

# **Agenda**

- Overview of Energy Hedging Jan-June Hedging Results
  - Risk Management Guideline Hedge Matrix
  - Historic Pricing Trends
  - Effective Coverage Ratios
  - Energy Hedge Results
- Storage RFI
- Integrated Resource Planning Update



# Risk Management Guideline Matrix

#### **APPENDIX 9**

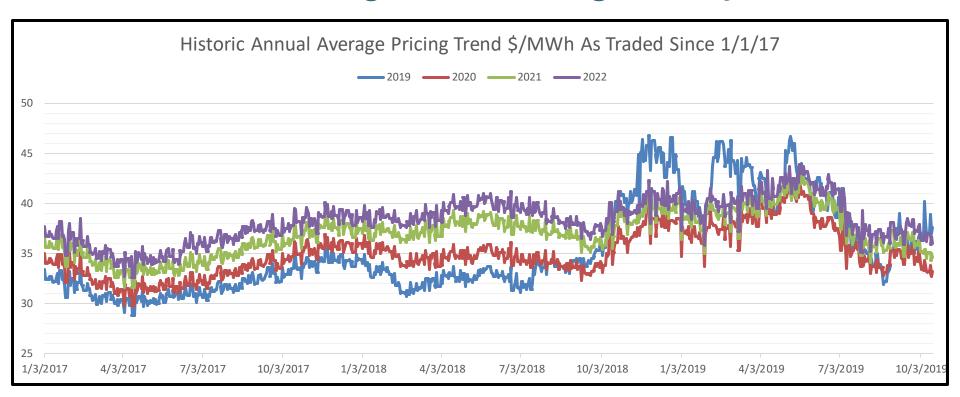
### **Recommended Coverage**

The following Time-Price Coverage Matrix will be used as a guide for EBCE's short term and long term procurement strategies. The objective of the Time-Price Coverage Matrix is to develop a procurement strategy focused on hedging against the risk of open load positions, as measured over time, and to mitigate EBCE's exposure to market price volatility and other pricing risk. EBCE will strive to further develop this matrix based on (1) EBCE's wholesale price risk and (2) appropriate limits for these risks. The actual covered positions taken by EBCE, reflected as a percentage of forecasted load, may deviate from the following Time-Price Coverage Matrix based upon EBCE's staff evaluation of current market conditions and other applicable requirements (e.g., regulatory requirements).

|                    |    | Price Matrix Percentile                    |     |     |     |     |     |      |  |
|--------------------|----|--|-----|-----|-----|-----|-----|------|--|
| Months to Delivery |    | >60%                                       | 60% | 50% | 40% | 25% | 10% | <10% |  |
|                    |    | Covered Position as a % of Forecasted Load |     |     |     |     |     |      |  |
| 0+                 | 3  | 80%  | 80% | 85% | 85% | 90% | 90% | 100% |  |
| 3+                 | 6  | 70%  | 70% | 75% | 80% | 80% | 90% | 100% |  |
| 6+                 | 9  | 70%  | 70% | 75% | 80% | 80% | 80% | 90%  |  |
| 9+                 | 12 | 60%  | 60% | 70% | 80% | 80% | 80% | 90%  |  |
| 12+                |    | 60%  | 60% | 70% | 80% | 80% | 80% | 90%  |  |

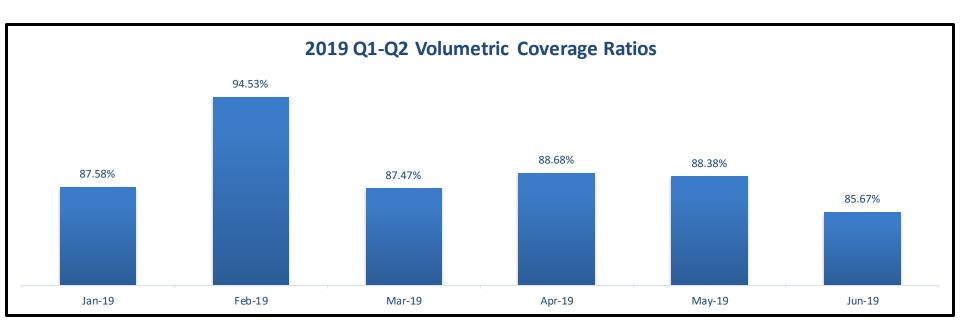


### **Historic Traded Average Annual Pricing Trend By Year**



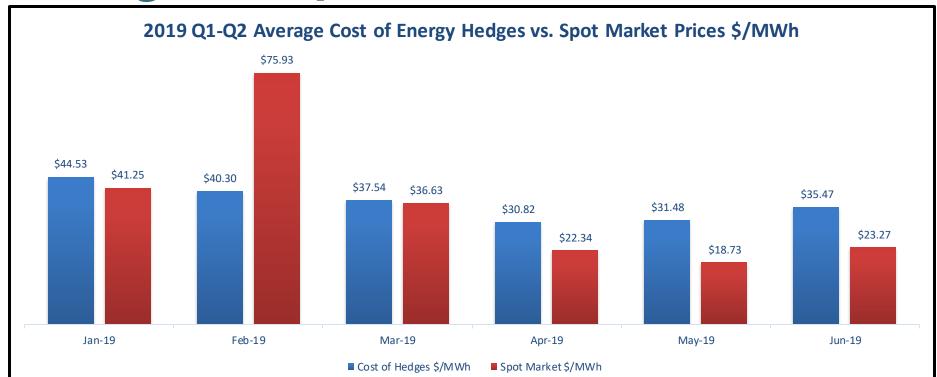


# **Volumetric Coverage Prior to Spot Market**



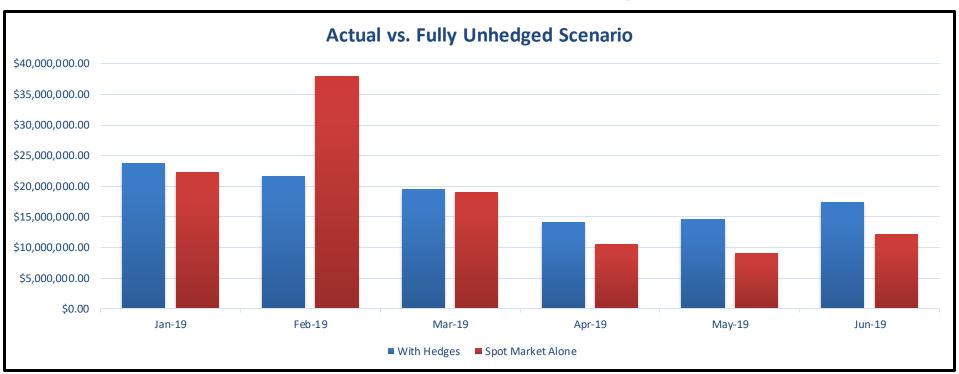


# **Hedges vs. Spot Market**



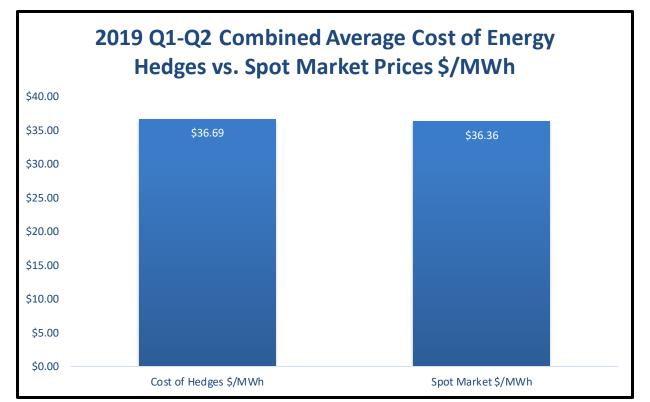


# 2019 Q1-Q2 Results vs. Unhedged Scenario





## 2019 Q1-Q2 Combined





# **New RA and Peak Energy RFI**

### Timeline:

Issued: Sept. 6, 2019

• Closed: Sept. 27, 2019

|         | Counter-<br>parties | Unique Sites | Variations | RA NQC<br>(MW) |
|---------|---------------------|--------------|------------|----------------|
| Overall | 26                  | 47           | 109        | 10,338         |

### **Key Takeaways:**

- Technologies:
  - Storage Only
  - Storage Hybridization
    - Onto new and existing solar facilities
    - Onto existing natural gas facilities
- COD: 2020-2023; ~80% of offers in 2022-2023
- Proportionate System and Sub-Local RA offerings

### **Next Steps:**

- Continue counterparty follow-ups and project analysis
- Bring forth formal next steps at November 20<sup>th</sup> Board meeting



# **Integrated Resource Planning**

- Joint CCA Analysis currently underway: Early December
  - True-Up to CPUC 2019 Reference System Plan
  - Further engagement with EBCE board: Dec board meeting
- Additional risk analysis and sensitivity analysis: Early Jan
  - Further engagement with EBCE board: Jan board meeting
- Disaggregate joint IRP into individual CCA IRPs: Jan/Feb
- Create EBCE draft IRP compliance report: Feb/Mar
- Present draft IRP to board: Mar board meeting
- Present final IRP submission to board: April board meeting
- Submit final IRP to CPUC: May



# **QUESTIONS?**



