

Market Code Consultation WS 9

Capacity payments / market



NECOM
NATIONAL
ENERGY CRISIS
COMMITTEE

Ancillary Services categories

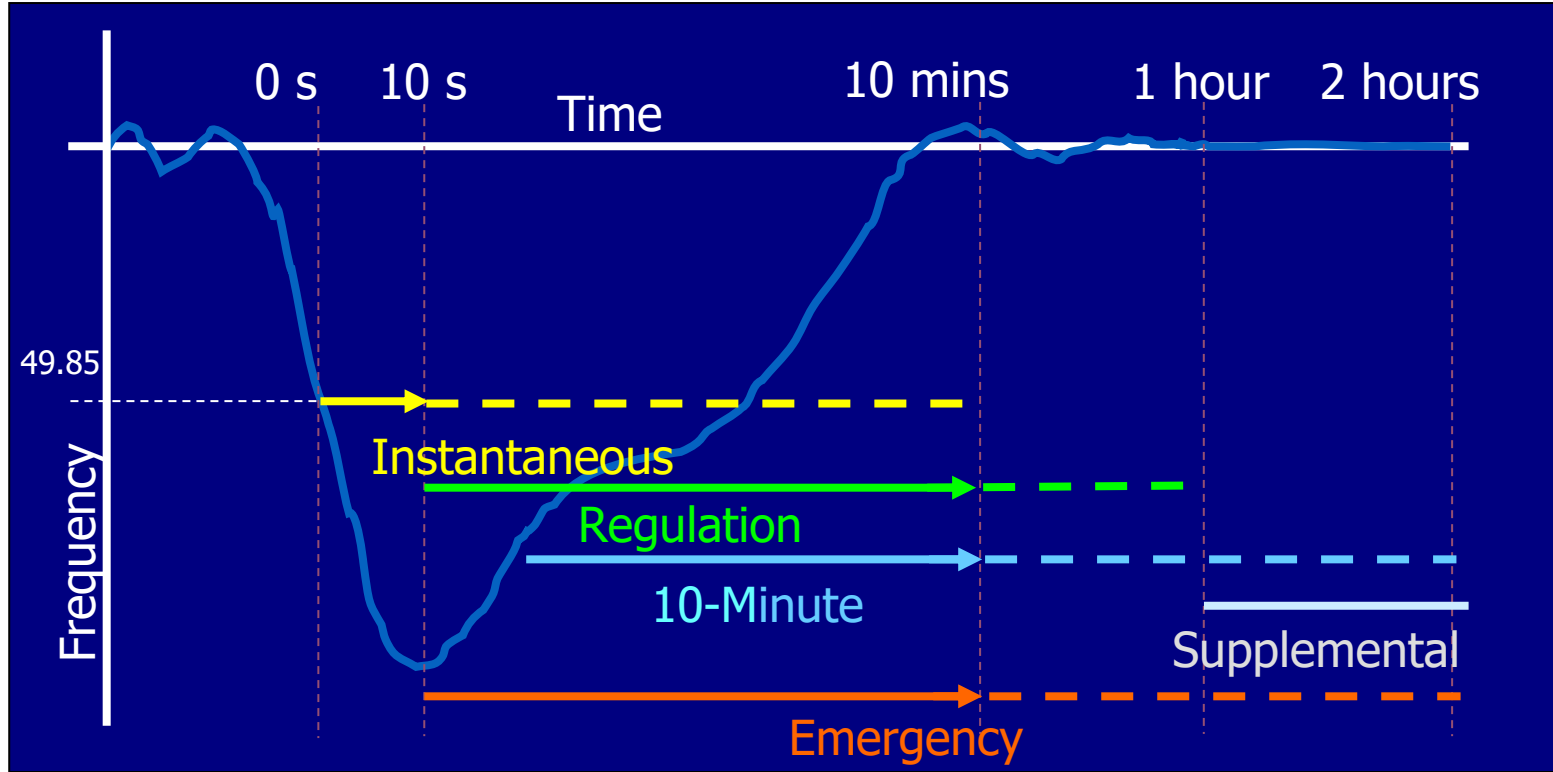
Medium/long term auction

- System restoration (black start and islanding)
- Reactive power
- Synchronous condenser operation
- Emergency reserves
- Supplemental reserves

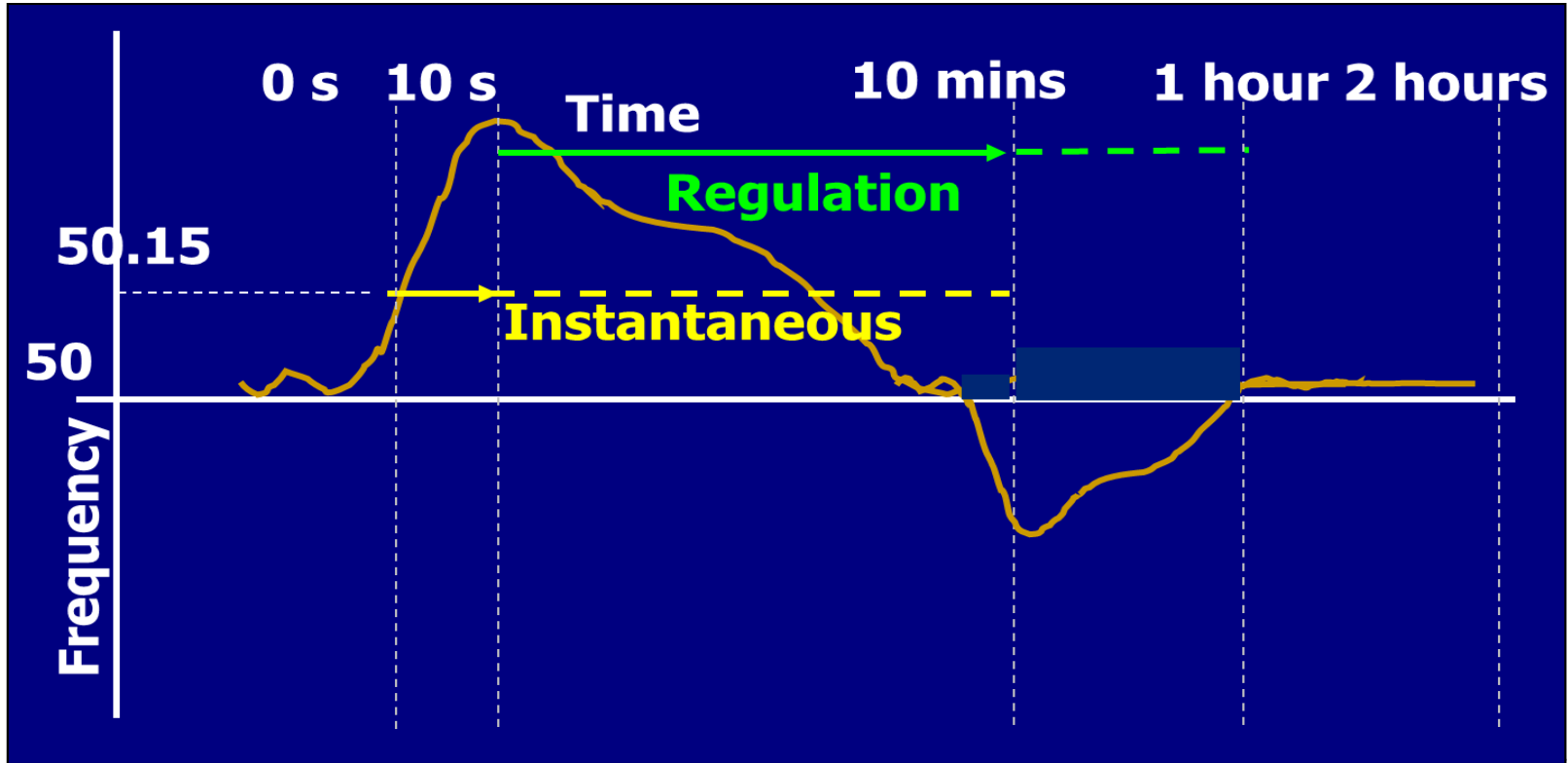
Dynamic market

- Constrained generation
- Regulating reserves
- Instantaneous reserves
- Ten-minute reserves

Ancillary Services – reserve categories



Ancillary Services – reserve categories

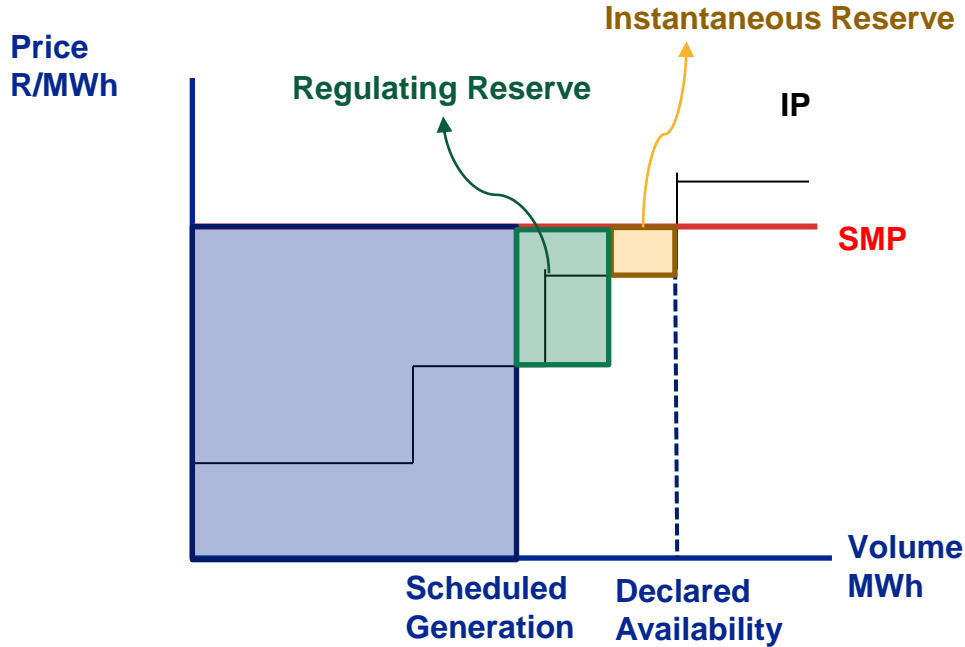


Scheduling of Reserves

- Co-optimisation with energy
 - Certified providers (generators and DR) bid into the day-ahead market
- Holding payment price (based on lost opportunity) set in the energy market (unconstrained schedule)
 - Possibility of including a minimum reserve price (to ensure sustained interest in the service when no lost opportunity experienced)



Reserve Capacity – Holding Payment (1)



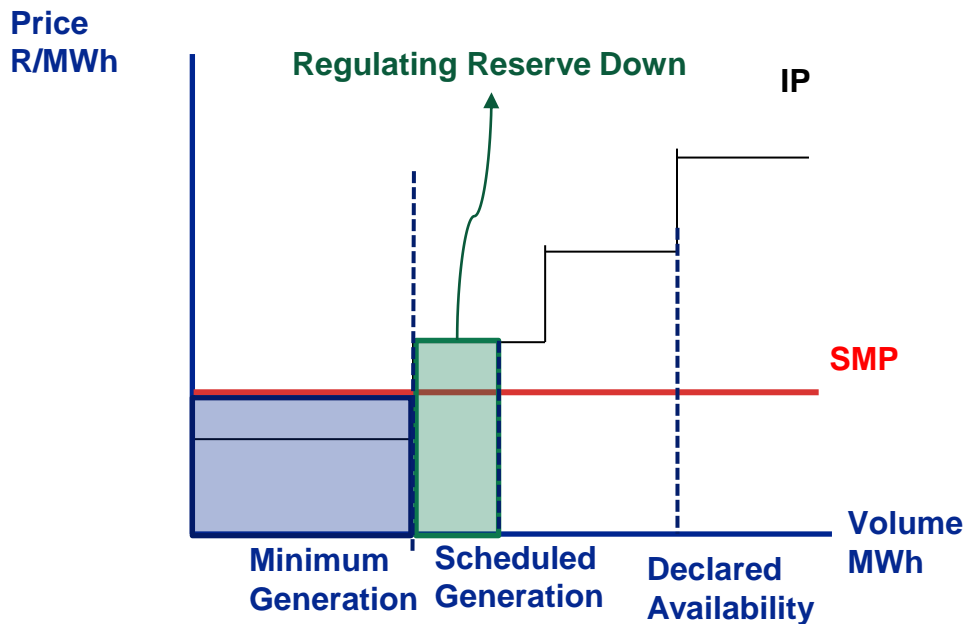
Reserve price set by highest **Cost of Lost Opportunity** in the reserve category in that hour

Payment reduced by real-time delivery considerations:

- Where effective/actual availability – actual production < scheduled reserves
- System Operator provides performance indicator for the Trading Unit in the month which could reduce the holding payment



Reserve Capacity - Holding Payment (2)



Reserve price set by highest **Cost Above Energy Market** in the downward reserve category in that hour. Importantly generators scheduled for Regulating Reserve Down cannot set SMP

- Payment reduced by real-time delivery considerations:
- Where effective/actual availability – actual production < scheduled reserves
 - System Operator provides performance indicator for the Trading Unit in the month which could reduce the holding payment