

- 1. Which market may protect customers from increased costs when their energy deliveries are consistent with their firm reservations?
 - A. Day Ahead
 - B. Synchronized Reserve
 - C. Financial Transmission Rights
 - D. Reliability Pricing Model
- 2. What tool is used to submit External Transactions?
 - A. Markets Gateway
 - B. InSchedule
 - C. ExSchedule
 - D. Power Meter
- 3. What tool is used to enter Generator meter data?
 - A. Markets Gateway
 - B. InSchedule
 - C. ExSchedule
 - D. Power Meter
- 4. Which of the following types of transmission service has the highest priority in an energy transaction?
 - A. Non-Firm Point to Point
 - B. Spot-in
 - C. Non-Firm Secondary
 - D. Network Import Willing to Pay Congestion
- 5. What type of information does PJM post in Markets Gateway under Generator Market Results?
 - A. Day Ahead Schedules for company-specific generation
 - B. Day Ahead Schedules for zone-specific generating units
 - C. Real-Time LMP's
 - D. Reliability Run results
- 6. Congestion on a transmission line signals the need to
 - A. Raise generation on the receiving end of the constraint
 - B. Move generation from East to West
 - C. Raise generation on the sending end of the constraint
 - D. Move generation from West to East
- 7. During a regulation test, a resource must change its status to
 - A. Available
 - B. Not Available
 - C. Self-Schedule
 - D. Max Emergency



- 8. What will happen if a company's market position causes it to exceed its available credit?
 - A. PJM will issue a collateral call
 - B. Referral to Market MonitorFirm Point-to-Point Transmission Customers
 - C. A complaint will be made to FERC
 - D. PJM will give a verbal warning
- 9. When are the weekly PJM bills due?
 - A. The 3rd day after the bill is issued.
 - B. The 7th day after the bill is issued
 - C. The 10th day after the bill is issued
 - D. The end of the current month.
- 10. If a Tier 2 Synchronized Reserve resource does not respond or under-responds to a synchronized reserve event, it is then subject to
 - A. Referral to Market Monitor.
 - B. A retroactive charge for all committed hours since the last synchronized reserve event.
 - C. A retroactive charge for all hours since the last synchronized reserve event.
 - D. Suspension of participation in the synchronized reserve market.
- 11. Capacity resources that do not respond during emergency procedures may be subject to
 - A. Removal from the capacity market
 - B. A peak period maintenance penalty
 - C. A non-performance assessment
 - D. Removal from the Day-ahead market
- 12. The Day Ahead load curve reflects
 - A. How much generation to call on in real-time
 - B. How much to procure for synchronized reserves
 - C. How much regulation is committed Day-ahead
 - D. How much demand is committed in Day-ahead
- 13. Cost-based minimum run values may be updated
 - A. Every 5 minutes
 - B. Once every 7 days
 - C. With values that maximize the resource's potential to recover costs
 - D. With values that comply with the resource's parameter limits
- 14. Which of the following is true of cost-based schedules?
 - A. Parameter data can be whatever the needs are of the unit
 - B. The cost data can be whatever the needs are of the unit
 - C. Any costs must be verified by PJM based on the cost development rules
 - D. Any fuel costs are acceptable as long as there is justification



- 15. Which product is only paid when it responds to a synchronized reserve event?
 - A. Tier 1 Synchronized Reserve
 - B. Tier 2 Synchronized Reserve
 - C. Non-Synchronized Reserve
 - D. Supplemental Reserve
- 16. Which of the following is a requirement for a resource to participate in regulation?
 - A. It must be able to raise or lower its output by the specified amount
 - B. It must be able to sustain the desired output for 60 minutes
 - C. It must pass the three-pivotal supplier test
 - D. It must be able to provide 1 MW of regulation capability
- 17. Which of the following is a trigger for Shortage Pricing?
 - A. A Hot Weather Alert
 - B. A Cold Weather Alert
 - C. A Voltage Reduction
 - D. A Max Emergency
- 18. What do the varying capacity prices indicate in the capacity market?
 - A. The prices of real estate and materials in that delivery area
 - B. The limitations for energy to be delivered to that area of the transmission system
 - C. The amount of generators in that delivery area
 - D. The amount of load in that delivery area
- 19. If a capacity resource must take an unplanned outage in April, what will the expected consequences be?
 - A. A reduction in their Installed Capacity (ICAP) value
 - B. A reduction in their Unforced Capacity (UCAP) value
 - C. They will be subject to a performance assessment
 - D. They will be subject to retroactive penalty charges
- 20. Under what circumstances can a Financial Transmission Right (FTR) incur a negative obligation?
 - A. When the FTR market is resource inadequate
 - B. When congestion at the sink is less than at the source
 - C. When congestion at the source is less than at the sink
 - D. When there is no congestion on the transmission path
- 21. Under what circumstances may a capacity resource incur a penalty for not responding to dispatch instructions?
 - A. When an emergency procedure triggers a performance assessment
 - B. When they are picked up in Day Ahead
 - C. During a minimum generation action
 - D. When they did not notify PJM and put in an eDART ticket



- 22. What does Generation clearing in the Base Residual Auction of the capacity market indicate?
 - A. The rebate of congestion charges paid by Firm Transmission Customers
 - B. The allocation of Auction Revenue Rights to Network Transmission Customers and Firm Point-to-Point Transmission Customers
 - C. The commitment of the resource to be available to provide energy three years into the future
 - D. The reliability value of the resource for the next 11 years
- 23. The Day-ahead market clears enough supply to satisfy the
 - A. Day-ahead bid-in fixed load plus Day Ahead Scheduling Reserve Requirement.
 - B. Real -time load forecast plus Synchronized Reserve Requirement.
 - C. Day-ahead bid-in fixed load plus Synchronized Reserve Requirement.
 - D. Real-time load forecast plus Day Ahead Scheduling Reserve Requirement.
- 24. What does PJM dispatch initiate that requires all generators to respond by updating their current reserve condition details?
 - A. Supplementary Status Report
 - B. Instantaneous Reserve Check
 - C. Gen Checkout
 - D. Reserve MW Outage Ticket
- 25. How may Increment offer and Decrement bidding activity be restricted in the Day Ahead Market?
 - A. The software will only allow up to 100 bids/offers per day per node
 - B. The volume of each bid/offer times its nodal reference price must not exceed the available credit
 - C. The operator will not clear bids/offers if they are forecasted to violate the credit limit
 - D. The bids and offers will not be cleared if they are shown to cause congestion in the study
- 26. Units that are desired to be committed and dispatched by PJM should be offered into Markets Gateway as:
 - A. Must Run
 - B. Emergency
 - C. Economic
 - D. Not Available
- 27. When does the Base Residual Auction typically take place?
 - A. May 3 years before the delivery year
 - B. June 3 years before the delivery year
 - C. May 5 years before the delivery year
 - D. June 5 years before the delivery year
- 28. For how long is the monthly Financial Transmission Rights bid and offer period open?
 - A. One business day
 - B. Two business days
 - C. Three business days
 - D. Four business days



- 29. What time does the reliability run period typically end?
 - A. 10:30
 - B. 12:00
 - C. 16:00
 - D. 18:30
- 30. There is a must-offer requirement in which market?
 - A. Capacity
 - B. Regulation
 - C. Financial Transmission Rights
 - D. Auction Revenue Rights
- 31. Companies with transactions in both of which products may result in the forfeiture of payments under certain circumstances?
 - A. Day-ahead and balancing
 - B. Increment Offers and Financial Transmission Rights
 - C. Financial Transmission Rights and Capacity
 - D. Synchronized Reserves and Regulation
- 32. The regulation market is cleared based on
 - A. The amount of energy available above the current output
 - B. The energy the resource is willing to reduce uneconomically
 - C. Regulation offers and their penalty factors
 - D. Adjusted Regulation offers and their performance scores
- 33. Which of the following is found on the weekly PJM bill?
 - A. Regulation charges
 - B. Network Integration Transmission Service charges
 - C. Unscheduled Transmission Service charges
 - D. Reactive Services charges
- 34. The Tier 2 Reserve market is cleared based on
 - A. The reserve requirement that is not fulfilled by Tier 1 resources
 - B. The reserve requirement that was not fulfilled in Day-ahead
 - C. The amount of energy available above all resources' current output
 - D. The amount of offline MW's that can be online within 10 minutes
- 35. Which can be described as the sum of fuel costs, fuel related costs, emission allowance cost and maintenance cost?
 - A. The Heat Rate Cost
 - B. The Variable Operation and Maintenance Cost
 - C. The Total Fuel Related Cost
 - D. The Start-up Cost



- 36. The Installed Capacity of a unit is verified by the results of the
 - A. Summer Net Capability Test
 - B. Three Pivotal Supplier Test
 - C. Regulation A Test
 - D. Regulation D Test
- 37. The Financial Transmission Rights auction clearing is based on
 - A. The transmission capability of the PJM Control Area
 - B. Balancing the amount of bids and offers in the auction
 - C. The amount of capacity that cleared in the Base Residual Auction
 - D. Day-ahead versus Real-time generation and load
- 38. How are Regulation charges reconciled?
 - A. Based on the Three-Pivotal Supplier test
 - B. Based on the average load and allocated evenly
 - C. Based on the Load Ratio Share
 - D. Based on the bid in Day-ahead Load
- 39. Which resources have an obligation to submit an offer under certain emergency conditions?
 - A. Financial Transmission Rights
 - B. Tier 1 Synchronized Reserve
 - C. Tier 2 Synchronized Reserve
 - D. Regulation
- 40. During which emergency procedure may a resource be expected to raise its output and be bound to limited pre-determined parameters?
 - A. Voltage Reduction Action
 - B. Maximum Generation Emergency Action
 - C. Primary Reserve Warning
 - D. Unit Startup Notification Alert
- 41. How long before the operating hour are Regulation Market clearing results posted?
 - A. 5 minutes
 - B. 15 minutes
 - C. 20 minutes
 - D. 30 minutes
- 42. Which screen in Markets Gateway is used to update unit output information in real time?
 - A. Offer Updates
 - B. Detail Updates
 - C. Hourly Updates
 - D. Availability Updates