

Estimated ORDCs and Reserves Levels

EPFSTF

June 8, 2018

Catherine Tyler



Monitoring Analytics

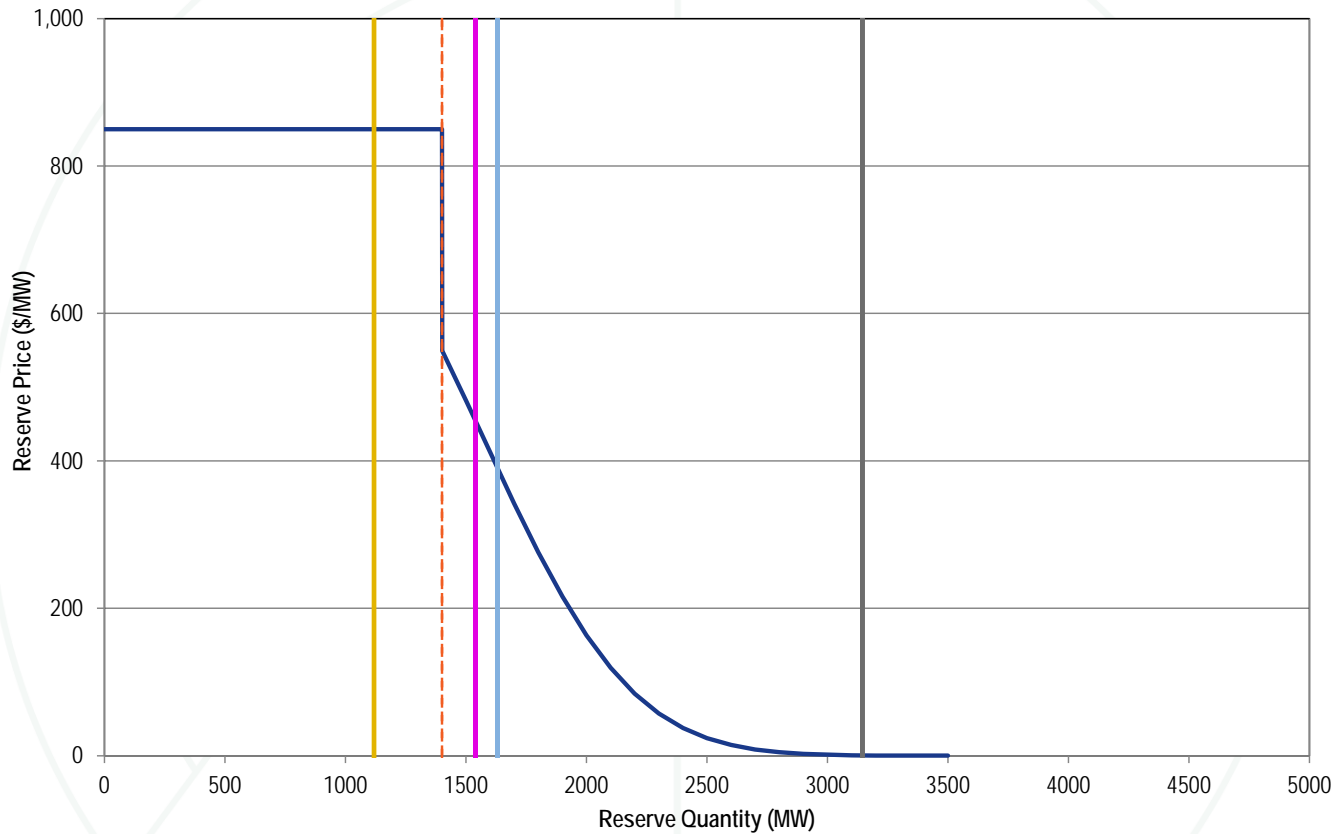
PJM Estimated ORDCs

- **The ORDC estimation method presented by PJM in May was a straightforward adaptation of the method used by ERCOT.**
- **The ORDC means that PJM will buy more than current synchronized reserve levels and pay higher prices for synchronized reserves.**
- **Used within the energy and reserve joint optimization, the MMU expects the estimated ORDCs would lead PJM to carry more online capacity than it has historically.**
- **The implication is not only a change to price formation, but also a change to operations.**

Estimated ORDCs and Historic Reserves

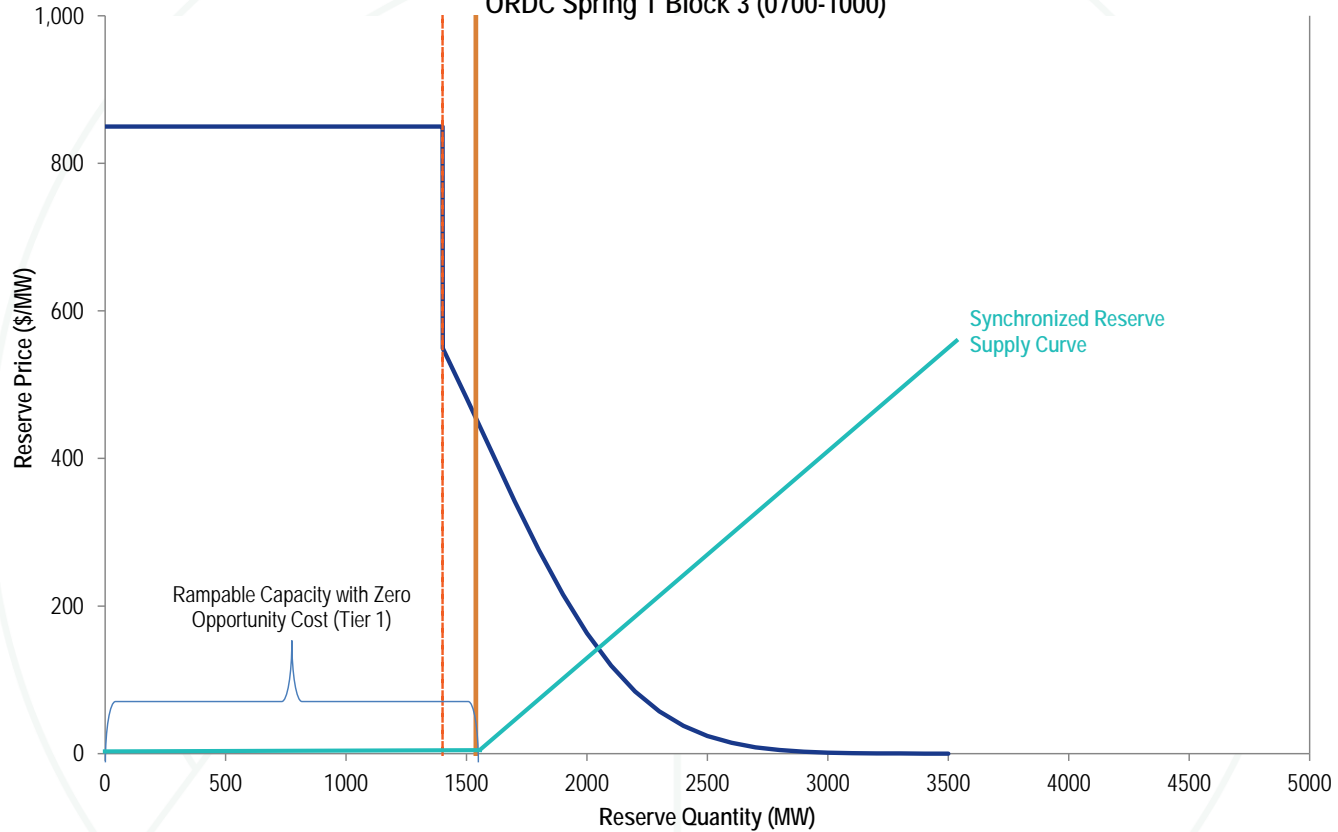
- **The following graphs plot the PJM ORDC estimates provided at the May EPFSTF meeting.**
- **The MMU added historic synchronized reserve levels:**
 - **2015 through 2017**
 - **By season and time block**
 - **Five minute pricing solution synchronized reserve levels**
 - **Minimum, Maximum**
 - **Mean, Median**
- **The actual historic reserve requirement may vary from the MRR (minimum reserve requirement) in the plotted curve.**

ORDC Spring T Block 3 (0700-1000)



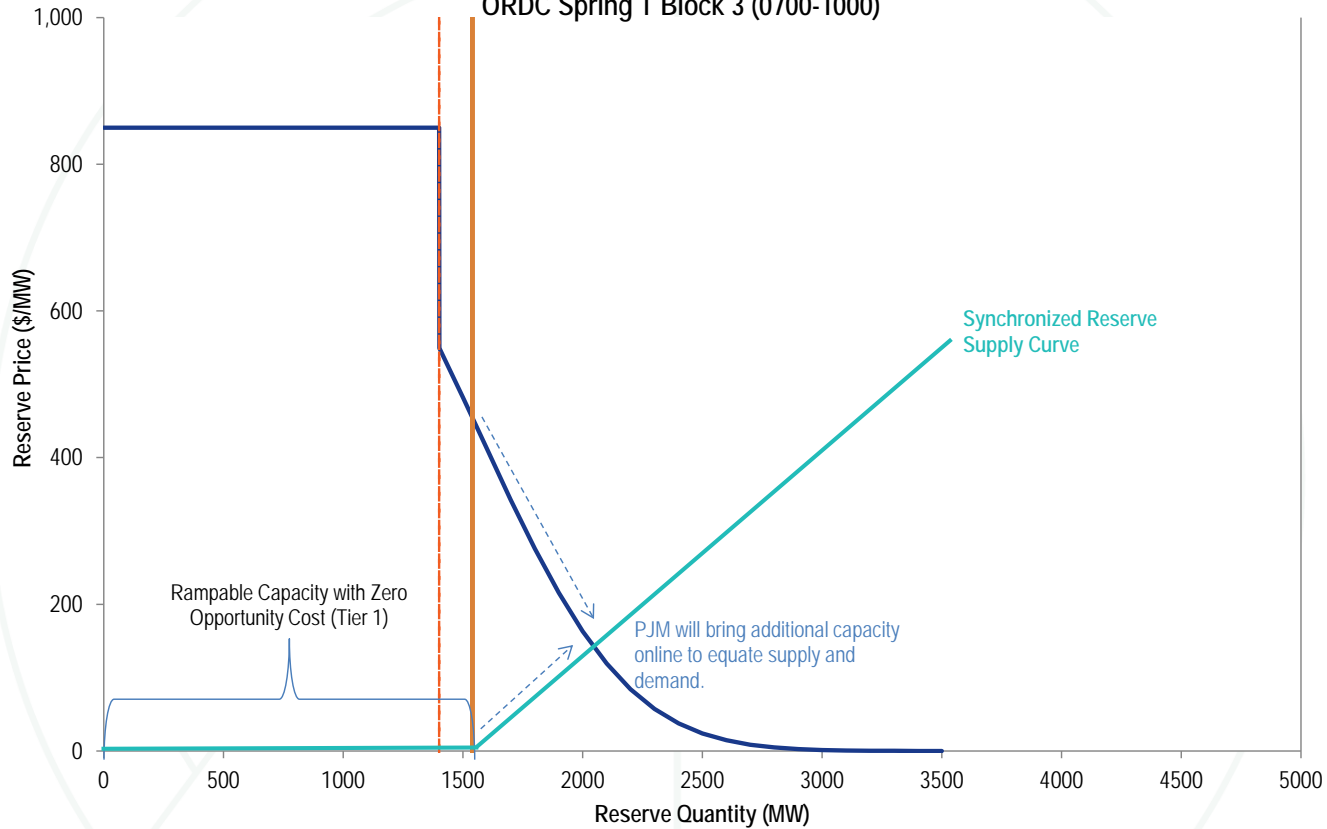
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Illustration of Supply and Demand ORDC Spring T Block 3 (0700-1000)



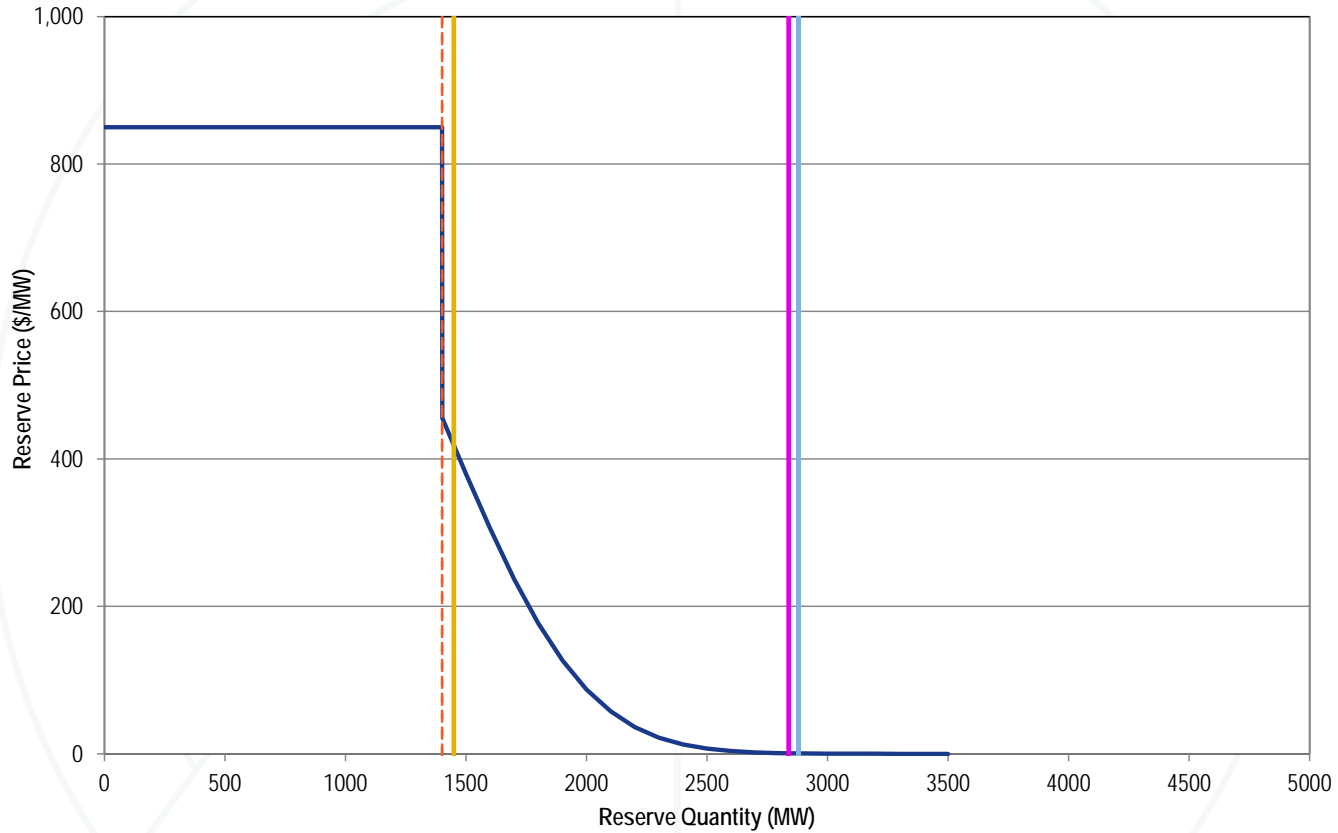
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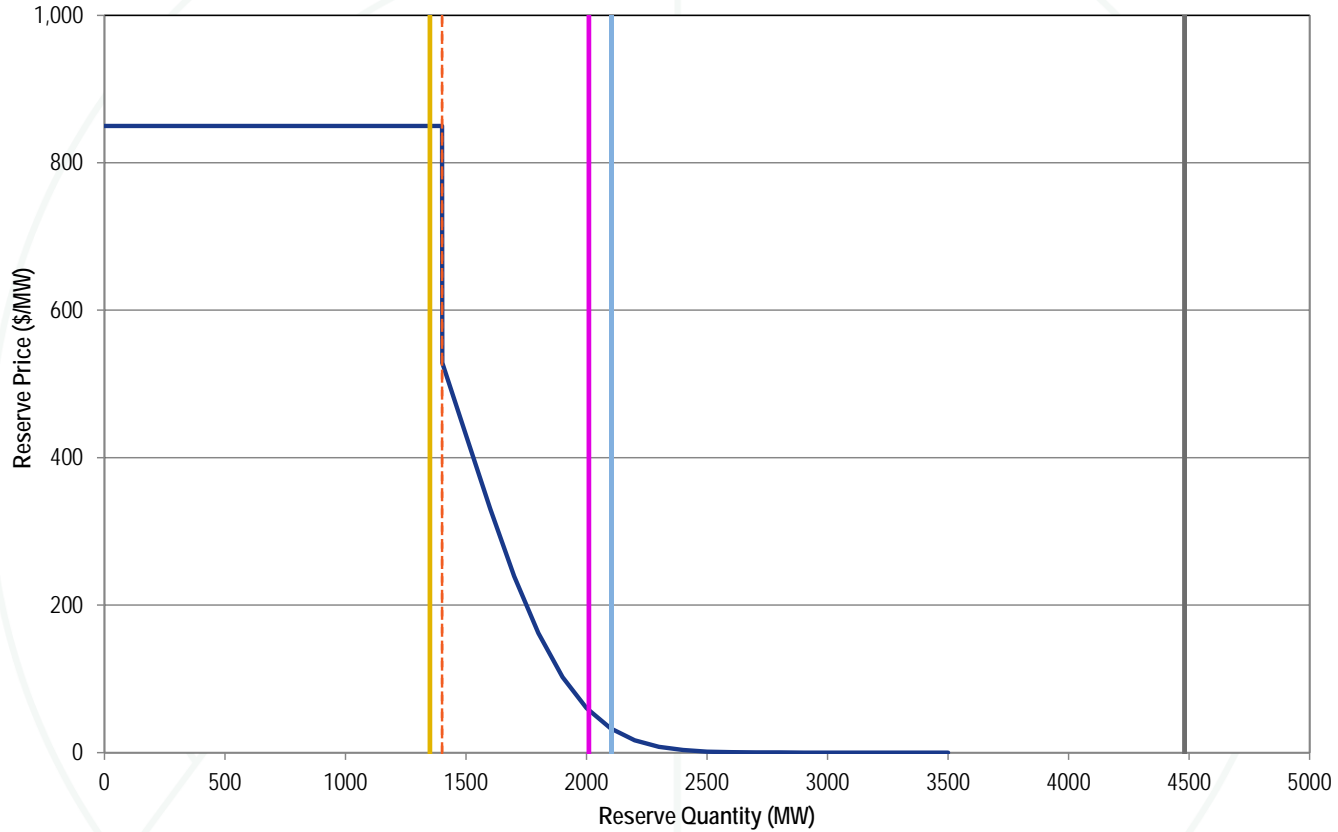
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ORDC Summer T Block 2 (0300-0600)



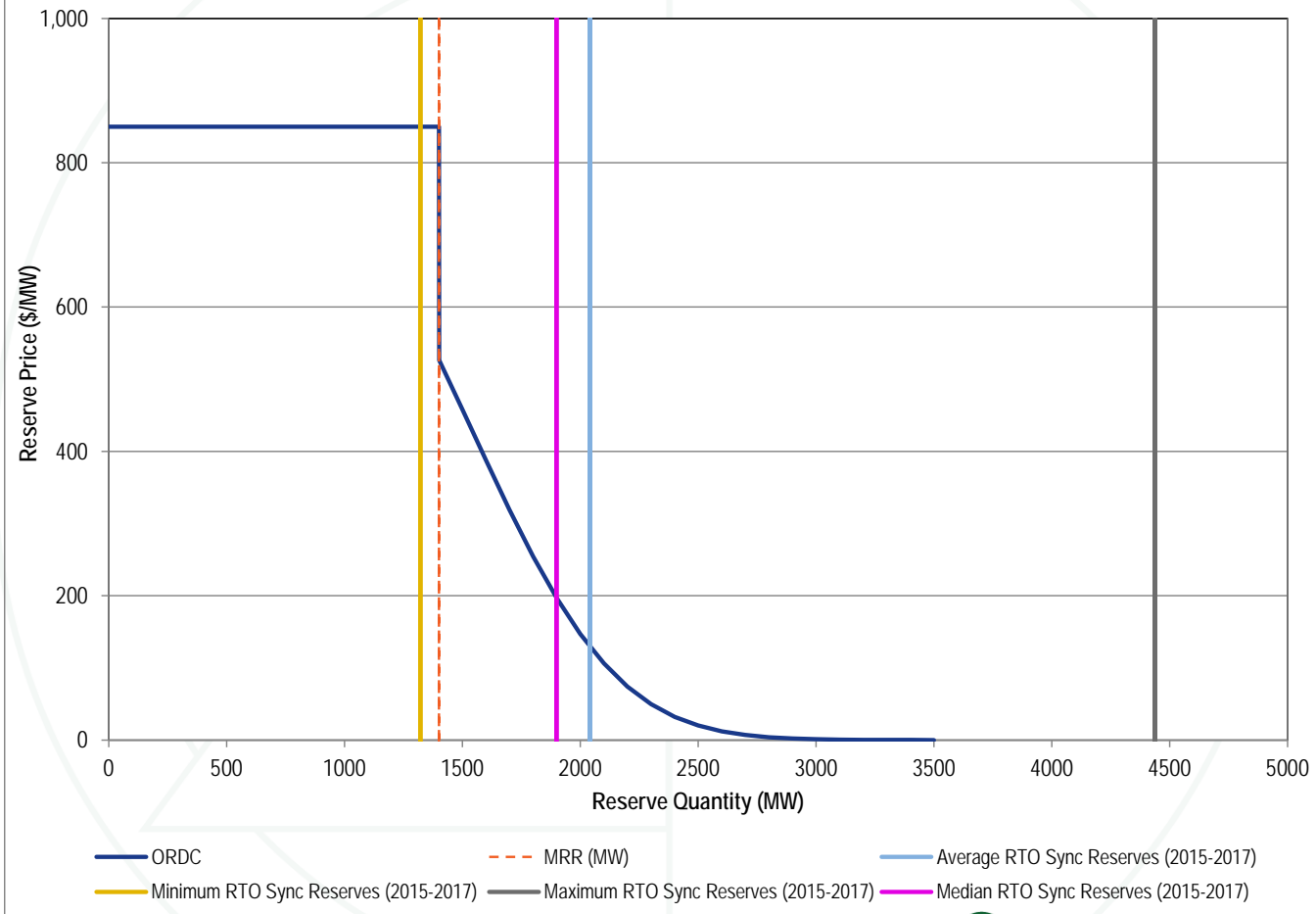
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ORDC Fall T Block 1 (2300-0200)

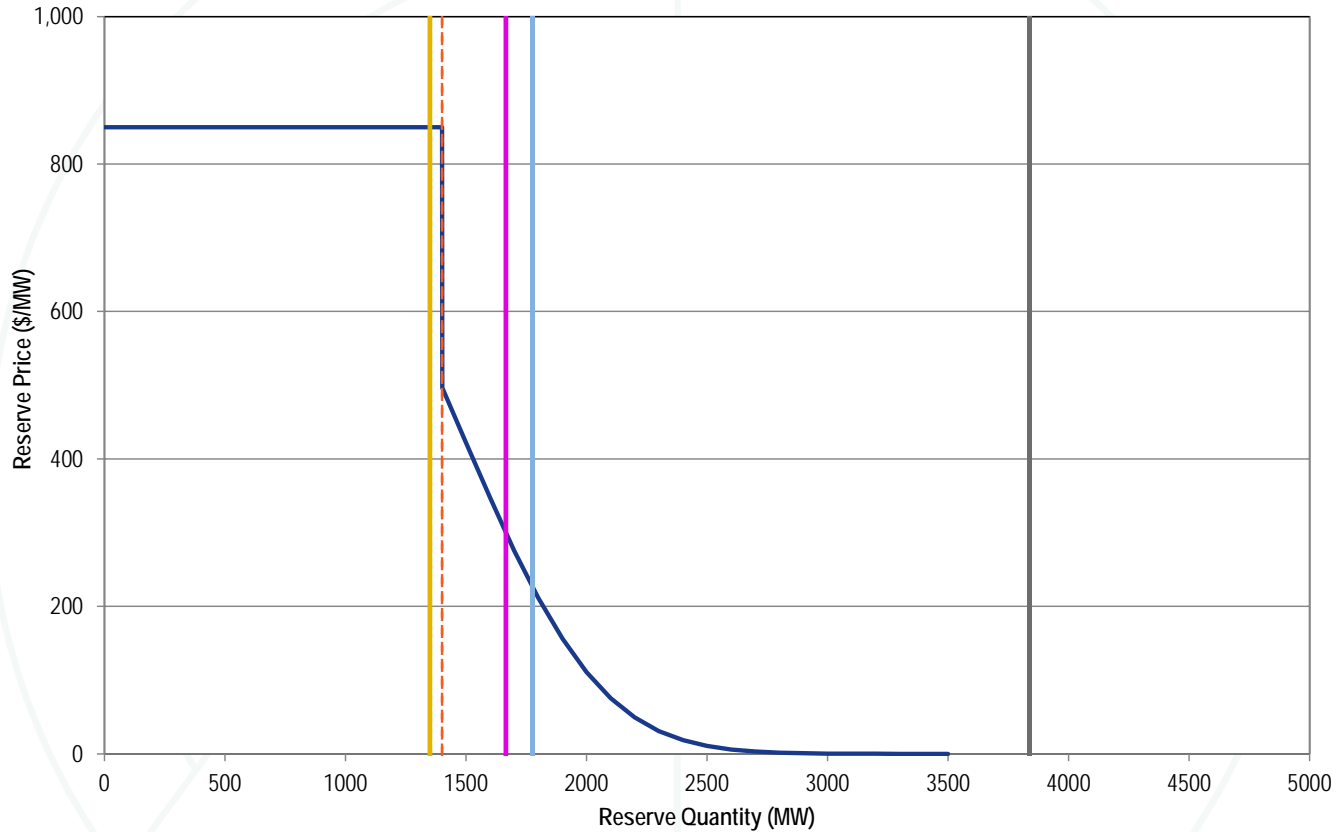


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ORDC Fall T Block 2 (0300-0600)

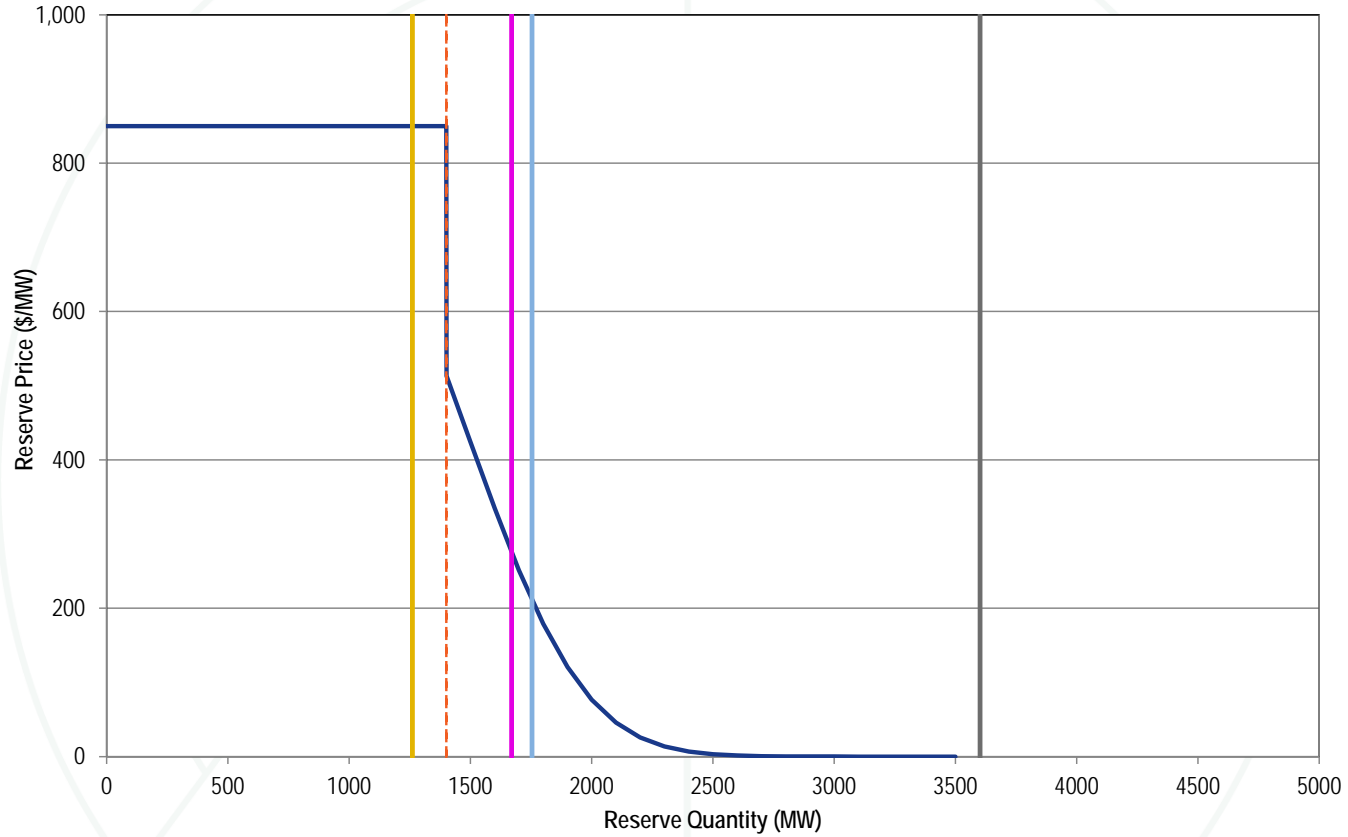


ORDC Fall T Block 3 (0700-1000)



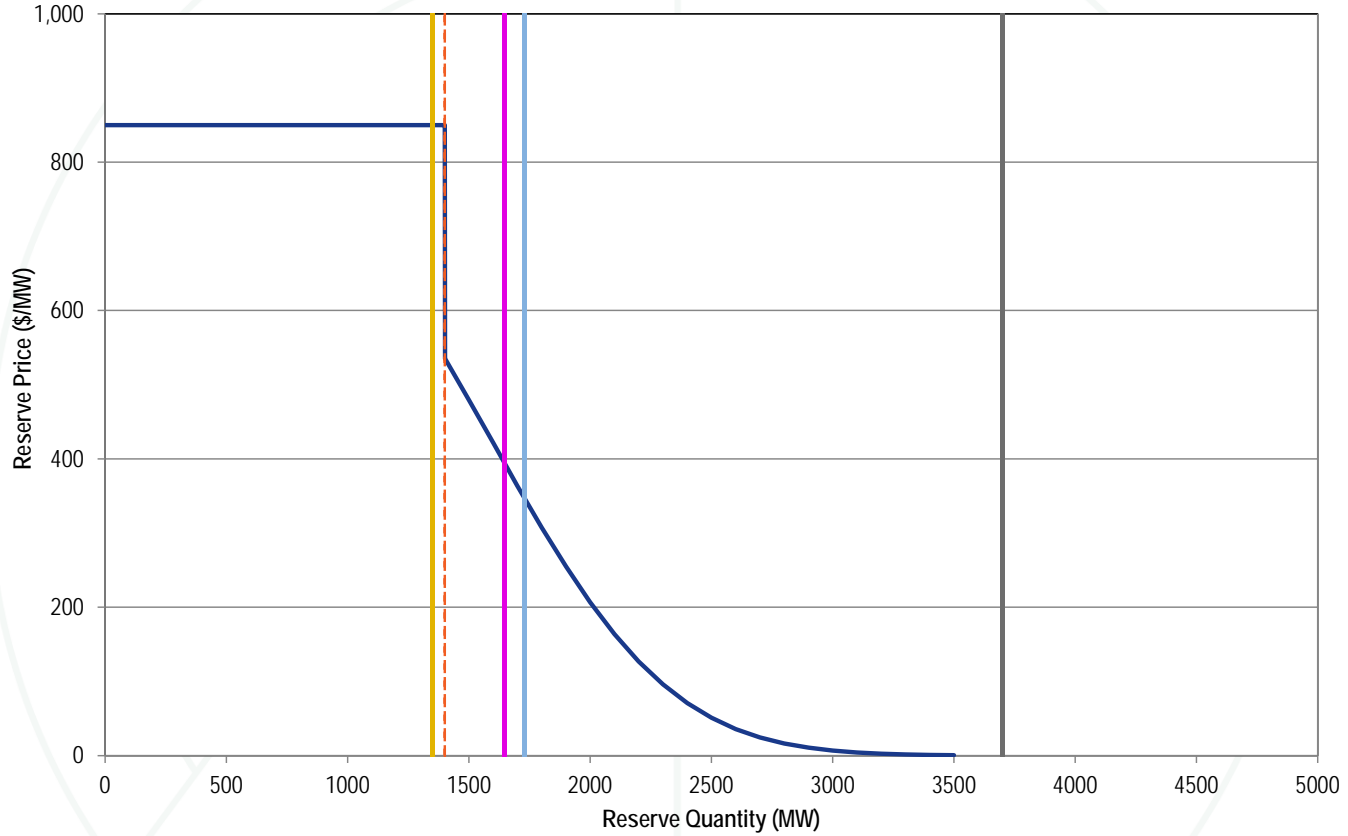
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ORDC Fall T Block 4 (1100-1400)



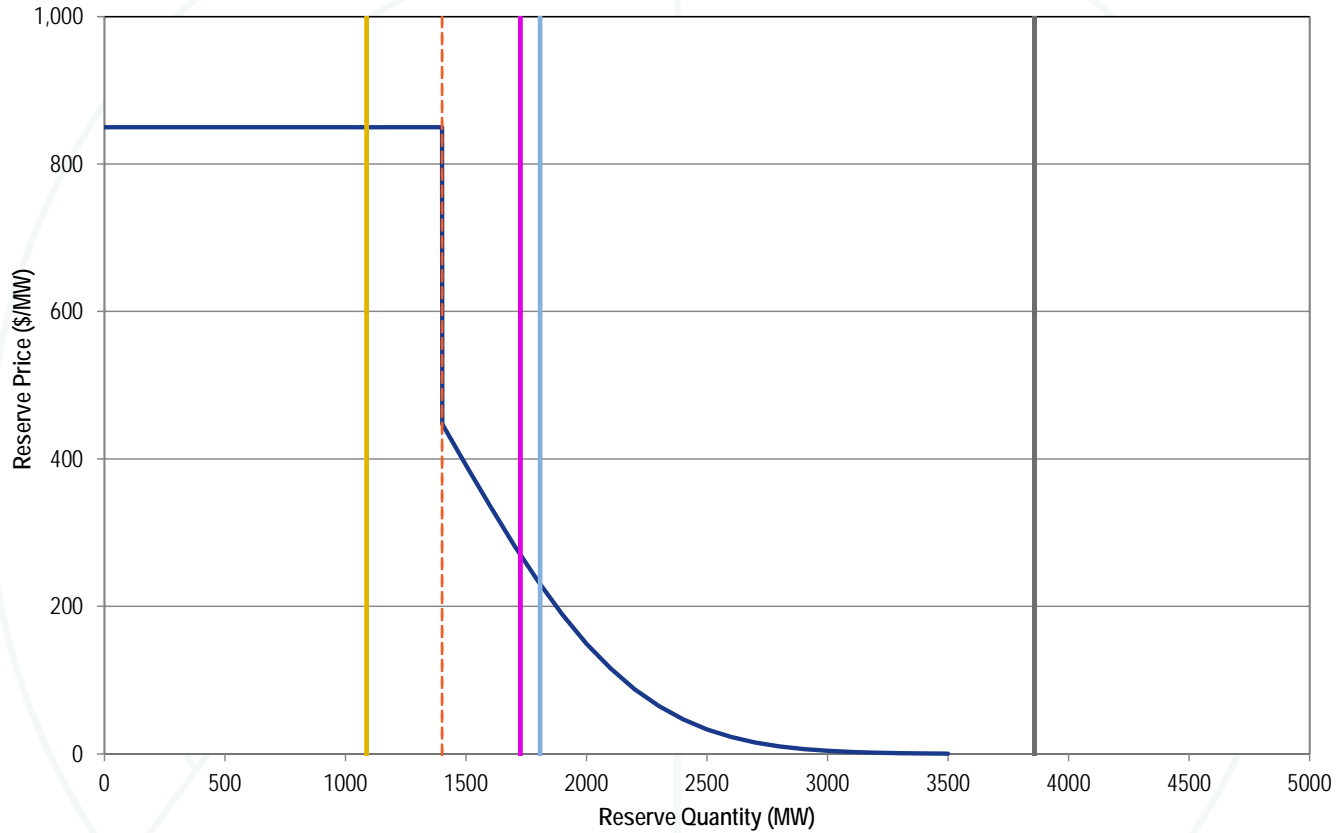
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ORDC Fall T Block 5 (1500-1800)



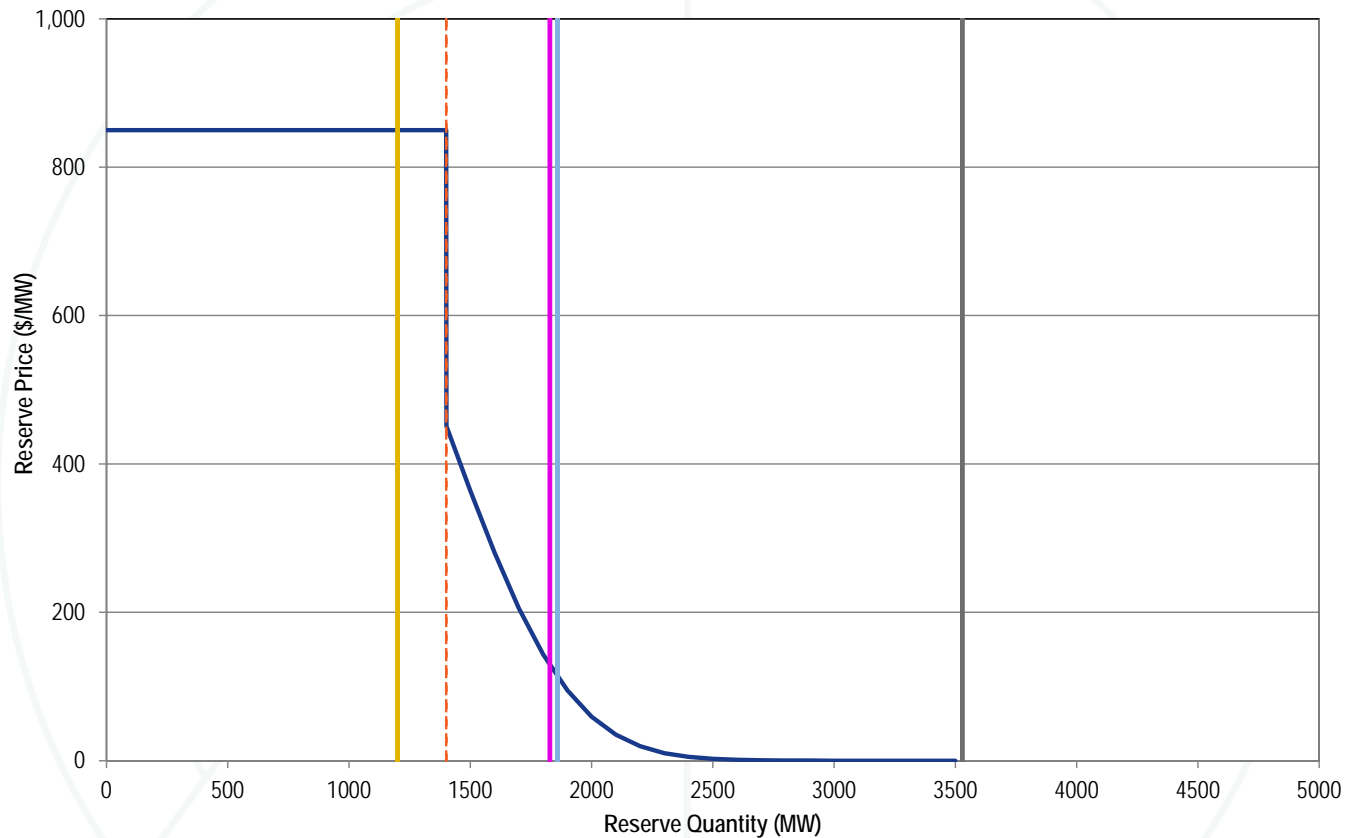
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ORDC Fall T Block 6 (1900-2200)



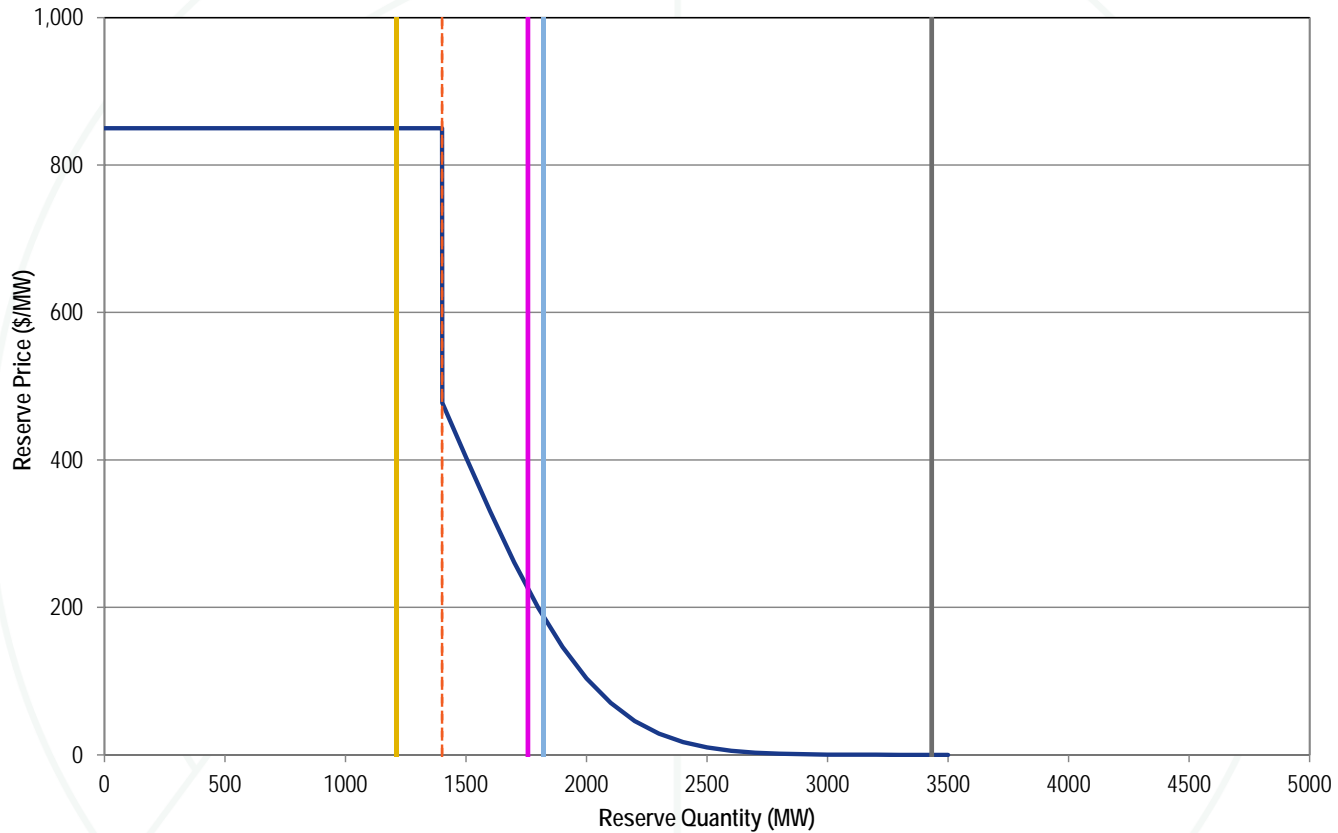
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ORDC Spring T Block 1 (2300-0200)



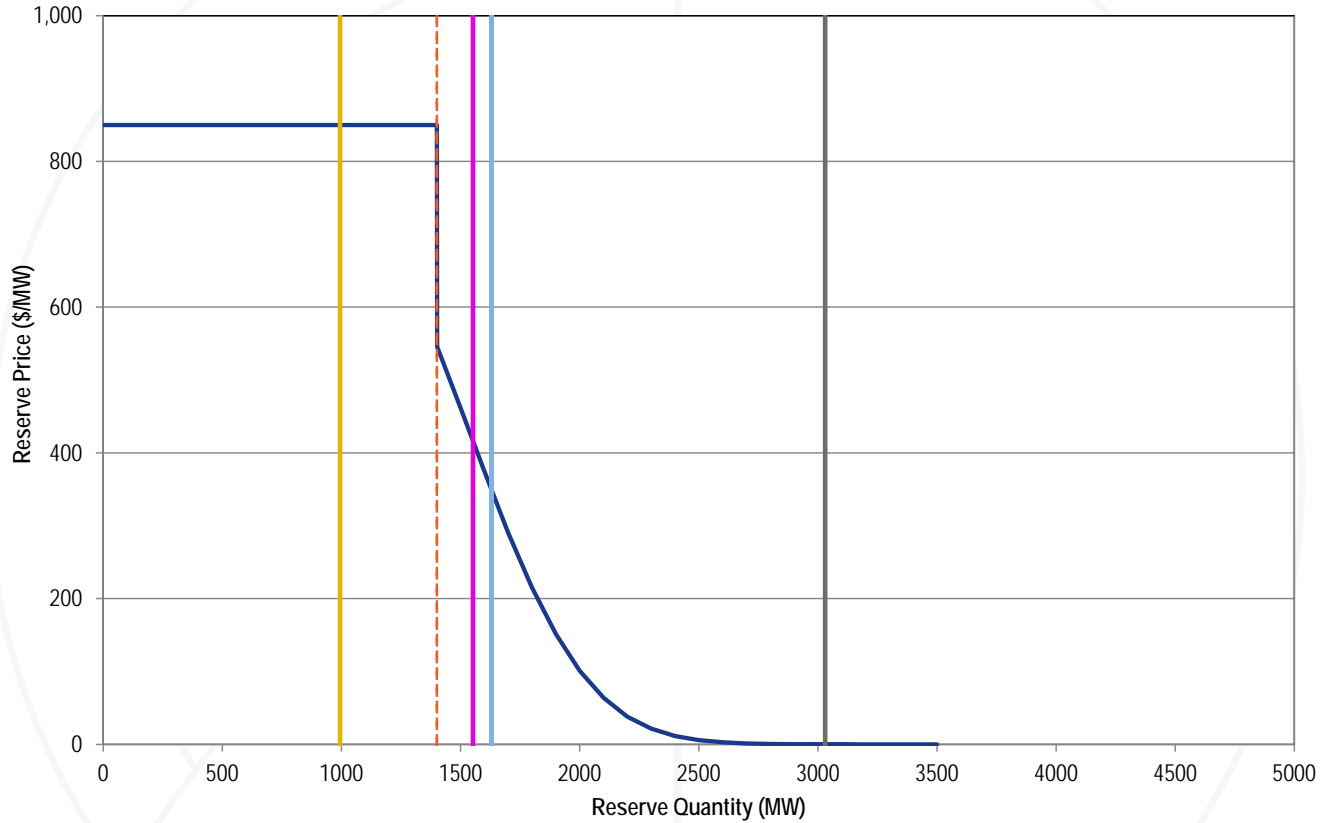
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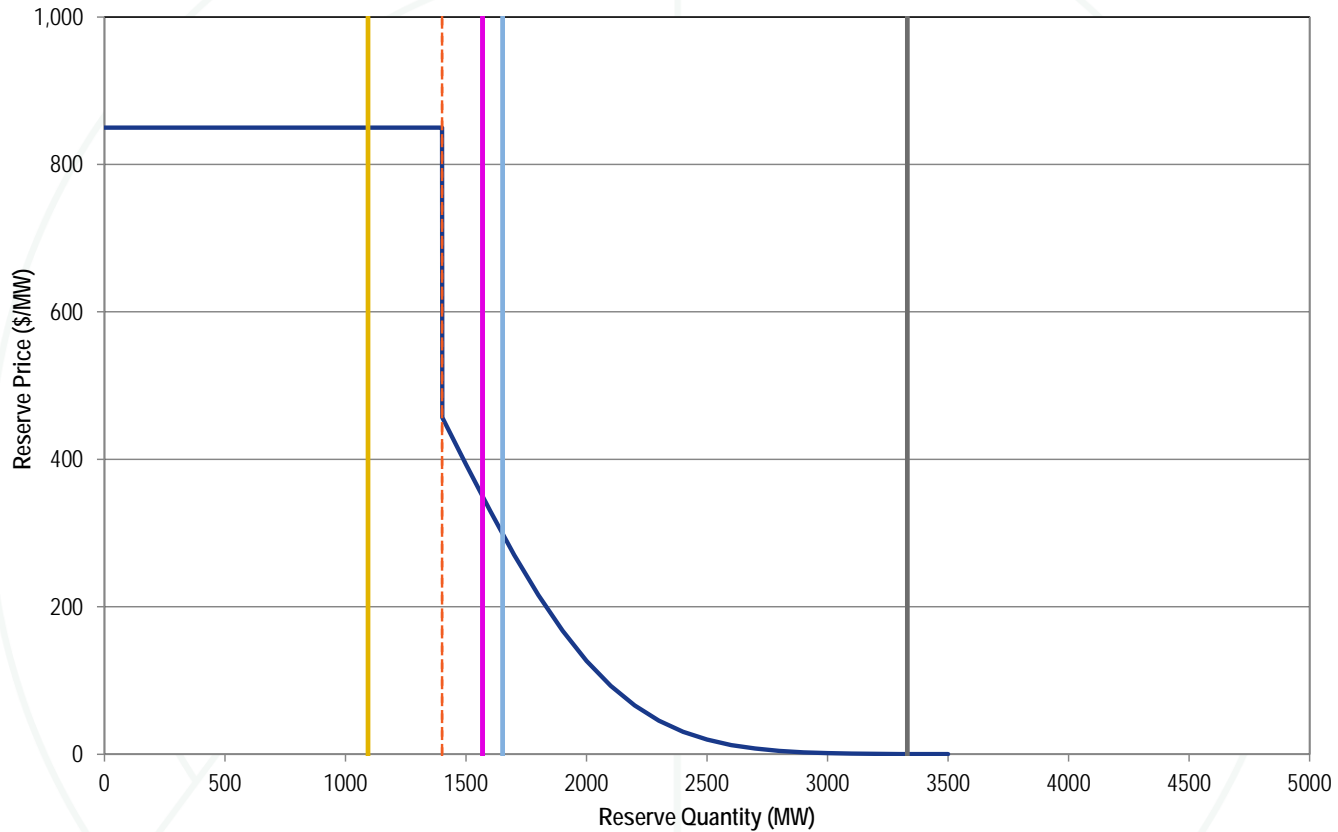
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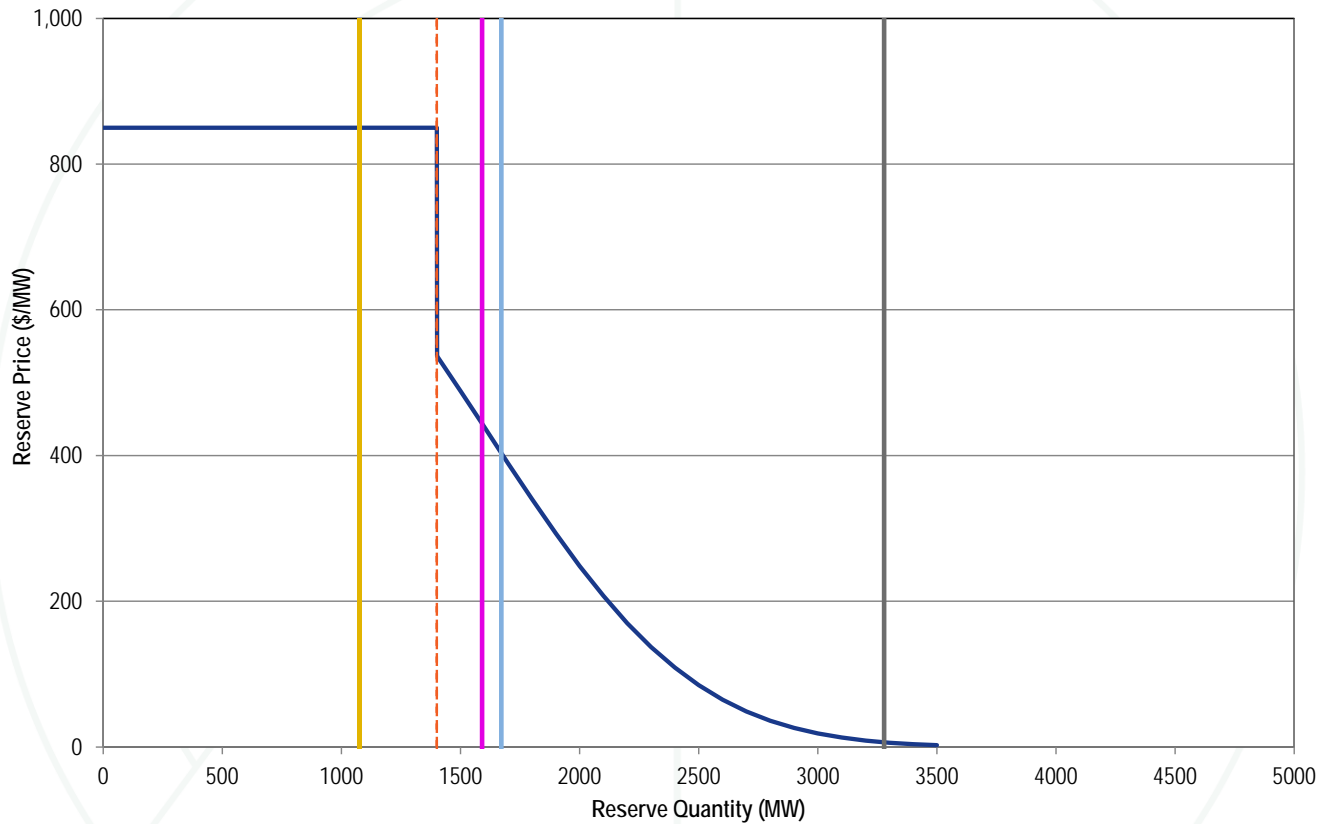
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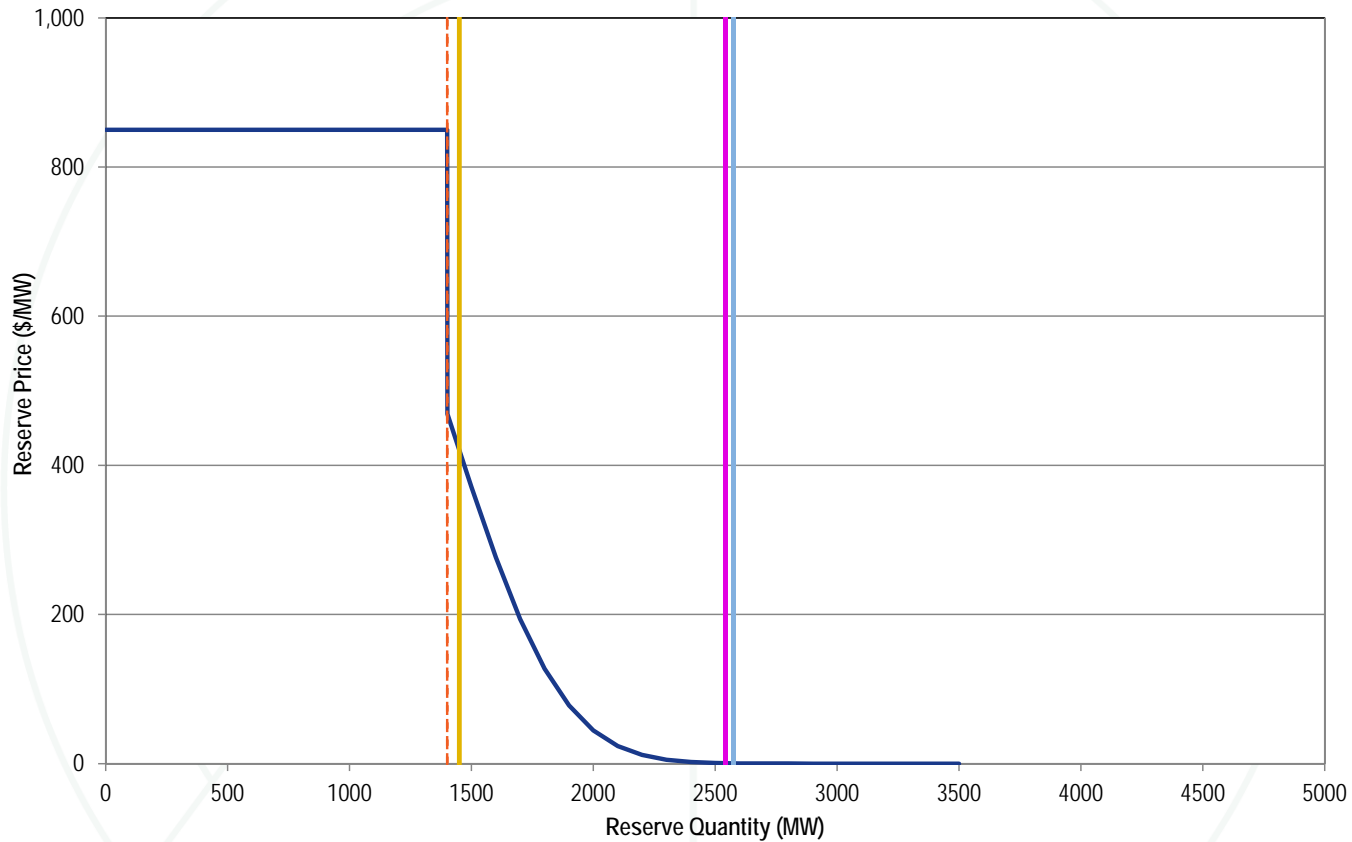
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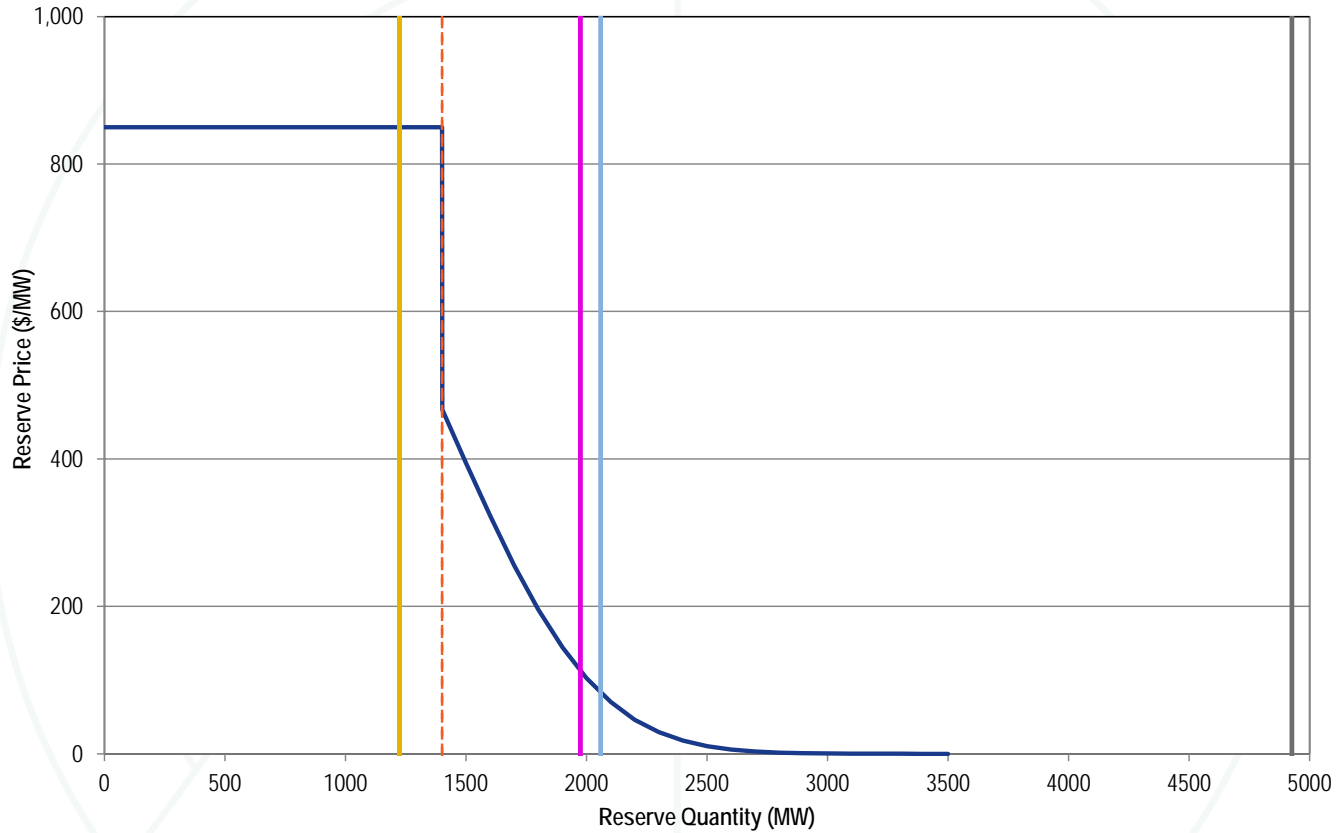
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ORDC Summer T Block 1 (2300-0200)



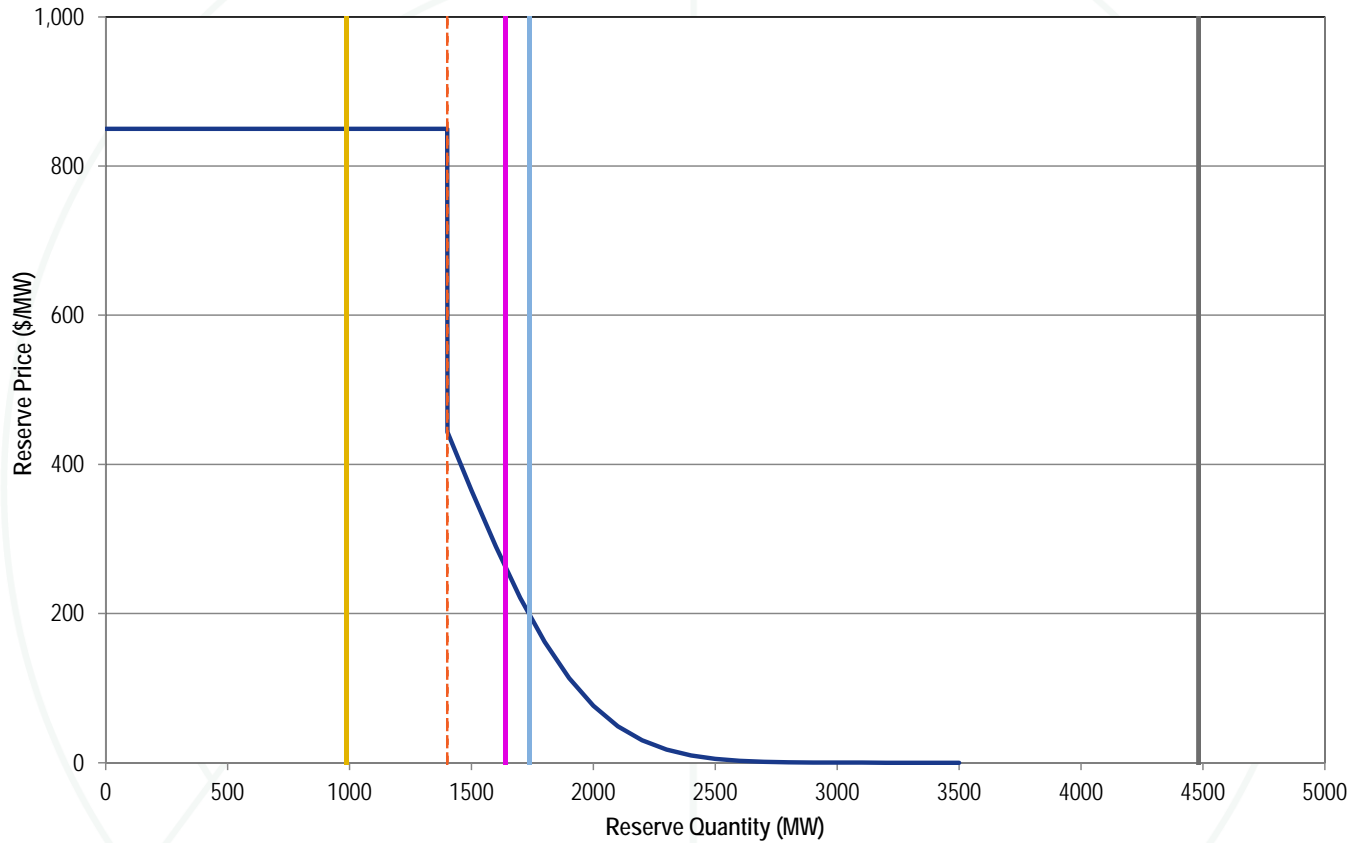
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ORDC Summer T Block 3 (0700-1000)



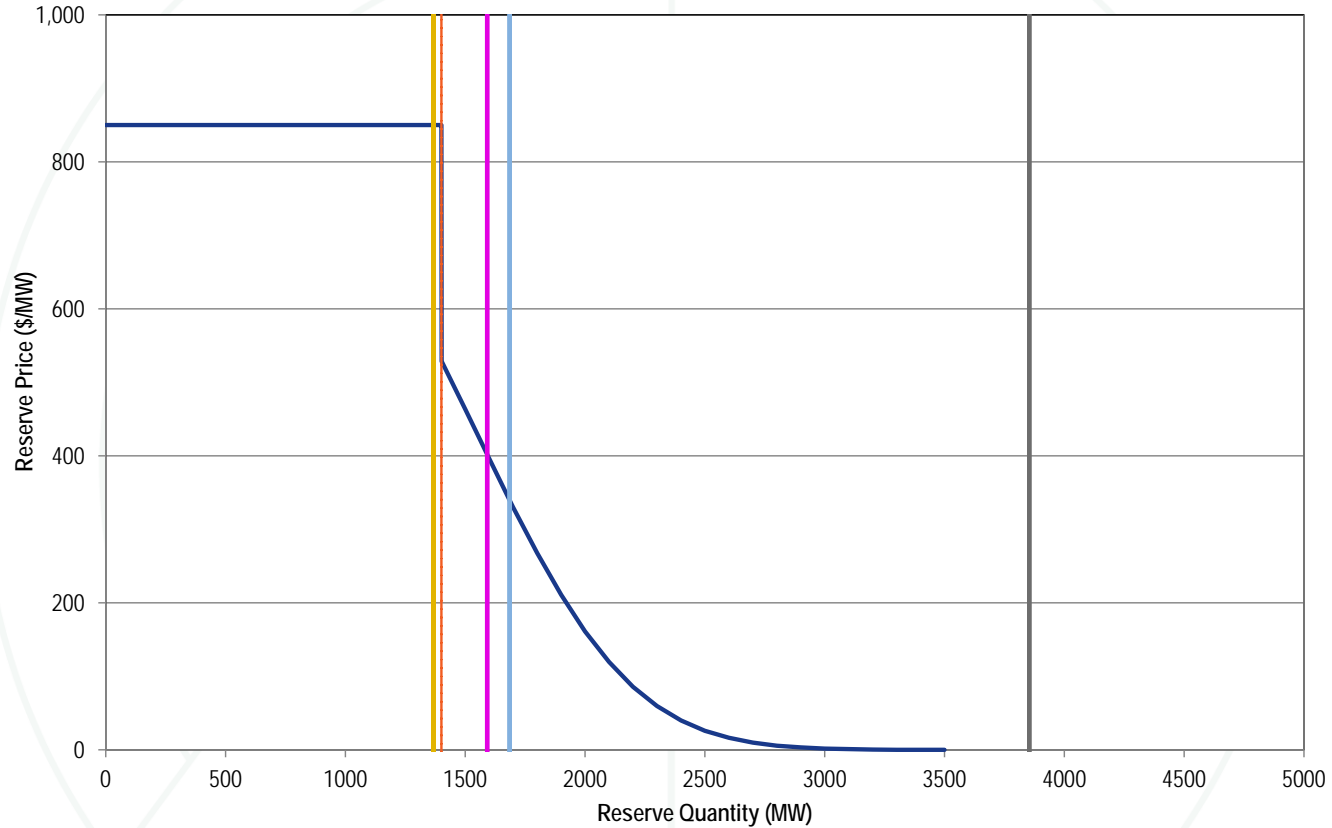
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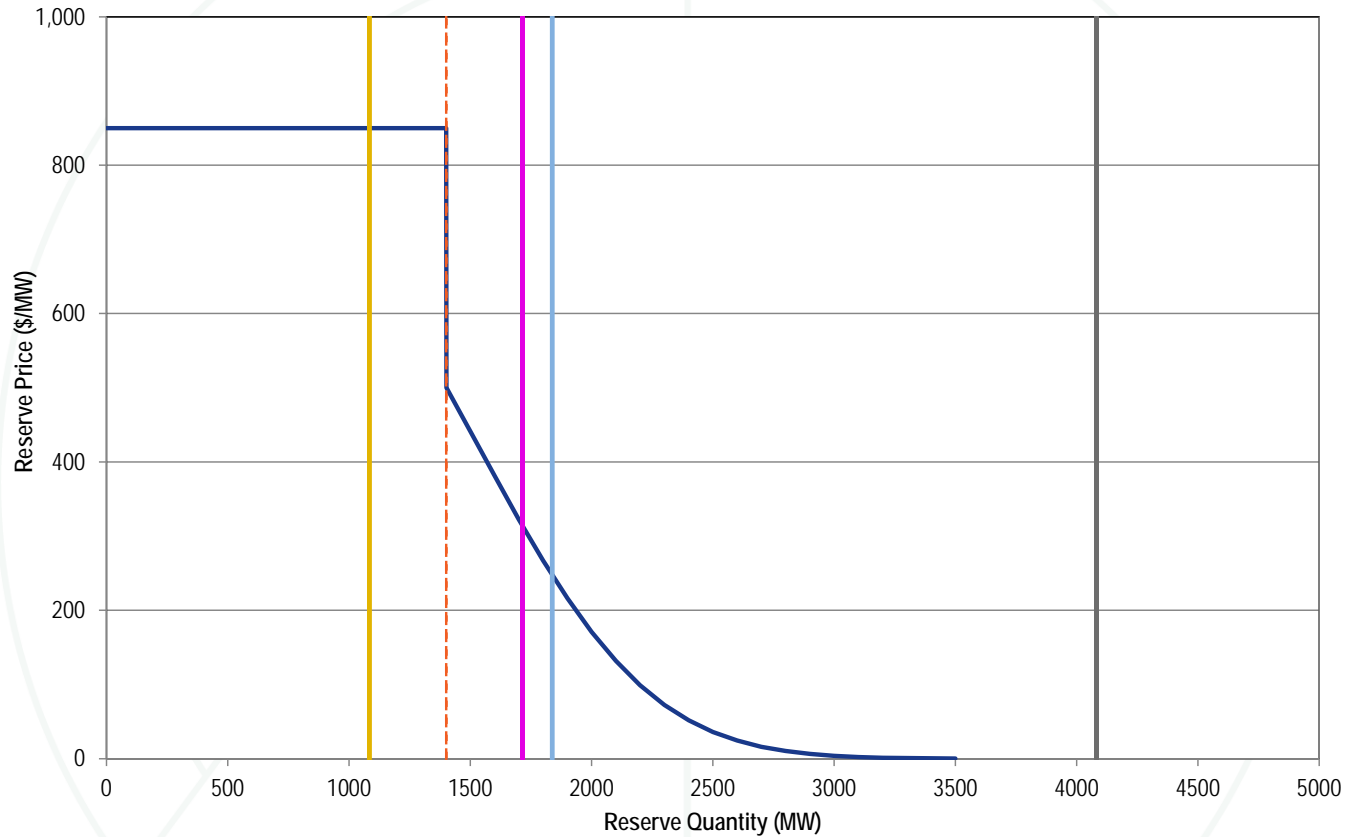
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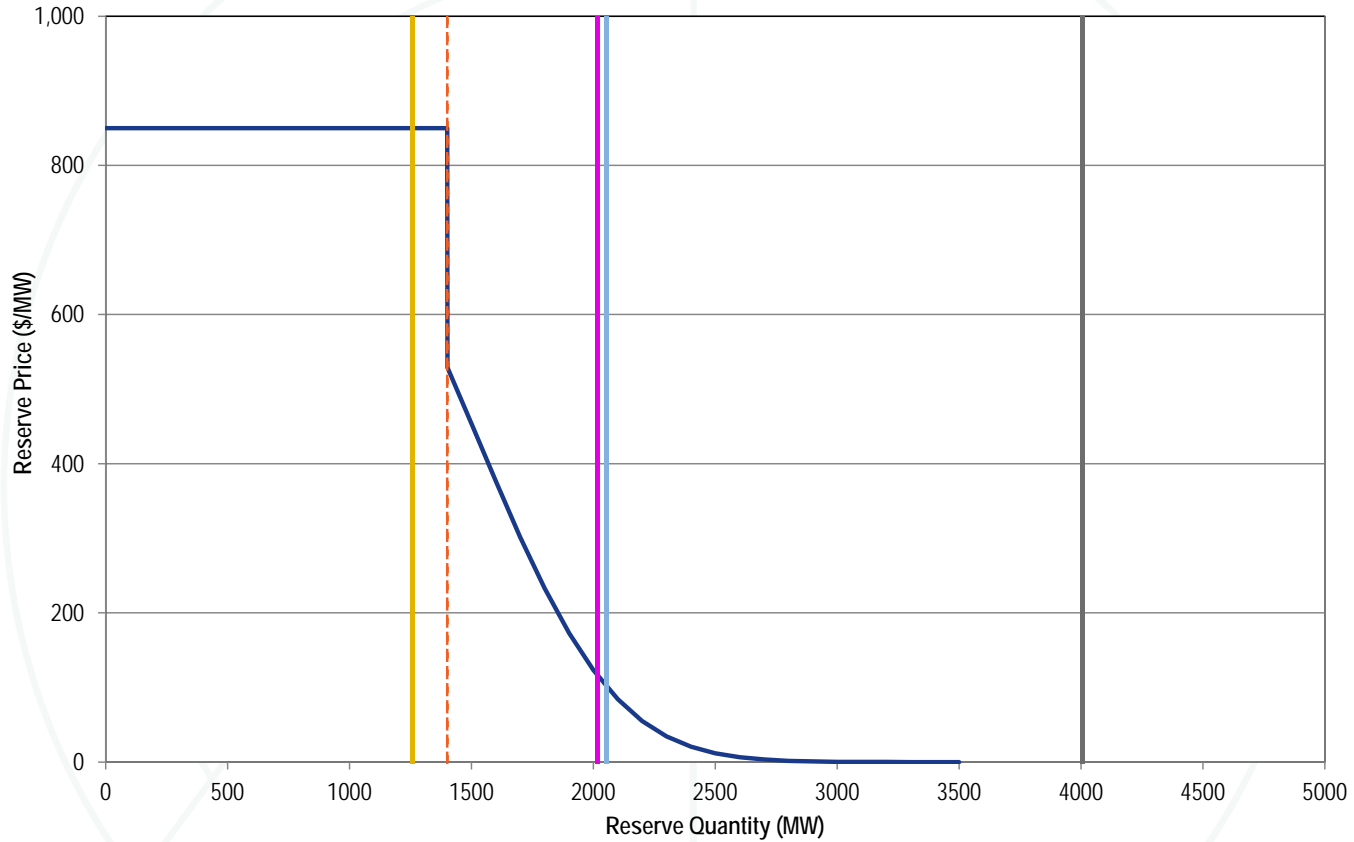
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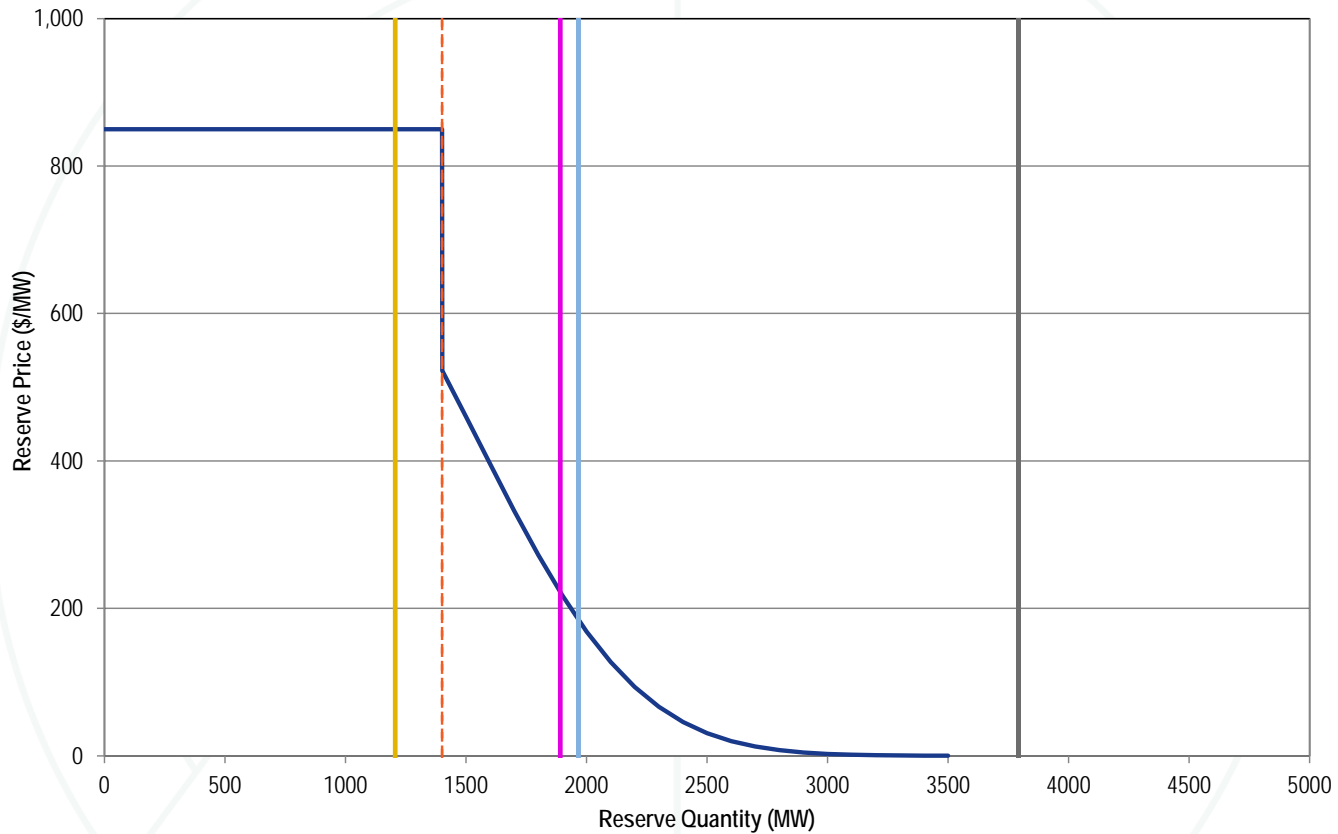
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ORDC Winter T Block 1 (2300-0200)



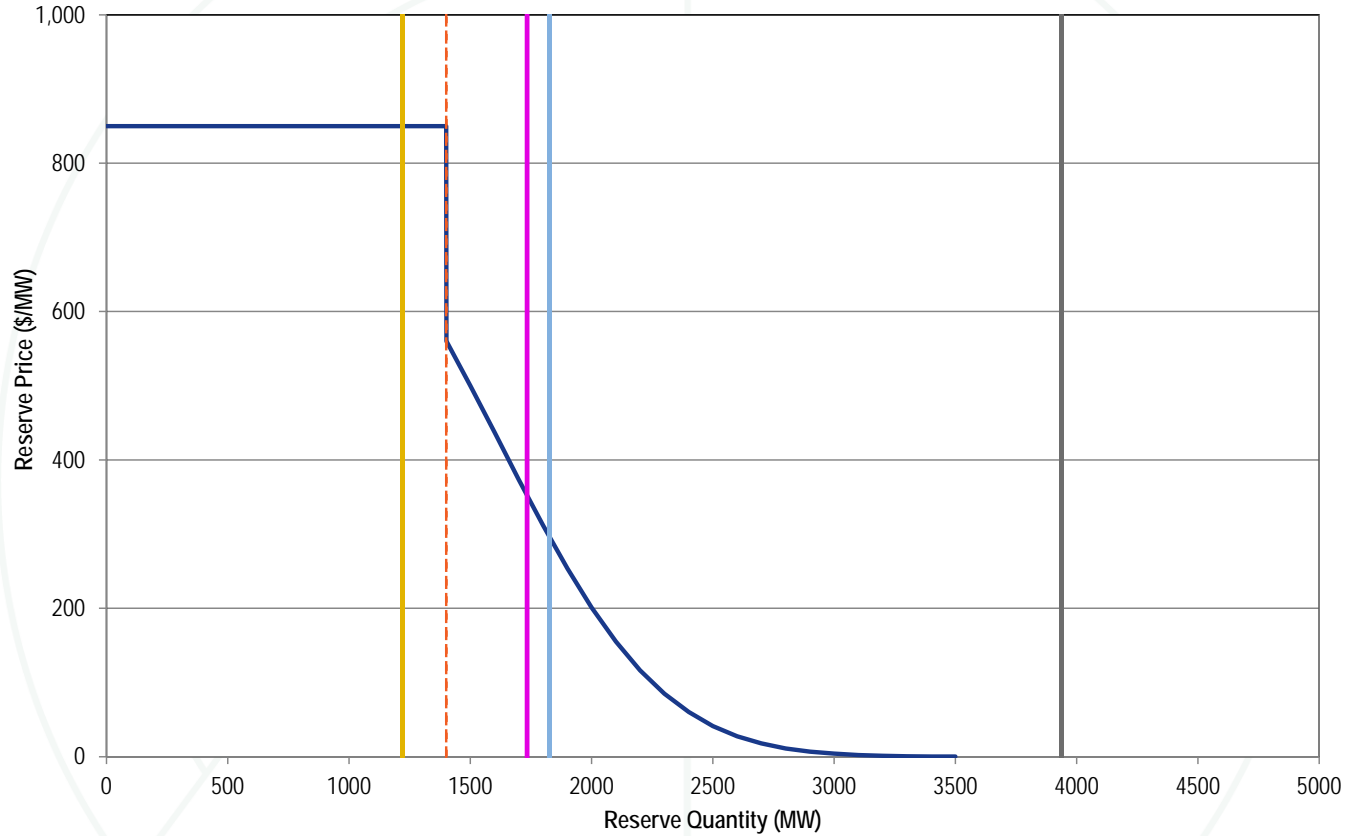
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ORDC Winter T Block 2 (0300-0600)



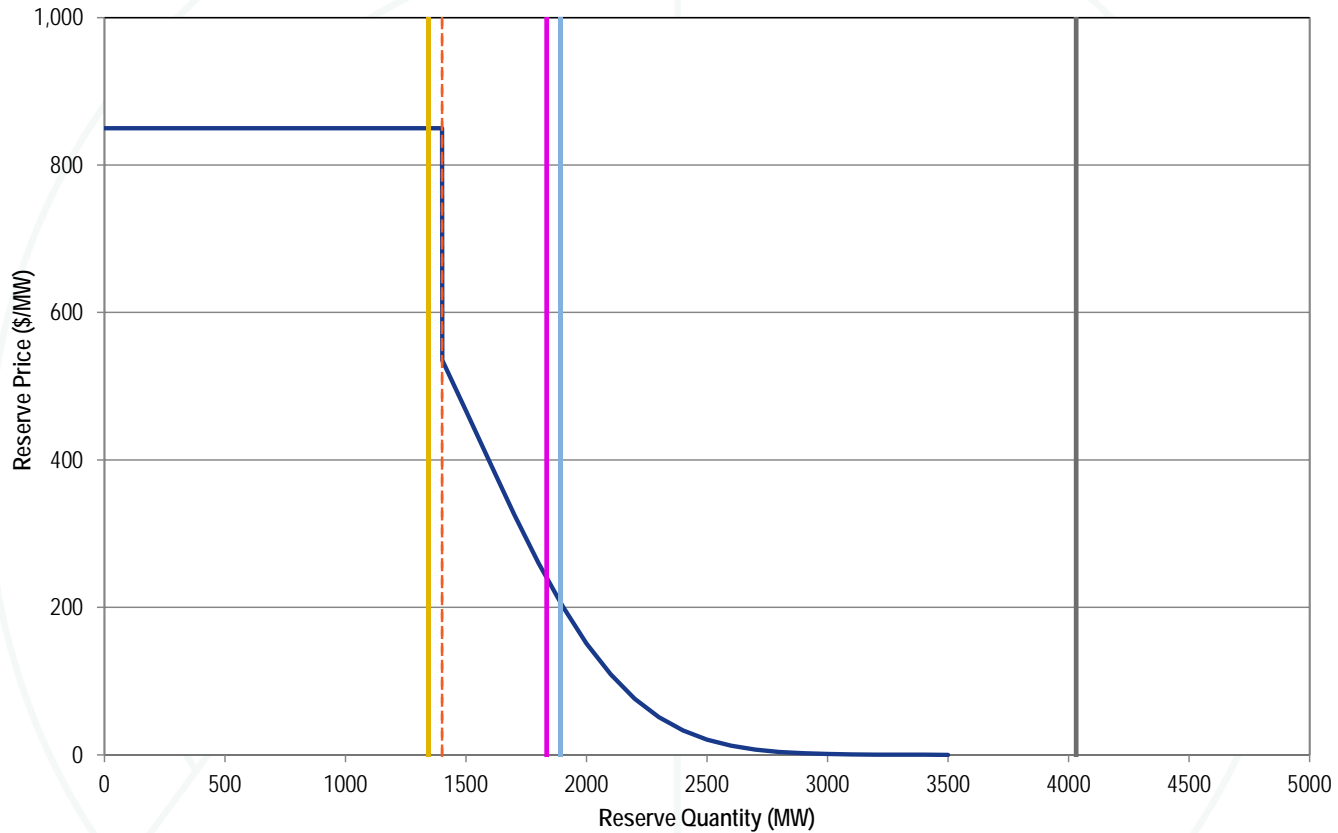
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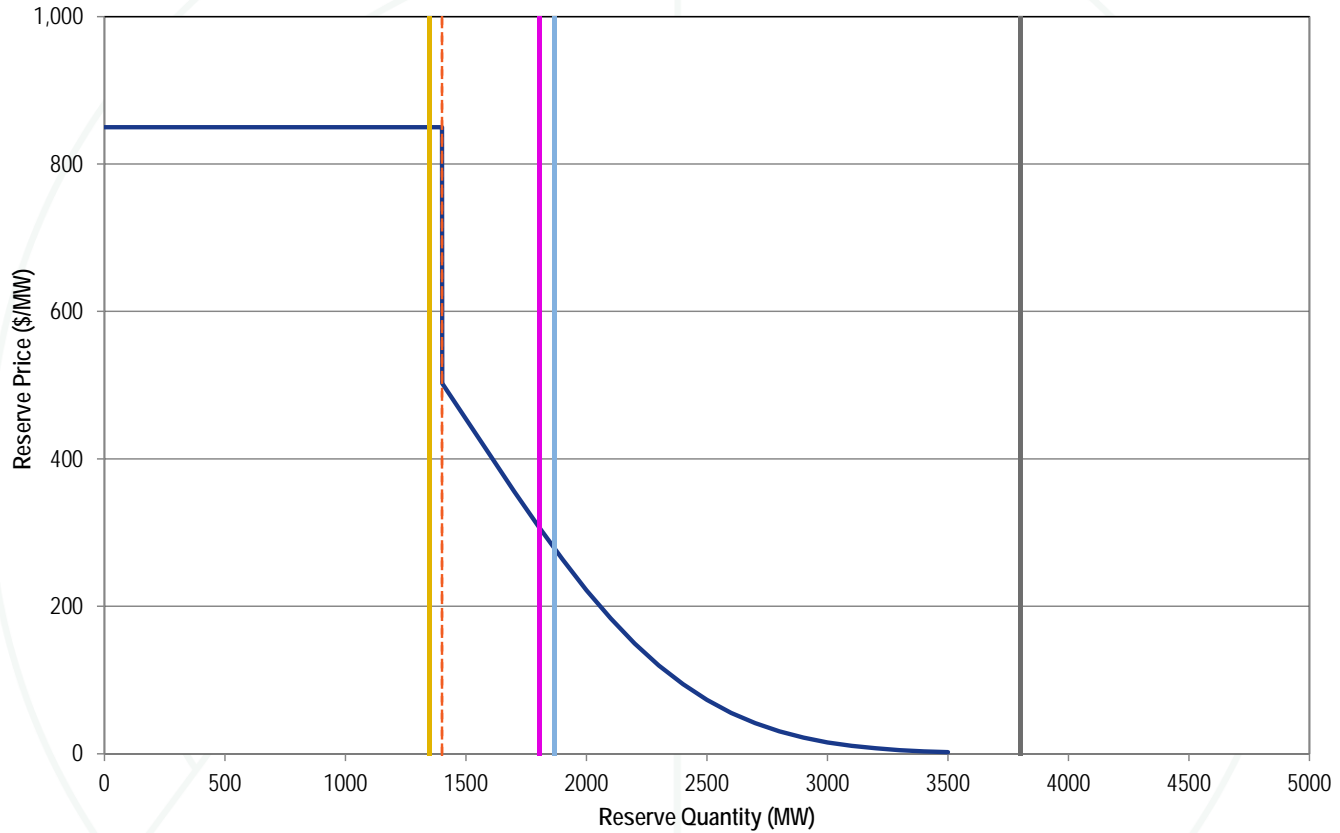
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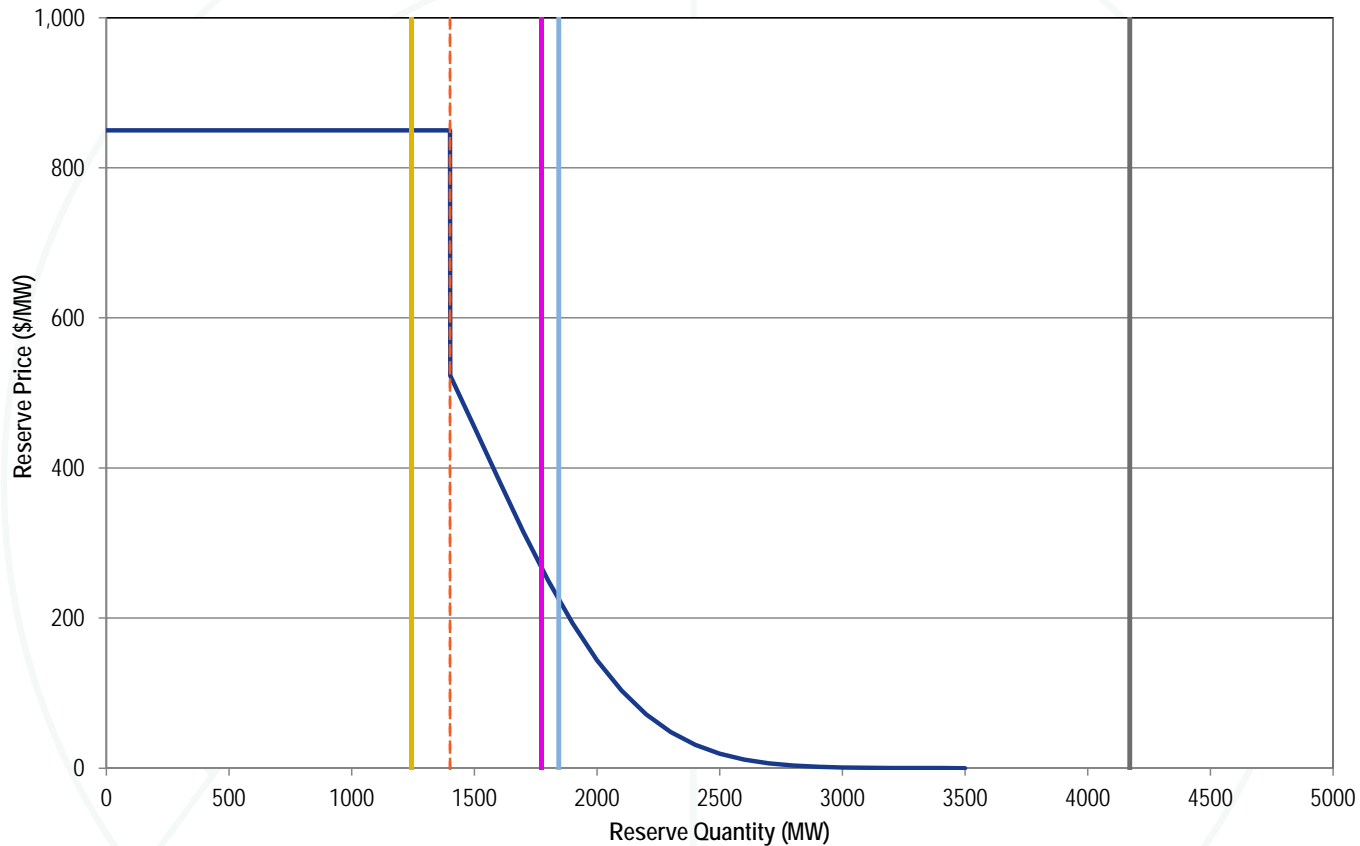
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