EIM CONGESTION RENT

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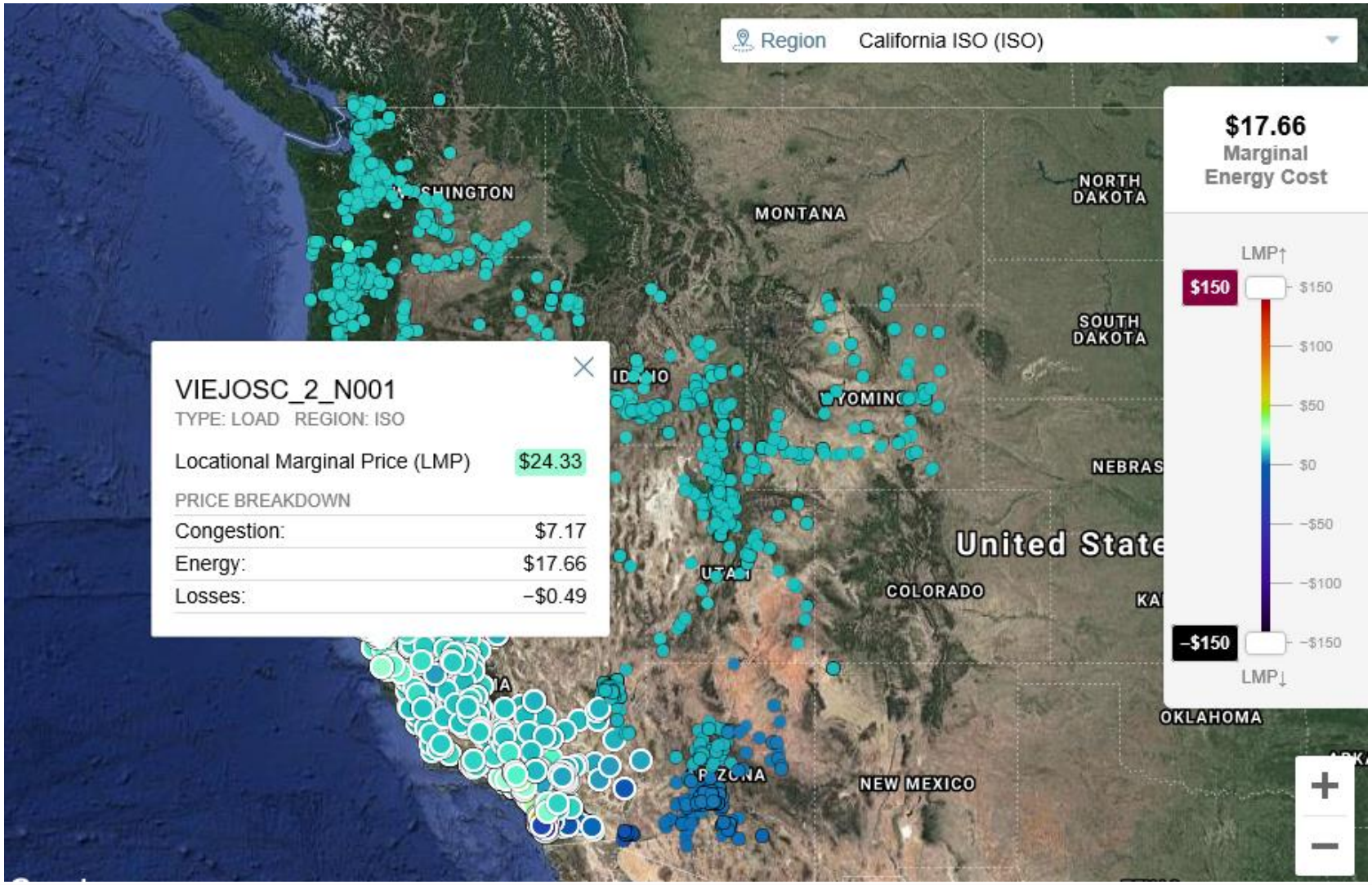
PACIFICORP

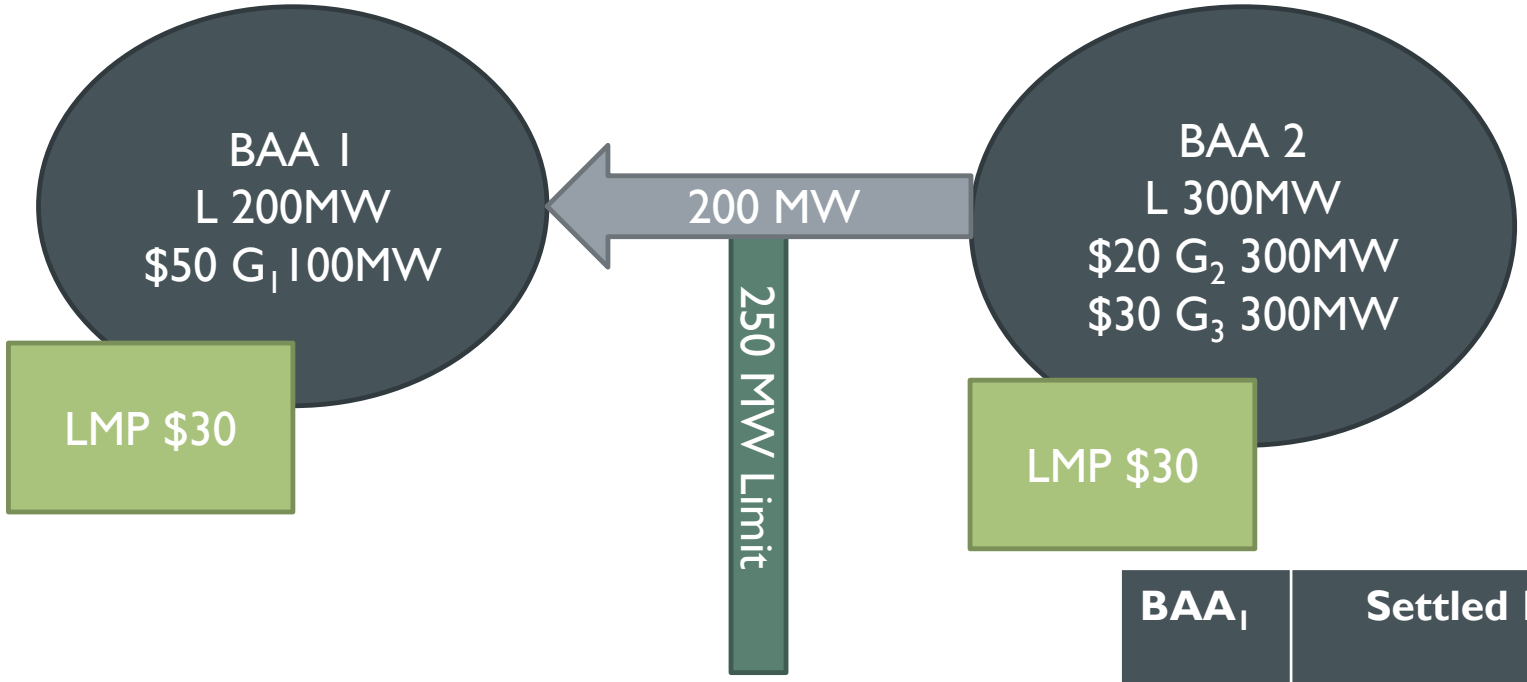
POWERING YOUR GREATNESS

MARGINAL COST OF CONGESTION (MCC)



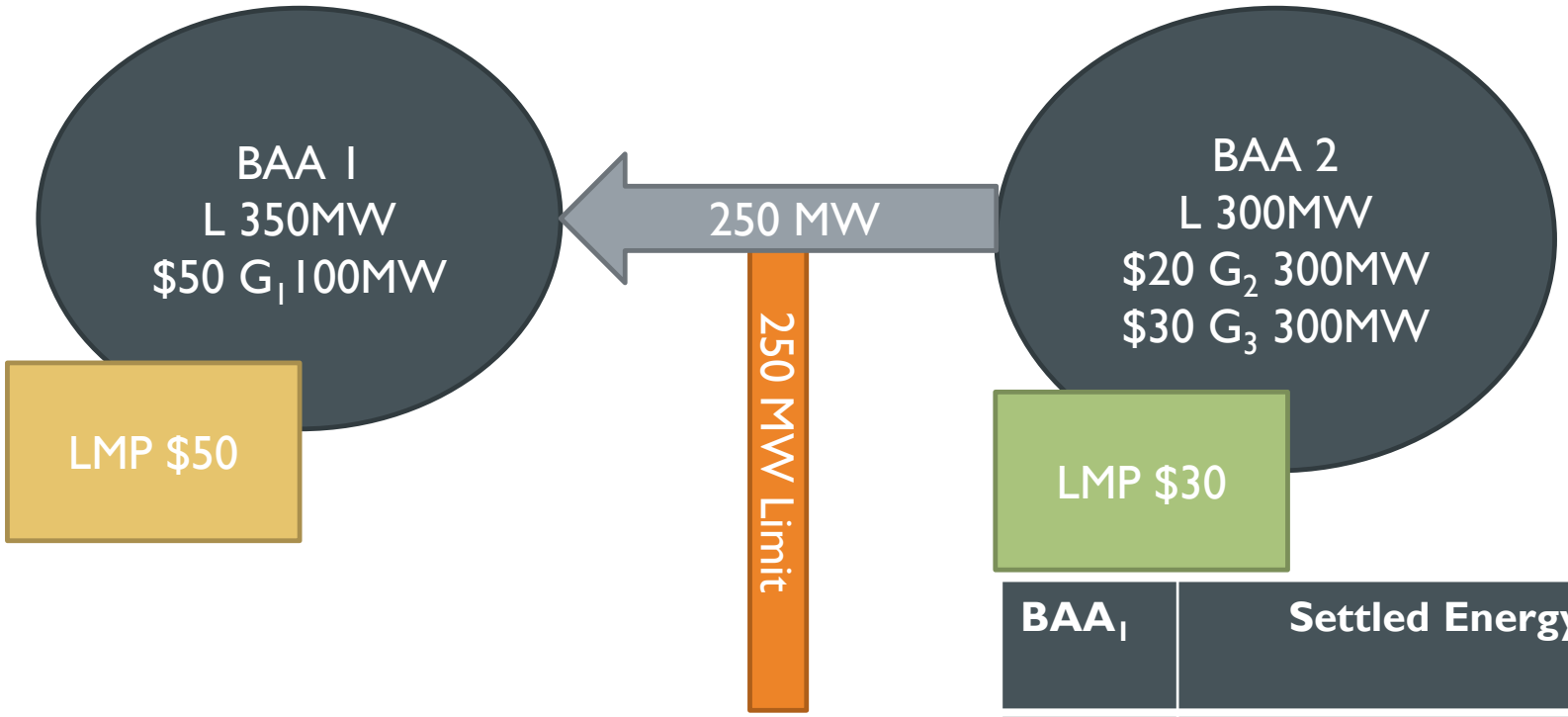
- **Definition of MCC:** A component of the LMP at the Pnode that accounts for congestion[1]
- EIM Transfer Congestion is reflected in the MCC of the LMP to account for allocation of revenues at the interties.[1]

EXAMPLE WITHOUT CONGESTION



BAA_1	Settled Energy	BAA_2	Settled Energy
L_1	200MW* $30= $6,000	L_2	300MW *$30= $9,000
G_1	0MW * $30= $0	G_2	300MW *$30= ($9,000)
		G_3	200MW *$30= ($6,000)

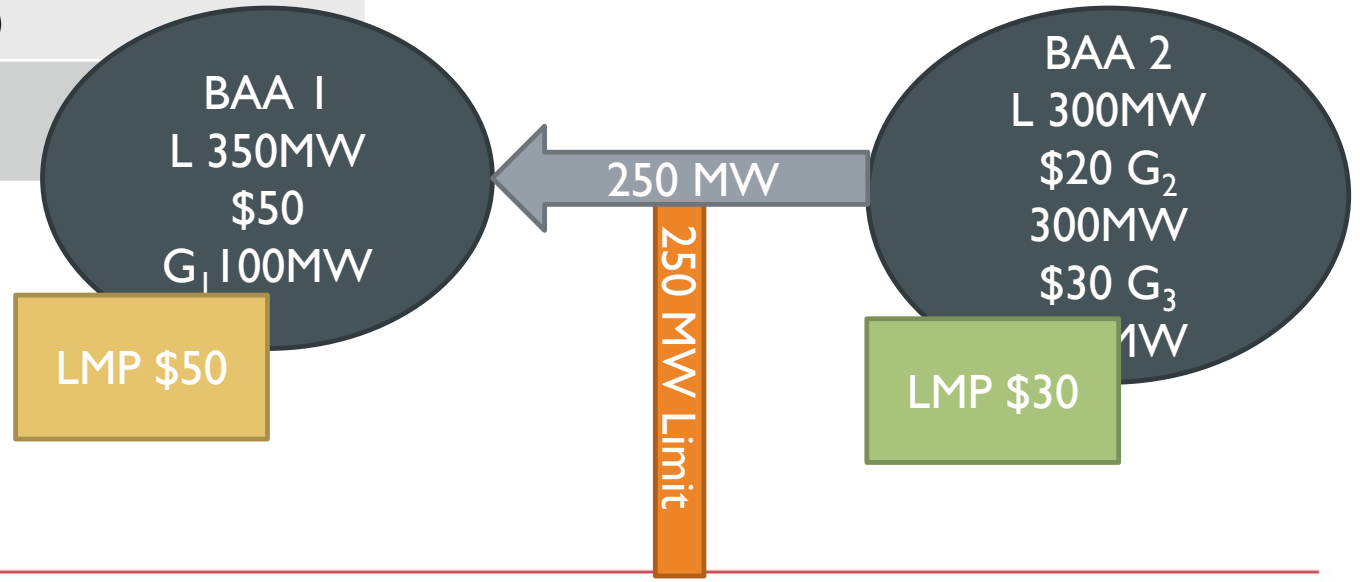
EXAMPLE WITH CONGESTION



BAA_1	Settled Energy	BAA_2	Settled Energy
L_1	350MW* $50= $17,500	L_2	300MW *$30= $9,000
G_1	100MW * $50= ($5,000)	G_2	300MW *$30= ($9,000)
		G_3	250MW *$30= ($7,500)

CONGESTION REVENUE

BAA_1	Settled Energy	BAA_2	Settled Energy
L_1	350MW * $50= $17,500	L_2	300MW * $30= $9,000
G_1	100MW * $50= ($5,000)	G_2	300MW * $30= ($9,000)
		G_3	250MW * $30= ($7,500)
BAA_{TOTAL}	$12,500	BAA_{TOTAL}	($7,500)
Congestion Rev.	$12,500-$7,500 = **$5,000**		



CURRENT EIM CONGESTION ALLOCATION

- Congestion Revenue flows to a neutrality account called Real-Time Congestion Offset
- Congestion that occurs within a BAA is allocated to the EIM Entity of that BAA
- Congestion that occurs between EIM Entities is typically split 50/50; However, there are exceptions.
- Congestion Revenue is collected on all constraints:
  - Intertie Scheduling Limit
  - EIM Transfer Limit
  - Rate of Change Constraints

CURRENT EIM CONGESTION ALLOCATION

- **External Interties:** Interface between an EIM Entity and a Non-EIM Entity[2]
  - A Non-EIM Entity can enforce limits on the incremental rate of change between FMM and RTD or EIM flow limits
  - 100% of the congestion rent is applied to the EIM Entity that is interconnected
- **Internal Interties:** Interface between two EIM Entities or wheeling through a non-EIM Entity[2]
  - Interchange Scheduling Limit (ISL) is equal to or less than the EIM Transfer Limit, then the congestion rent is split 50/50
  - ISL is greater than the total EIM Transfer Limit
    - Congestion caused by the EIM Transfer Limit will be allocated 100% to the EIM Entity that provided the transmission to the Intertie Scheduling Point
    - Congestion caused by the ISL will be allocated 100% to the EIM Entity managing the Intertie Scheduling Point
- **Additional Exceptions:**
  - 100% of the Congestion Revenue is allocated to the EIM Entity that is constrained due to a Down Flexible Ramp Sufficiency Test Failure, Contingency Event, or an Isolated BAA Event[2]

REFERENCES

- 1. CAISO. November 20, 2019. "Business Practice Manual For the Energy Imbalance Market". https://bpmcm.caiso.com/BPM%20Document%20Library/Energy%20Imbalance%20Market/BPM_for_Energy%20I_mbalance%20Market_V18_clean.docx
- 2. CAISO. September 8, 2015. "Energy Imbalance Market Year 1 Enhancements Phase 2: Draft Final Proposal". http://www.caiso.com/Documents/DraftFinalProposal_EnergyImbalanceMarketYear1Enhancements_Phase2.pdf.