Load Serving Entities

WHAT COULD TRANSITION TOWARD A LOAD SERVING ENTITY MODEL MEAN FOR ONTARIO?

PRESENTED TO
Electricity Marketplace of the Future
IESO Stakeholder Summit

PRESENTED BY
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Questions

What is an LSE?

What benefits can different LSE models unlock?

What are the key takeaways for Ontario?
Simple Answer:

Load Serving Entity (LSE) = the entity that is assigned wholesale electricity system costs and sends out customer bills
What is an LSE?

Full Answer:

LSEs take a wide variety of business models and customer relationships. Examples:

- Pass-Through Billing
- Default Service Provider
- Vertically Integrated Utility
- Competitive Retailer
- Community Choice Aggregator
### What Benefits Can LSEs Unlock?

<table>
<thead>
<tr>
<th>Potential benefits....</th>
<th>Pass-Through Billing</th>
<th>Default Service Provider</th>
<th>Vertically Integrated Utility</th>
<th>Competitive Retailer</th>
<th>Community Choice Aggregator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedging</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Green Power</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Competitive Investments</td>
<td>Yes</td>
<td>Yes</td>
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<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Enabling DERs</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Value-Add Services</td>
<td></td>
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<td>Yes</td>
<td>Yes</td>
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<td>Customer Preferences</td>
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<td>Yes</td>
<td>Yes</td>
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</tbody>
</table>

- **= Yes**
- **= Maybe (depending on implementation)**
Takeaways for Ontario

- **A Wide Variety of Business Models** can be enabled
- **Putting the Customer First** means enabling them to express their preferences (e.g. green, hedging, who sends the bill)
- **Align with Market Renewal** to achieve full competitive benefits (e.g. move from planning & contracts toward market-based investments)
- **Align Retail Rates** with market value and T&D costs (to maximize efficiency and avoid cross subsidies)
- **Enable DERs and Disruption** including startups, retailers, and tech that can offer customers something new and different
Dr. Kathleen Spees is a Principal at The Brattle Group with expertise in wholesale electricity and environmental policy design and analysis. Her work for market operators, regulators, regulated utilities, and market participants focuses on: energy, capacity, and ancillary service market design; the design of carbon and environmental policies; valuation of traditional and emerging technology assets; and strategic planning in the face of industry disruption. Dr. Spees has worked in more than a dozen international jurisdictions supporting the design and enhancement of environmental policies and wholesale power markets in decarbonizing electricity systems. Dr. Spees has supported the IESO since 2014 in a number of market design efforts and modeling analyses of the Ontario electricity system. Dr. Spees earned her PhD in Engineering and Public Policy within the Carnegie Mellon Electricity Industry Center in 2008 and her MS in Electrical and Computer Engineering from Carnegie Mellon University in 2007. She earned her BS in Physics and Mechanical Engineering from Iowa State University in 2005.
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