



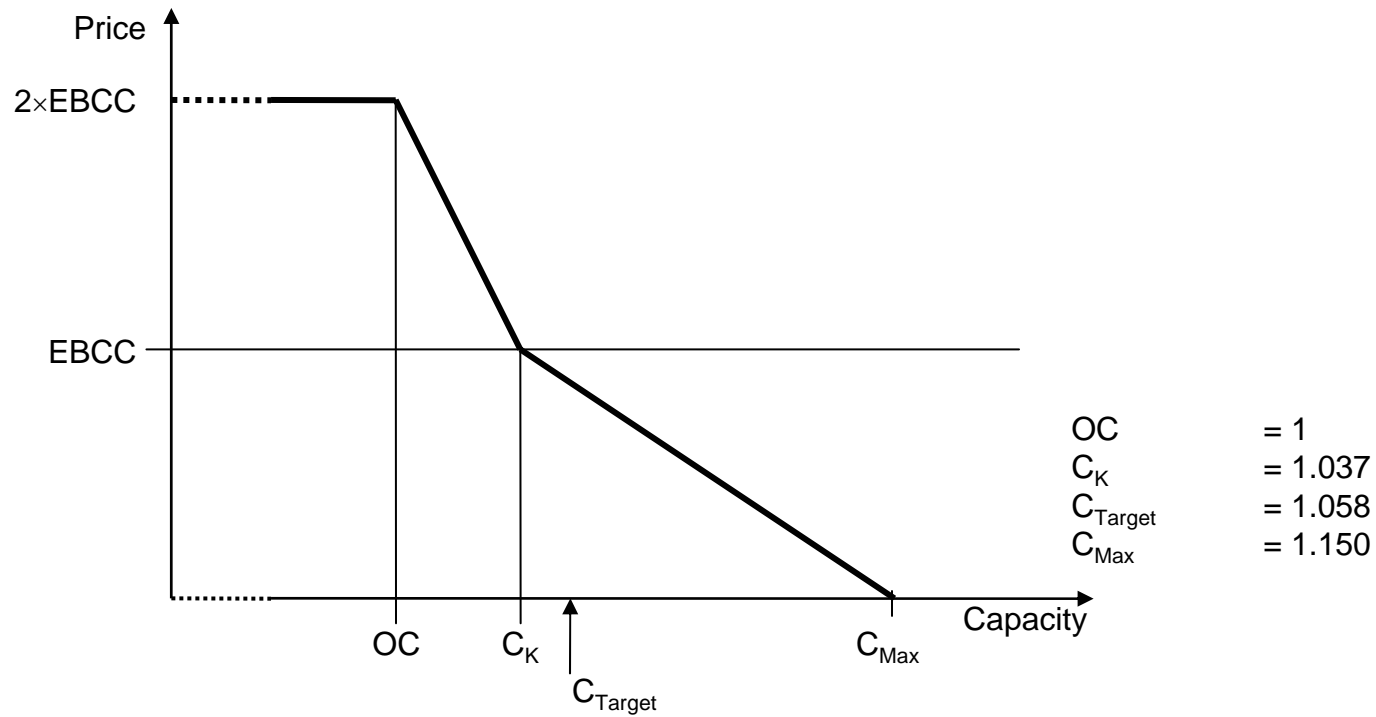
Demand Curve Examples

PJM RAM Meeting
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Market Monitor



ISONE (Locational) ICAP Demand Curve



ISONE terms

- EBCC - cost of new entry
- 2 x EBCC - two times cost of new entry
- OC - Objective Capability
- C_k - Capacity at kink in demand curve
- C_{Target} – Target long run average capacity
- C_{Max} – Capacity level at which price = 0
- All calculations on an installed capacity basis



ISONE terms

- EBCC - cost of new entry. \$156/MW-day
- 2 x EBCC - two times cost of new entry. \$312/MW-day
- Total cost of new entry per Ray Pasteris
- Does not include net revenue offset in ISONE formulation
- ISONE includes an after the fact adjustment for actual net revenues



ISONE terms

- OC - Objective Capability
 - The minimum capacity required for reliability
 - PJM equivalent is forecast load plus the required reserve margin. $1.16 * \text{peak load}$.
 - Goal is to never fall below this level of capacity
 - On a planning basis
 - Actual expectation may be to fall below a small percentage of years
 - Significant impact on location of demand curve



ISONE terms

- C_{Target} – Target long run average capacity
 - OC plus average actual level of capacity
 - Based on historical data analysis
 - About 1.1 SD above OC
 - Will shift as actual distribution of capacity changes
 - NE curve with PJM OC
 - $C_{\text{Target}} = 1.23 * \text{peak load}$



ISONE terms

- C_k - Capacity at kink in demand curve
 - Located in order to arrive at C_{Target}
 - Location based on asymmetric returns per shape of demand curve
 - Price higher when $C < C_k$
 - Price lower when $C > C_k$
 - NE curve with PJM OC
 - $C_k = 1.20 * \text{peak load}$



ISONE terms

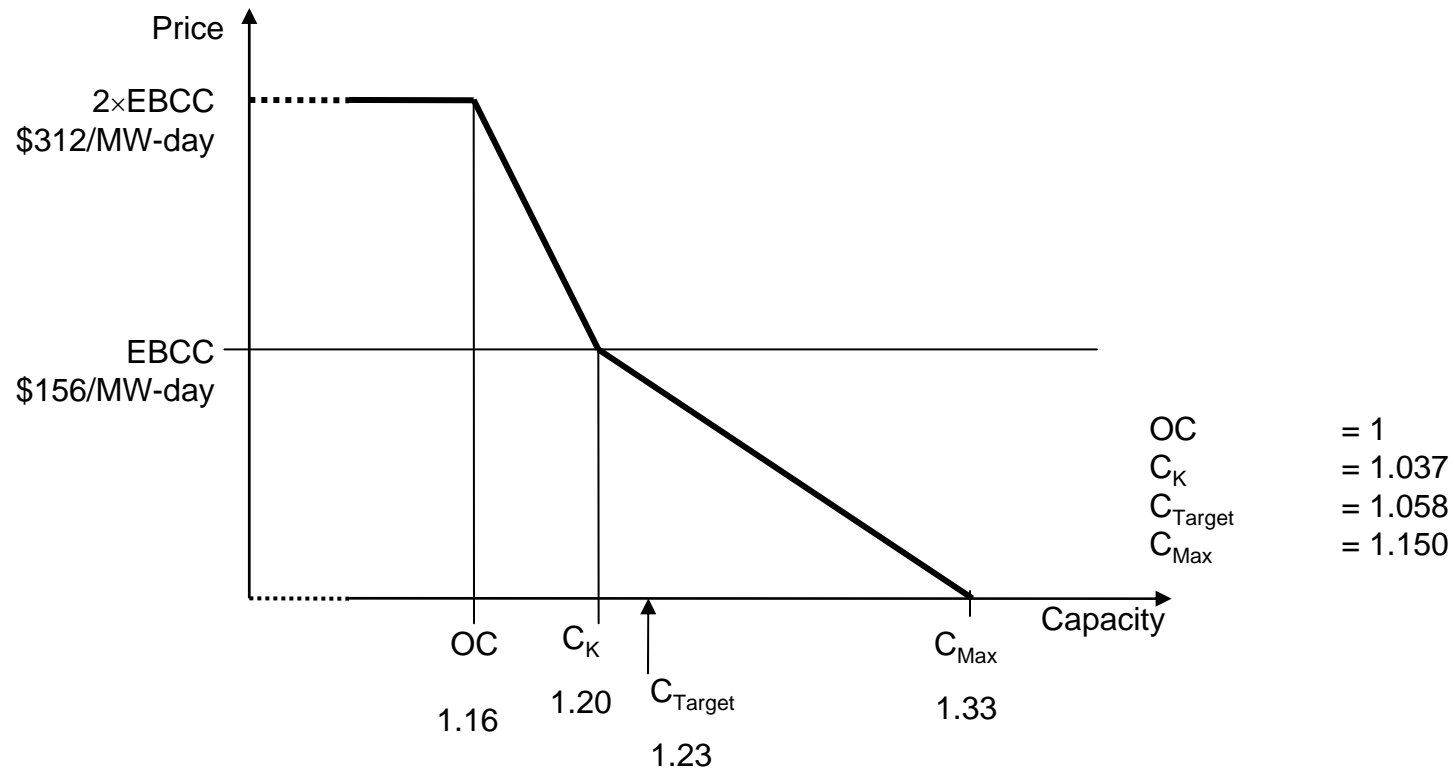
- C_{Max} – Capacity level at which price = 0
 - Determined by slope of demand curve segment
 - Determined by other points on demand curve
 - Ratio of slopes
 - Location of OC and Ck
 - NE curve with PJM OC
 - $C_{Max} = 1.33 * \text{peak load}$





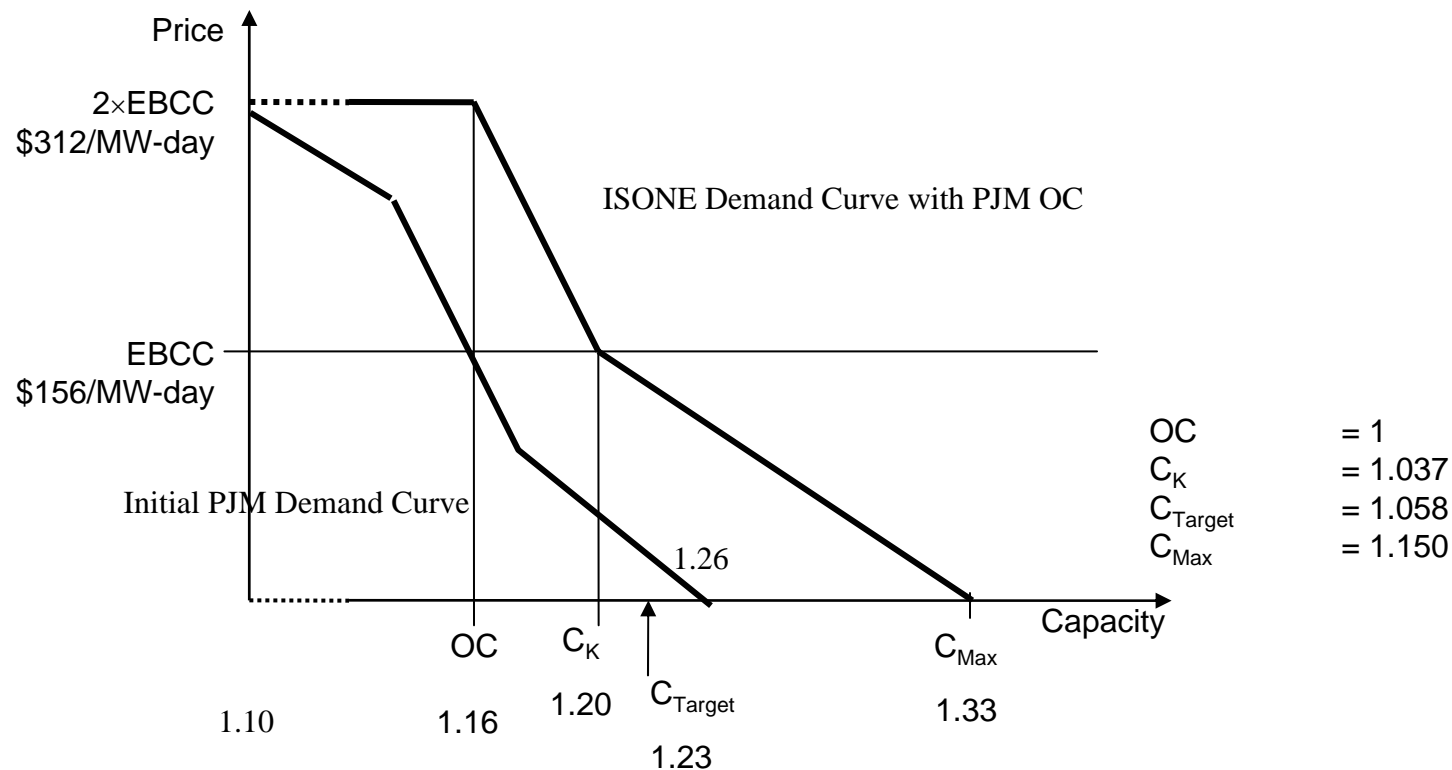
ISONE (Locational) ICAP Demand Curve

PJM OC level - Example





ISONE (Locational) ICAP Demand Curve PJM OC level – Example With PJM Initial Demand Curve





PJM Initial Demand Curve

- Initial PJM demand curve included a net revenue offset
- The example PJM demand curve does not include a net revenue offset for comparison with ISONE demand curve

