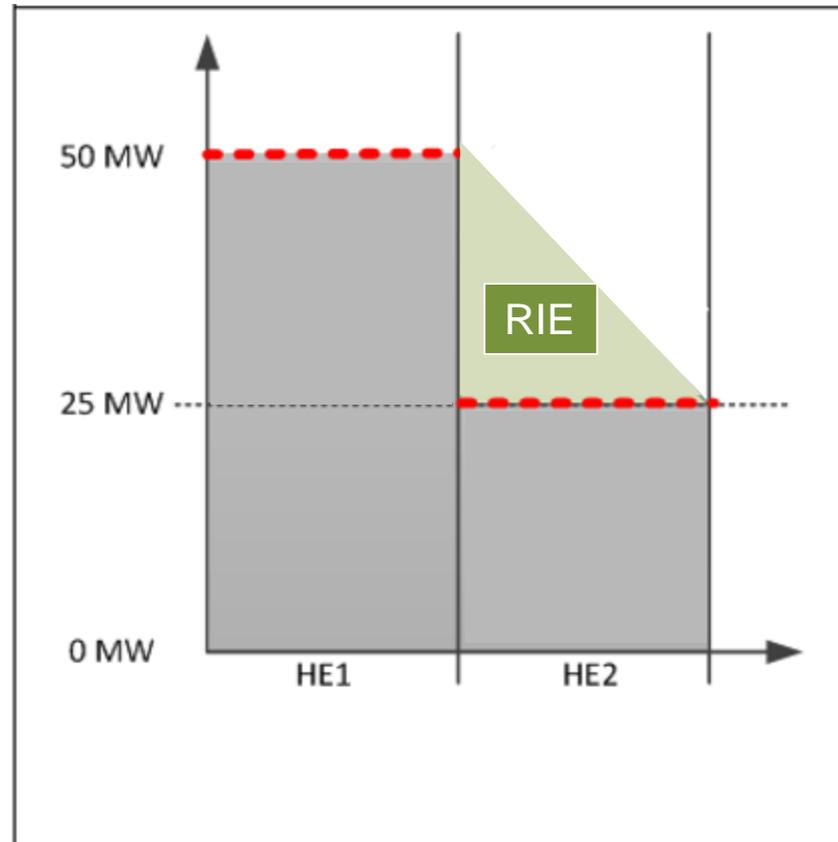




# Residual Imbalance Energy Changes Fall 2016 Release Training

RIE is the “left over” energy after forecast or dispatch changes



This example is after the end of a trading hour. RIE can also occur leading up to a trading hour.

# Why the change?

## Problem

Current residual imbalance energy (RIE) provisions do not appropriately treat situations in which a variable energy resource (VER) is ramping due to a change in its forecasted energy output versus situations in which a VER is dispatched based on its bid.

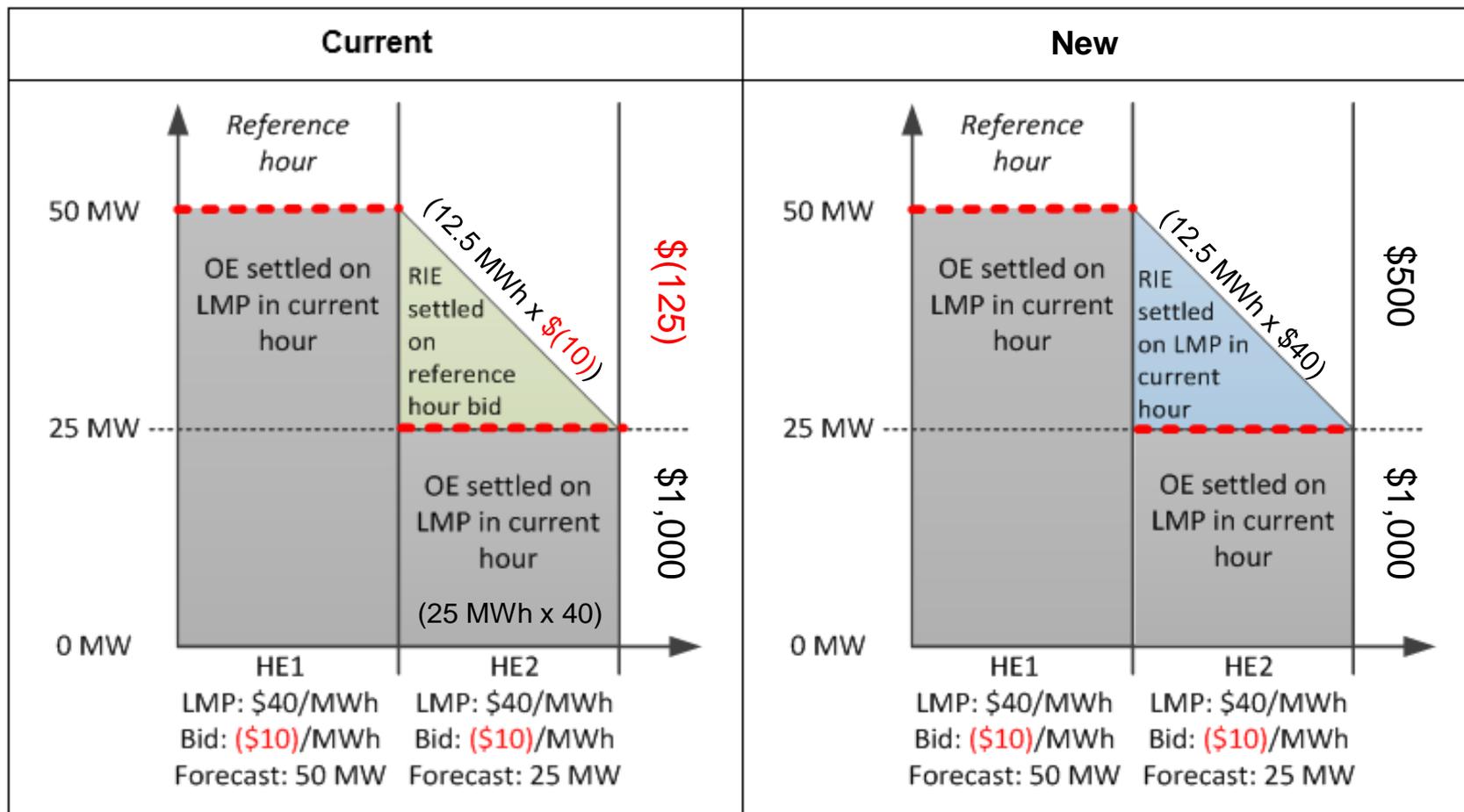
## Solution

VER settlement will distinguish between

- the RIE above the forecast and;
- the RIE within the forecast

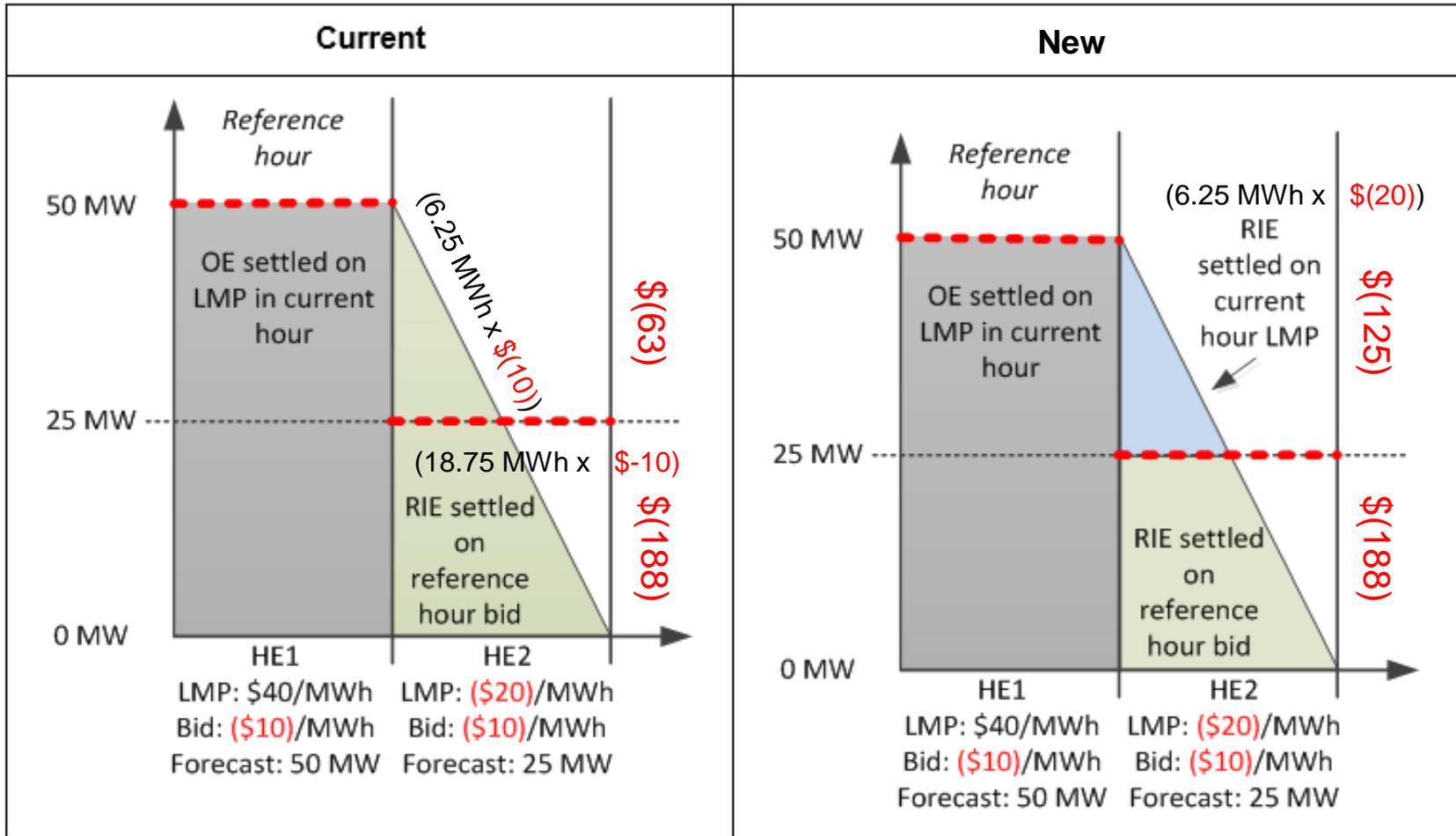
# Comparison example with no LMP change

## Forecast decrease – No LMP change



# Comparison example with LMP change

## Forecast decrease – LMP less than bid



# New expected energy type “FCS”

- FCS = Forecast
- Represents capacity above the forecast

California ISO Customer Market Results Interface

Day-Ahead Real-Time Post-Market Default Bids Convergence Bidding Load Forecast Reference LSE Energy Imbalance Market

Trade Date: 04/06/2016 SC: [ALL] Resource: Market Service Type: [ALL] Apply Reset  
Hour: [ALL] Interval: [ALL] Energy Bid Type: Final

### Expected Energy Allocation Details

Trade Date	SC ID	Resource	Configuration Hour Ending	Interval	Market Service Type	Energy Type	Real-Time Market Type	Bid Price [\$]	Expected Energy [MWH]	OeOverlapMss [Yes/No]	Energy Bid Type
No Data found											

Report Generated: 04/06/2016 16:04:59