

# Tier 2 Compensation Refund

Tier 1 Compensation (MIC)

March 17, 2015

Ray Fernandez

Manager, Market Settlements Development

- If a resource fails to provide the assigned Tier 2 capability during an event, the resource incurs a retroactive obligation to refund the shortfall
- Compensation is **paid back** at the SRMCP times the MW shortfall for all assigned hours over the immediate past interval
- The immediate past interval is defined as the duration which is the lesser of:
  - the average number of days between events over the past two years in an annual review (currently 14 days)
  - the number of days since the resource last failed to respond to its assigned capability for an event
- Resource also incurs a “day of event” compensation refund equal to the lesser of the assignment or MW shortfall times the SRMCP for each hour the resource was assigned Tier 2 MW

Retroactive Refund = 25 MW x SRMCP for each hour unit was assigned back to 2/9



14 days retroactive

2/9

2/11

2/22

2/23

2/11 Spinning Event  
T2 Assignment and  
Response = 50 MW

Day of Event Refund = 25 MW x SRMCP  
for each hour unit was assigned Tier 2

2/23 Spinning Event  
T2 Assignment = 75 MW  
and Response = 50 MW

Resource  
has a 25 MW  
shortfall

Retroactive Refund = 25 MW x SRMCP for each hour unit was assigned back to 2/12



11 days retroactive to last shortfall

2/11 2/12

2/22 2/23

2/11 Spinning Event  
T2 Assignment = 65 MW  
and Response = 50 MW

Resource  
has a 15 MW  
shortfall

Day of Event Refund = 25 MW x SRMCP  
for each hour unit was assigned Tier 2

2/23 Spinning Event  
T2 Assignment = 75 MW  
and Response = 50 MW

Resource  
has a 25 MW  
shortfall

- Market participants with multiple resources can utilize aggregate response by over responders to offset under responders during an event
- Resource Retroactive Shortfall MWh = Resource Shortfall MWh – ((Resource Shortfall MWh / Participant’s Total Shortfall MWh) \* Participant’s Total Over Response MWh)

Participant Total Over Response = 20 MWh

Resource A T2 Shortfall = 25 MWh

Resource B T2 Shortfall = 10 MWh

Resource A Retroactive Shortfall = 25 MWh – ( ( 25 MWh / 35 MWh ) \* 20 MWh ) = 10.71 MWh

Resource B Retroactive Shortfall = 10 MWh – ( ( 10 MWh / 35 MWh ) \* 20 MWh ) = 4.29 MWh

Market Participant has 20 MW T2 over response for 2/23 event

Retroactive Refund = 5 MW x SRMCP for each hour unit was assigned back to 2/12



11 days retroactive to last shortfall

2/11    2/12

2/22    2/23

2/11 Spinning Event  
T2 Assignment = 65 MW  
and Response = 50 MW

Resource  
has a 15 MW  
shortfall

Day of Event Refund = 25 MW x SRMCP  
for each hour unit was assigned Tier 2

2/23 Spinning Event  
T2 Assignment = 75 MW  
and Response = 50 MW

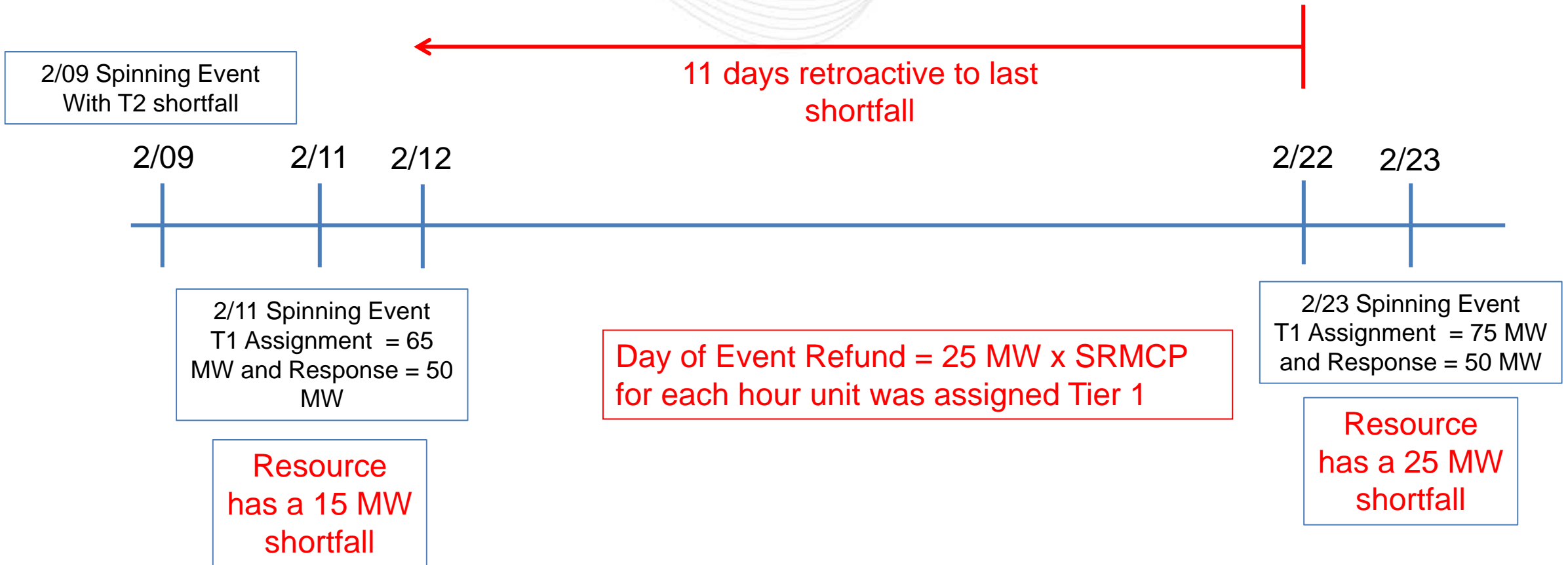
Resource  
has a 25 MW  
shortfall

1. Combine Tier 1 obligation with Tier 2
  - Immediate past interval is the lesser of:
    - 14 days retroactive
    - the number of days since the resource last failed to respond to its assigned Tier 1 capability for an event
    - the number of days since the resource last failed to respond to its assigned Tier 2 capability for an event
  - Aggregate a market participant's Tier 1 and Tier 2 over response for resources with an obligation to offset any under response

2. Treat Tier 1 and Tier 2 obligations separately
  - Status quo for immediate past interval with Tier 1 and Tier 2 determined independently
  - Aggregate over response calculated separately for Tier 1 and Tier 2 resources with an obligation



Retroactive Refund = 25 MW x SRMCP for each hour unit was assigned T1 and T2 back to 2/12



Retroactive Refund = 25 MW x SRMCP for each hour unit was assigned T1 back to 2/12

← 11 days retroactive to last shortfall

