

HECO 100 MW Renewable Energy Request For Proposals

“Grandfathered Proposals” and Curtailment

Technical Conference

HECO 100 MW RE RFP Tech Session Grandfather and Curtailment.ppt



Hawaiian Electric Company, Inc.

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“Grandfathered Proposals”



What are the “Grandfathered Proposals”?

- Discussed in the Solicitation of Interest (pages 3 and 4) and RFP, Section 1.3 (pages 2 and 3)
- Proposals to sell renewable energy and/or capacity that are exempt from the PUC’s Competitive Bidding Framework as they were submitted before the adoption of the Framework in December 2006



What are the “Grandfathered Proposals”?

(continued)

- Could result in PPAs for approximately 60 to 135 MW of renewable energy
 - Approximately 30 MW of wind energy located on the North Shore of Oahu
 - 5 MW of energy from synthetic gas derived from waste products
 - 25 MW of energy from ocean thermal conversion, which could potentially increase to 100 MW



Why are the “Grandfathered Proposals” Relevant to this RFP?

- The amount of non-firm renewable generation ultimately awarded in this RFP process could potentially be impacted by successful completion of power purchase agreements with the grandfathered proposals
- If the projects from the grandfathered proposals come on line, they may, during certain times, affect HECO’s ability to accept energy under power purchase agreements that result from this RFP process



Curtailment

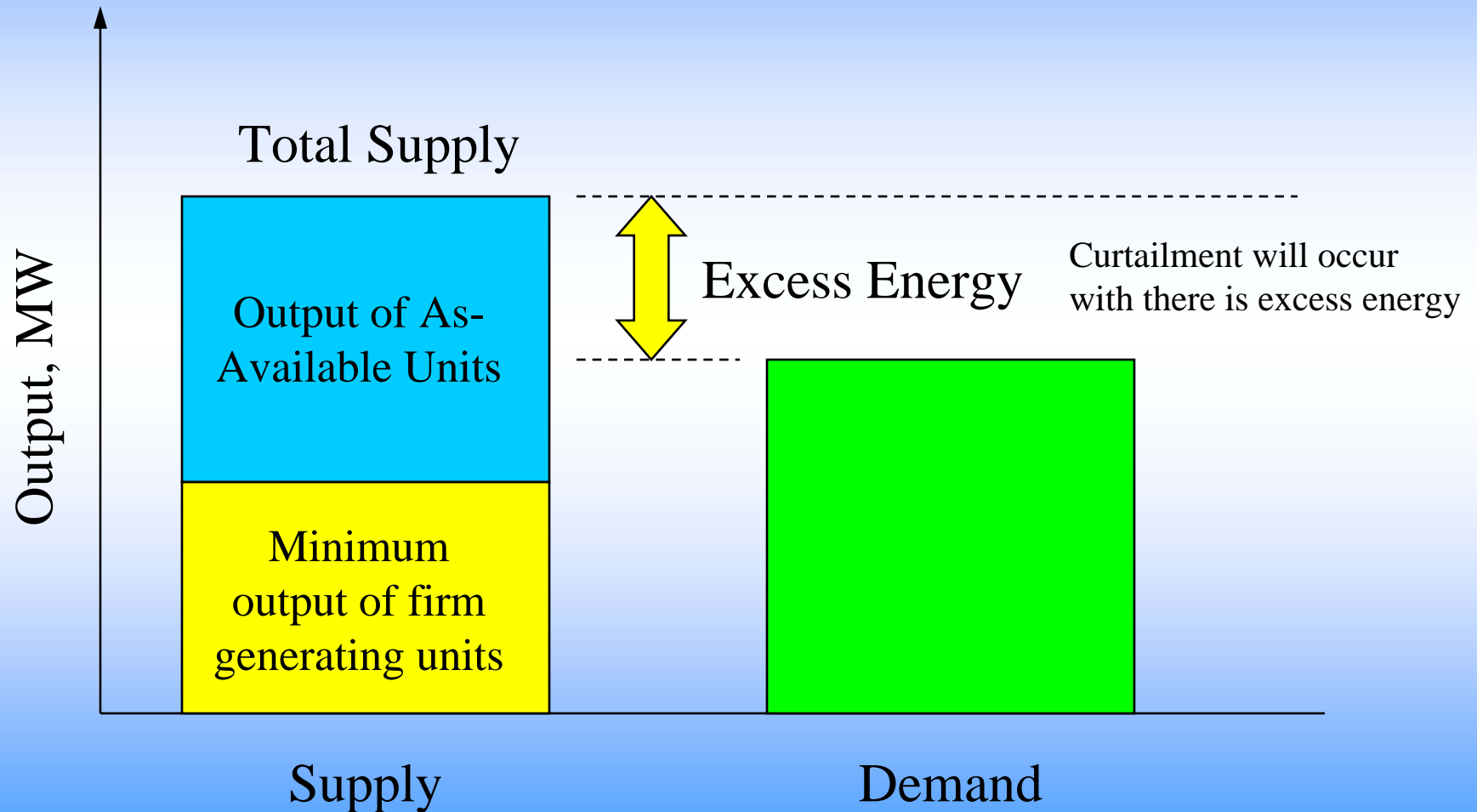


What is Curtailment?

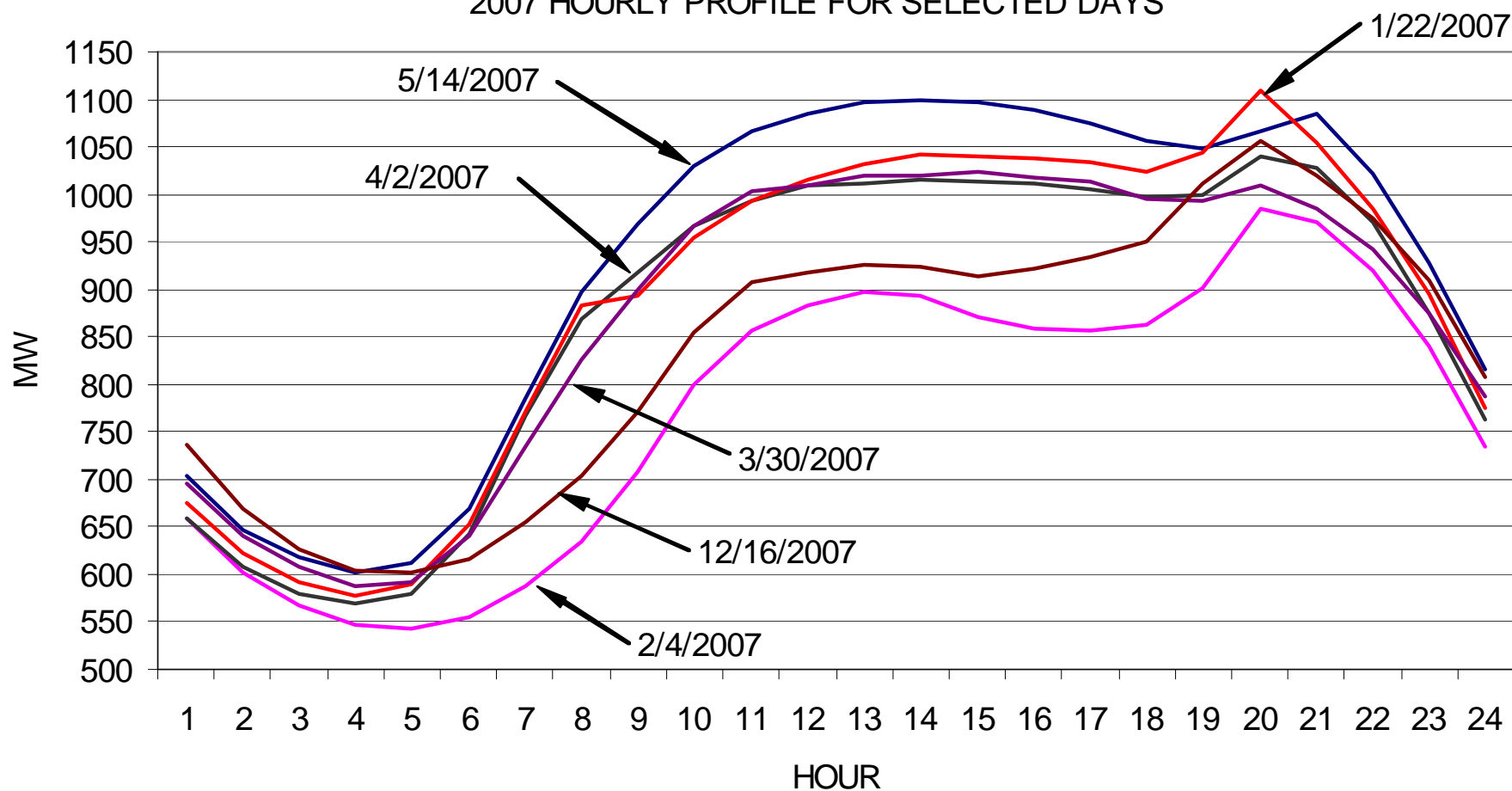
- Curtailment is when the output of a generator must be intentionally reduced for one or more of several reasons:
 - there is excess energy (i.e., not enough demand on the system)
 - the fluctuating output of the generator is resulting in unacceptable power quality on the grid
 - conditions cited in Section 8 (Continuity of Service) and Section 9 (Personnel and System Safety) of the Draft PPA



What is Excess Energy?



2007 HOURLY PROFILE FOR SELECTED DAYS



In What Order Will Sellers' Output be Curtailed?

- If curtailment becomes necessary for reasons directly attributable to a Seller's Facility, the output of that Seller's Facility will be curtailed
- If curtailment becomes necessary for reasons other than those directly attributable to a Seller's Facility, curtailment shall be made to the extent possible in reverse chronological order of the chronological seniority dates determined by the Company for the contracts



In What Order Will Sellers' Output be Curtailed? (continued)

- Deliveries under the contract with the most recent chronological seniority date will be curtailed first and deliveries under the contract with the earliest chronological seniority date will be curtailed last [¶2.e.(2), on page B-8, of the Draft PPA]
- Future firm, baseloaded renewable capacity generation (e.g., from grandfathered proposals) may reduce the Company's ability to accept as-available energy during light loading periods



Restoration After Curtailment

- As conditions warrant, the Company shall end or reduce the curtailment when it is reasonably determined that the reason for the curtailment is no longer in existence [¶2.e.(1), on page B-8, of the Draft PPA]
- Seller may request that Seller's Facility be restored no sooner than one hour after the Company has curtailed the Seller's Facility [¶2.e.(1), on page B-8, of the Draft PPA]



Thank You

