

The Southern Company Energy Auction

The following overview is intended to provide a general understanding of the Energy Auction. The specific terms and conditions governing the Energy Auction are set forth in Southern Companies' Market-Based Rate Tariff, which is on file with the Federal Energy Regulatory Commission and accessible at www.ferc.gov.

Purpose

- The Energy Auction is a voluntary mitigation measure that resolves potential concerns that Southern Companies may have generation dominance
- To accomplish this purpose, Southern Companies will implement:
 - Day-Ahead Energy Auctions (firm and recallable) to be administered every business day (excluding NERC holidays); and
 - Hour-Ahead Energy Auction to be administered every hour.
- The process ensures that Southern Companies cannot exercise market power through either physical or economic withholding of capacity

Eligible Participants include those who...

- Have executed a service agreement under Southern Companies' market based rate tariff
- Have signed a Participation Agreement associated with the Energy Auction, and
- Remain in good credit standing with Southern Companies

Energy Auction Overview

On a Day-Ahead and Hour-Ahead Basis ...

- Southern Companies will offer all of their “Available Capacity” for sale in the auctions
 - This is a “must-offer” obligation for Southern Companies that addresses concerns over *physical withholding* of capacity.
 - The definition of “Available Capacity” addresses Southern Companies’ responsibilities for maintaining system reliability, while at the same time serving their native load and obligations to third parties.
- The Southern Companies’ offer prices into the auctions will be mitigated
 - Southern Companies’ supply offers are subject to FERC-approved cost-based caps that address concerns over *economic withholding* of capacity.
 - Southern Companies will not negotiate the price for any transaction cleared through the auctions, but will accept the clearing price established under the auction procedures.

Energy Auction Overview

- The Energy Auction will be administered by Southern Company personnel
 - Personnel will be shared support, back office employees of the service company.
 - Southern Companies' wholesale marketing employees will not have access to any bidder information.
- The Energy Auction will be monitored by an Independent Auction Monitor
 - The Independent Auction Monitor will be selected by Southern Companies, subject to FERC approval.
- The Energy Auction supplements, but does not replace, existing bilateral markets
 - Subject to the Energy Auction process, Southern Companies will maintain market based rate authority for both long-term and short-term transactions.

Day-Ahead Auction

Day-Ahead Auction – 2 Products

- Firm LD Energy
 - 50 MW, 16-Hour, “Into Southern” Firm LD.
 - Sold from Available Capacity in excess of the Recallable Energy amount.
- Recallable Energy
 - 50 MW, 16-Hour, “Into Southern” Recallable Energy.
 - Energy is recallable in the event of a supply side disruption.
 - Curtailed customer has the option to “buy through” at the hourly auction price if doing so will not impact reliability.
 - Considerations of system reliability will determine the amount of Recallable Energy that will be available for auction.
 - Specific determinations will be made daily and will be based upon an evaluation of the status of Southern Companies’ generating resources.
 - Southern Companies’ determinations are subject to review by the Independent Auction Monitor.

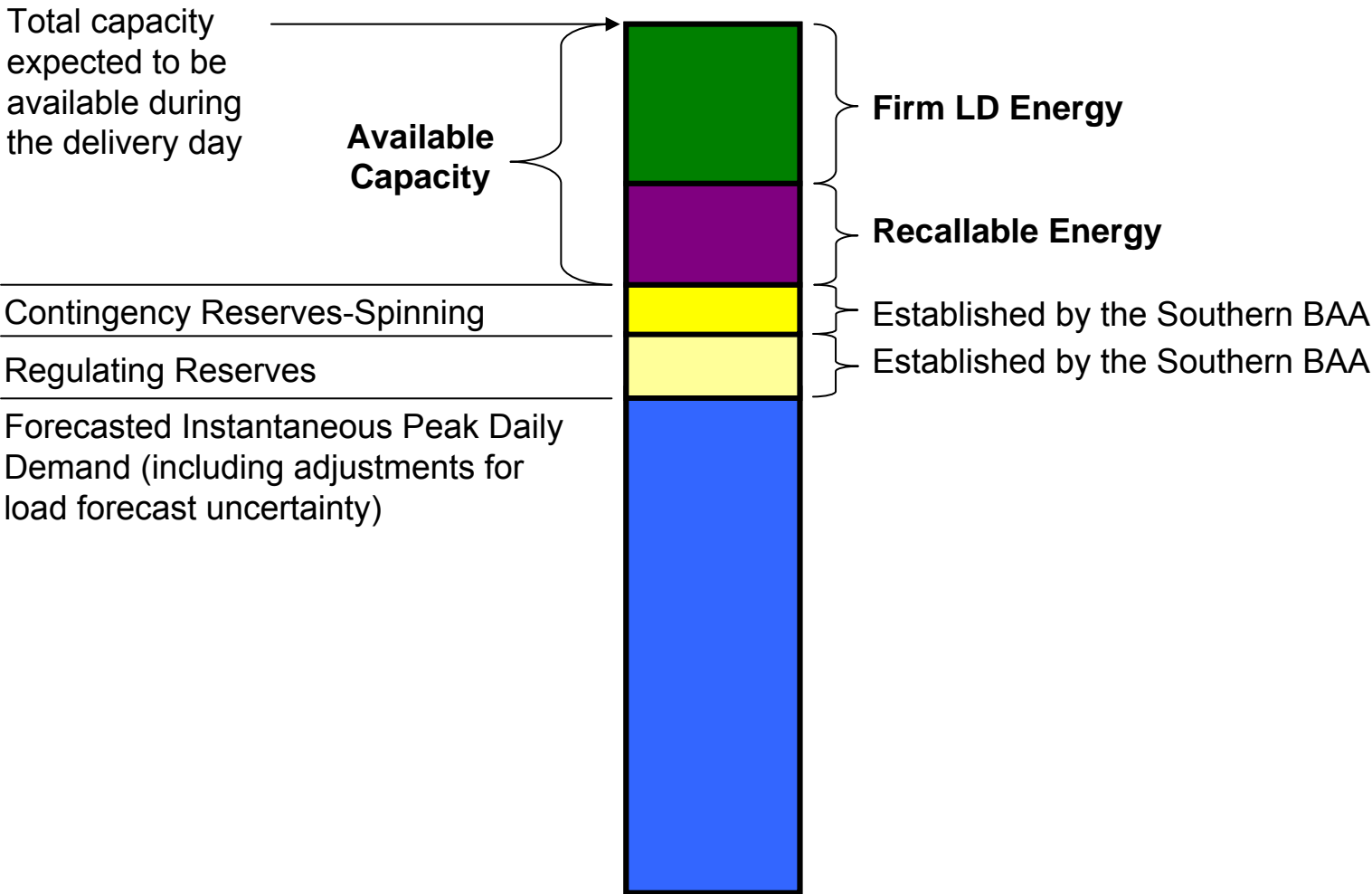
Day-Ahead Available Capacity

- Day-Ahead Available Capacity will include all capacity that is capable of being committed for serving load between the close of the Day-Ahead auction and the beginning of the Delivery Period, after considering all of the following:
 - The capacity that is reasonably needed to serve all Southern Operating Companies' obligations at the instantaneous peak of the delivery day, including
 - Retail and wholesale native load
 - Wholesale sales to third parties
 - Load forecast uncertainty
 - The capacity needed to meet Southern Balancing Authority Area (BAA) reliability obligations, including
 - Contingency Reserves-Spinning
 - Regulating Reserves

Day-Ahead Available Capacity

- Capacity excluded from the Available Capacity calculation
 - Any capacity that is unable to be committed for serving load during the delivery period.
 - Any capacity determined to be unavailable during the delivery period due to its planned outage, maintenance outage, forced outage, or other operational constraints.
 - Any capacity reasonably expected to require an outage during the delivery period due to known problems at the generating facility.
 - Any quick-start combustion turbines or unscheduled hydroelectric capacity reserved for Contingency Reserve-Supplemental.
 - Any remaining unscheduled hydroelectric capacity (reserved for native load use).

Day-Ahead Available Capacity



Day-Ahead Seller Offer Prices

- Subject to cost-based cap
 - 110 percent of the projected average cost of the units expected to be sold, plus a FERC-approved demand charge equivalent to \$21.43/MWh
- The projected average cost includes commitment costs and minimum run time costs, as appropriate
- Expressed as an implied heat rate (MMBtu/MWh)
 - Actual settlement price will be based upon the published Henry Hub midpoint price published by Platts Megawatt Daily
- Southern Companies can set a lower Seller Offer Price to facilitate sales

$$\text{SOP} \leq \text{Average Cost} \times 1.1 + \text{demand charge}$$

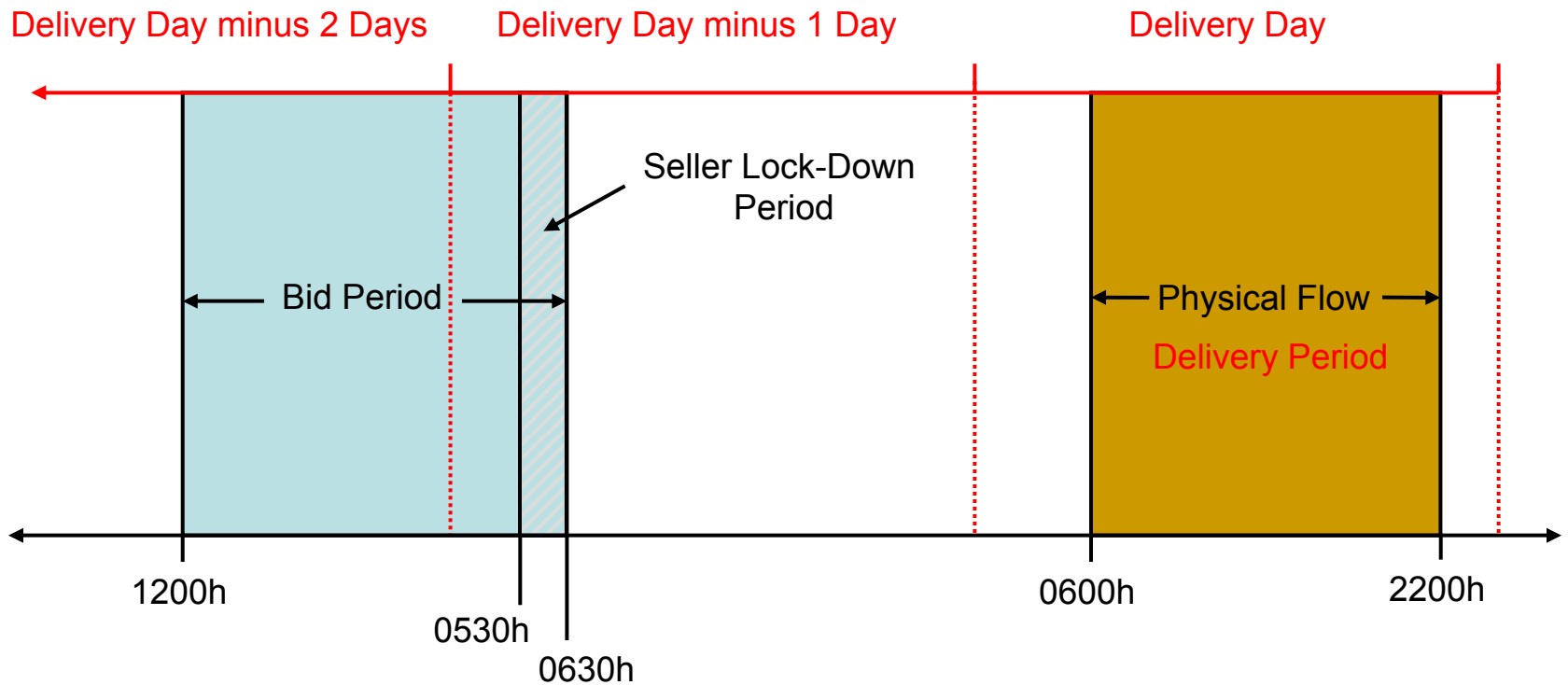
Day-Ahead Auction Timing

- Bid Period opens 12 noon CPT two days prior to delivery day
 - Available Capacity is initially determined and submitted to the auction immediately after the opening of the Bid Period.
 - The amount of Available Capacity may be revised during Bid Period (but before “lock down” period) based upon changes in primary inputs to the determination of Available Capacity.
- Bids are submitted to the auction any time during the Bid Period
 - Bids will be in the form of the number of blocks desired at an implied heat rate (MMBtu/MWh).
 - Bids will be checked for potential credit violations at the time of submittal (based upon bid price).
 - The bidder may request that multiple blocks be cleared “all or nothing” (i.e., the bid may be contingent on all requested bid blocks clearing).
 - Exercising this option can result in an infeasible bid that will be disqualified from the clearing process.

Day-Ahead Auction Timing

- Seller Lock-Down period begins 5:30 am CPT one day prior to delivery day
 - Seller Offer Prices are finalized and sent to Auction Administrator prior to this time.
 - After this time, there can be no changes either to Available Capacity or to Seller Offer Prices
- Bid Period closes at 6:30 am CPT one day prior to the delivery day
- Auction clears upon closing

Day-Ahead Auction Timeline



All hours CPT

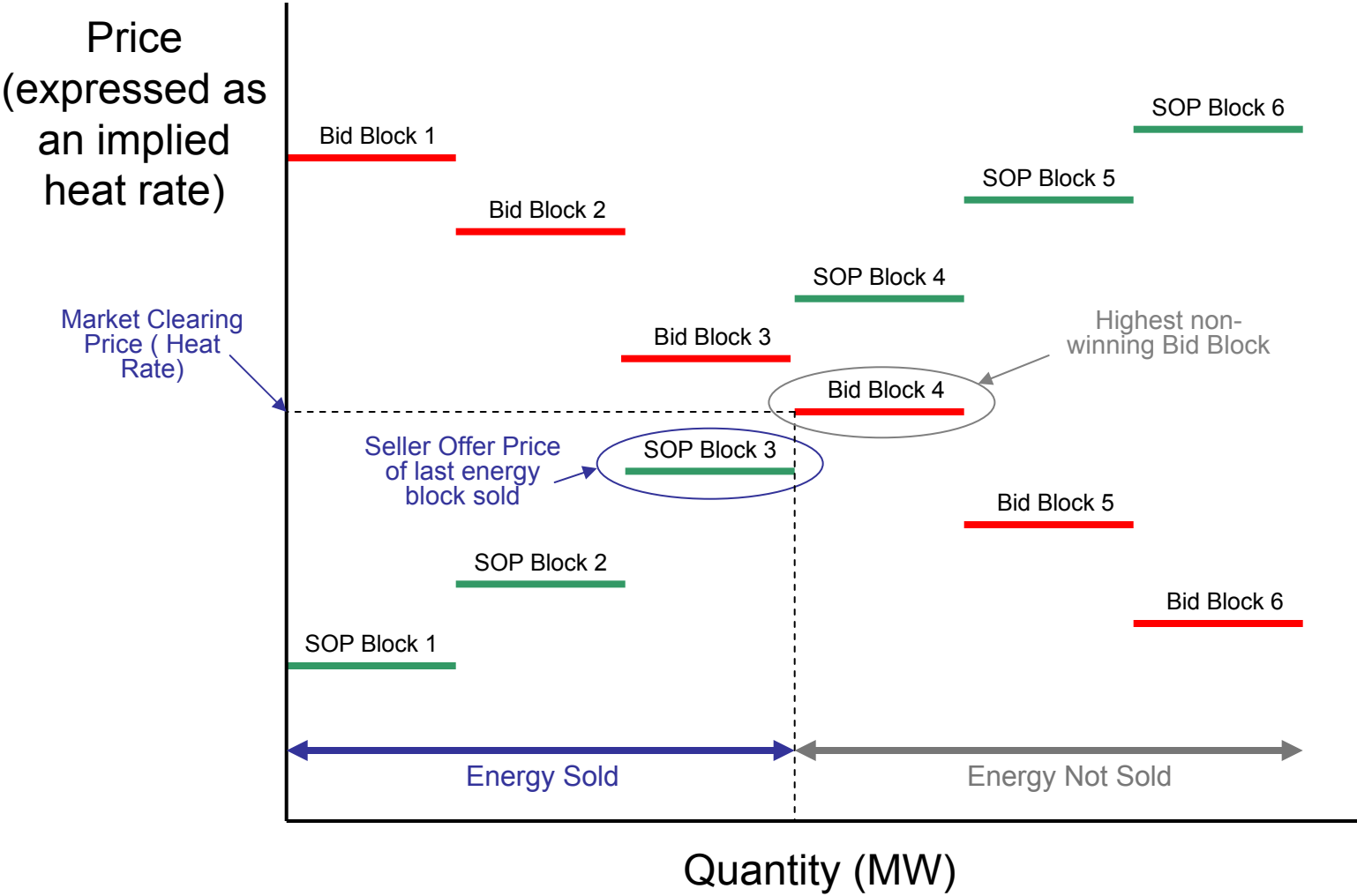
Day-Ahead Auction Clearing

- Firm LD Energy and Recallable Energy products are cleared “simultaneously” as two independent auctions
- Seller Offer Prices are converted into an economic “supply curve” that is monotonically increasing in price
- Bids are converted into an economic “demand curve” that is monotonically decreasing in price
- The quantity of MW cleared is determined by the point where the next highest bid is lower than the next lowest offer price
 - All bids that are higher than this pricing point will be cleared (unless the bid has been disqualified due to infeasibility).
 - Upon clearing, each cleared bid will be validated against credit criteria.
 - Bids that violate credit will be invalidated.
 - All other cleared bids will be awarded their requested MW amount.

Day-Ahead Auction Clearing

- Market Clearing Price (Heat Rate) is the greater of:
 - Highest non-winning bid; or
 - Seller Offer Price of the last energy block sold.
- All winning bidders pay the Market Clearing Price (Heat Rate) times the Henry Hub Midpoint gas price (as published by Platts Megawatt Daily) corresponding to the Delivery Day

Day-Ahead Auction Clearing



Day-Ahead Energy Scheduling

- Buyer will follow normal day-ahead scheduling practices
- Buyer is informed of the delivery point in Southern BAA for scheduling purposes
- Buyer is responsible for all transmission-related arrangements (and costs), including tagging
 - Southern Companies intend to tag all Recallable Energy to more readily facilitate the ability to recall.
 - Otherwise, buyer will be responsible for honoring recall requests.
- Buyer is provided an Energy ID for use on the NERC tag

Sales Outside the Day-Ahead Auction

Southern Companies are authorized to make sales at negotiated, market-based rates, subject to the following limitations:

- During the Bid Period
 - No sales by Southern Companies inside the Southern BAA for products sold pursuant to the Day-Ahead Auction.

- During the Seller Lock-Down Period
 - No Changes to Available Capacity or Seller Offer Prices for the Day-Ahead Auction.

Hour-Ahead Auction

Hour-Ahead Product

Characteristics of the Hour-Ahead Product:

- 1-Hour
- Non-Firm
- "Into Southern"
- 1 MW increments

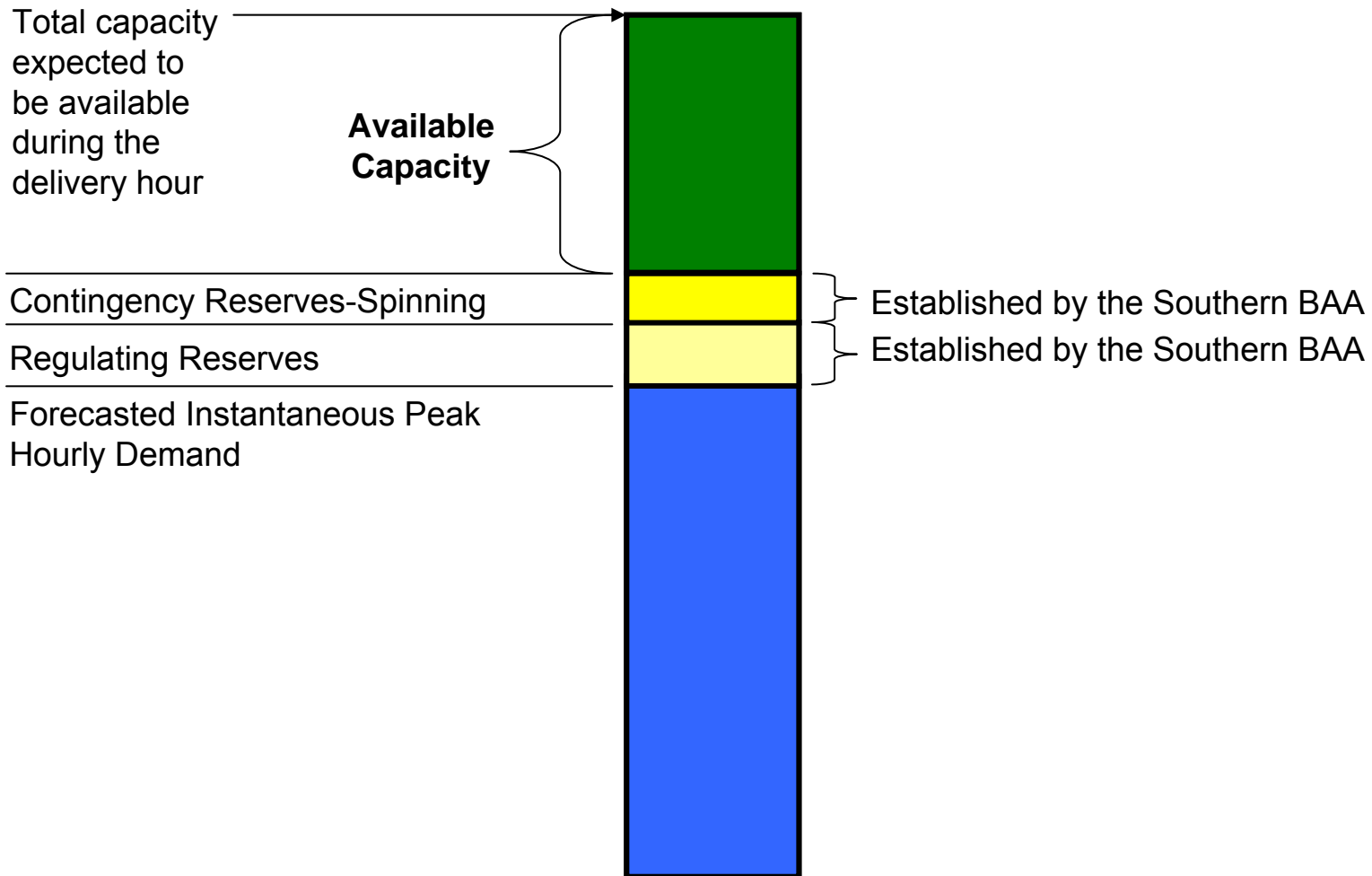
Hour-Ahead Available Capacity

- Hour-Ahead Available Capacity includes all capacity that is capable of being dispatched for serving load during the upcoming Delivery Hour, after considering all of the following:
 - Capacity that is needed to serve all Southern Operating Companies' obligations at the instantaneous peak of the upcoming delivery hour, including
 - Retail and wholesale native load
 - Wholesale sales to third parties
 - Load forecast uncertainty
 - Capacity that is needed to meet Southern Balancing Authority Area (BAA) reliability obligations, including
 - Contingency Reserves-Spinning
 - Regulating Reserves

Hour-Ahead Available Capacity

- Capacity excluded from the Available Capacity calculation includes:
 - Any capacity that is unable to be committed and available to serve load within 30 minutes
 - Any capacity determined to be unavailable during the upcoming delivery hour due to its planned outage, maintenance outage, forced outage, or other operational constraint
 - Any capacity reasonably expected to require an outage during the delivery period due to known problems at the generating facility
 - Any quick-start combustion turbines or unscheduled hydroelectric capacity reserved for Contingency Reserves-Supplemental
 - Any remaining unscheduled hydroelectric capacity (reserved for the economic benefit of native load)

Hour-Ahead Available Capacity



Hour-Ahead Seller Offer Prices

- Subject to cost-based cap
 - 110 percent of the projected incremental cost to serve the sale, plus a FERC-approved demand charge equivalent to \$21.43/MWh
- Projected incremental cost includes commitment and minimum run time costs, as appropriate
- Expressed as \$/MWh
- Southern Companies can set a lower Seller Offer Price to facilitate sales

$$\text{SOP} \leq \text{Incremental Cost} \times 1.1 + \text{demand charge}$$

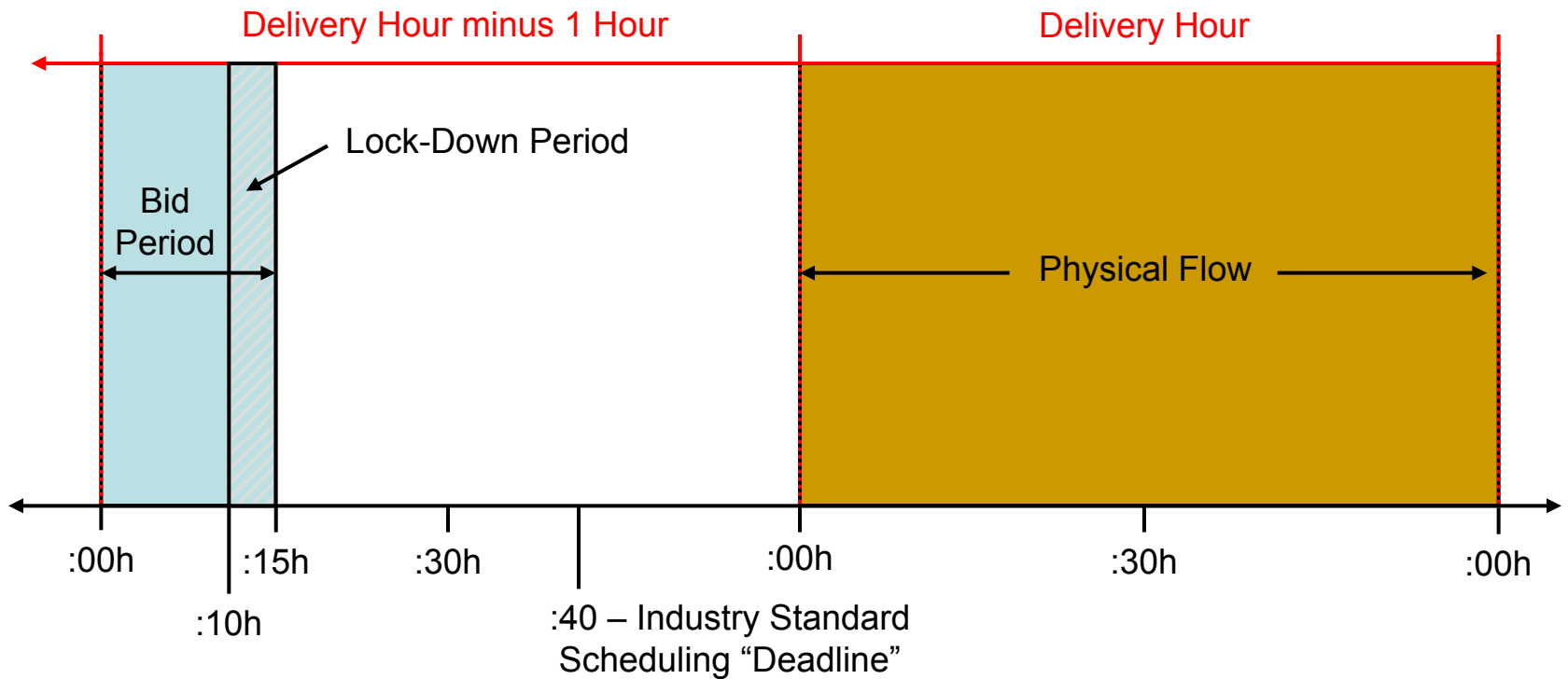
Hour-Ahead Auction Timing

- Bid Period opens 60 minutes prior to the hour (“top of the hour”).
 - Available Capacity is initially determined and submitted to the auction immediately after the opening of the Bid Period.
 - The amount of Available Capacity may be revised during Bid Period (but before “lock down” period) based upon changes in primary inputs to the determination of Available Capacity.
- Bids are submitted to the auction any time during the Bid Period.
 - Bids are in the form of price (\$/MWh) and desired MW.
 - Bidder may specify whether a “partial clearing” of its bid is allowed (similar to Day-Ahead “all or nothing” bid blocks).
 - Exercising this option can result in an infeasible bid that will be disqualified from the clearing process.
 - Bids will be checked for potential credit violations at the time of submittal based upon bid price.

Hour-Ahead Auction Timing

- “Lock-Down Period” begins 50 minutes prior to the hour (“ten-after”)
 - After this time, there can be no changes either to Available Capacity or to Seller Offer Prices
- Bid Period closes 45 minutes prior to the hour (“quarter-after”)
- Auction clears upon closing

Hour-Ahead Auction Timeline



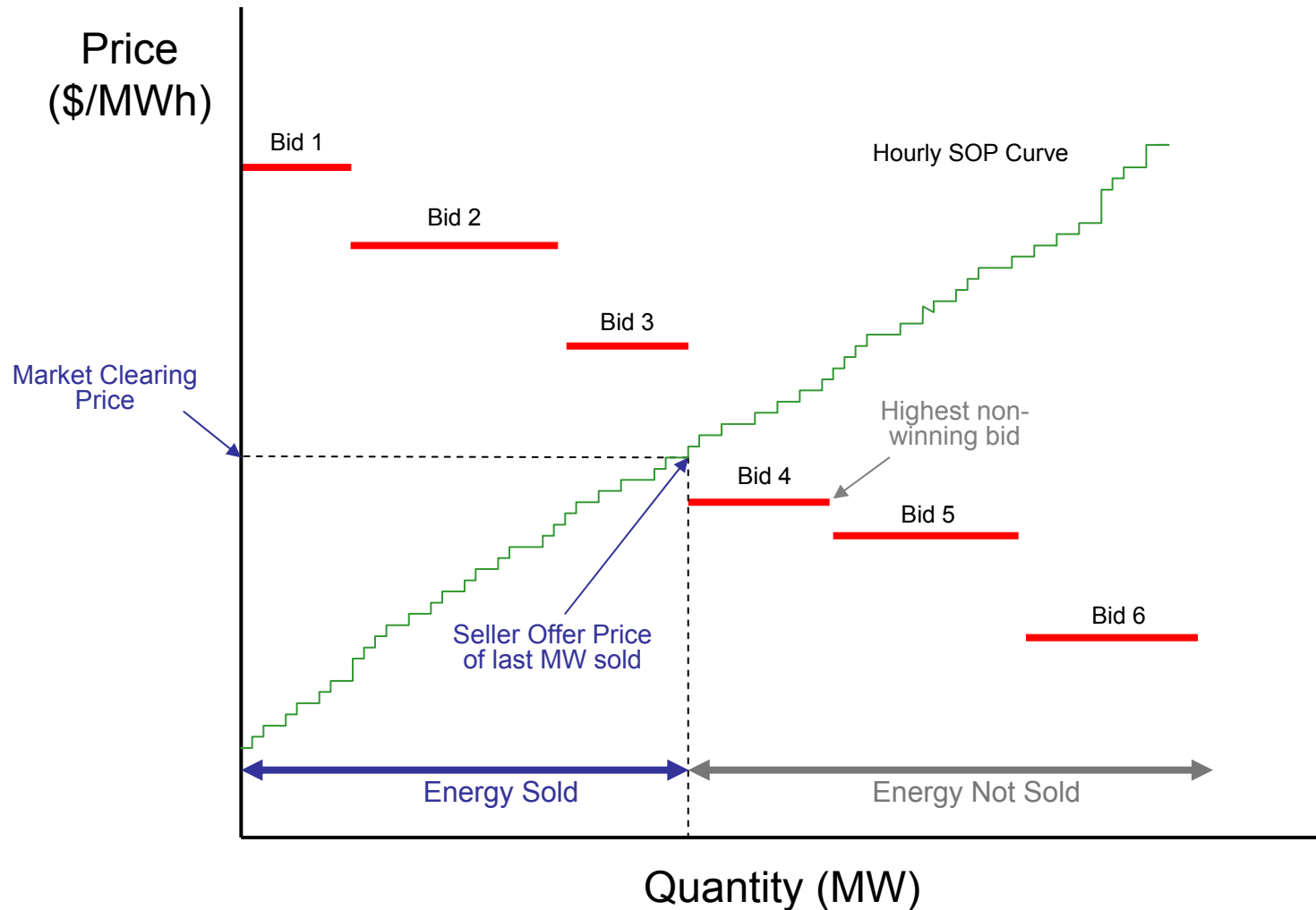
Hour-Ahead Auction Clearing

- Seller Offer Prices are converted into an economic “supply curve” that is monotonically increasing in price
- Bids are converted into an economic “demand curve” that is monotonically decreasing in price
- The quantity of MW cleared is determined by the point where the next highest bid is lower than the next lowest offer price
 - All bids that are higher than this pricing point will be cleared (unless the bid has been disqualified due to infeasibility).
 - Upon clearing, each cleared bid will be validated against credit criteria.
 - Bids that violate credit will be invalidated.
 - All other cleared bids will be awarded their requested MW amount.

Hour-Ahead Auction Clearing

- Market Clearing Price is greater of:
 - Highest non-winning bid
 - Seller Offer Price of the last MW sold
- All winning bidders pay the Market Clearing Price

Hour-Ahead Auction Clearing



Hour-Ahead Energy Scheduling

- Buyer will follow normal hour-ahead scheduling practices.
- Buyer is informed of the delivery point in the Southern BAA for scheduling purposes.
- Buyer is responsible for all transmission-related arrangements (and costs), including tagging.
- Buyer is provided an Energy ID for use on transmission tagging.

Sales Outside the Hour-Ahead Auction

Southern Companies are authorized to make sales at negotiated, market-based rates, subject to the following conditions:

- During the Bid Period
 - For the upcoming hour, no sales by Southern Companies inside the Southern BAA of the product sold pursuant to the Hour-Ahead Auction.

- During the Seller Lock-Down Period
 - For the upcoming hour, no changes to Available Capacity or Seller Offer Prices.