Committee on Energy Choice Technical Working Group on Open Energy Market Design & Policy

Steve Berberich, President and CEO

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Market operators are essential elements of an open, competitive market

- Serves as a platform for buying and selling power
- Supports a day-ahead market for optimized procurement of energy and ancillary services
- Supports a real-time market for spot market transactions
- Procures essential reliability services for the systems

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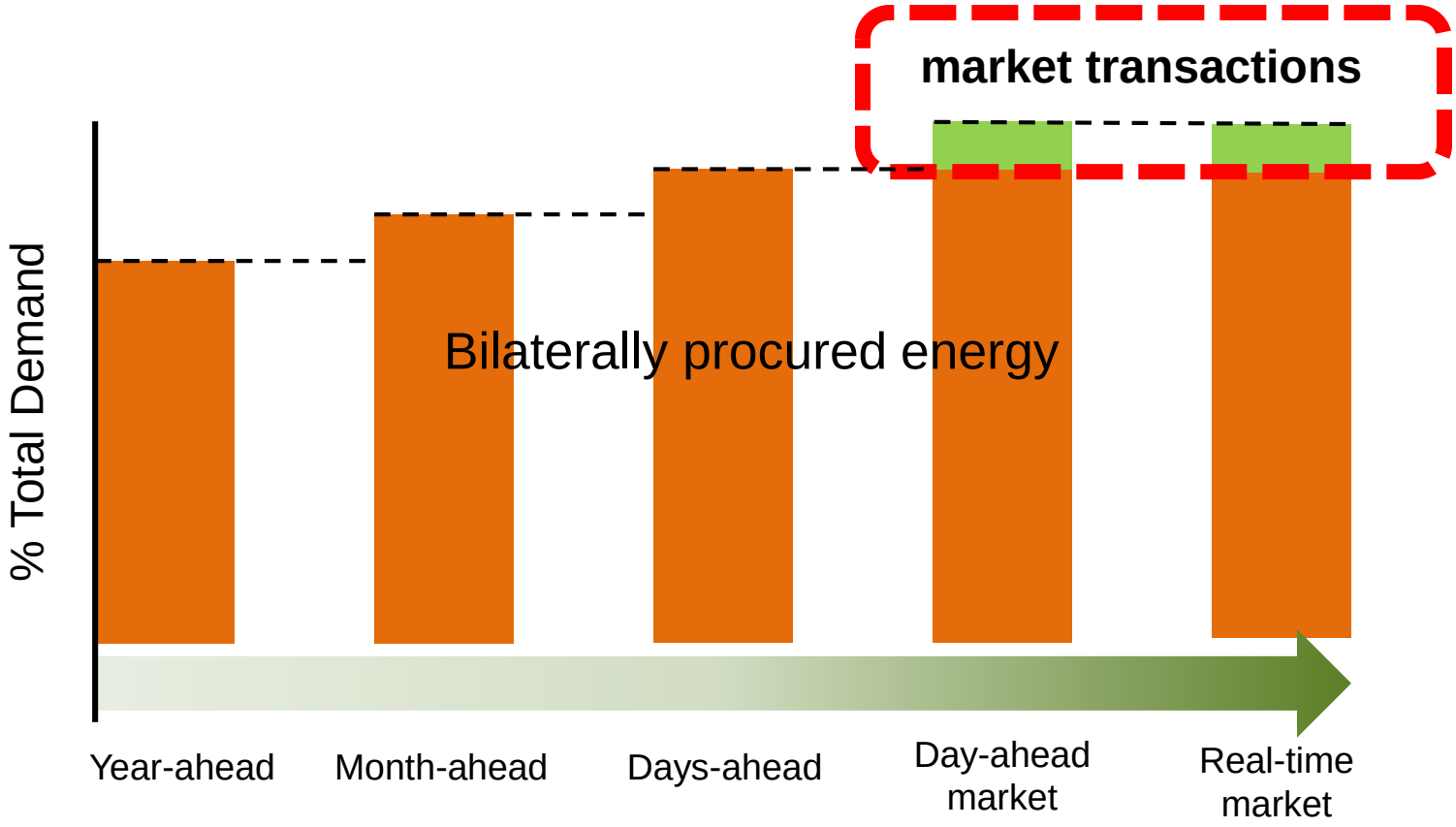
Demand is often met in advance of the market through utility-owned or bilaterally procured resources



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Responsibilities of a vertically integrated utility shift when creating a market operator

Market Operator	Utility
• Balancing Authority Area responsibilities • Transmission-level generation interconnections • Generation Dispatch • Transmission Planning • Transmission access service	• Transmission ownership and maintenance • Distribution system operations • Distribution level generation interconnections • Distribution planning & service to customers • Load interconnection • Load metering

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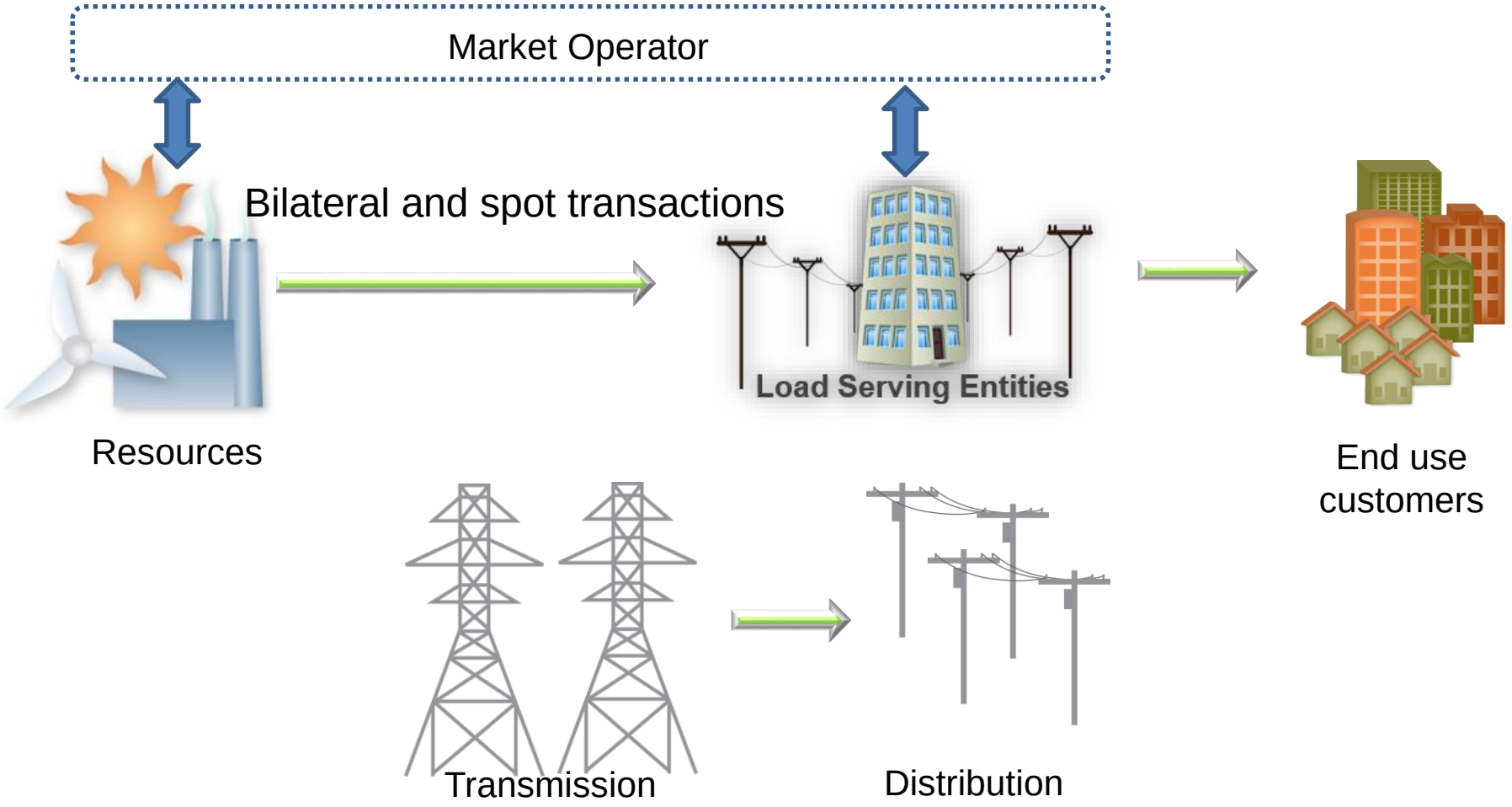
Typical competitive market model



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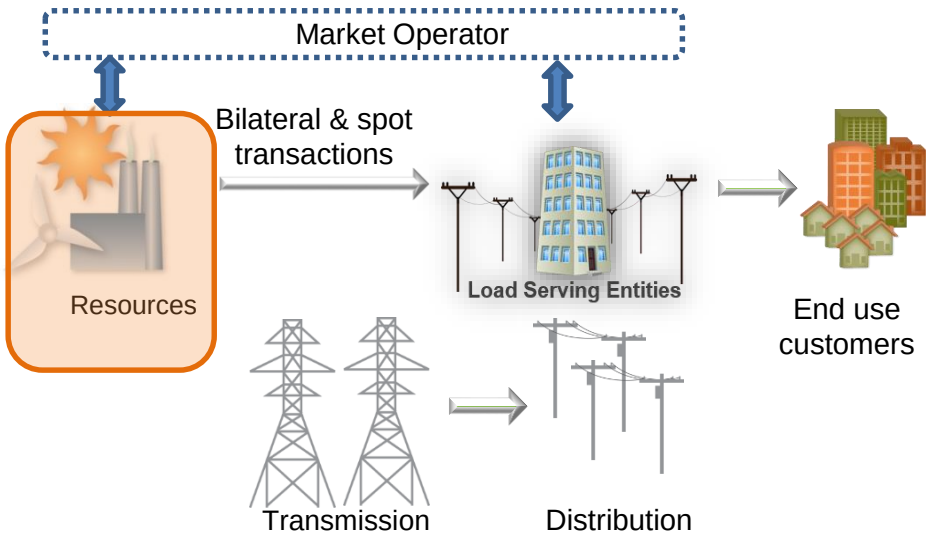
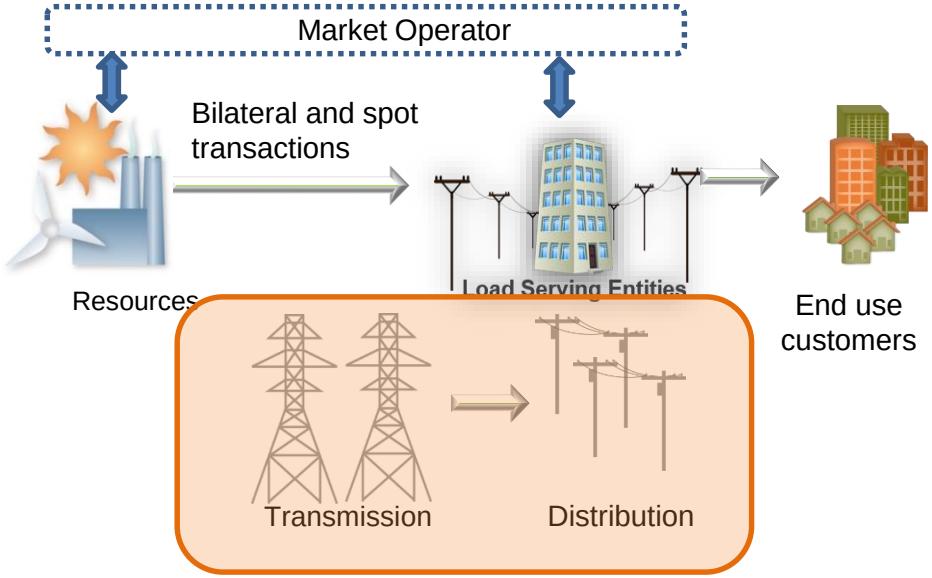
Competition needs to be created among generating resources but decisions need to be made

- Book value of generation is far more than the market
- PPAs are long-term contractual obligations of NV Energy
- Stranded asset treatment is the biggest policy issue in this area



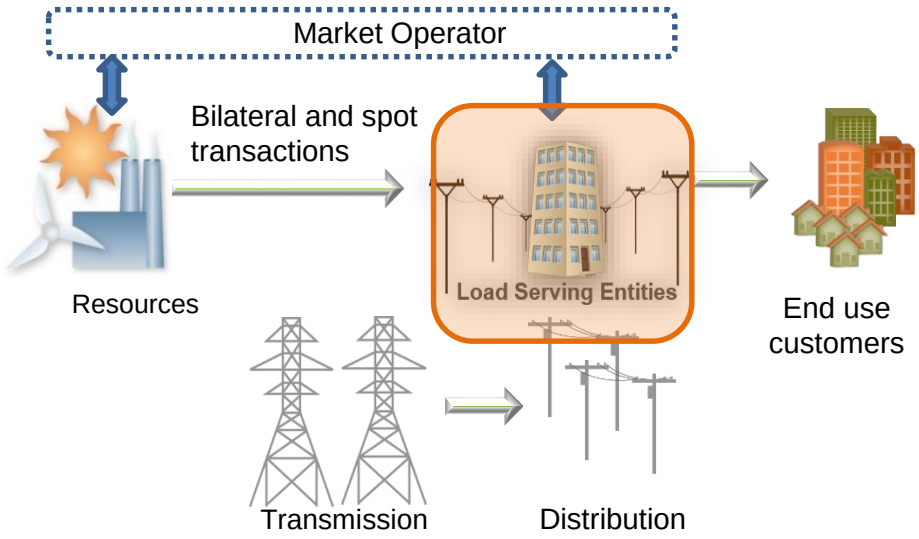
Transmission and Distribution are assumed to remain monopoly, regulated elements of the system

- Commission would maintain regulatory jurisdiction over this element
- Assumed to be new role of NV Energy



Load serving entities will be the primary procurer of power and will interface with end-use customers

- Load serving entities (or similar names) are key players in an open market
- Access to a market is essential
- Switching from LSE to LSE will need to be centrally managed
- Meter reads will need to be handed from the distribution operator to the LSE
- Possible to have the incumbent bill on behalf of the LSE



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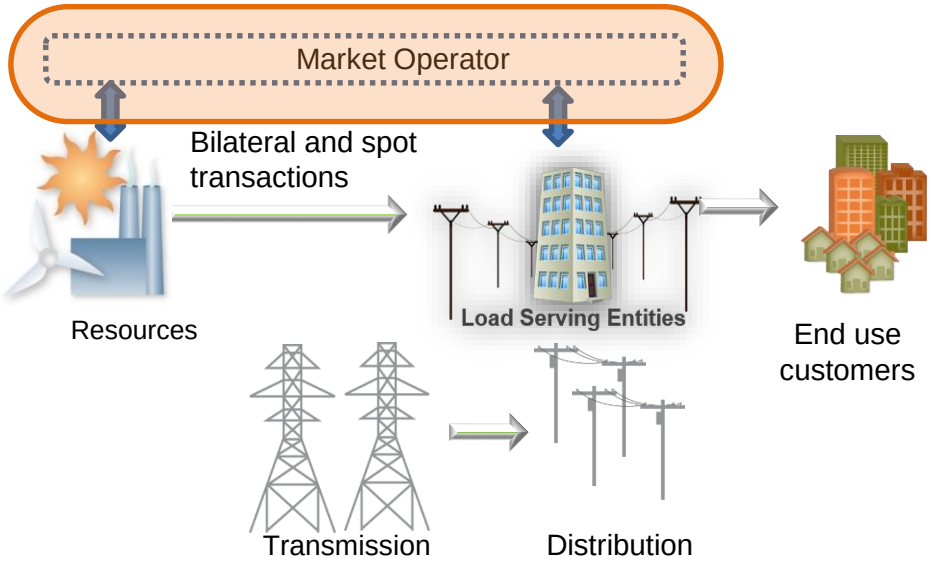
A market operator is required to provide an independent platform for trading

- Creating a new ISO could cost upward to $500 million
  - CA ISO's nodal market went live in 2009 at $200 million
  - Texas' nodal market cost $600 million.
- Technology and software investment is immense
- Market rules are complicated and likely will take 2 – 3 years to develop and be approved
- Capacity markets, if pursued, add even more complexity
- Will be FERC jurisdictional



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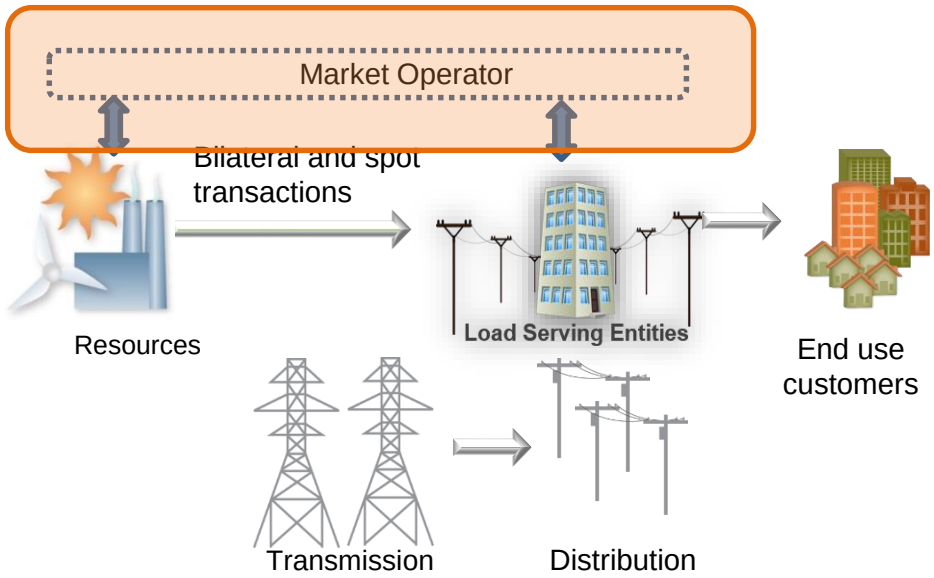
Leveraging an existing market will dramatically shorten the timeframe, cost and effort of establishing a market operator

- The California ISO has a mature, well-functioning market
- There is immense transfer capability between California and Nevada
- Nevada would retain it prerogative over resource mix
- Existing governance is a challenge



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