nFRONT CONSULTING LLC
Power Industry Planners • Analysts • Advisors

Presentation to KyMEA AR Members

Regarding Potential

SEPA Arrangement Options

For Frankfort Plant Board (FPB)

January 26, 2017

AR Contract Provisions Pertaining to "Local" or Member Owned Resources -- Balance Competing Principles

Avoid Shifting Costs to Other Members

Key Principles Driving Pertinent Provisions of the AR Contract

Maximize Value to the Member

Member-Owned, or Local, Resource Examples

SEPA Entitlements

Paris' Diesels

Existing

Direct Load Control
(e.g., Water Heater Load Shedding)

Community Solar Facility

Potential

The All Requirements Contract Provides for KyMEA to Facilitate Member-Owned, or Local, Resources in One of Three Ways

Member's Options:

Option 1.

KyMEA will Contract to Use and Provide Value-Based Credits to Member

Credit to Member

Based on 100% of Value to KyMEA

Option 2.

KyMEA will Contract to Market Output on Behalf of Member

Credit to Member

Based on Revenue Received, Less Marketing Costs

Option 3.

Member can Market Output through Another Party

Credit to Member

Expect to be based on Revenue Received, Less Marketing Costs

Option 1 provides Benefits to each SEPA Member from the Value of SEPA Capacity and Energy
– Options 2 and 3 are Expected to Only Provide Energy Value

Option 1.

KyMEA will Contract to Use and Provide Value-Based Credits to Member

↓

Credit to Member

Includes Capacity and Energy Value of SEPA

Option 2.

KyMEA will Contract to Market Output on Behalf of Member

↓

Credit to Member

Expected to include Only Energy Value

(See next slide.)

Option 3.

Member can Market Output through Another Party

↓

Credit to Member

Expected to include Only Energy Value

(See next slide.)

Reasons for the Difference in Value
Provided by Option 1 relative to Options 2 and 3

Under Option 1:

The Contract with KyMEA would provide credits based on the value to KyMEA of the SEPA energy ***AND capacity*** – because KyMEA can effectively use SEPA capacity without incurring additional transmission charges.

Under Options 2 or 3:

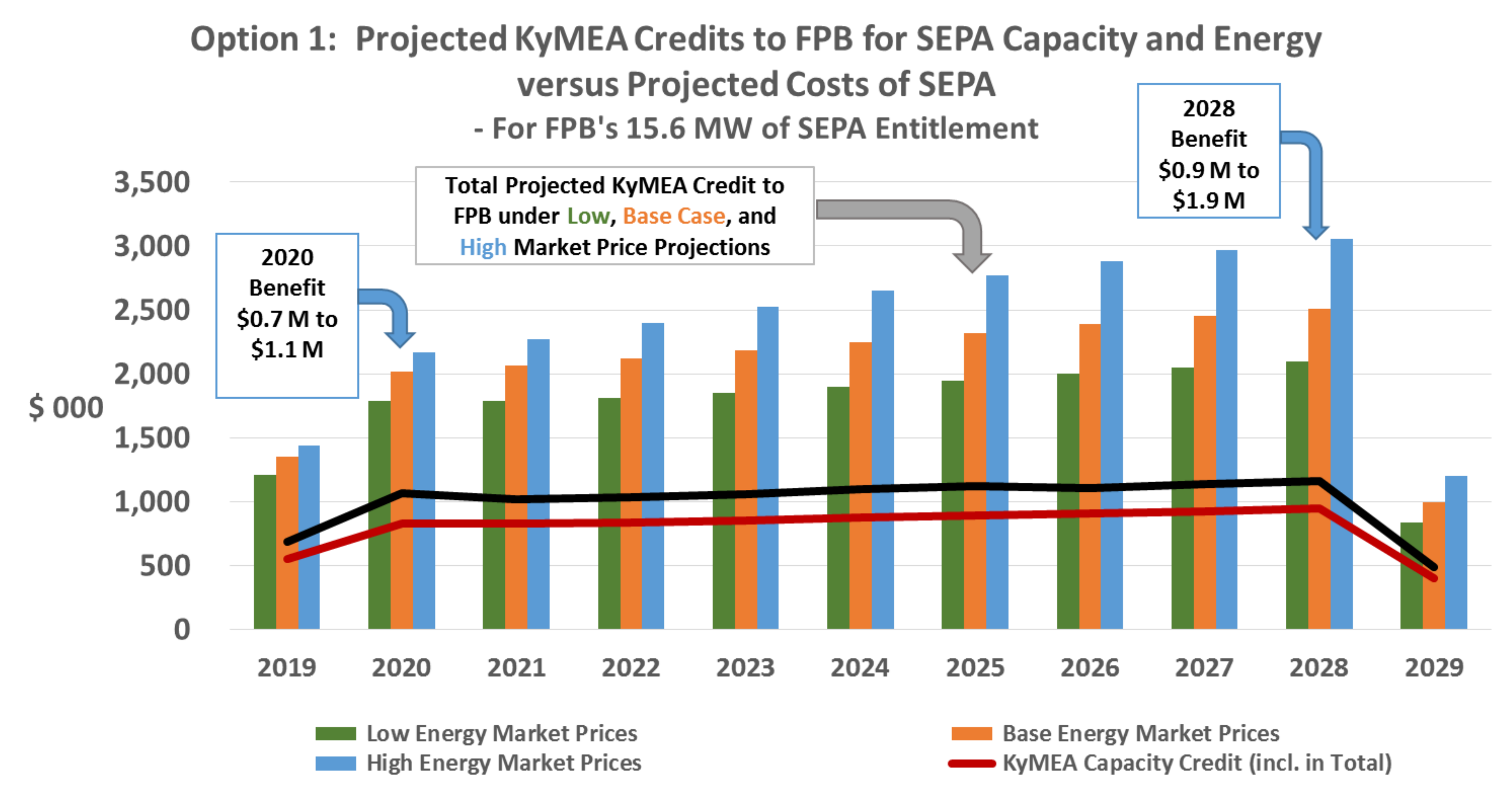
Under Options 2 and 3, the SEPA Members would have market risk that we believe would result in less if any benefit to the Members from the value of SEPA ***capacity***. We expect the value Members would realize would be based primarily on the value of energy in the market – not ***capacity*** - through one of the following two basic marketing approaches:

1. Market only energy from SEPA
   - As is now being managed by OMU on the SEPA Members' behalf
   - Due to low energy market price levels, recently, revenue levels have not covered the cost to the Members of SEPA power

2. Attempt to also market capacity and energy from SEPA to others - However, additional transmission capacity charges to wheel the SEPA from TVA to the purchaser may be incurred and if so:
   - Can be expected to offset much if not all of the resulting additional revenue, and
   - Increase risks to the Members

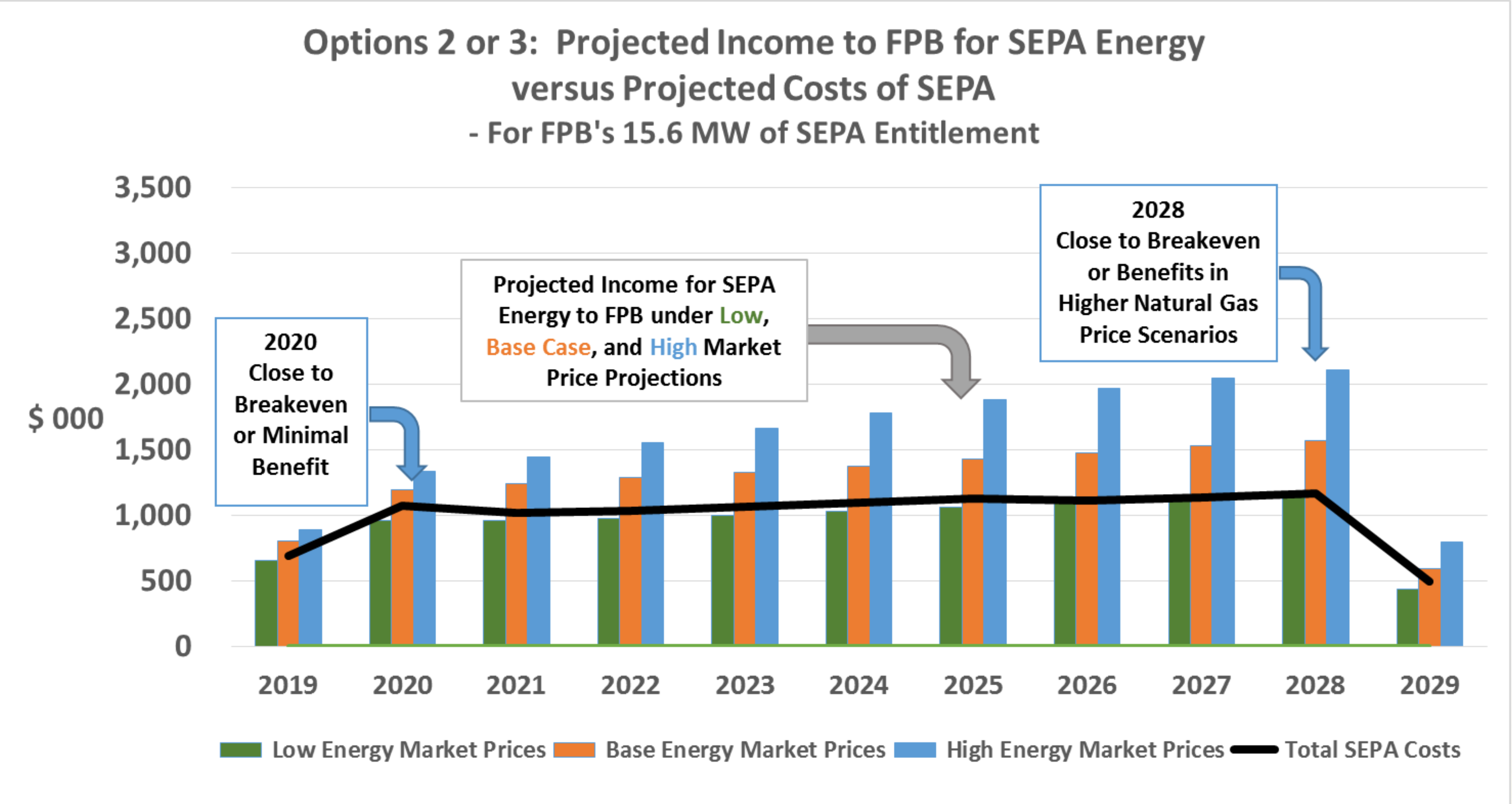
Under Option 1:

Total KyMEA Credits for SEPA Entitlements are Projected to Result in Significant Net Benefit to the Member -- KyMEA Fixed Capacity Credits Alone Would Cover Most Projected SEPA Costs



Under Options 2 and 3:

Credits for to Members for SEPA Entitlements are Projected to Much Lower than under Option 1



6 Key Provisions
of the Proposed Contract between KyMEA and the AR Members that have SEPA

1. KyMEA commits to use SEPA as part of its AR Power Supply Portfolio to serve the loads of the AR Members

2. Because of that use, KyMEA requires less capacity and energy from other resources and passes along the resulting avoided costs and any other benefits to the SEPA Members

3. The capacity rate used to determine the credit is specified in the Member's contract with KyMEA – it tracks the capacity rate that KyMEA would have paid to Paducah for a greater entitlement to the capacity of their combustion turbine plant – fairly represents KyMEA's current long-term cost of peaking capacity

4. The energy rate will track the cost of energy avoided by KyMEA in each hour over the term of the contract – which will be close to the cost of energy purchased from MISO at the interface between MISO and the LGE/KU transmission system.

5. The proposed contract would also credit the Member for any other value that KyMEA realizes from the attributes (for example, renewable energy credits) of the project. At this time, no additional value is assumed, but circumstances could change in which additional value would be realized.

6. The term of the contract begins May 1, 2019 (or June 1, 2019 at Members' option) and continues until the earlier of May 31, 2029, termination of the AR Contract, or termination of the Member's contract with SEPA.

Overall Conclusion:

The proposed contract for KyMEA to use SEPA provides significant benefits to the SEPA Members and is consistent with the AR Contract. Therefore, we recommended approval of the contract by KyMEA and each SEPA Member.

Reasonable to Expect Significant Benefits

Capacity and Energy Credits are Projected to be Significantly Greater than the Cost of SEPA and Consistent with KyMEA's Avoided Costs

Benefits Can be Expected under a Very Wide Range of Market Prices for Energy

Just the Capacity Credits from KyMEA specified in the Proposed Contract cover almost all of the currently projected cost of SEPA to the Member

Favorable Situation for the KyMEA AR Members that have SEPA

Renewable, Non-Carbon Source of Energy "Stays Home"

used to Serve AR Members' Loads instead of Being Used by Others

The Proposed Contract provides a Stable, Long-term Beneficial Arrangement for SEPA Resource

But terminates if the Member decides to cancel its contract with SEPA or its AR Contract with KyMEA