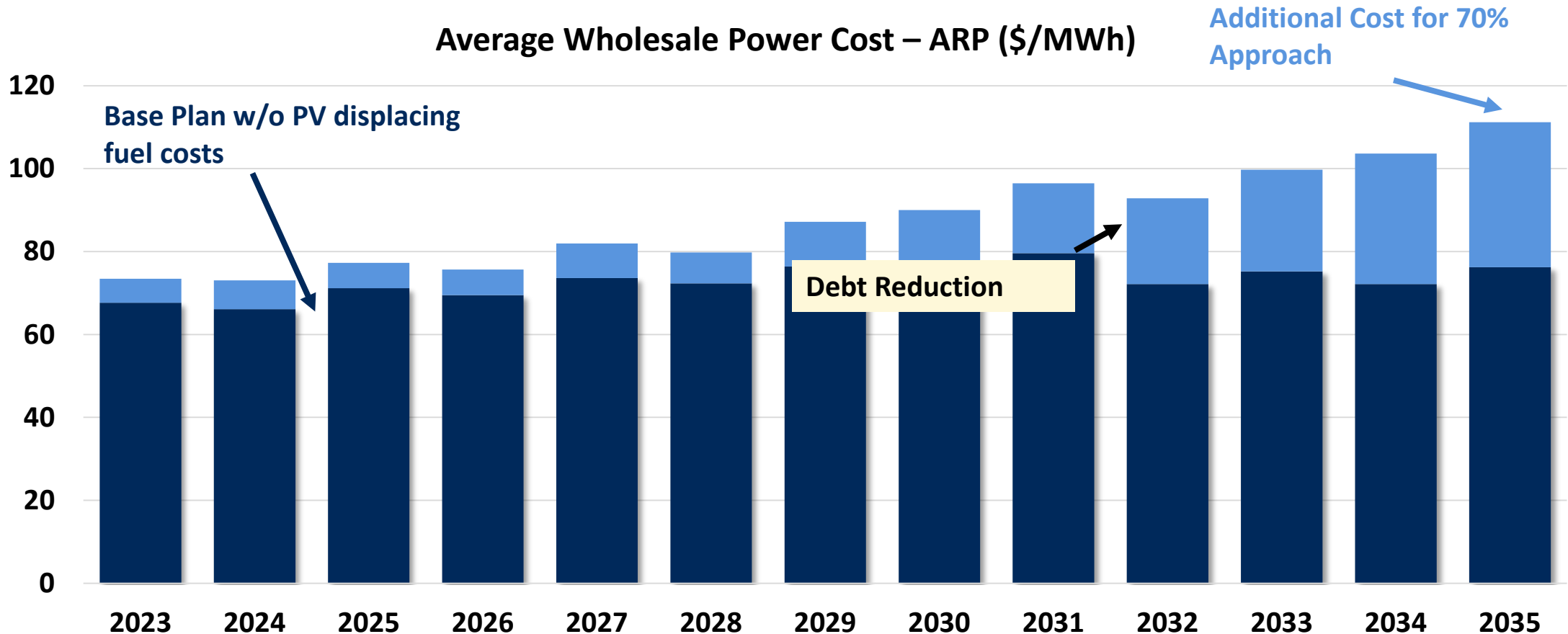
Base Plan Only Compliant Through ~2027

Post 2027, Purchases of ACP Critical to Cost Effectively Meeting Goal



Base Plan Rates Stable With Debt Payoff*

Can Add ~450 MW More PV with Reasonable Cost Stability



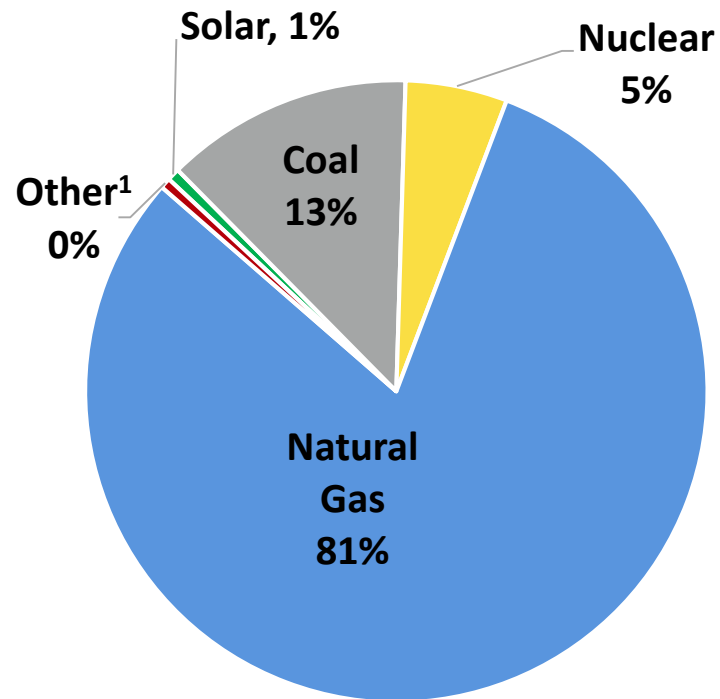
*55% Reduction in CO₂ from 2005 base case with ~450 MW is shown.

Note: PV costs fluctuate year to year since land purchases are fully paid for in year of PV install. 3% inflation shown.

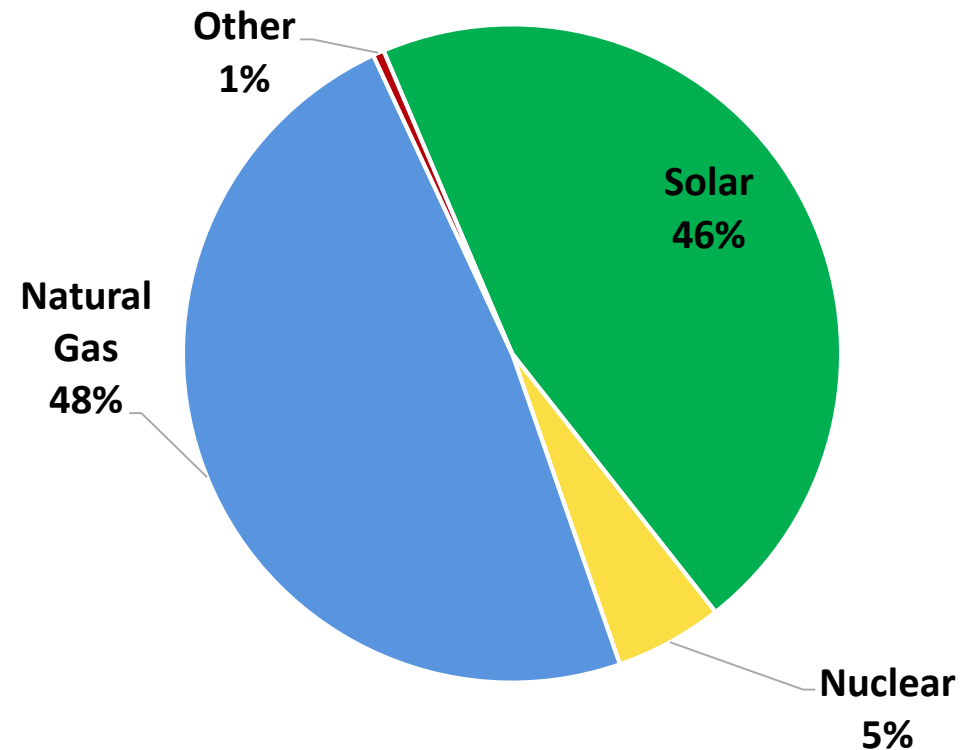
70% CO₂ Reduction from 2005, Large PV Investment

Natural Gas <50% of Energy Mix but a Backstop for Reliability

FMPA Today (Energy) (CY20)



FMPA 2035 (Energy)



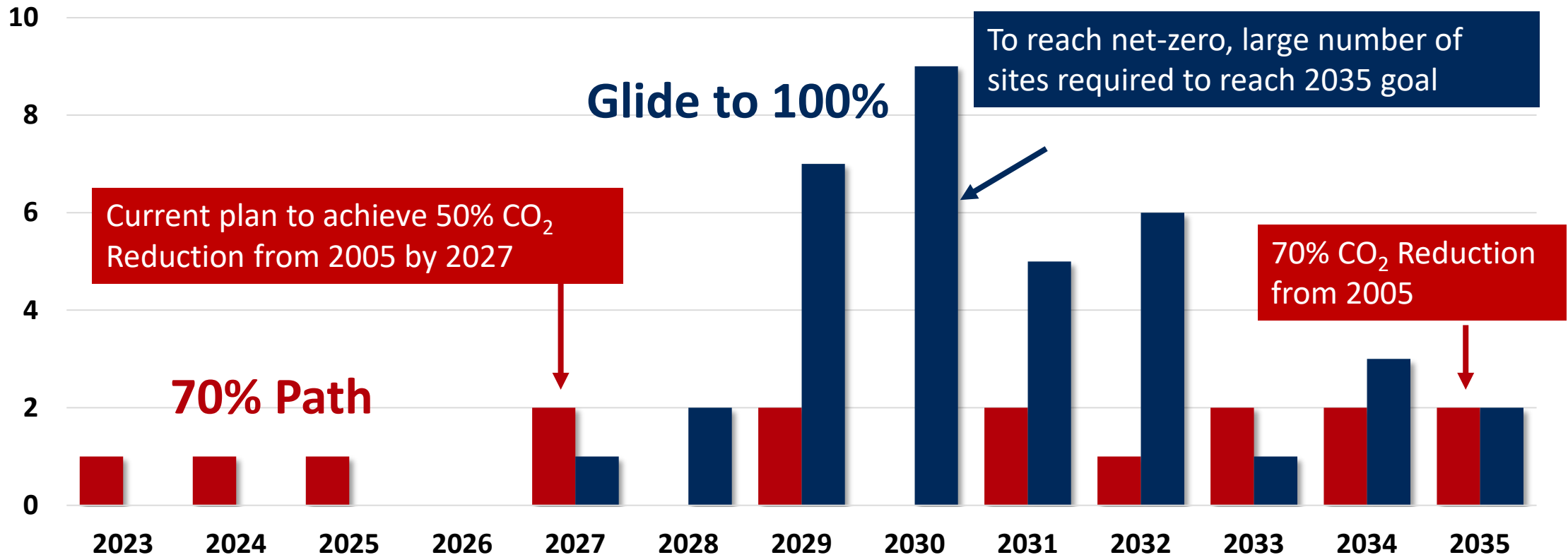
1 – Includes US Sugar, residual and distillate fuel oil.

Large Investments in Solar Require Pre-Planning

70% of 2005 Requires ~1,200 MW PV, Compliance ~2,700 MW

Impact For Florida Much Greater - FRCC Peak is ~33x FMPA's²

Number of 74.5 MW PV Sites¹ / Year



1 - Power Plant Siting Act and associated interconnection granularity may need to evolve.

2 - FRCC 2020 Peak 48,334 MW (2020 FRCC Load and Resource Plan Form 10), 2020 FMPA Peak 1,463 MW.

Cost Increases Driven on Multiple Fronts

PV Displaces Natural Gas Generation But Gas Capacity Needed

- Cost increase drivers:
 - Increasing solar by 750 MW beyond base plan of 450MW solar, some storage will be needed
 - Increased transmission investment to support new solar
 - ACP payments covering 48% of thermal generation in the 70% reduction scenario
 - Remaining gas generation operates at very inefficient levels, with much cycling leading to higher O&M costs
- Capital cost and timing of solar, including land and transmission, highly uncertain in race to build solar nationally, challenging siting and permitting processes
- Most natural gas/diesel generation capacity still needed for cloudy days scenario
- Additional ancillary services of more spinning and fast start units not included – would raise cost even further

Draft FMPA Priorities for Legislation Adjustments

Several Changes Desired, Unknown What Can Be Accomplished

- Slow Ramp - of net-zero goal to 2050 from 2035, practically not doable by 2035 and very costly to customers if attempted
- Regionalize Reduction Goals - taking into account current emission rates, renewables availability in a region and regional consumer cost impacts
- Cap on Regional Electricity Prices Increases - that slow implementation plans if regional prices rise above certain escalation rate
 - Alternatively extend ACP option through 2049 and remove inflation escalation from ACP
- Reliability Off-Ramp – if regional supply reliability declines, ramp of emission reductions would be delayed until infrastructure can be put in place to ensure reliability
- ACP Funds – should be available to regional utilities who need support in achieving emission reduction targets while keeping power costs affordable to all consumers including fixed and low income
- Significant National and International influences in Legislation will make changes challenging

**AGENDA ITEM 9 – INFORMATION
ITEMS**

**c. Debt and Rate Strategy for St.
Lucie Project**

**Board of Directors Meeting
April 15, 2021**



9c – Debt and Rate Strategy for St. Lucie Project

Board of Directors

April 15, 2021

Strategic Considerations for ARP and St. Lucie Project

Direction Sought for Preparation of Fiscal 2022 Budgets

- #1 goal from recent strategic planning session: lower controllable wholesale power costs for all power supply projects
- Refinancing and extending St. Lucie debt could allow for significant near-term rate reduction for that Project
- Concept presented to Finance Committee in March
- Now wishing to inform all St. Lucie Project participants
- Board will still have final approval of any actions before they occur

St. Lucie – Extend Debt Life to Reduce Rates

Could Lower \$10+/MWh per Year with 5-Year Debt Extension

- Final payoff of St. Lucie Project debt currently October 1, 2026
- Final debt payment includes \$59M bullet payment on Series 2012A
- Annual contributions being made to General Reserve Fund through project billings to pay significant portion of 2026 debt obligation
- Refinancing and extending the debt five years would allow us to reduce contributions and meaningfully lower project rates beginning Fiscal 2023
- St. Lucie 2 licensed to operate until 2043
- If unit retires prior to end of extended debt life, project should have sufficient reserves after 2026 to be able to pay off remaining debt

Two Bond Series Targeted for Refinancing

Both Series Have Interest Rates Well Above Current Market

Series 2011B

- Earliest call date is 10/1/21
- ~\$23M principal remaining at call date
- Average interest rate ~5%

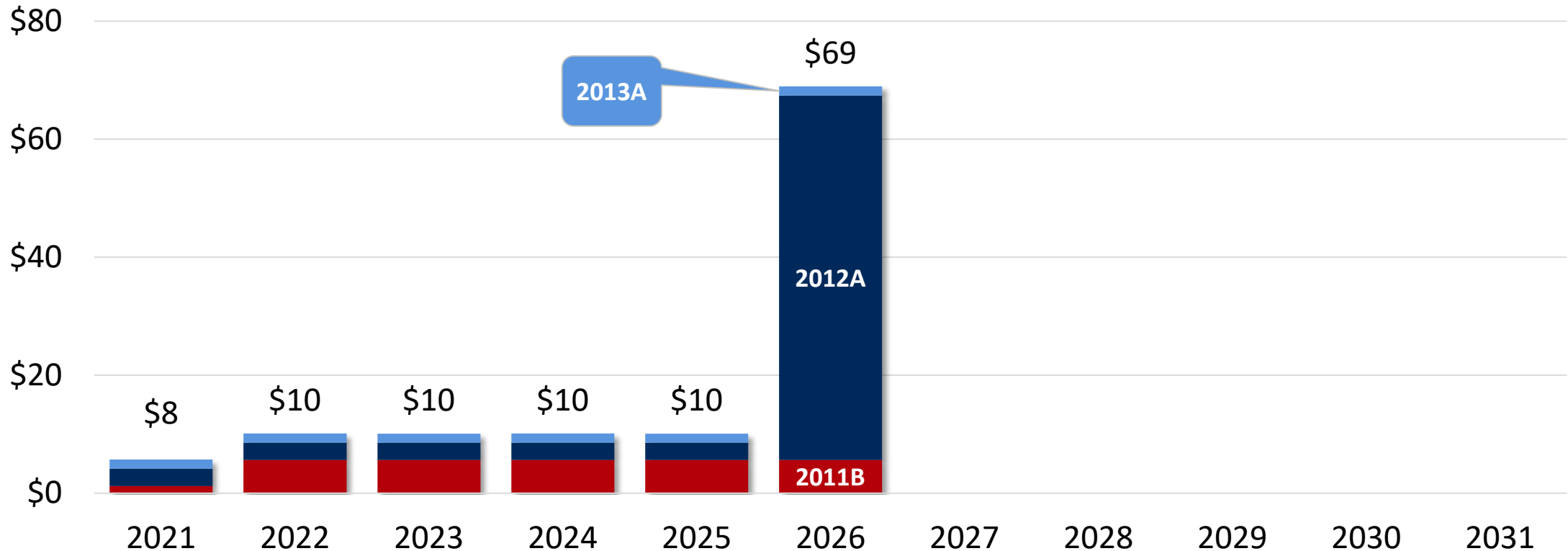
Series 2012A

- Earliest call date is 10/1/22
- ~\$59M principal remaining at call date
- Interest rate is 5%

~\$90M Total Principal Remaining After Fiscal 2021

Low Payments for Next Four Years with Large Final Payment

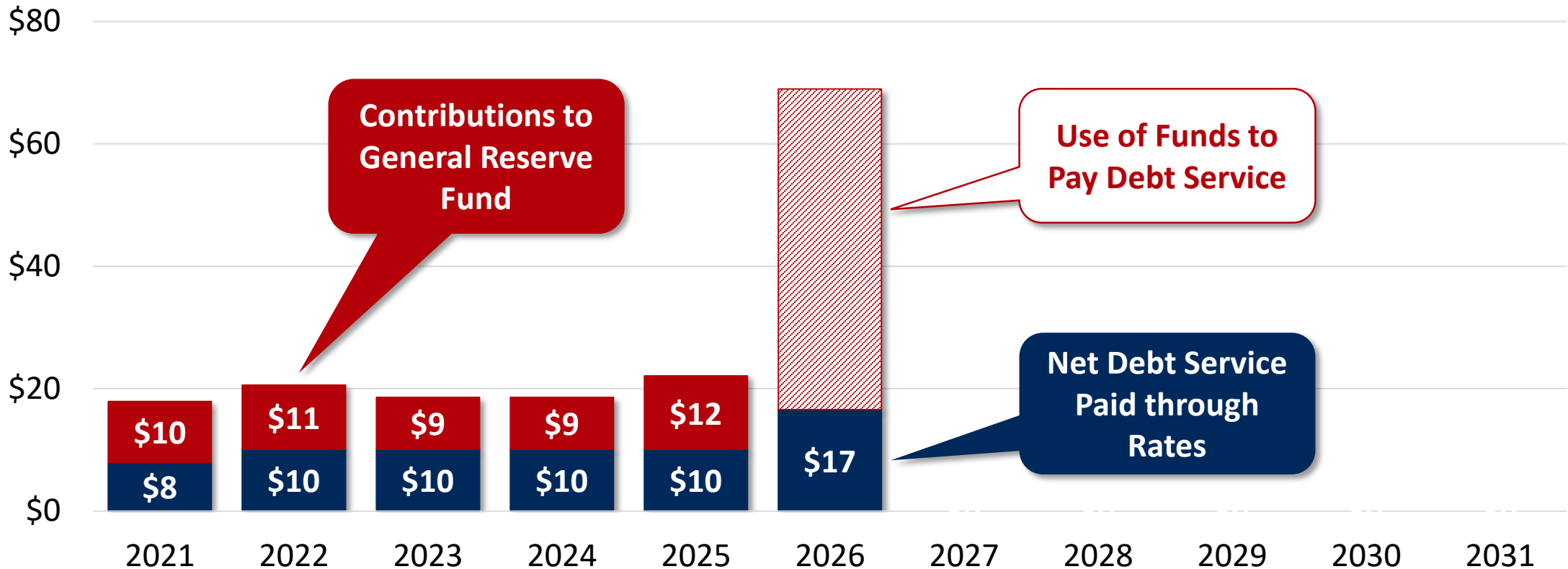
St. Lucie Project Remaining Debt Service (\$Millions)



Funding General Reserve Annually for Final Payment

Funding Averages \$10M/yr, or ~\$14/MWh on Project Rate

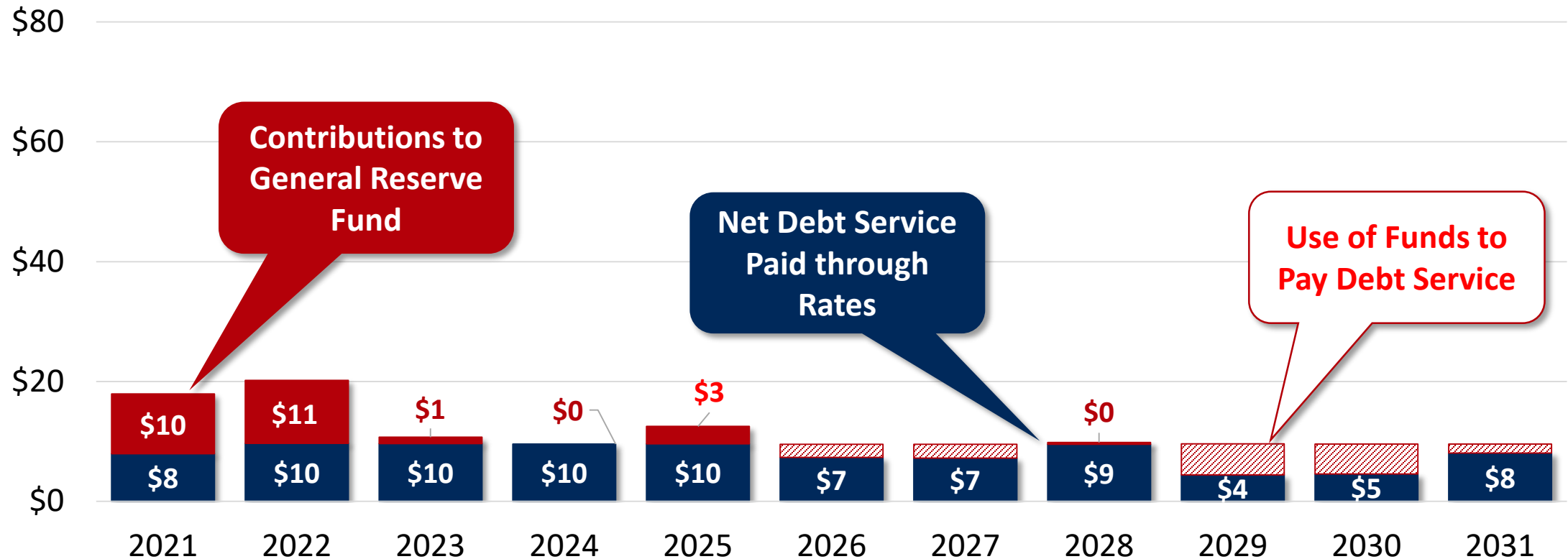
St. Lucie Project Remaining Debt Service and Fund Contributions (\$Millions)



Funding Needs Reduced by Extending Debt Maturity

Reduced Funding Enables Lower Project Rates in Near Term

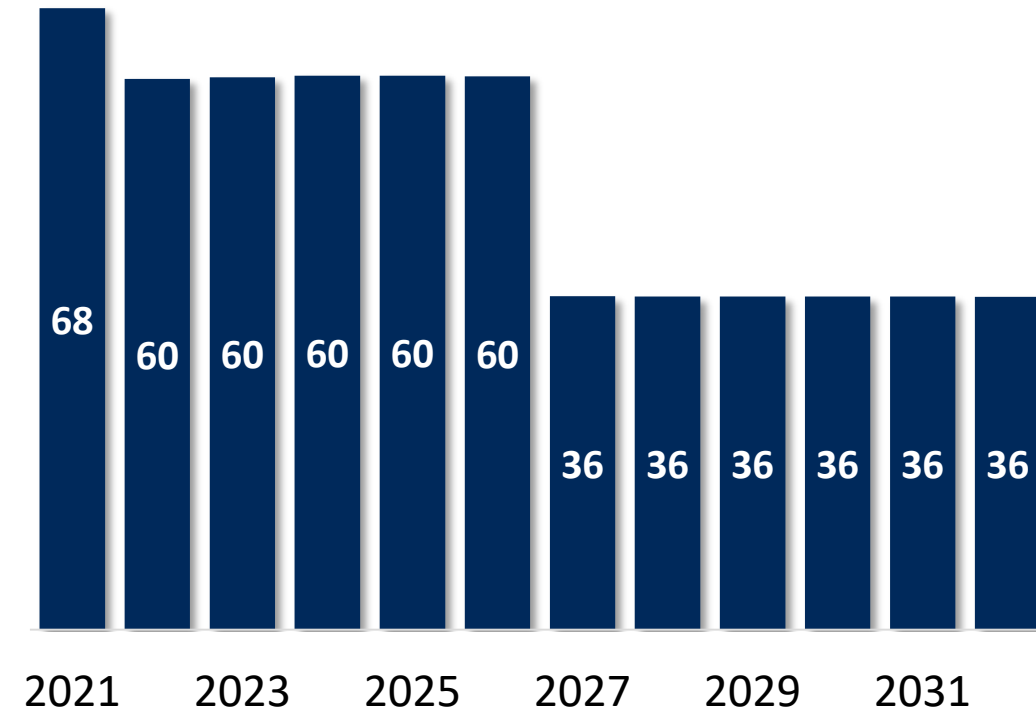
St. Lucie Project Remaining Debt Service and Fund Contributions for Debt (\$Millions)



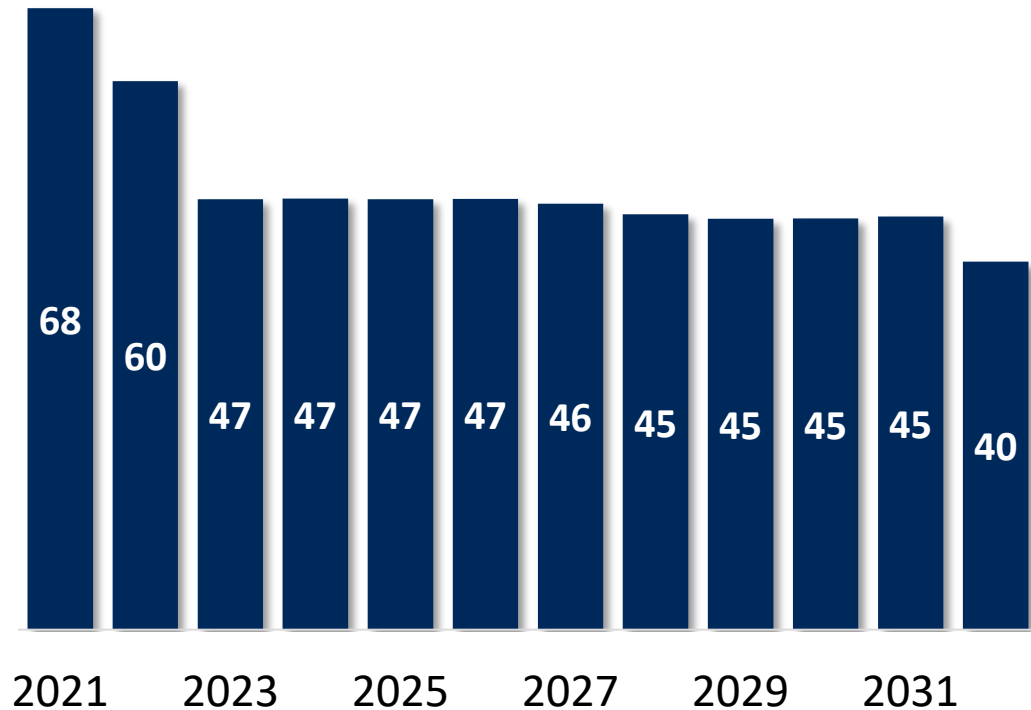
St. Lucie Costs Lower through 2026 w/ Debt Extension

Costs Beyond 2026 Higher than without Extension, but Steady

**Projected St. Lucie Participant Costs
Without Debt Extension (\$/MWh)**



**Projected St. Lucie Participant Costs
With Debt Extension (\$/MWh)***



Recommended Motion

- No action requested. For information only.

**AGENDA ITEM 9 – INFORMATION
ITEMS**

**d. Summary of Finance Committee
Items**

**Board of Directors Meeting
April 15, 2021**



Summary of Finance Committee Items

BOD 9d / EC 9e

Board of Directors & Executive Committee

April 15, 2021

Other Items

Review and/or Approval Required

- Approval of Risk Policies
- Review of the Agency Annual Risk Inventory
- New pooled loans
- Discuss Rate Protection Account (EC only)

**AGENDA ITEM 10 – MEMBER
COMMENTS**

**Board of Directors Meeting
April 15, 2021**

AGENDA ITEM 11 – ADJOURNMENT

**Board of Directors Meeting
April 15, 2021**