



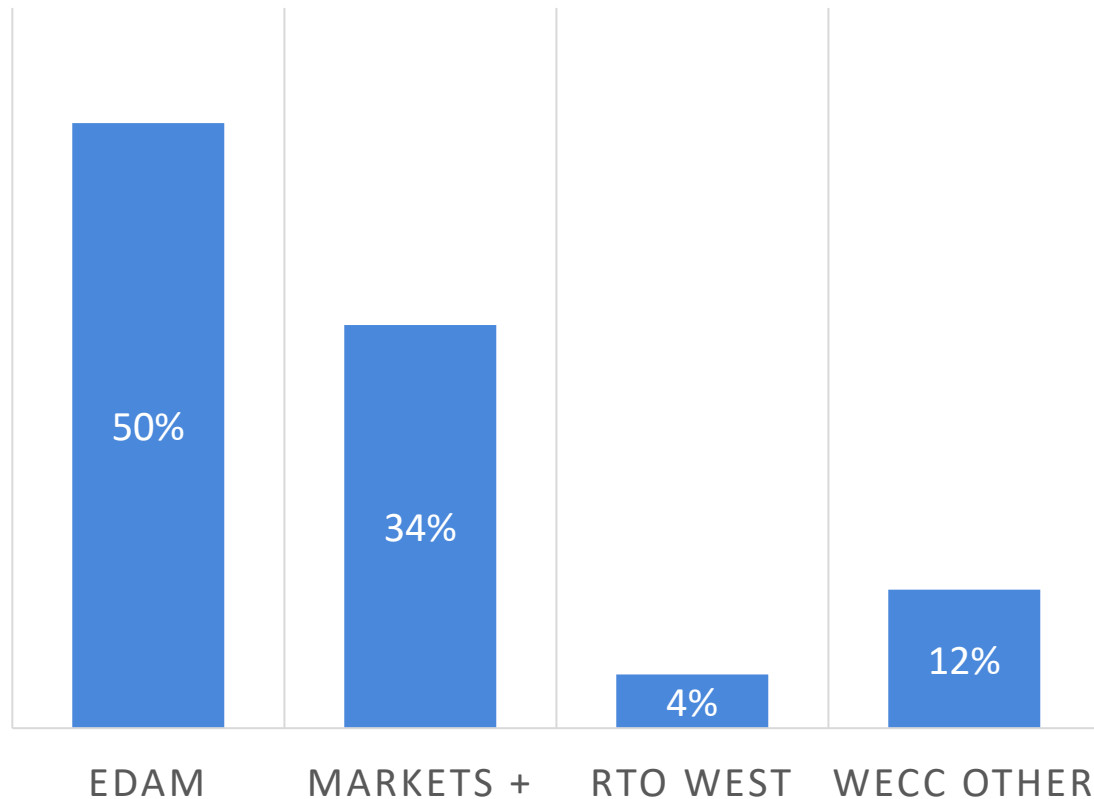
Western Market Integration Update WPTF NYC Roundtable

Carrie Bentley – Gridwell Consulting
CBentley@gridwell.com
916.306.0754

May 29, 2025

Impacts of Western Market Evolution

MARKET LOAD SHARE (2023 ANNUAL DEMAND)



- Western utilities are aligning based on policy mandates, governance comfort, and system familiarity
- These decisions split the regional footprint and introduce seams, especially across critical trading corridors
- Market share based on initial leanings indicates a highly fragmented market is likely



Emerging Themes Through 2030

- Market integration over the next 5 years will significantly impact commercial activities in the west
- Key themes that will structurally change trader risk and opportunities in energy and RA markets

Market Integration vs. Fragmentation

Seams Management and Interoperability

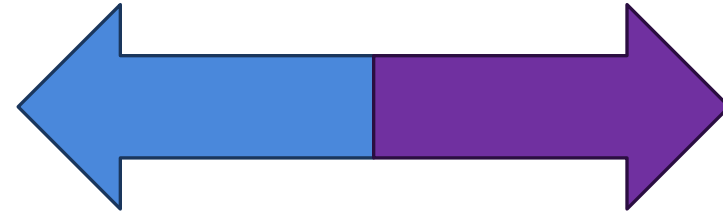
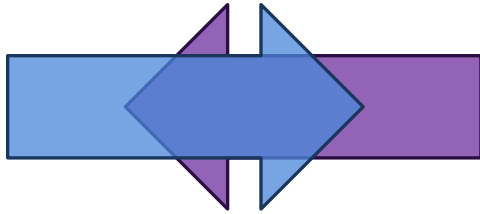
Evolution of Trading & Hedging Strategies

Resource Adequacy as a Regional Challenge



Market Integration vs. Fragmentation

- Convergence or coexistence?



- If one platform clearly outperforms the other, a convergence could occur, otherwise, expect ongoing parallel markets with incremental efforts to improve their interoperability
- Market fragmentation is the biggest structural risk for traders
 - For traders, the question is whether this split is temporary or permanent
 - One market would simplify trading, while dual markets could spur ongoing arbitrage opportunities but also redundant compliance and complexity
 - Theme will shape everything from trading volumes to regulatory risk in the West



Seams Management and Interoperability

- Each “seam” brings potential inefficiencies, price discrepancies, and rule conflicts
 - EDAM and Markets+ won’t natively optimize across each other’s footprint, any transaction that crosses from an EDAM BAA to a Markets+ BAA must fall back to bilateral scheduling (E-Tags) and wheeling through the seam
- These seams can limit liquidity and trading across regions
 - Expect basis price differentials to emerge at EDAM vs. Markets+ interface points
 - Congestion and tagging requirements at the seam raise transaction costs, which may discourage some deals or spawn new hedging instruments to manage the gap
- Seams mitigation efforts may ease these frictions
 - Interface pricing agreements, protocol standardization
 - Still, in near term, expect to navigate different market rules, separate congestion management systems, dual settlement processes



Evolution of Trading & Hedging Strategies

Liquidity boom and bust - centralized DA markets will increase volumes, introduce price signals and transparency

Financial products such as LMP-based swaps and futures may emerge

Congestion risks will increase and participants will need to rely on CRRs (in EDAM, if implemented) or FTRs (in Markets+)

Full hedging across seams may not be feasible, driving within-footprint trading or premiums to cross regulatory borders

Bilateral contracts may reference LMPs and inter-SC trades may grow in importance

Strategic transmission ownership increasingly a competitive advantage



Resource Adequacy as a Regional Challenge

- No unified RA obligation across EDAM or Markets+
 - WRAP aims to pool RA regionally, outside full RTO governance
 - CPUC RA, WRAP, and potential SPP RA programs coexist
 - RA contracts must prove delivery across footprints—using tags, pseudo-ties
- Over time, regional coordination may improve
 - If WRAP and similar efforts succeed, we could see a more unified Western RA market
 - Until frameworks harmonize, traders dealing in RA must navigate disparate crediting rules and craft contracts carefully
- The region's ability to maintain reliability at least cost will hinge on ironing out these RA “seams” without a single authority



What to Watch Going Forward

✓ Market Footprint Changes

- Who else joins EDAM or Markets+? Any momentum toward combining? Any major addition or defection could shift liquidity

✓ Performance Metrics

- Are markets delivering lower costs and more reliability ? Are trading volumes hitting the projected increases? Are prices between regions converging or do large basis spreads persist at seams, indicating friction? How are congestion costs and FTR/CRR auction outcomes
- For RA, does the West get through peak periods without capacity shortfalls? Also watch RA prices – If there's a tightening in one area, are bilateral RA contract prices spiking across the region?

✓ Regulatory/Policy Shifts

- Any hint of a broader Western RTO or federal intervention to push consolidation would be a game-changer. California might revisit joining an RTO fully or FERC could nudge toward greater inter-market coordination if they see inefficiencies
- On the RA front, we might see WRAP evolve or even mandatory RA standards if things get shaky

➤ **Bottom line: Stay Agile and Informed**

