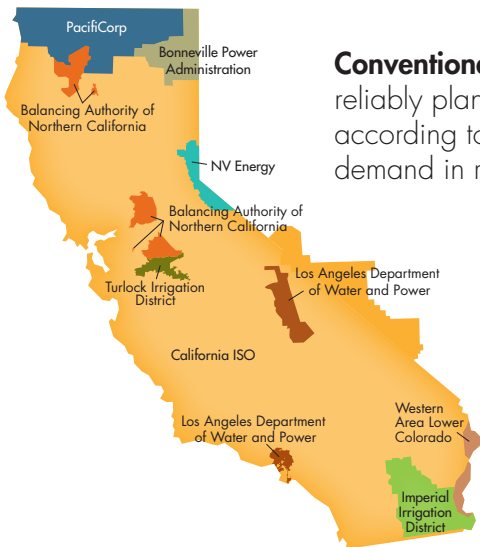


Comparison Matrix

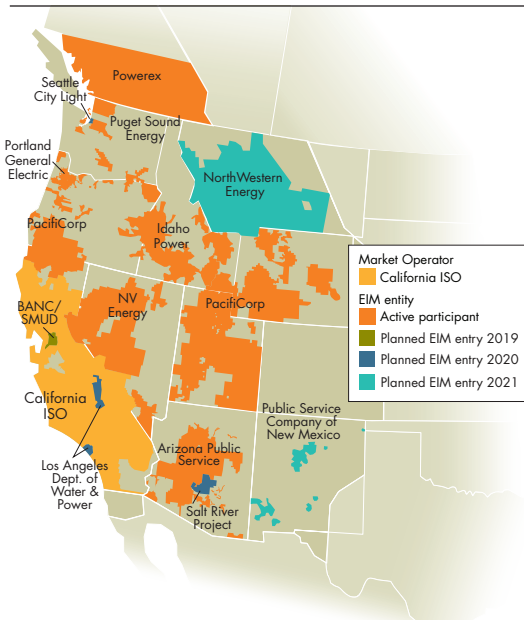
Below you will find a matrix comparing the responsibilities of a conventional balancing authority (BA), an independent system operator balancing authority (ISO or RISO BA), and a market operator of an energy imbalance market (Western

EIM market operator). Learn about the functions that each type of entity performs, and witness the increase in transparency, reliability, and efficiency that comes from a regional market administered by an independent entity.



Conventional balancing authority (BA): an entity responsible for reliably planning and operating an area of the high voltage grid according to federal standards. All BAs balance supply with demand in real time.

Independent system operator balancing authority (ISO BA): performs the same responsibilities as a conventional BA, but dispatches lowest-cost supply and procures ancillary services both the day before flow and in real time, using a market and advanced technology to optimize the grid every five minutes. An ISO also conducts holistic, transparent, long-term infrastructure planning.



Western Energy Imbalance Market: a real-time electricity market serving separate BAs participating in the EIM. Participating entities can buy or sell the last few megawatts needed to satisfy demand just before the energy must flow. The California ISO operates the only EIM in the western United States.



Regional ISO BA: expands the responsibilities of an ISO balancing authority to a broader region that typically includes multiple states and jurisdictions. If expanded, the California ISO Balancing Authority would centrally dispatch lowest-cost generation and procure ancillary services both the day before flow and in real time, using a market and advanced technology to optimize the expanded grid every five minutes. A regional ISO would also conduct holistic, transparent, long-term infrastructure planning for the expanded area.

Comparison Matrix

	Conventional balancing authority	ISO balancing authority	Western Energy Imbalance Market	Regional ISO balancing authority
Complies w/national reliability standards	X	X	X	X
5-minute real-time optimized market		X	X	X
24-hour day-ahead optimized market		X		X
Fully resourced to meet demand	X	X	X	X
Centralized competitive energy market		X	X	X
Centralized competitive reserves market		X		X
Optimizes geographic diversity of resources			X	X
Lower costs from load and geographic diversity				X
Independent entity provides open access to transmission system		X		X
Efficient access to lower cost resources		X	X	X
Adheres to state policy mandates	X	X	X	X
Integrated transmission planning by independent entity		X		X
Competitive solicitation for transmission development		X		X
Transparent stakeholder process		X	X	X
Greater transparency in generation data (including GHG emissions)		X	X	X
Independent market monitoring		X	X	X