



Workshop: New Resource Decisions and Project Structure Implications

FMIPA Executive Committee

March 18, 2020

Workshop Overview

- Review of previous workshop's results
- Demand cost billing options:
 - Coincident Peak option
 - Non-Coincident Peak option
- ARP Project Structure Considerations
 - Supermajority voting structure
 - ARP term/outlook
 - Fixed allocable interests in new resources
 - Fixed allocable interests in all resources

Recap of December Workshop

- Historically, the current ARP structure served an important purpose: providing great certainty and a sense of permanence to all Participants and investors.
- Current ARP resources are rate competitive, in a good environmental position, and essentially debt-free in next 12 years (October 31, 2031).
- However, there is a need for new resources for ARP in 2026 – 2029, which is expected to be peaking in nature.
- Larger, growing members and resource contract terminations are primary drivers of the need for new resource(s).
- Rate options are available to (1) increase ability to load manage, (2) defer new resource need, and (3) provide more control over cost allocation.
- Participants have different views on the ability to get long term commitments for additional resources.
- There is interest in exploring options to add new resources in a different allocable manner.



Demand Cost Billing Options

What Have We Heard that Members Want?

- Greater certainty to monthly fixed cost billings (i.e., avoiding “weather roulette” inherent in current monthly coincident peak (CP) allocation)
- Fair allocation of fixed costs to members
- Ability to meaningfully implement load management at city level

Current Methodology for Charging Demand Costs

- Monthly demand rate computed based on:
 - Base demand rate
 - Plus adjustment for prior period demand over/under recoveries, spread over the current billing month and next 3 months
- Participant demand billing determinant based on each city's demand during the hour of the monthly ARP system peak, less Excluded Resource capacity
 - Different weather patterns over ARP's geographically diverse service territory can lead to wide cost spreads, especially during late fall/winter/early spring months
 - Leads to questions of fairness of cost allocation
 - Not tied to how we plan our system (i.e., summer peak)

2 Alternatives for Allocating Demand Costs Considered

- CP Option: Demand costs allocated based on Participants' average coincident peak (CP) demand during the summer months (June – September) over the prior 3 fiscal years
- NCP Option: Demand costs allocated based on Participants' average non-coincident peak (NCP) demand over the prior 3 fiscal years
- Under either scenario, total monthly demand costs to be collected would be 1/12 of the annual budgeted demand amount, plus adjustment for prior period over/under recoveries
- Difference between the scenarios is the allocation of these costs to specific Participants

Alternative #1: Summer Ave. Coincident Peak

Fixed Cost Allocations Based on Summer Average Coincident Peak over Last 3 Years

- Pros:

- Allows greater certainty for monthly demand billings than current methodology, because allocation ratios set once per year and fixed for next 12 months
- Minimizes the “weather roulette” issue that can cause Participants to have abnormally high or low costs in a month due to random weather events
- Allocating annual demand costs based on the ARP summer system peak more closely aligns to how the ARP plans its system

- Challenges:

- EC would need to approve manual adjustments if a Participant gained or lost a large load

Alternative #2: 12 Month Non-Coincident Peak

Fixed Cost Allocations Based on Average Non Coincident Peak over Last 3 Fiscal years

- Pros:

- Allows greater certainty for monthly demand billings than current methodology, because allocation ratios set once per year and fixed for next 12 months
- Minimizes the “weather roulette” issue that can cause Participants to have abnormally high or low costs in a month due to random weather events
- Could allow individual cities to manage their system peaks without immediate impacts to other Participants (no impact in first year, but full impact would appear in three years)

- Challenges:

- NCP-based billing doesn’t align with how the ARP plans its system (i.e., based on the ARP summer peak)
- EC would need to approve manual adjustments if a Participant gained or lost a large load

Timing to Act Good: Costs Declining, Excess Capacity Sold

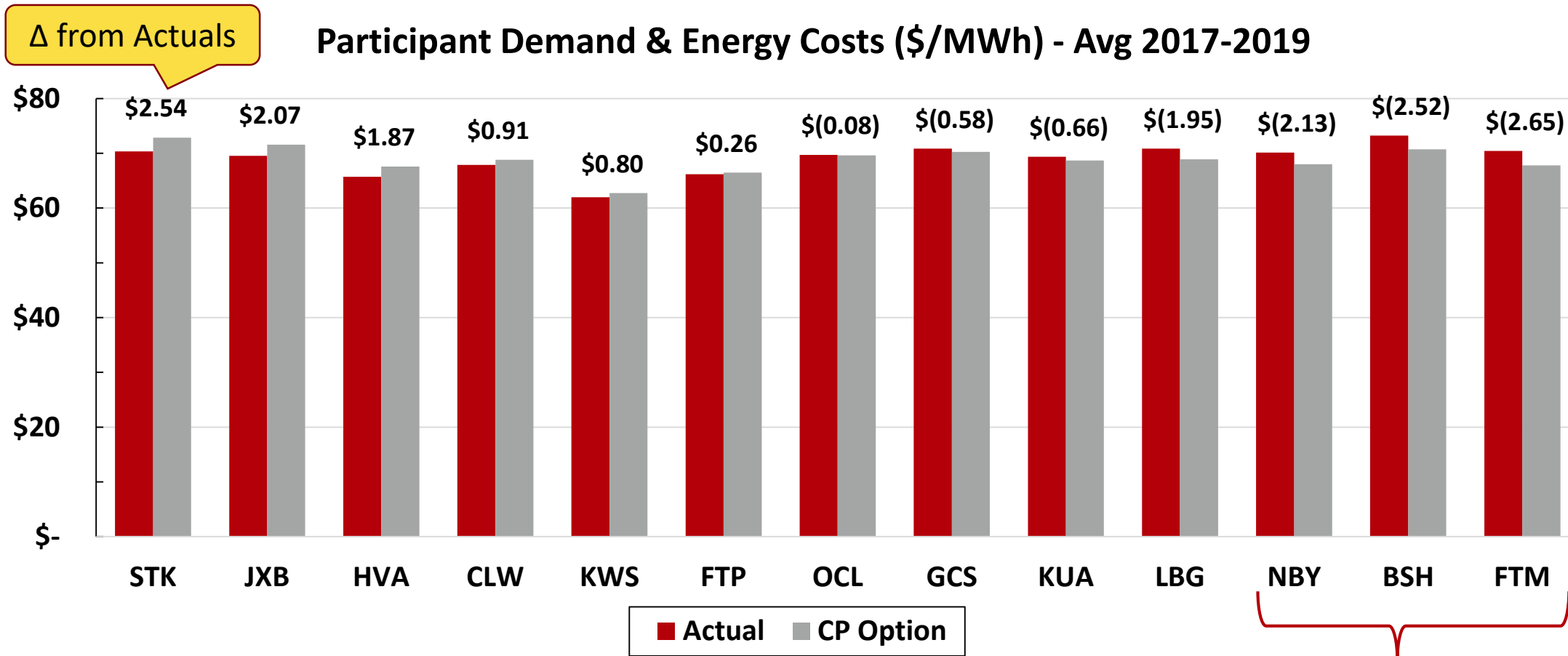
- Potential impact of slight cost increase for some Participant costs very likely more than by offset projected fuel costs, more excess sale & other savings
 - Every member likely to have cost lower in FY21 than in FY19
- ARP sold most excess capacity; needs to explore member capacity and load management options to defer capacity needs and create Member value
 - Likely 25 – 75MW of resources from:
 - Distributed Generation – Member & customer generation – back-up generators
 - Controlling Municipal owned functions – water pumping and water heating
 - Large interruptible load – Specific large loads
 - Residential and Commercial load management aggregated up – water heaters, AC, pool pumps, etc.

Alternatives Analyzed Based on Actual Data

- Utilized historical ARP cost data from FY 2017 – FY 2019 and historical Participant loads
- Some weather anomalies (e.g., hurricanes Irma and Michael) occurred during these years, but averaging demand determinants over 3 years helped mitigate
- Rates recalculated as if alternative options were in place over the full 3-year period from FY 2017 – FY 2019
- Rates set to recover the same total annual Participant dollars under each case

Summer Coincident Peak Option Yields Reasonable Results

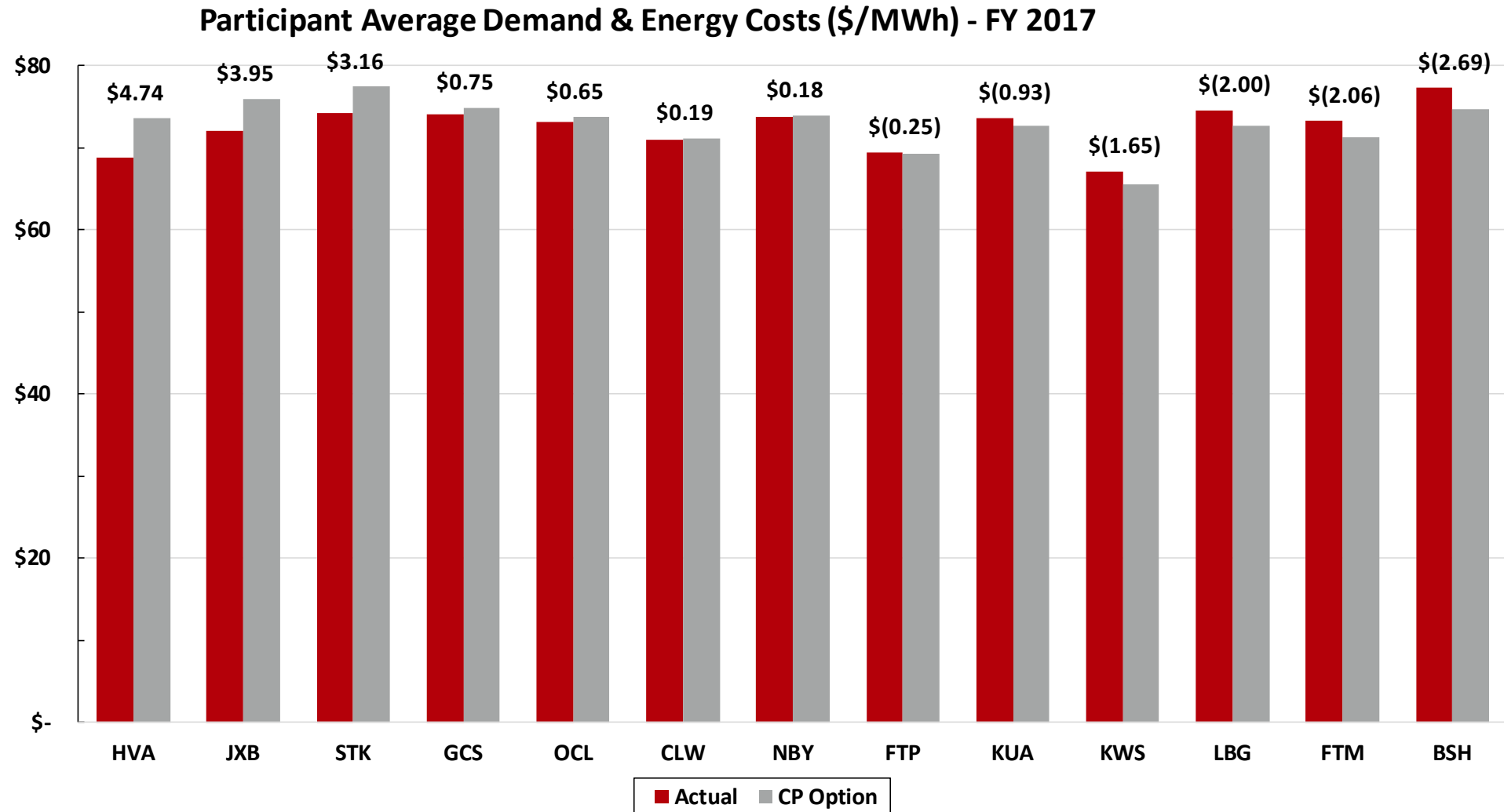
Participants Aver. Costs \pm \$3/MWh of Actual of 3 Years



Small, centrally-located members saw greatest savings

CP Option vs Actual Costs for FY 2017

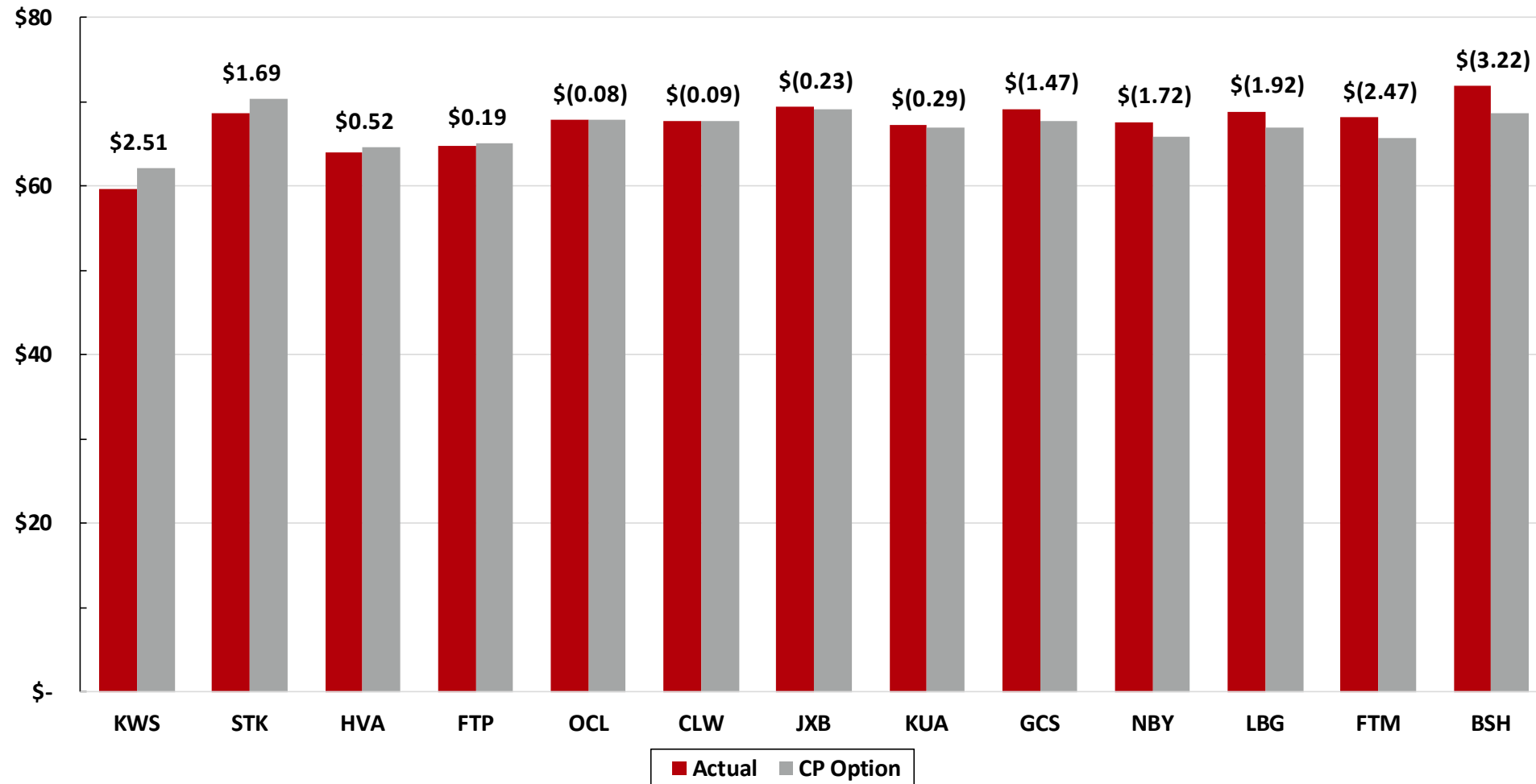
Demand Billings Based on Average CP Demands Over Previous 3 Fiscal Years



CP Option vs Actual Costs for FY 2018

Demand Billings Based on Average CP Demands Over Previous 3 Fiscal Years

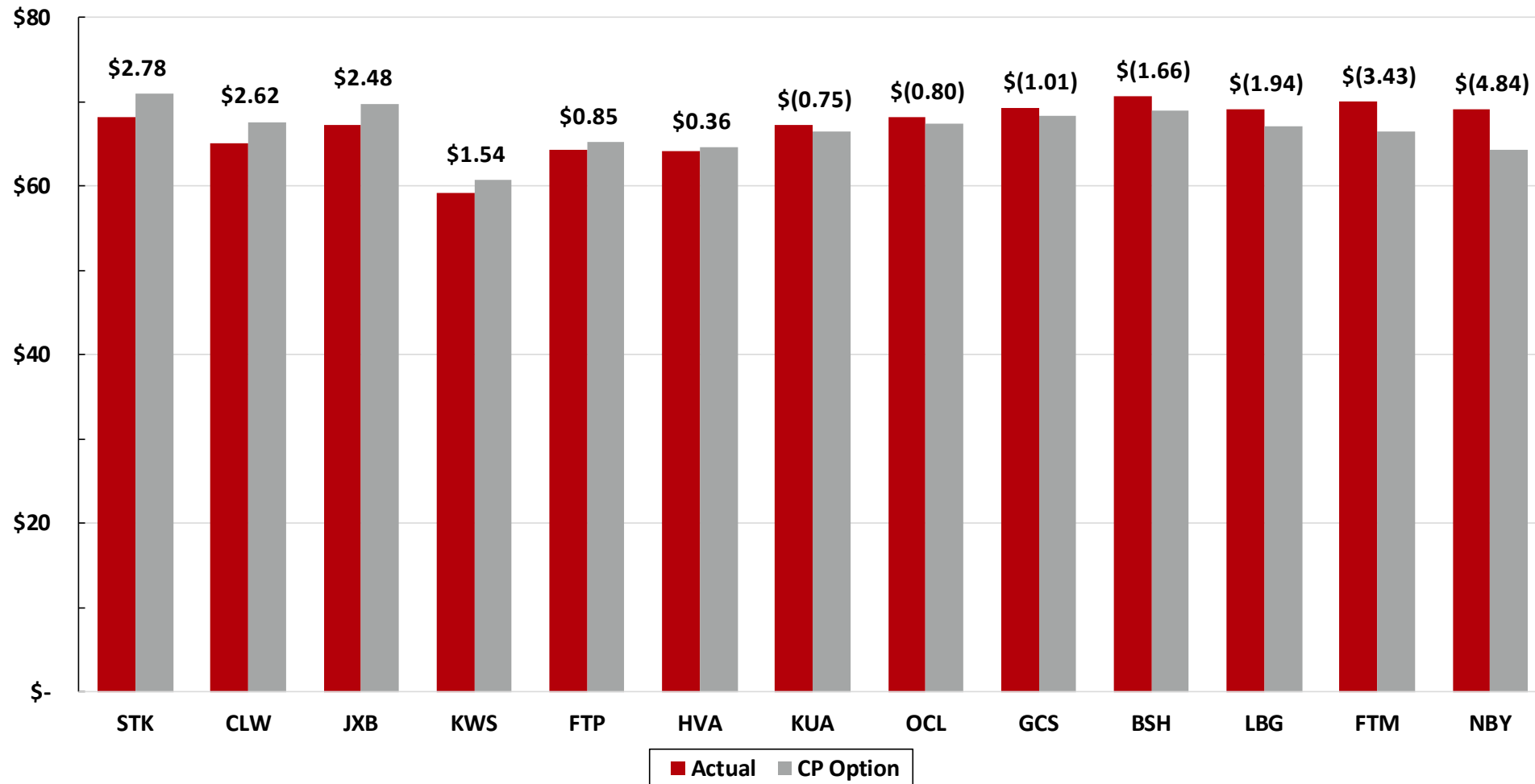
Participant Average Demand & Energy Costs (\$/MWh) - FY 2018



CP Option vs Actual Costs for FY 2019

Demand Billings Based on Average CP Demands Over Previous 3 Fiscal Years

Participant Average Demand & Energy Costs (\$/MWh) - FY 2019

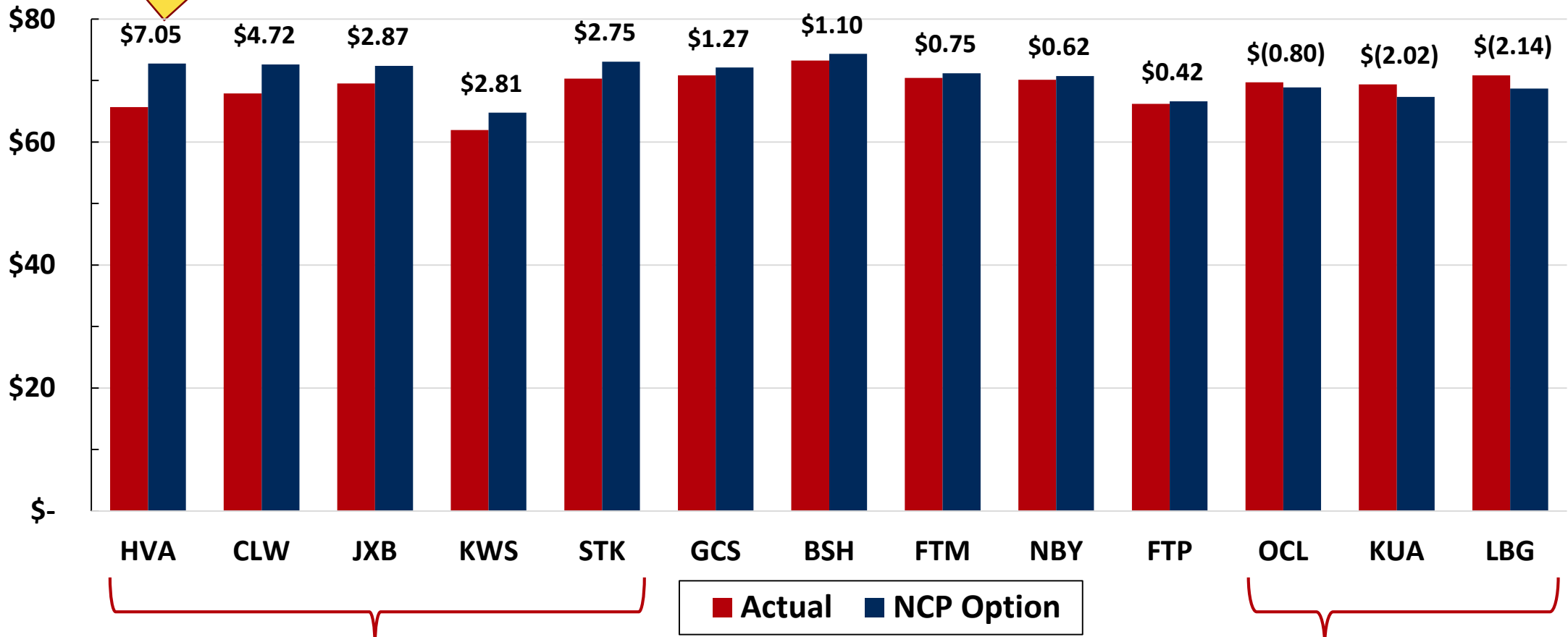


More Significant Variations with 12 Month NCP Option

Some Participants Saw Significant Cost Increases

Δ from Actuals

Participant Demand & Energy Costs (\$/MWh) - Avg 2017-2019



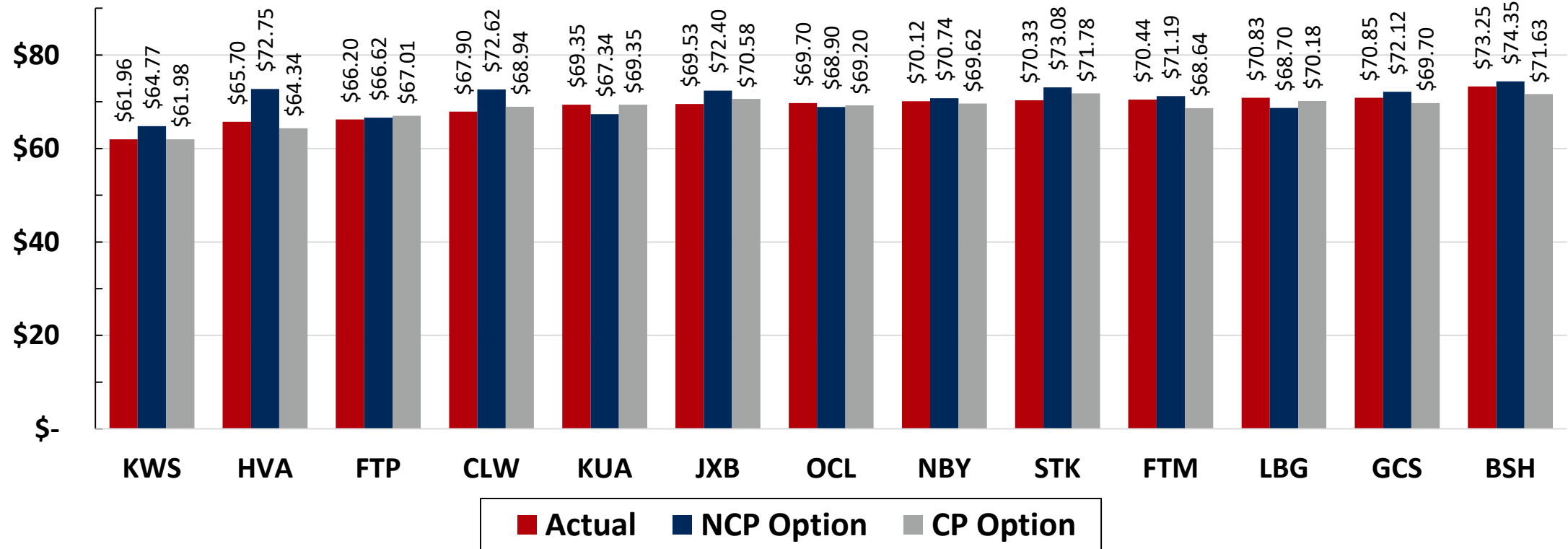
North and south cities that tend to peak at different times than the ARP system saw the greatest increase

Larger, centrally-located members with peaks highly correlated to ARP system peak saw savings

On Average, CP Option Shows Greater Long-Term Comparability to Current Methodology

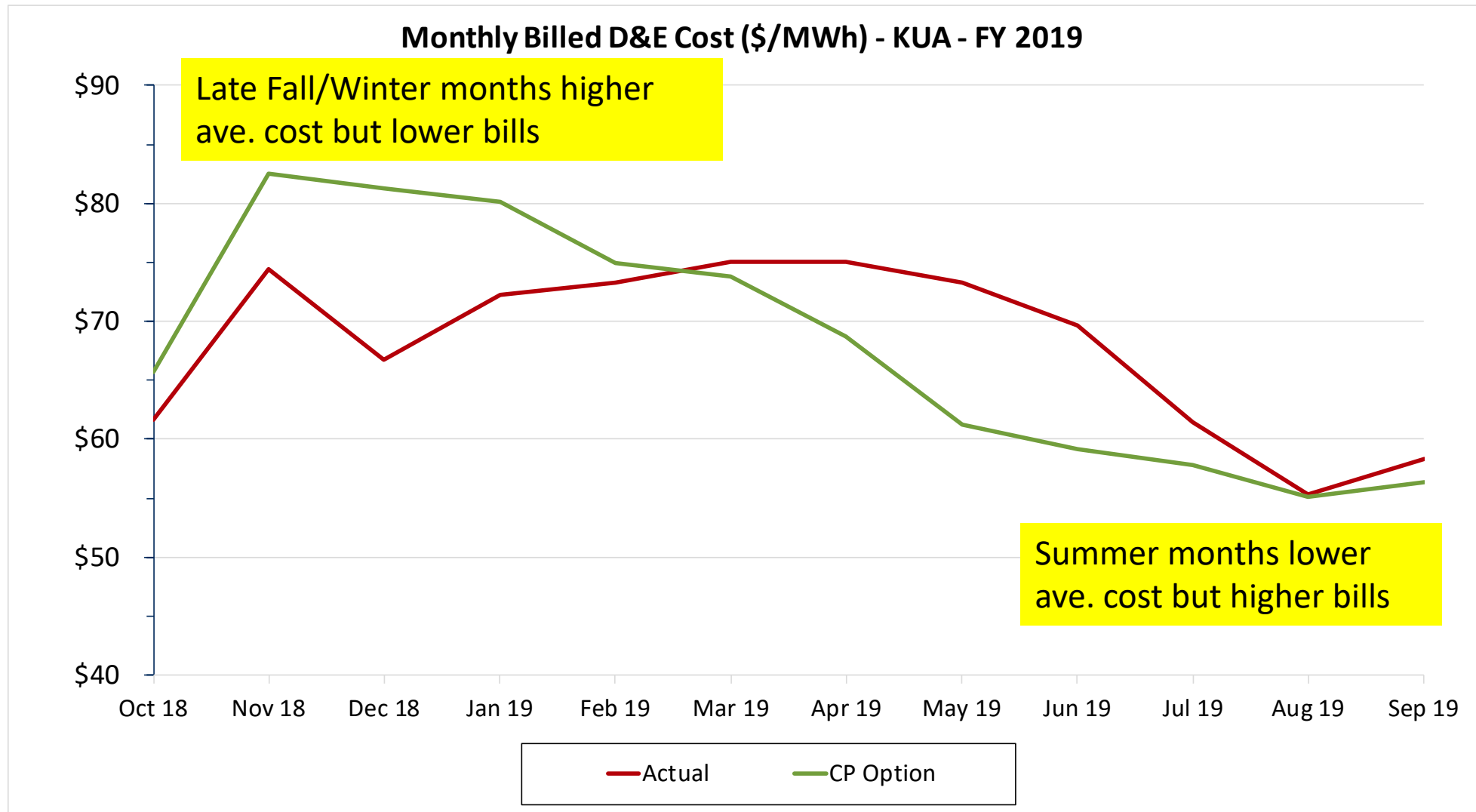
Magnitude of Cost Shifts from Actuals was Lower than NCP Option

Participant Demand & Energy Costs (\$/MWh) - 3 Year Average



KUA Ex. of Monthly Cost Change CP Option vs. Actual

Acts More Like a Budget Billing



Some Issues Still Need to be Addressed

- Incentive rates (LAIR and Economic Development Rate)
- CROD-related calculations
- Demand cost over/under collection methodology (e.g., stick with current approach of including monthly adjustments, switch to annual true-up, etc.)
- Possibly other issues

Takeaways and Next Steps

- These are just two potential options
- Does the EC prefer an approach?
- Are there any additional options/variations the EC would like to see?



ARP Project Structure Considerations

Supermajority Voting Structure

- Currently, two or more members of the EC can request a second confirming vote, after action is taken.
- And, that second vote must pass by a supermajority of 75% (at least 10 of 13) for action to be taken.
- Applies to:
 - Rate schedule changes,
 - Debt issuances or decisions requiring debt issuance, and
 - Power supply and other contracts having a term of 7 years or longer.

Supermajority Voting Structure

- Options for Next Steps:
 - Alter the current 75% supermajority requirement down from to:
 - 67% (or $\frac{2}{3}$), requiring 9 of 13 votes to take action, or
 - 60%, requiring 8 of 13 votes to take action.
 - Instead of a supermajority requirement, require two votes at separately noticed and called meetings, with a simple majority vote required at each meeting (e.g., similar to ordinance requirements).
 - Eliminate the supermajority requirement altogether.

Supermajority Voting Structure

Strengths:

- Builds greater consensus
- Some options do not require contract amendment
- Addresses next resource needs decisions
- Significant decisions should be near unanimous

Weaknesses:

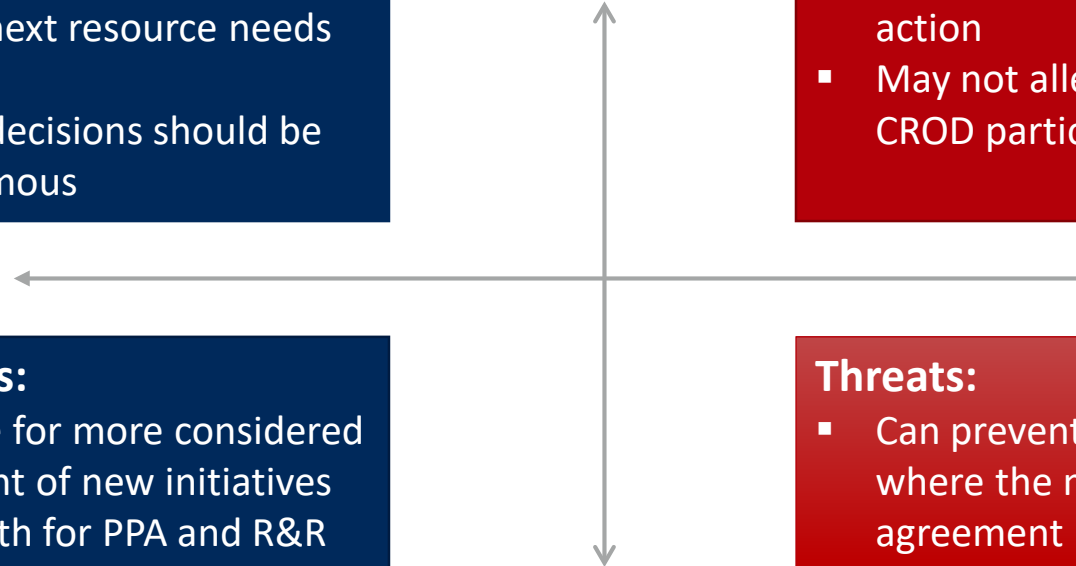
- Minority can block needed action of the majority
- Can hinder ability to take needed action
- May not alleviate concerns of CROD participants

Opportunities:

- Can provide for more considered development of new initiatives
- Provides path for PPA and R&R type funded options

Threats:

- Can prevent needed action where the majority are in agreement
- Participants could be limited in having the ARP meet their goals
- Last option requires contract amendment



ARP Term/Outlook (12-15 years)

- Currently, the ARP contract has a ever-green minimum 30-year term that extends each October 1
- With all ARP debt currently scheduled to be retired by 10/1/2031, term of the ARP contract does not have to be kept at 30 years
- A reduction of the term to 12-15 years covers the life of all debt and, thus, has no adverse impact on bondholders, which is the threshold test for approval of any ARP contract amendment

ARP Term/Outlook (12-15 years)

- Options for Next Steps:
 - Executive Committee adopts a formal policy that all future resource decisions would be limited for financing and terms of obligation (bonds and PPAs) to be no more than 12-15 years in length.
 - Policy could expressly include a supermajority requirement ($\frac{2}{3}$, $\frac{3}{4}$ or unanimous) for approval of resources outside the policy restrictions.
 - Amend the ARP Contract to a shortened evergreen term of 12-15 years (October 1, 2032-35)
 - Participants that have given the section 2 notice to stop the automatic renewal of the contract term (Green Cove Springs (2035), Starke (2037), and Fort Meade (2041)) would all move to the same contract term.

ARP Term/Outlook (12-15 years)

Strengths:

- Keeps the status quo, but only for a defined period
- Not a complex modification
- Fits resource needs for next 5 – 7 years
- Current short-term rates are low

Weaknesses:

- Shorter-term financings are usually higher cost (today, 1-2%)
- Does not address possible future needs for long-term resources

Opportunities:

- If change by policy, minimal cost and time to modify
- May provide opportunity to restore ARP/bring in others
- Defined path to broader structural changes

Threats:

- Requires outside approvals if shortening contract
- Political threats without ARP Contract
- Could leave ARP more exposed to short-term costly markets
- Longer-lived assets would have to be addressed (e.g., TCEC1)

Fixed Allocable Interests in New Resources

- Currently, all resources are the liability and responsibility of all Participants.
 - All resources and obligations are ARP obligations.
- New resources could be structured to be a liability and responsibility of a smaller subset of Participants, using subordinated debt and other mechanisms.
- This would mean that Participants that are not contributing to the need for new resources could be excluded from financial liability for those new resources, but their resource reliance would also be limited.

Fixed Allocable Interests in New Resources

- Options for Next Steps:
 - Have finance and legal team put together a proposal for how new resources could be financed with subordinated debt, supported by a revenue pledge from only a subset of ARP Participants who are causing the new resource need.
 - Have finance and legal team put together a proposal for how new resources could be designated as ARP “supplemental system” resources, with only Participants who are causing need for new resources having an obligation to pay for the new resources.
 - Have finance and legal team put together a proposal for new resources to be established as separate projects, which become new excluded resources under the ARP Contract.

Fixed Allocable Interests in New Resources

Strengths:

- Reduces Participant friction over resource additions
- Allows subgroups to participate in new resources
- Provides greater flexibility for long term

Weaknesses:

- Costly and ~ 1-2 years to implement
- Complicates ARP financing
- May dilute credit strength of ARP – limits shared Participant interests

Opportunities:

- Can provide an opportunity to fully restore ARP/bring in others
- Retains value of existing resources

Threats:

- Requires outside approvals
- Eliminates some ARP contract protection
- Could complicate operational arrangements (cost sharing)

Fixed Allocable Interests for All Resources

- All members could have opportunity to participate in existing ARP resources, to the level of choice, except that all existing ARP obligations would have to be satisfied.
- This would envision creating multiple projects, particular to resources or groups of resources, and each current ARP Participant being allocated a share of each new project.
- Dispatch, planning, etc. (everything done today for ARP participants by FMPA) would be handled through a new Joint Dispatch Project, which would provide all services.
- The existing ARP would cease to exist.

Fixed Allocable Interests for All Resources

- Options for Next Steps:
 - Leadership team prepares a plan to identify all issues that need to be addressed (FMPP, joint dispatch, transmission, planning, regulatory compliance, etc.).
 - Finance and legal team prepares plan for:
 - financing of new projects,
 - retirement of all existing ARP obligations,
 - contractual structure for new projects
 - transition planning.

Fixed Allocable Interests in All Resources

Strengths:

- Provides opportunities for all members to participate in projects

Weaknesses:

- Very complex, lengthy, and costly process (3-5 years, more than \$5 million for transactional costs)
- Appropriate for project peaking need only?
- Operational and administrative complexity
- Complicated project structure

Opportunities:

- Current Participants can have broader choices in power supply options

Threats:

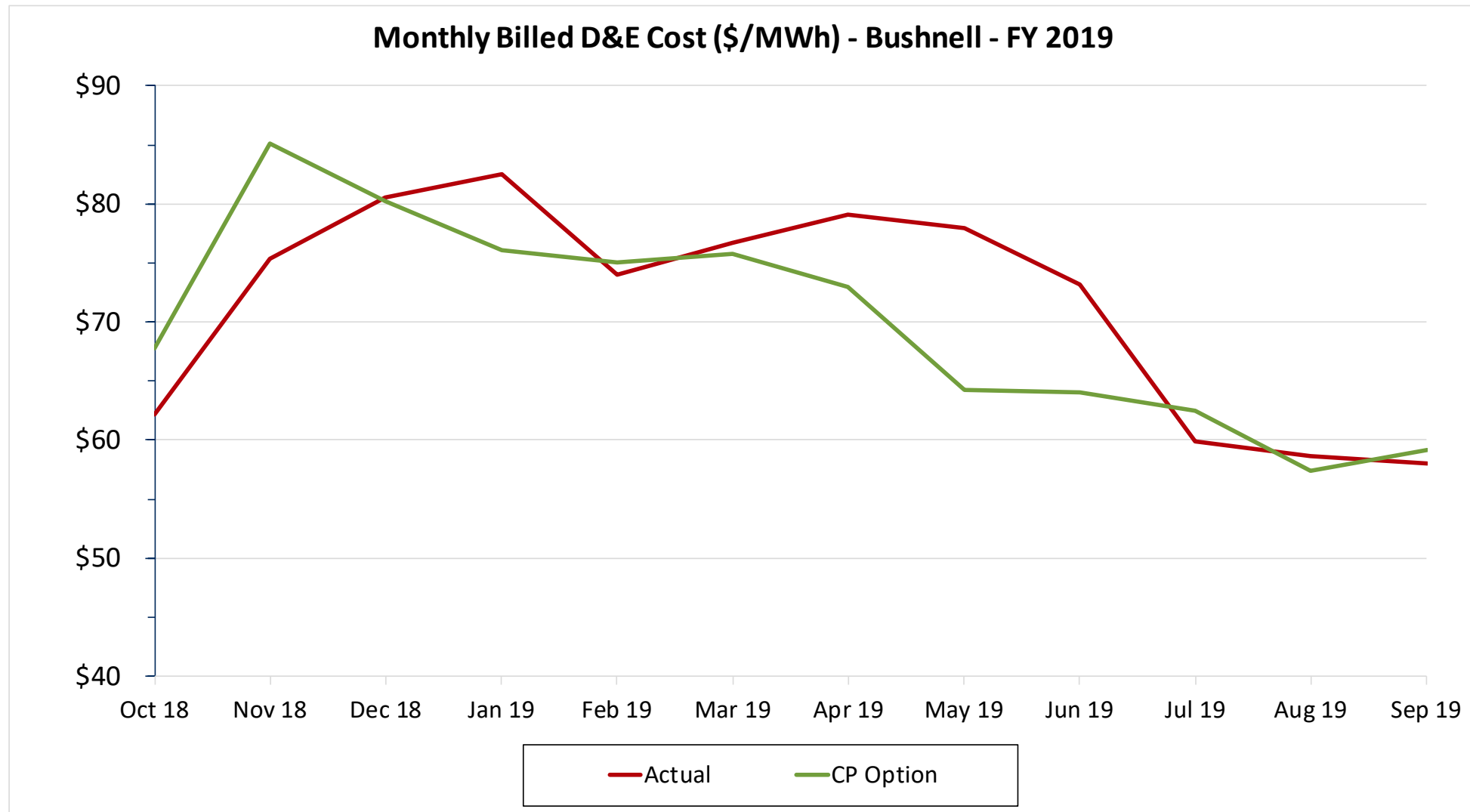
- Requires many outside approvals
- Could eliminate most ARP contract benefits
- Places greater decision-making burden on Participants
- Existing ARP Participants are still tied to today's resources



Supplemental Data

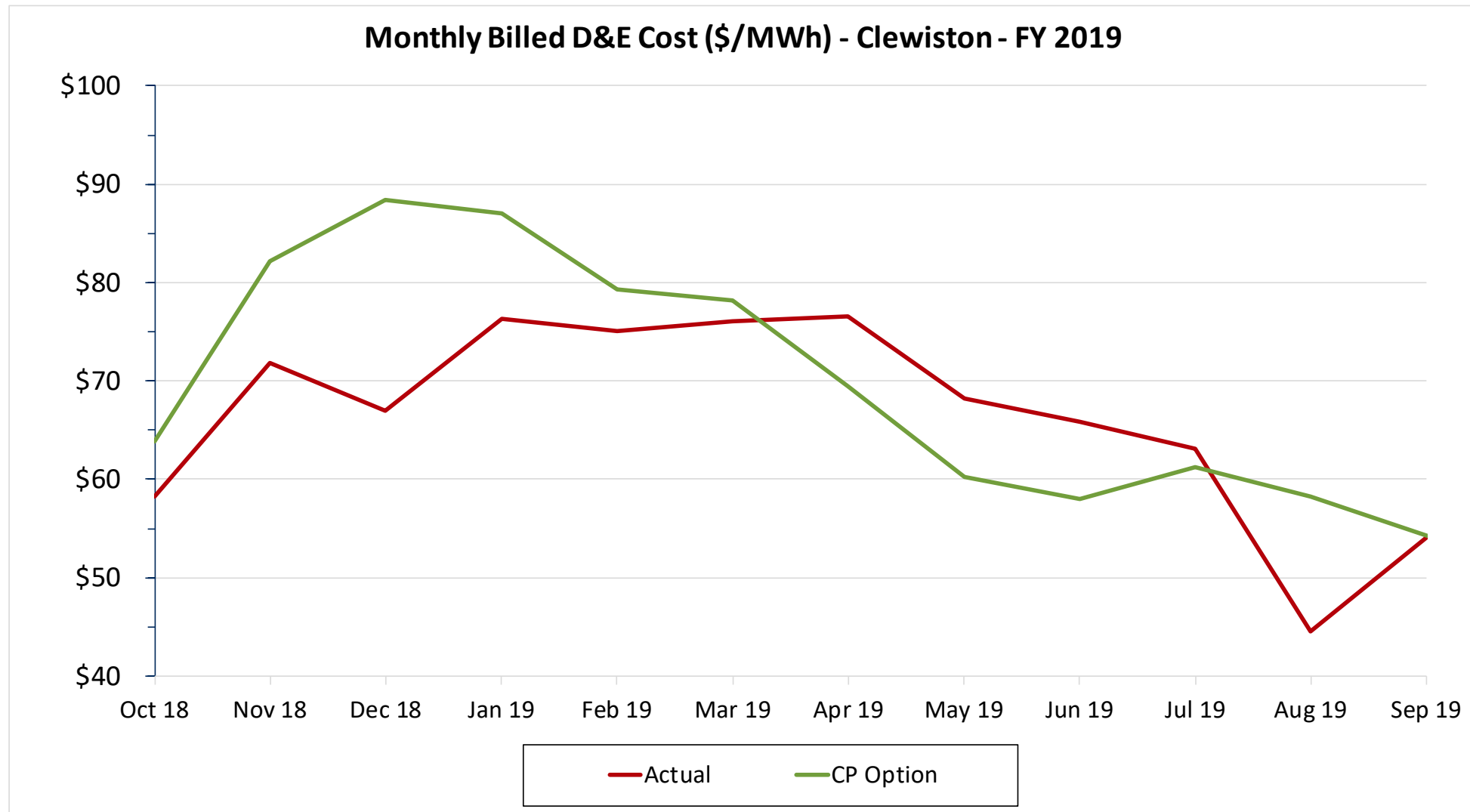
Comparison of Monthly Billed \$/MWh Demand and Energy Cost for CP Option vs. Actual Costs

Bushnell – FY 2019



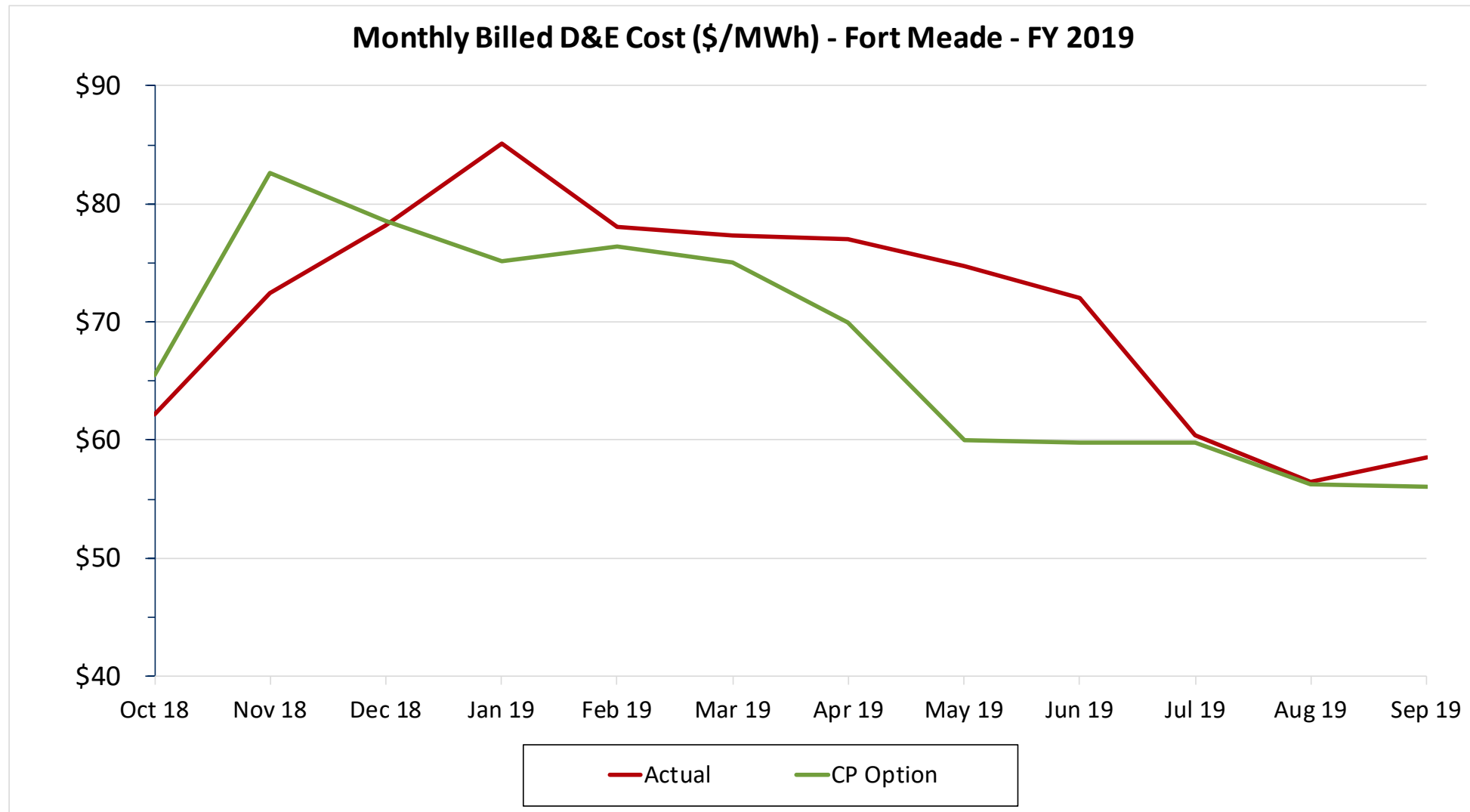
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Clewiston – FY 2019



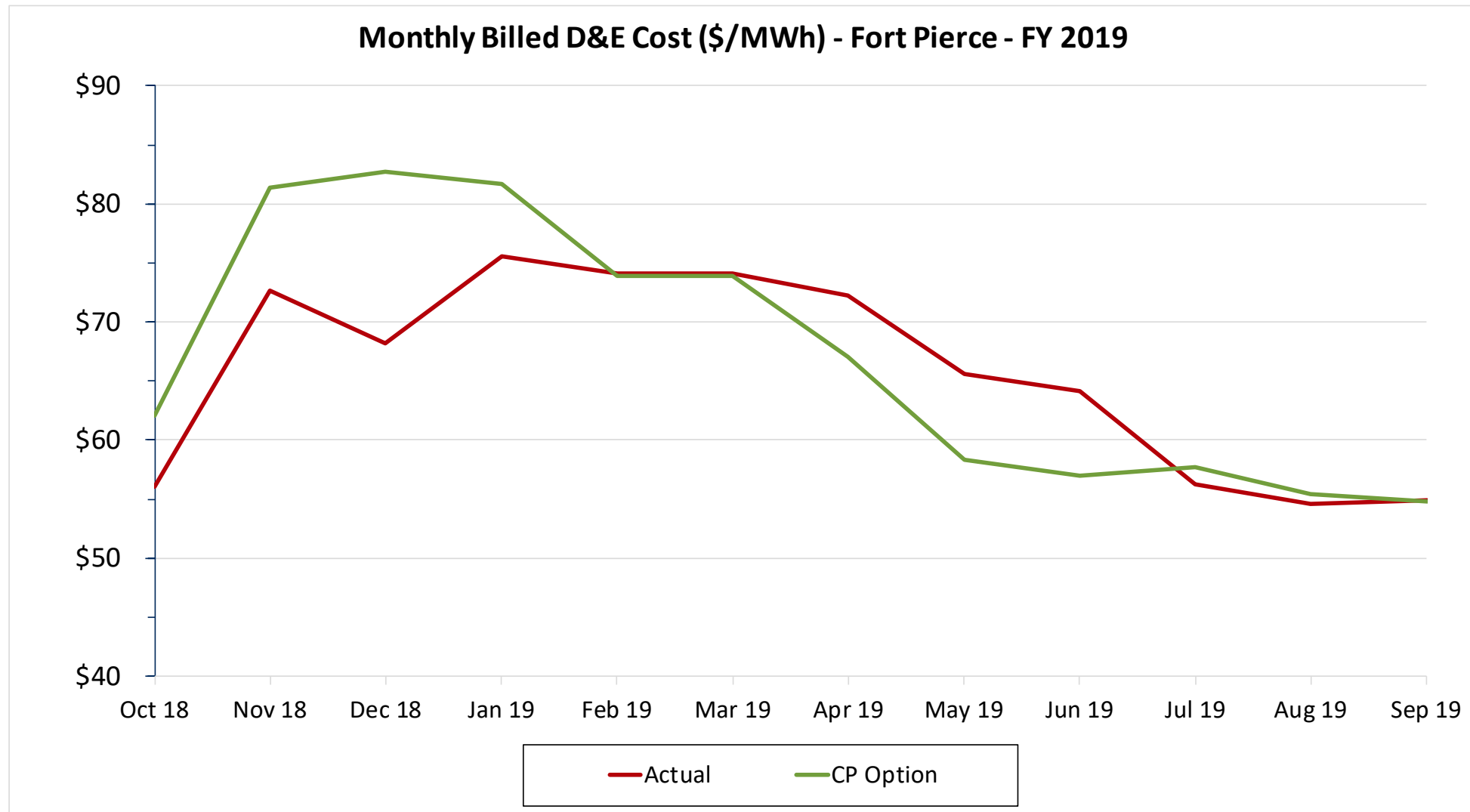
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Fort Meade – FY 2019



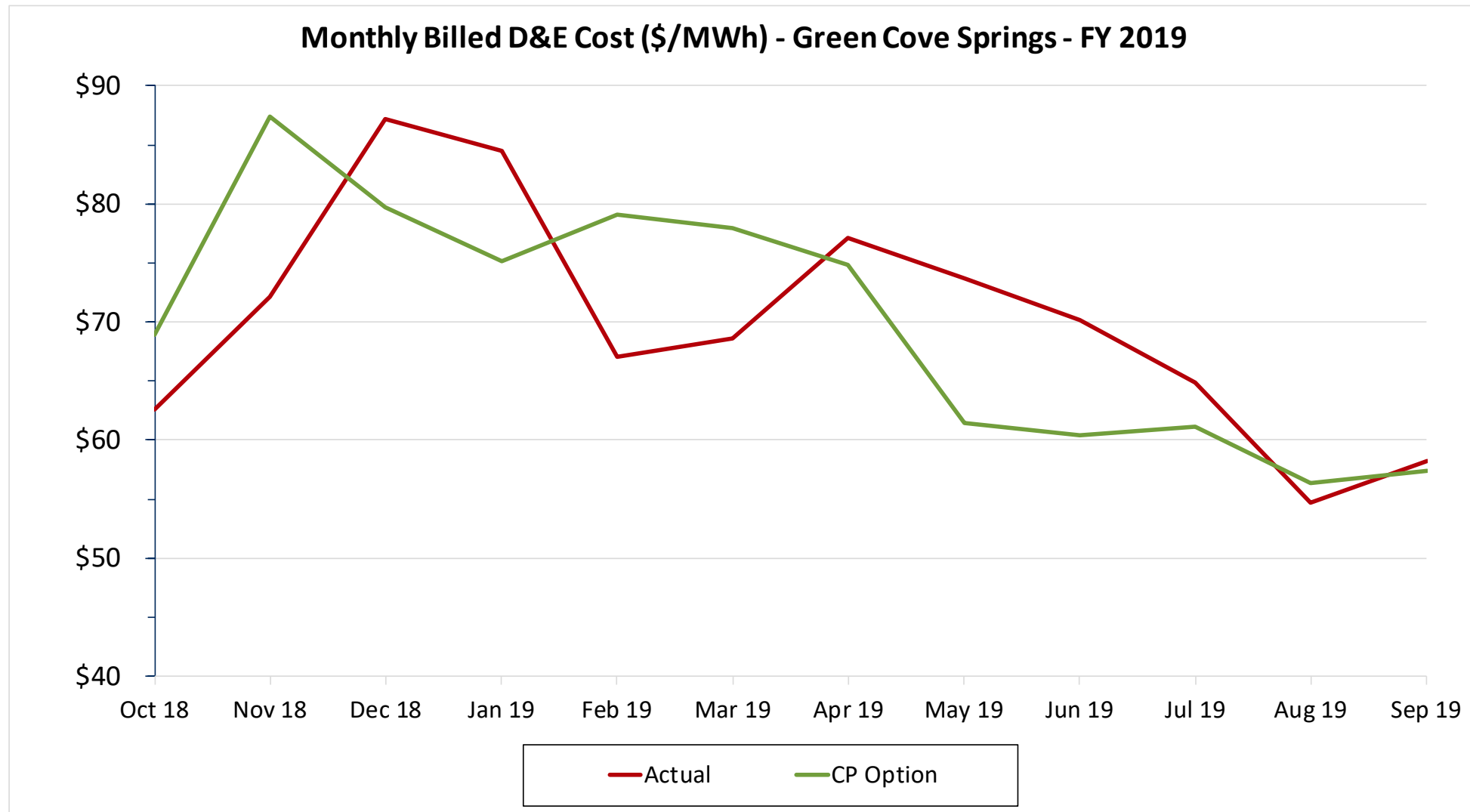
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Fort Pierce – FY 2019



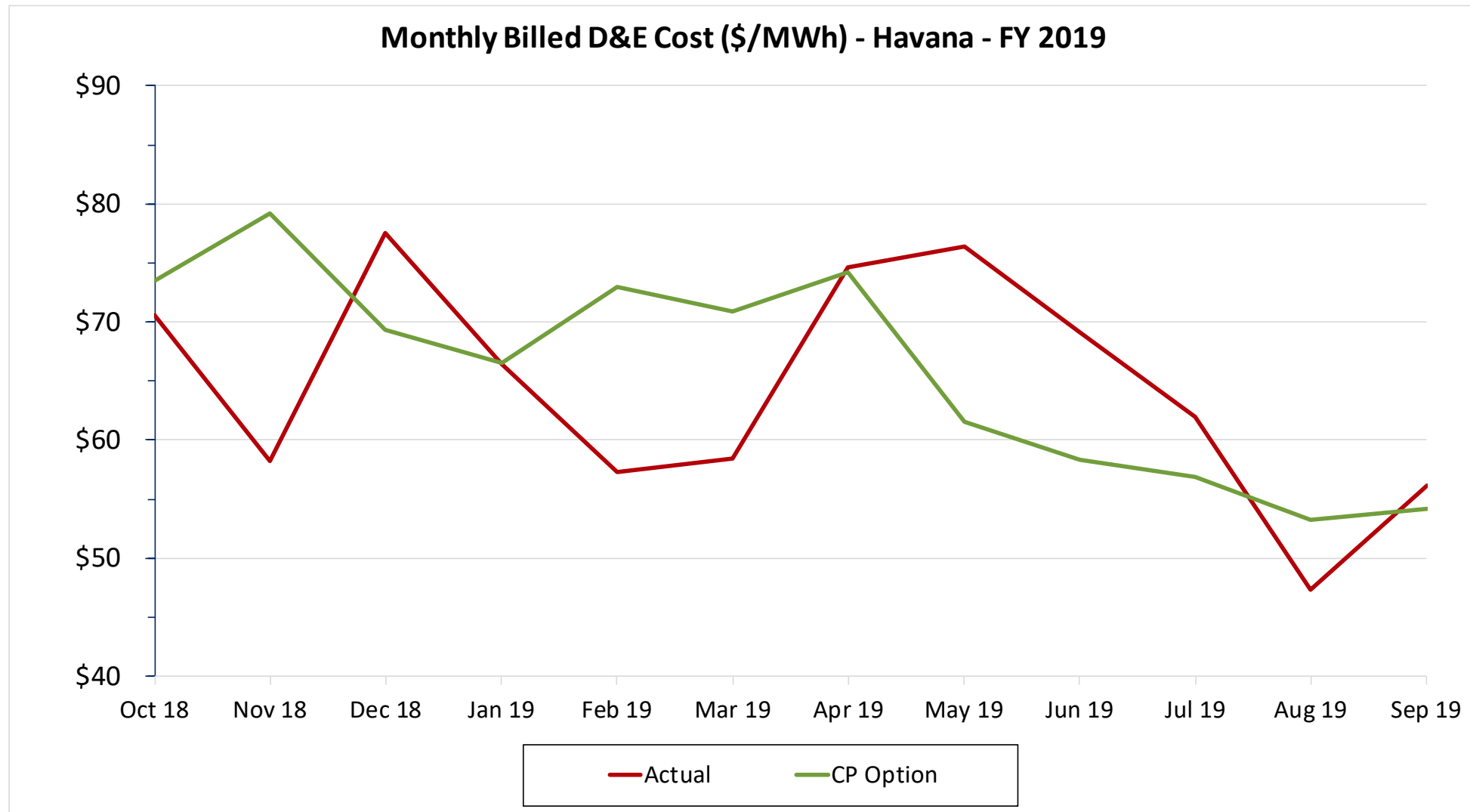
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Green Cove Springs – FY 2019



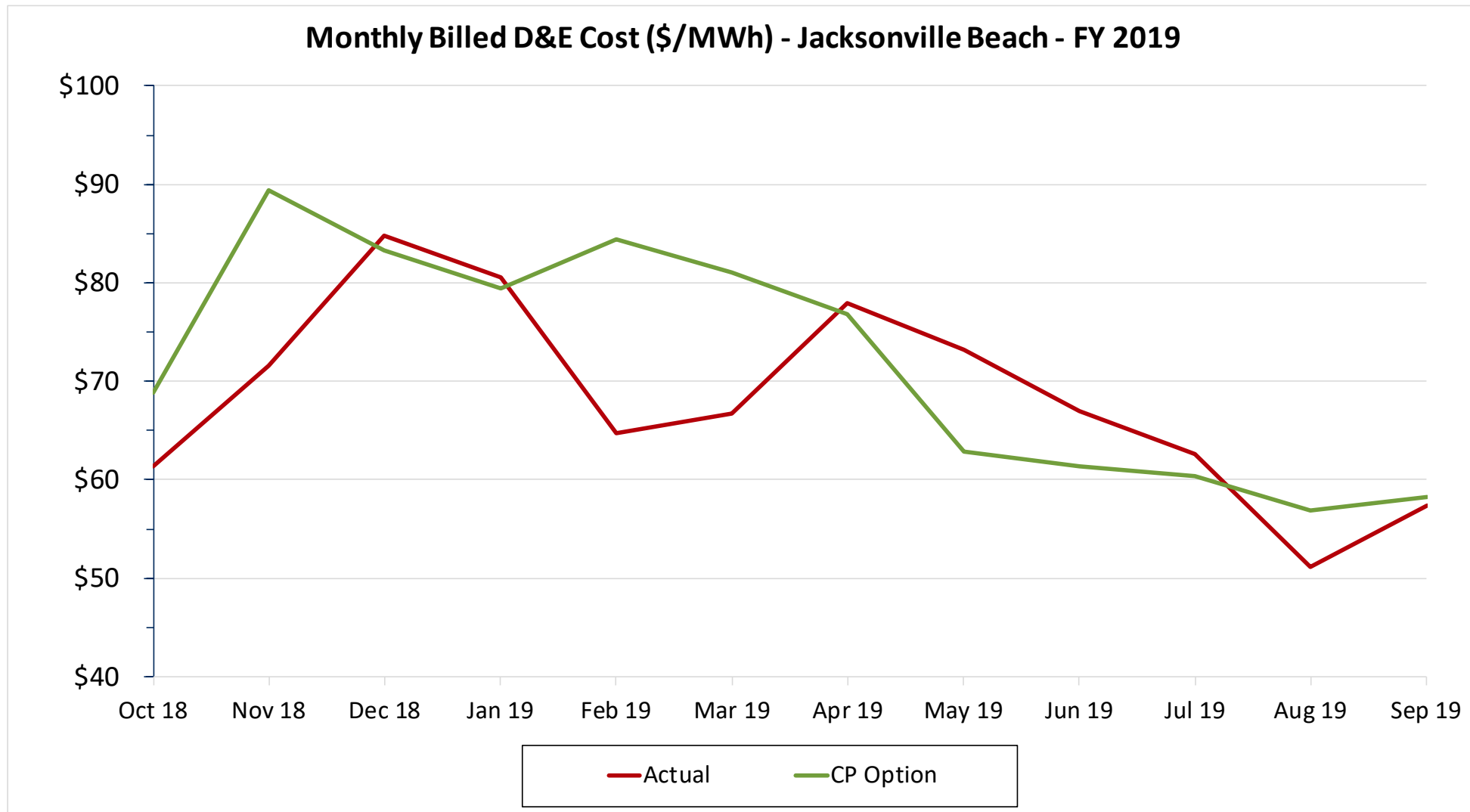
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Havana – FY 2019



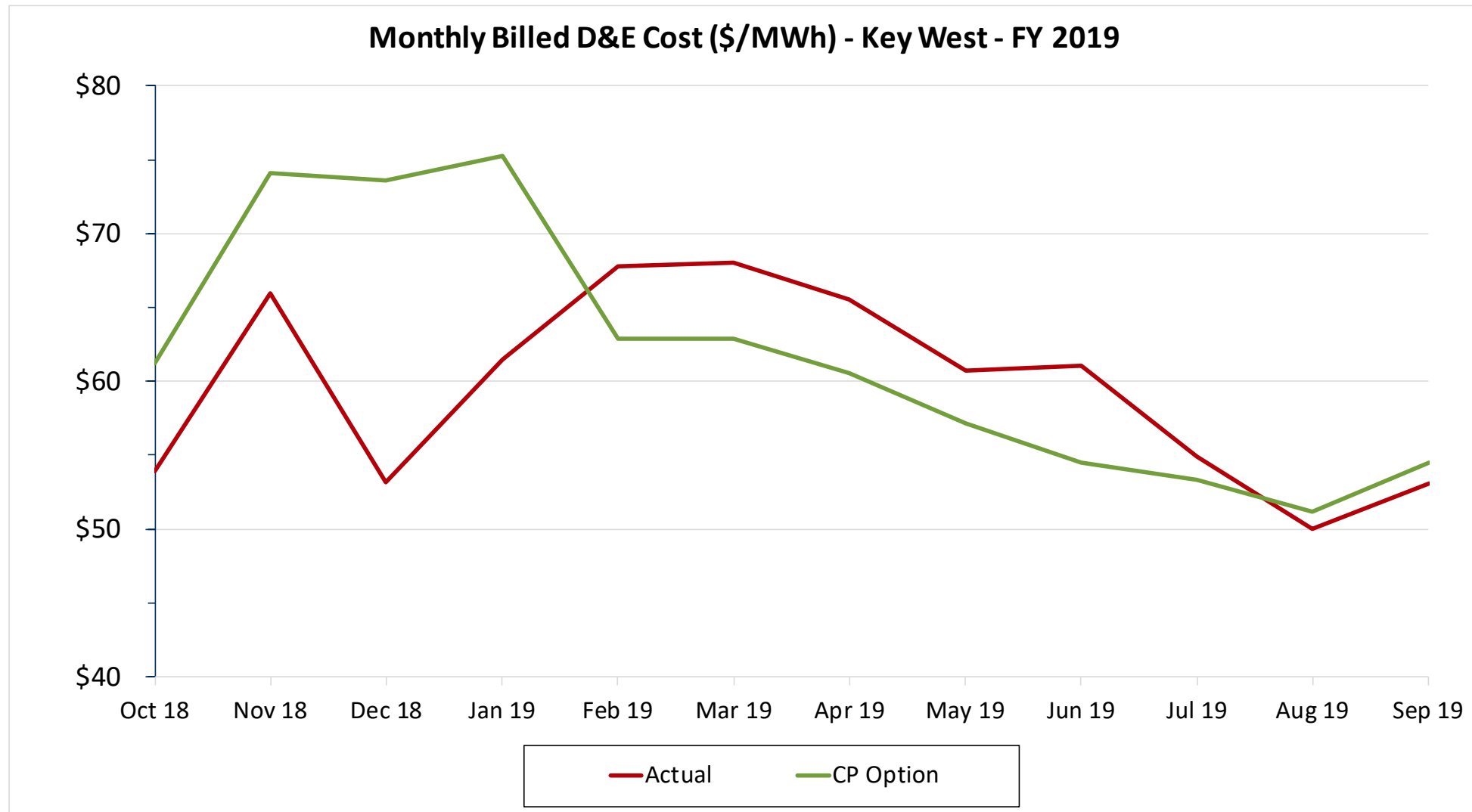
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Jacksonville Beach – FY 2019



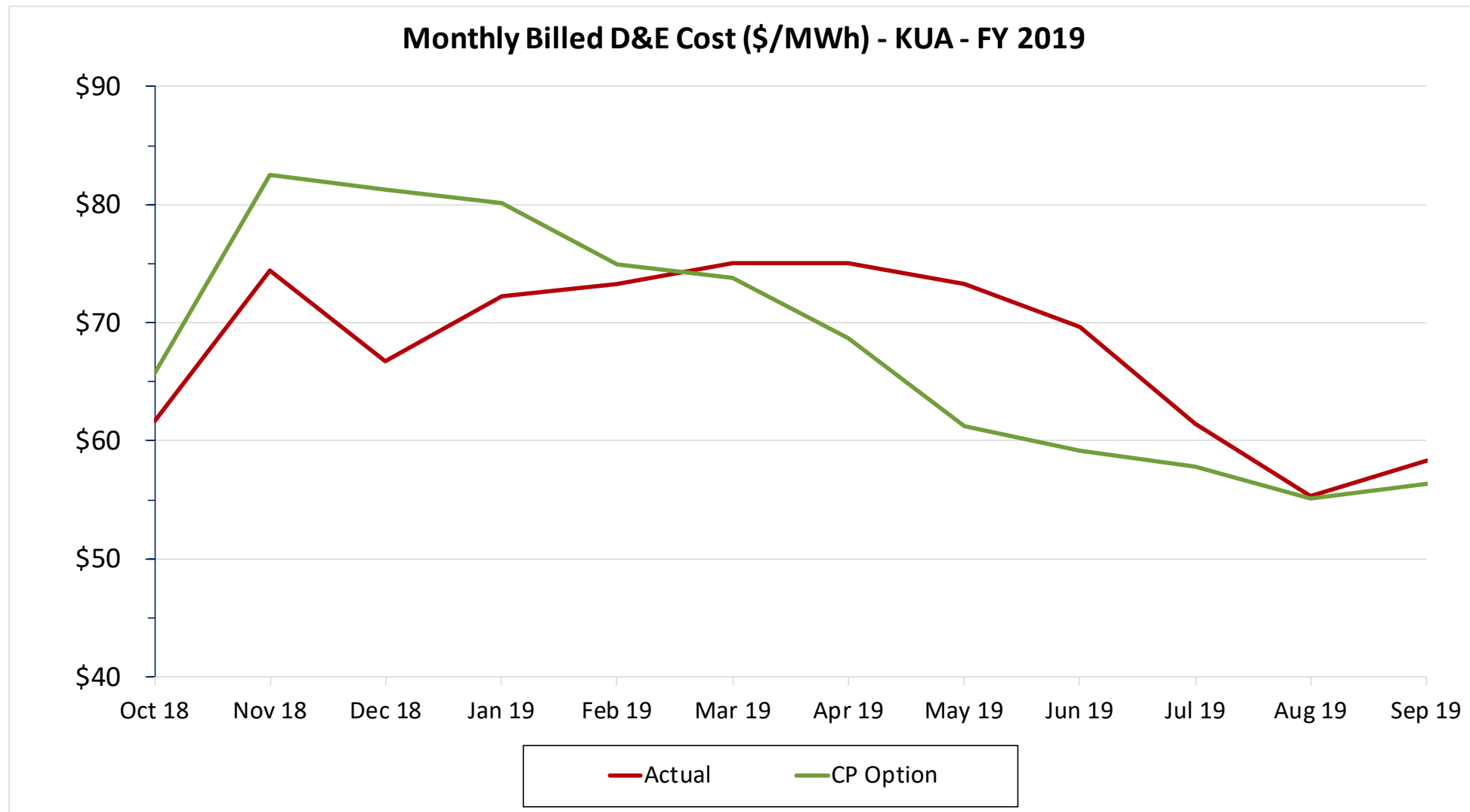
Comparison of Monthly Billed \$/MWh Demand and Energy Cost for CP Option vs. Actual Costs

Key West – FY 2019



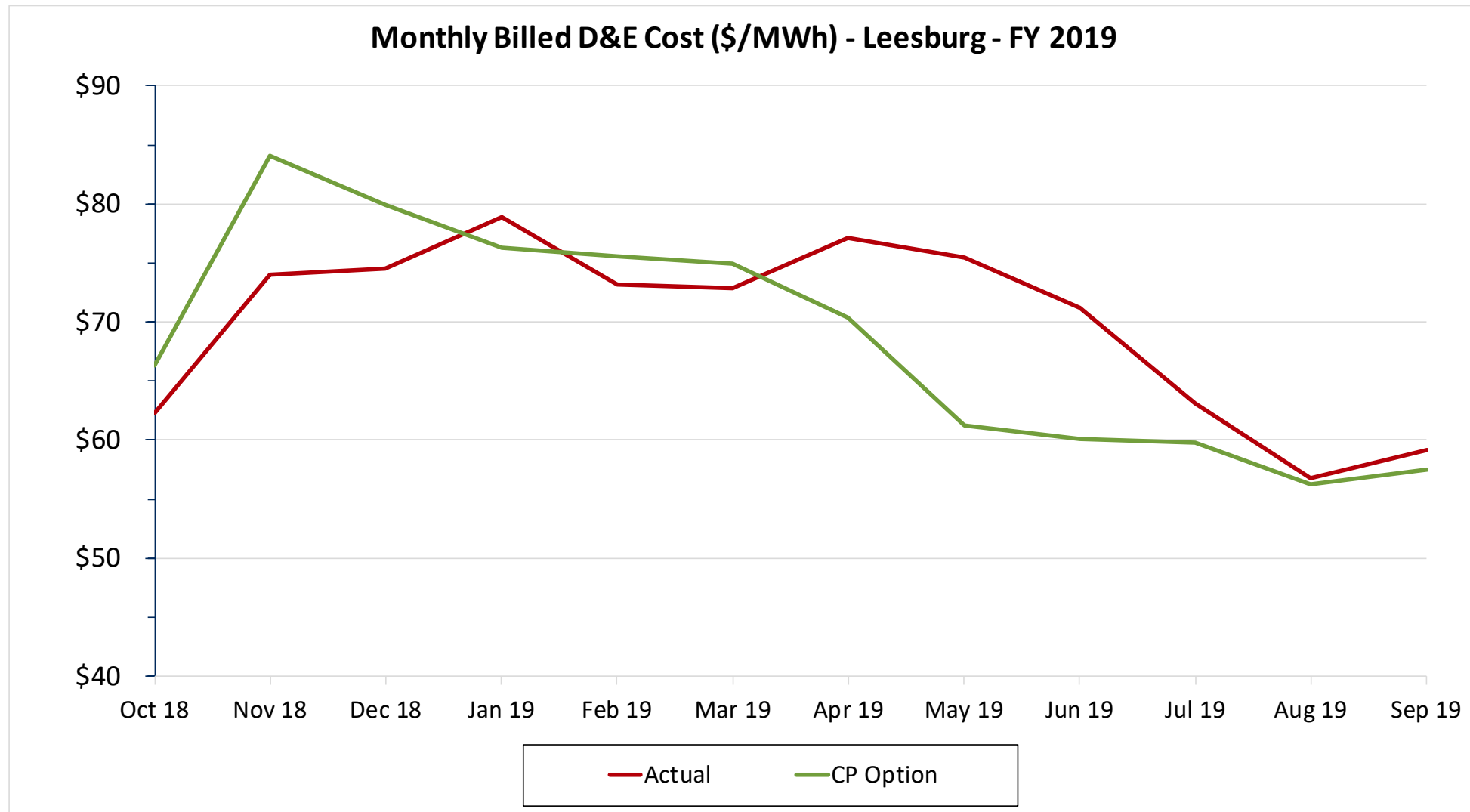
Comparison of Monthly Billed \$/MWh Demand and Energy Cost for CP Option vs. Actual Costs

KUA – FY 2019



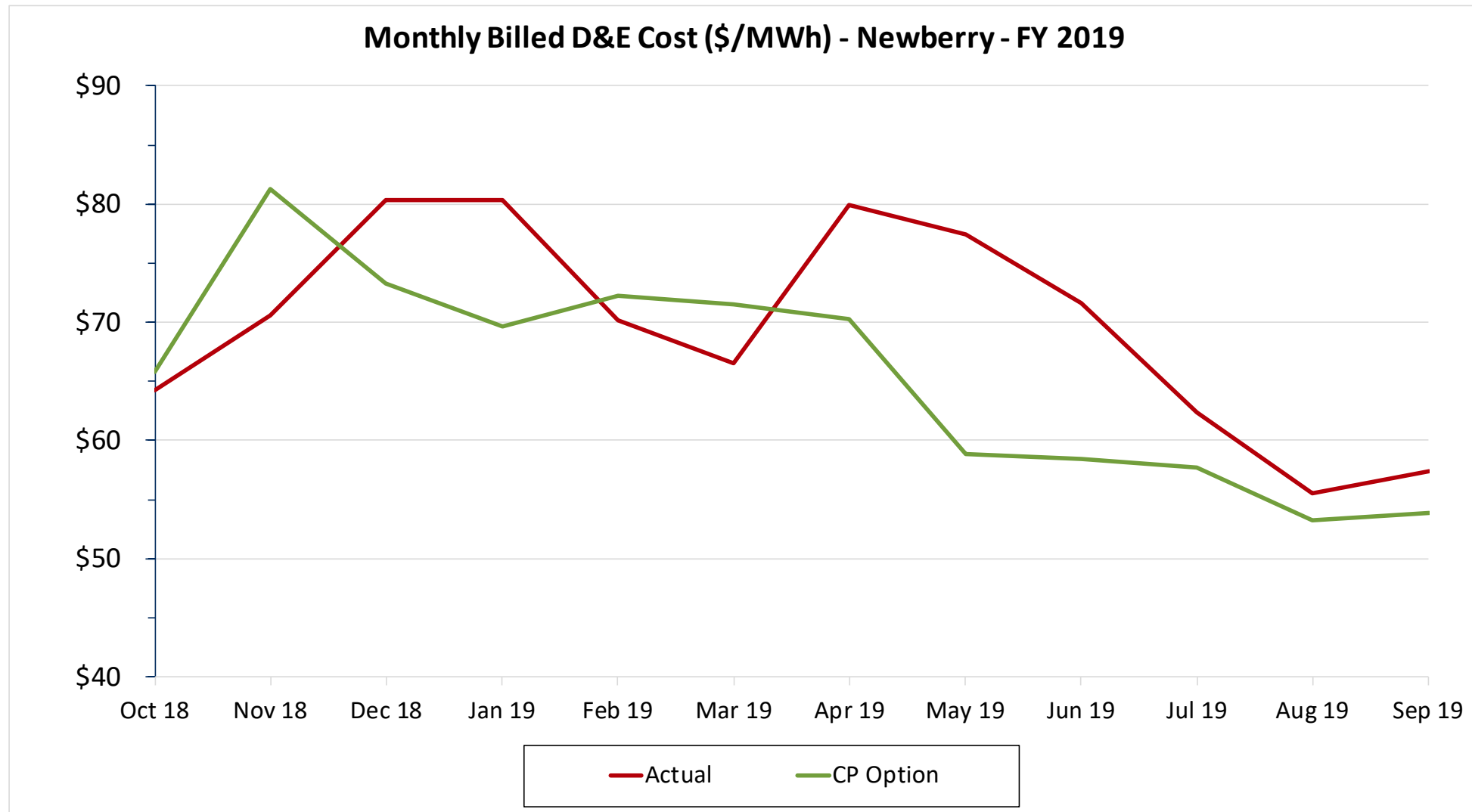
Comparison of Monthly Billed \$/MWh Demand and Energy Cost for CP Option vs. Actual Costs

Leesburg – FY 2019



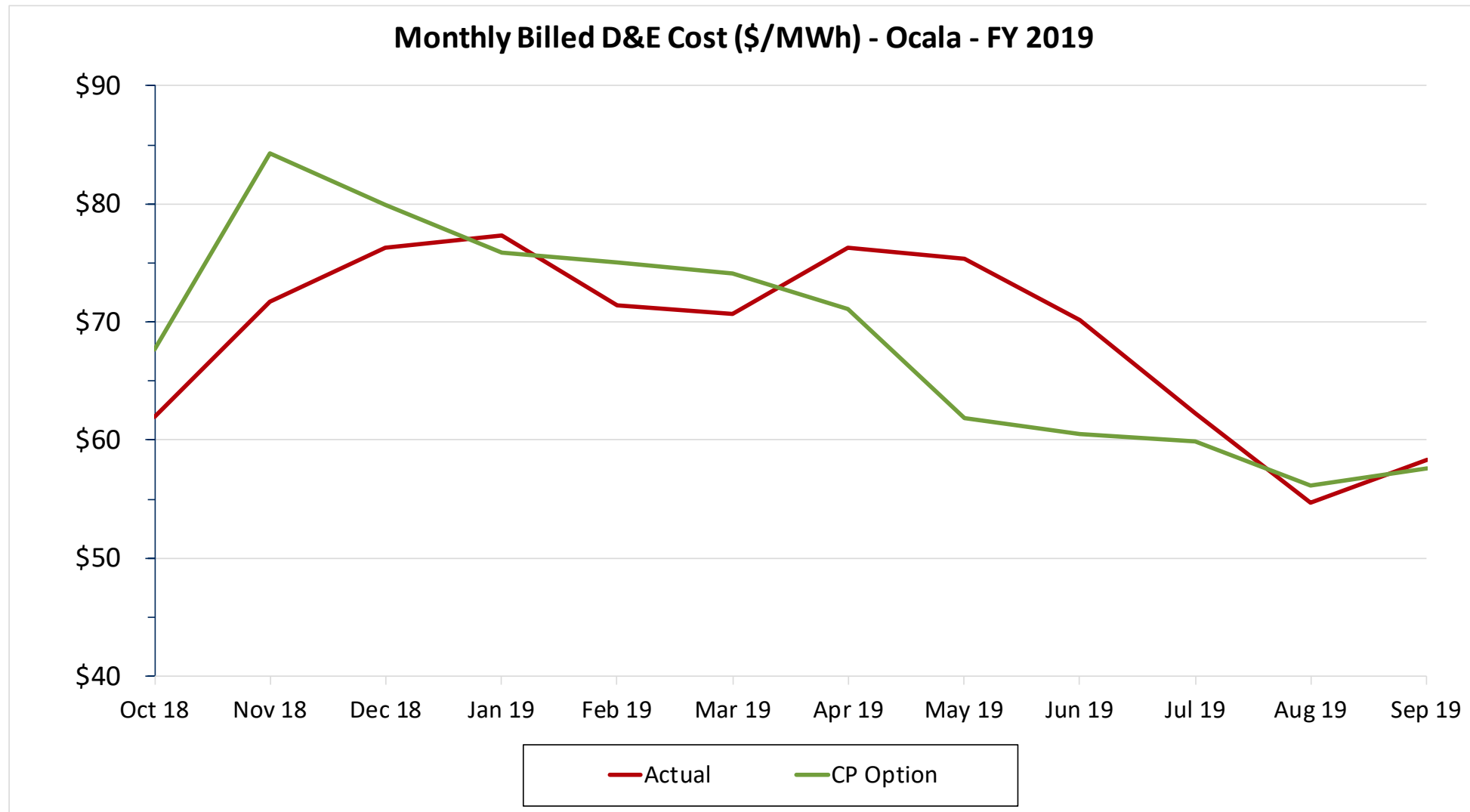
Comparison of Monthly Billed \$/MWh Demand and Energy Cost for CP Option vs. Actual Costs

Newberry – FY 2019



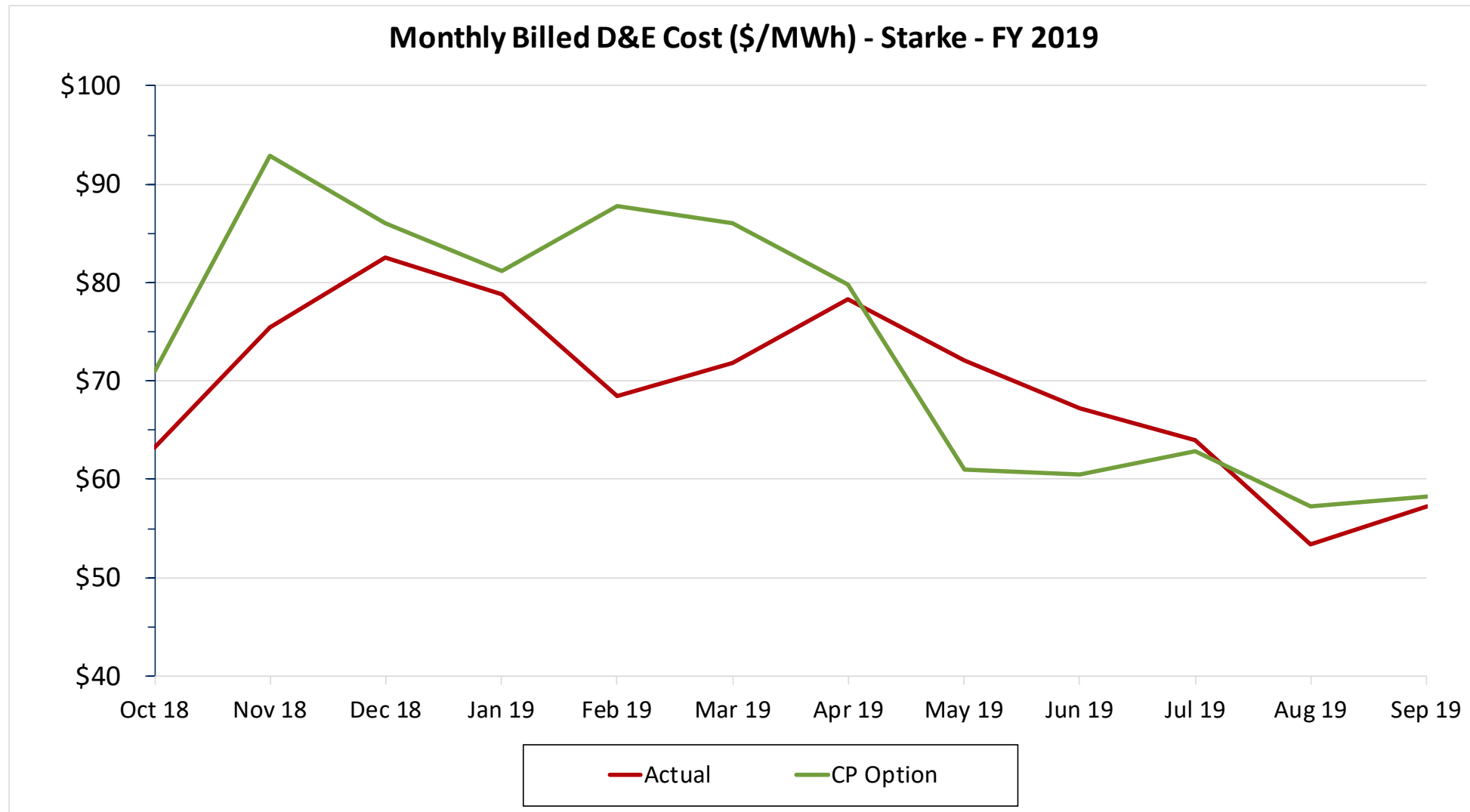
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Ocala – FY 2019



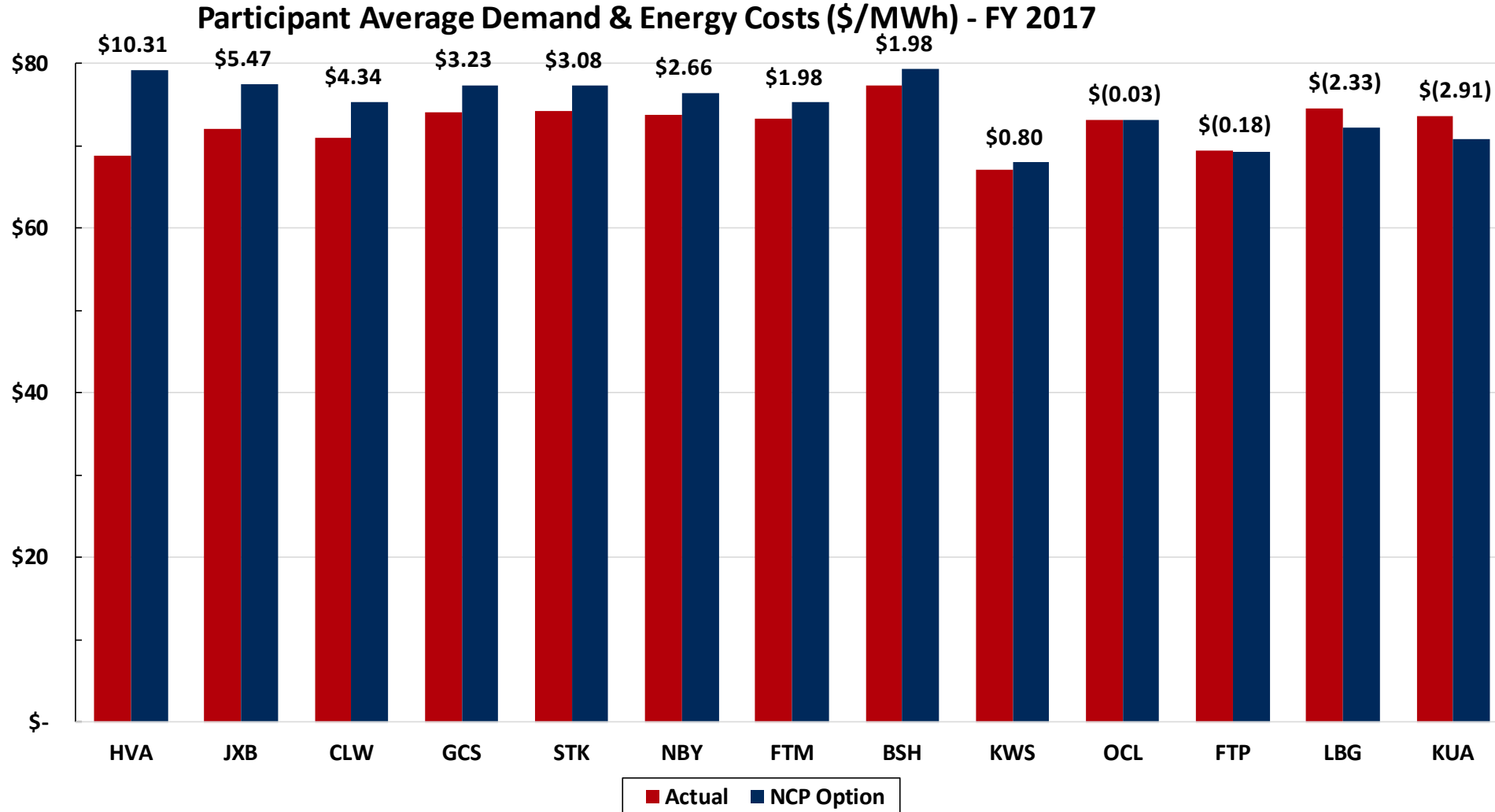
Comparison of Monthly Billed \$/MWh Demand and Energy Cost for CP Option vs. Actual Costs

Starke – FY 2019



NCP Option vs Actual Costs for FY 2017

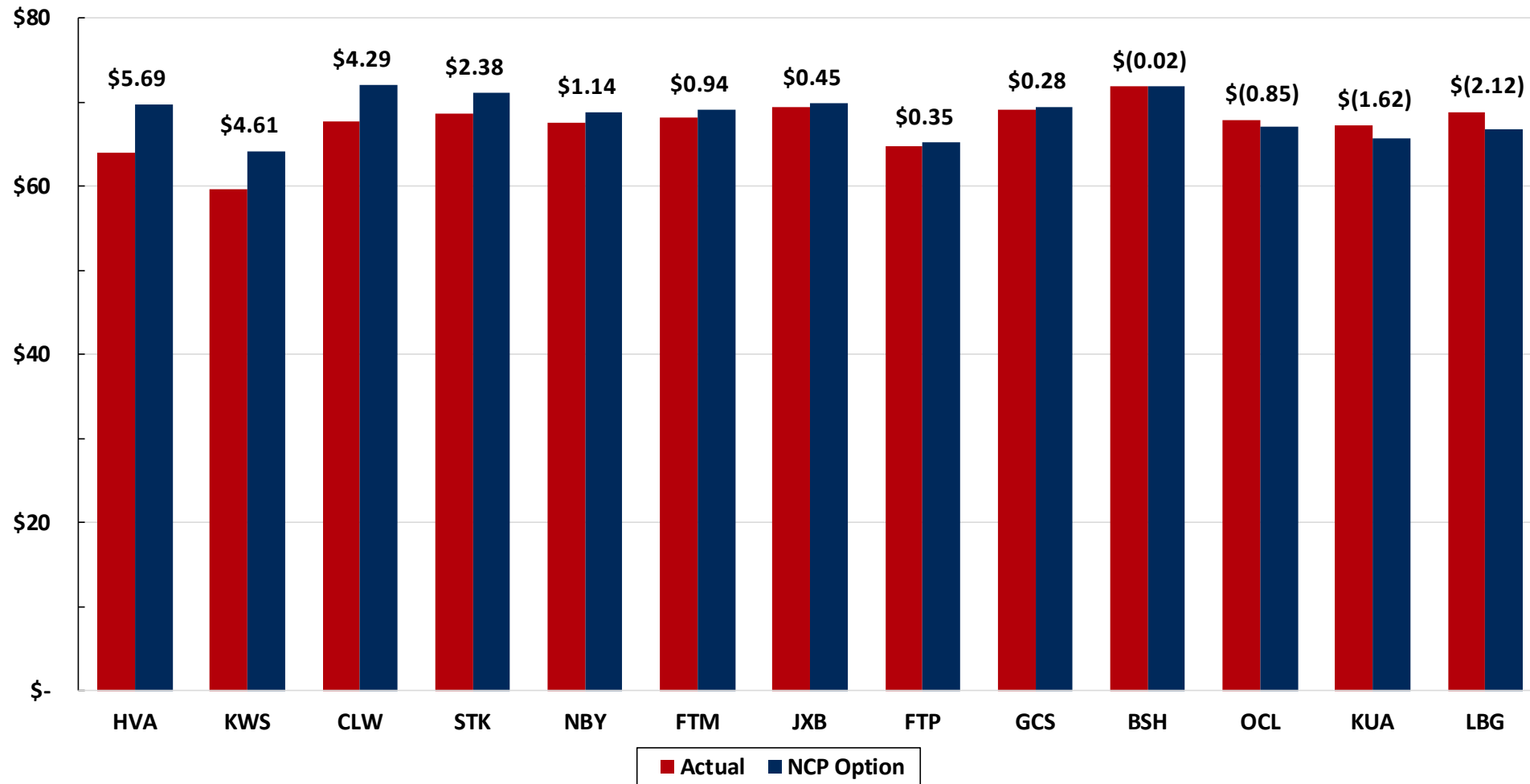
Demand Billings Based on Average Monthly NCP Demands Over Previous 3 Fiscal Years



NCP Option vs Actual Costs for FY 2018

Demand Billings Based on Average Monthly NCP Demands Over Previous 3 Fiscal Years

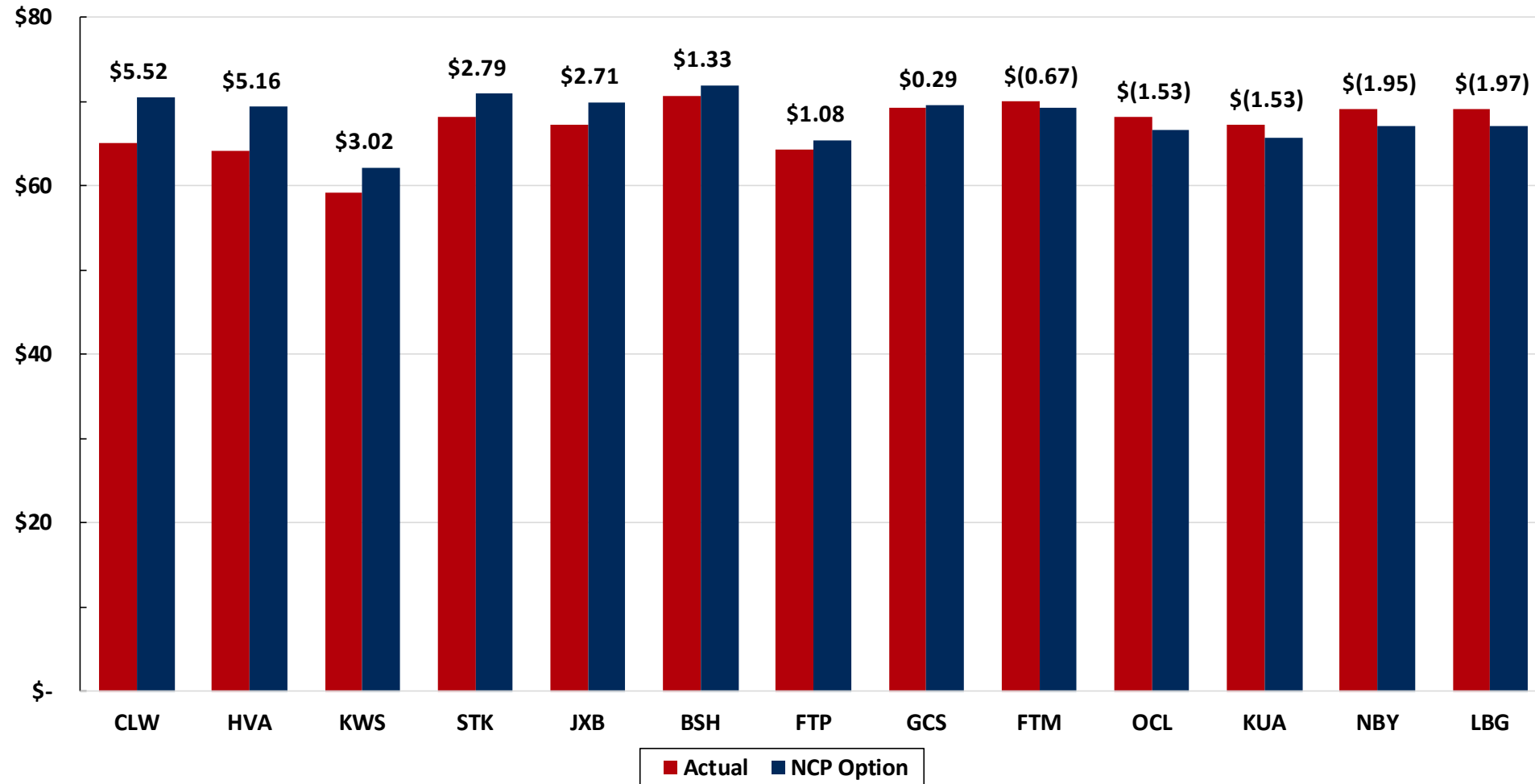
Participant Average Demand & Energy Costs (\$/MWh) - FY 2018



NCP Option vs Actual Costs for FY 2019

Demand Billings Based on Average Monthly NCP Demands Over Previous 3 Fiscal Years

Participant Average Demand & Energy Costs (\$/MWh) - FY 2019





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