

Transactive **Energy** Rate Recovery

an equitable approach to recover cost

by
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AGENDA

1. The Energy Rate Recovery Paradigm
2. The **Transactive Energy** Paradigm-shift
3. The **TE** Architectural Representation
4. Discussion on the Benefits
5. Open it up for Q&A

The *Energy* Rate Recovery Paradigm

Industry Norms

- The intent of pricing electricity is to recover *all* costs associated with providing *reliable* service; from a *long-run* vantage point.

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“Cost of Service” Recovery Methodology

Generation Entities
(independent or vertically owned “integrated”)

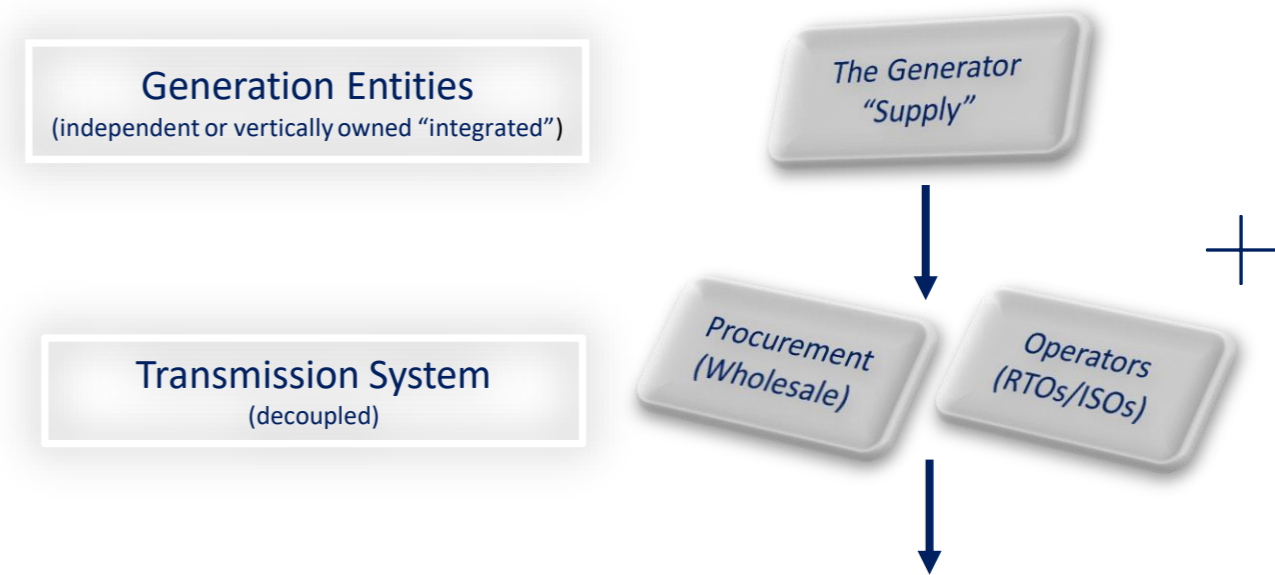
*The Generator
“Supply”*

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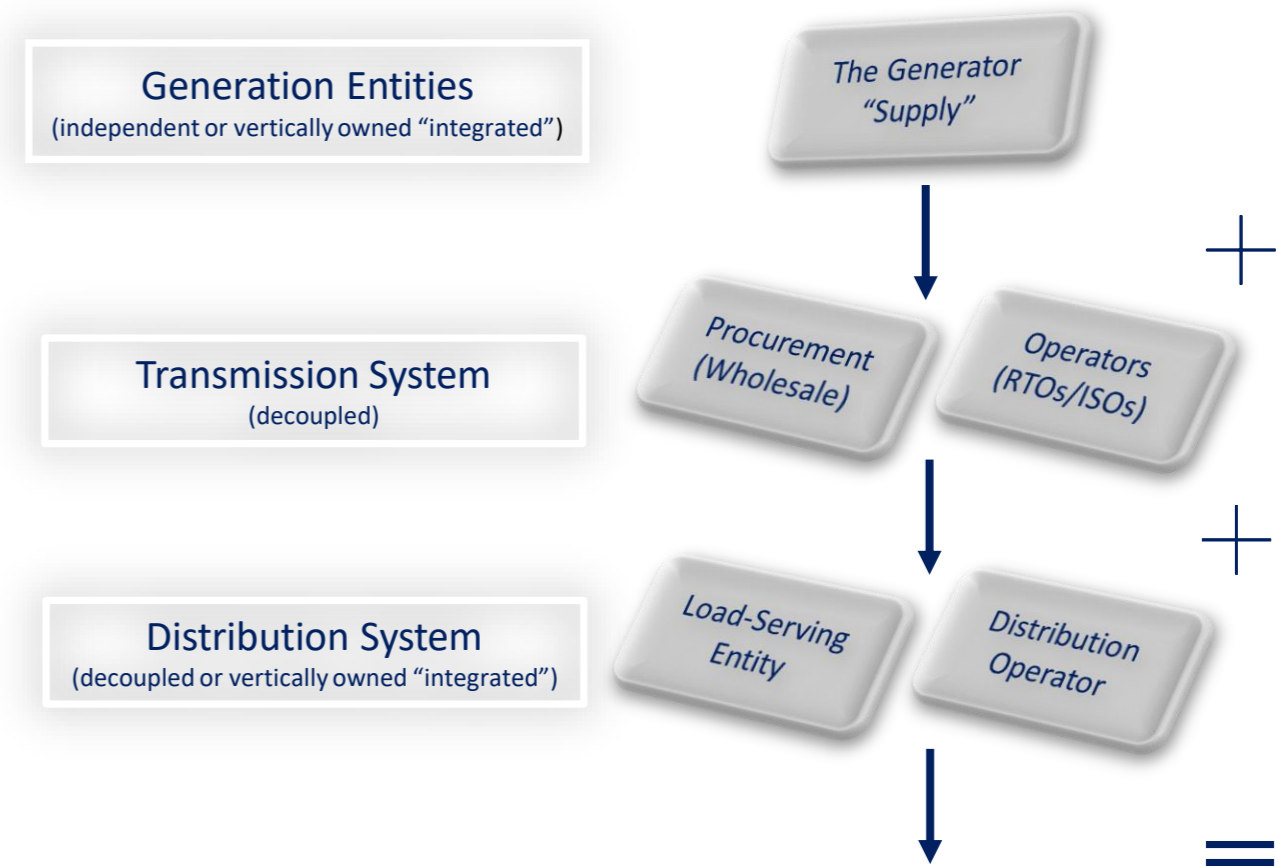


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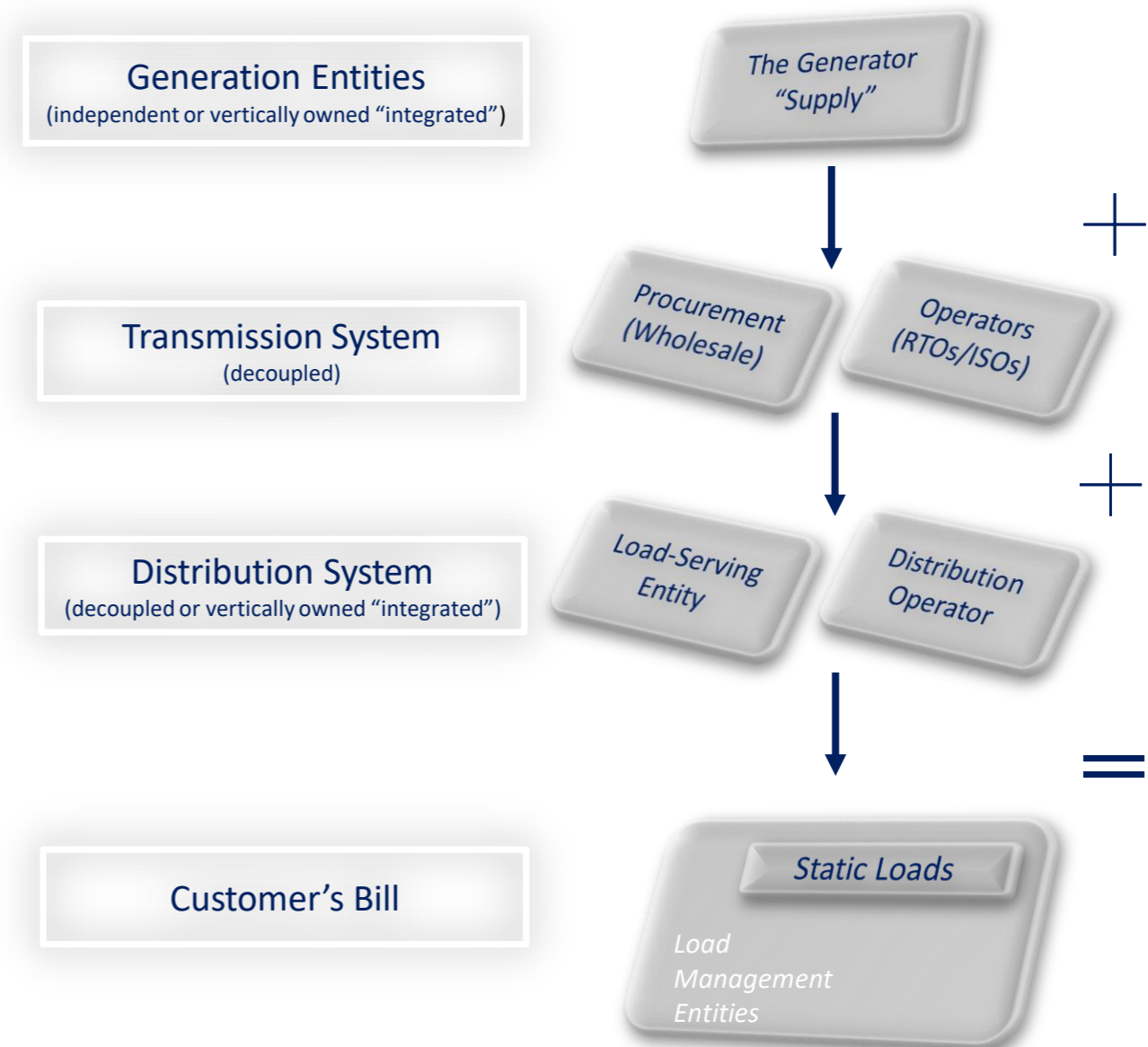


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Cost of Service Worked

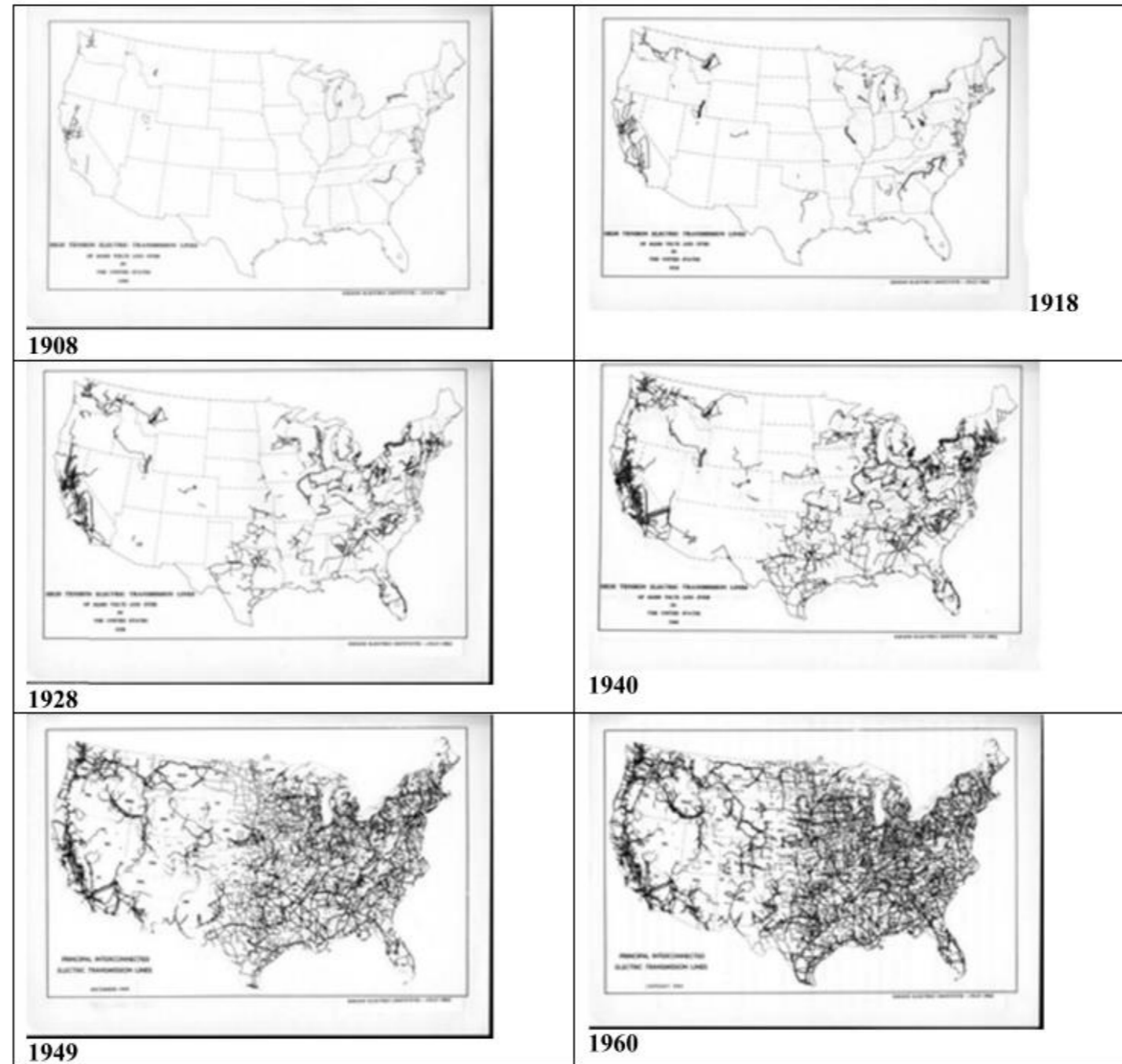
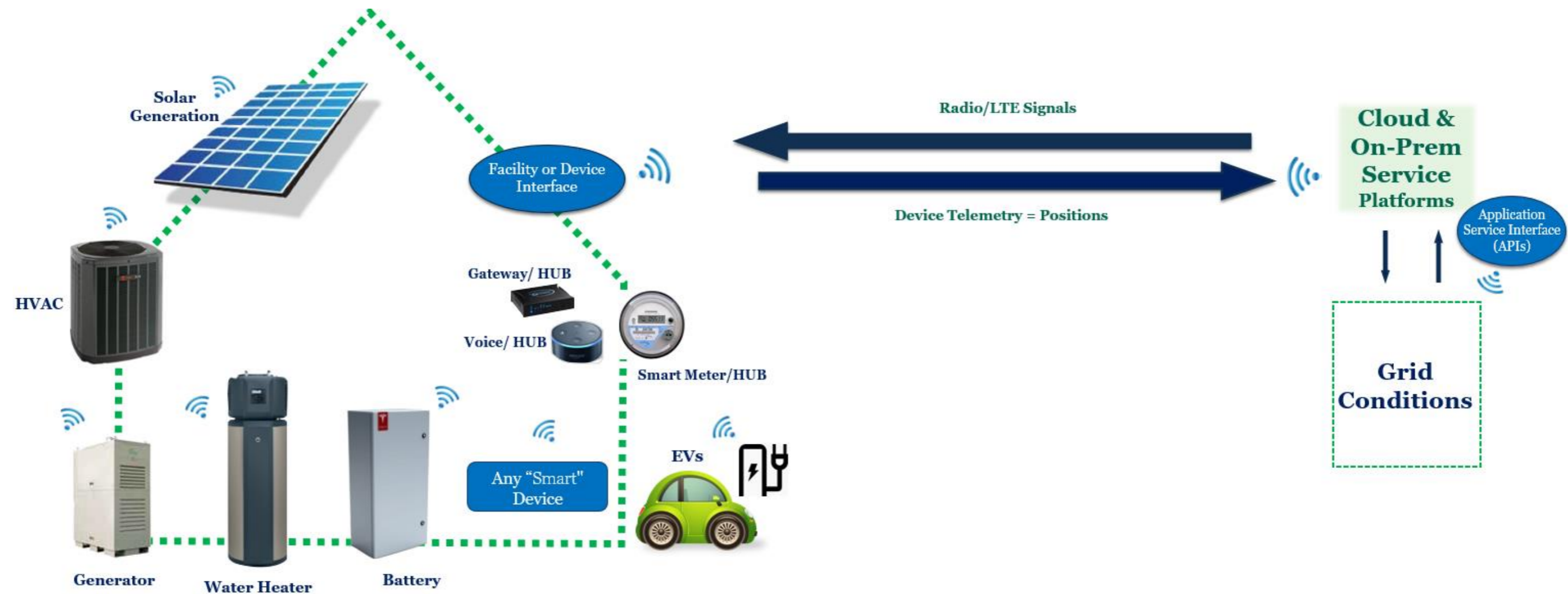


Fig. 1. Maps showing high-tension electric transmission lines in continental United States, multiple years. (Source: Report on the Status of Interconnected Power Systems, Edison Electric Institute, 1962).

Cost of Service Worked; However, Change is Now Needed!



Source: TeMix Inc. Energy Internet of Things

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“Cost Causation of Service” Recovery Methodology

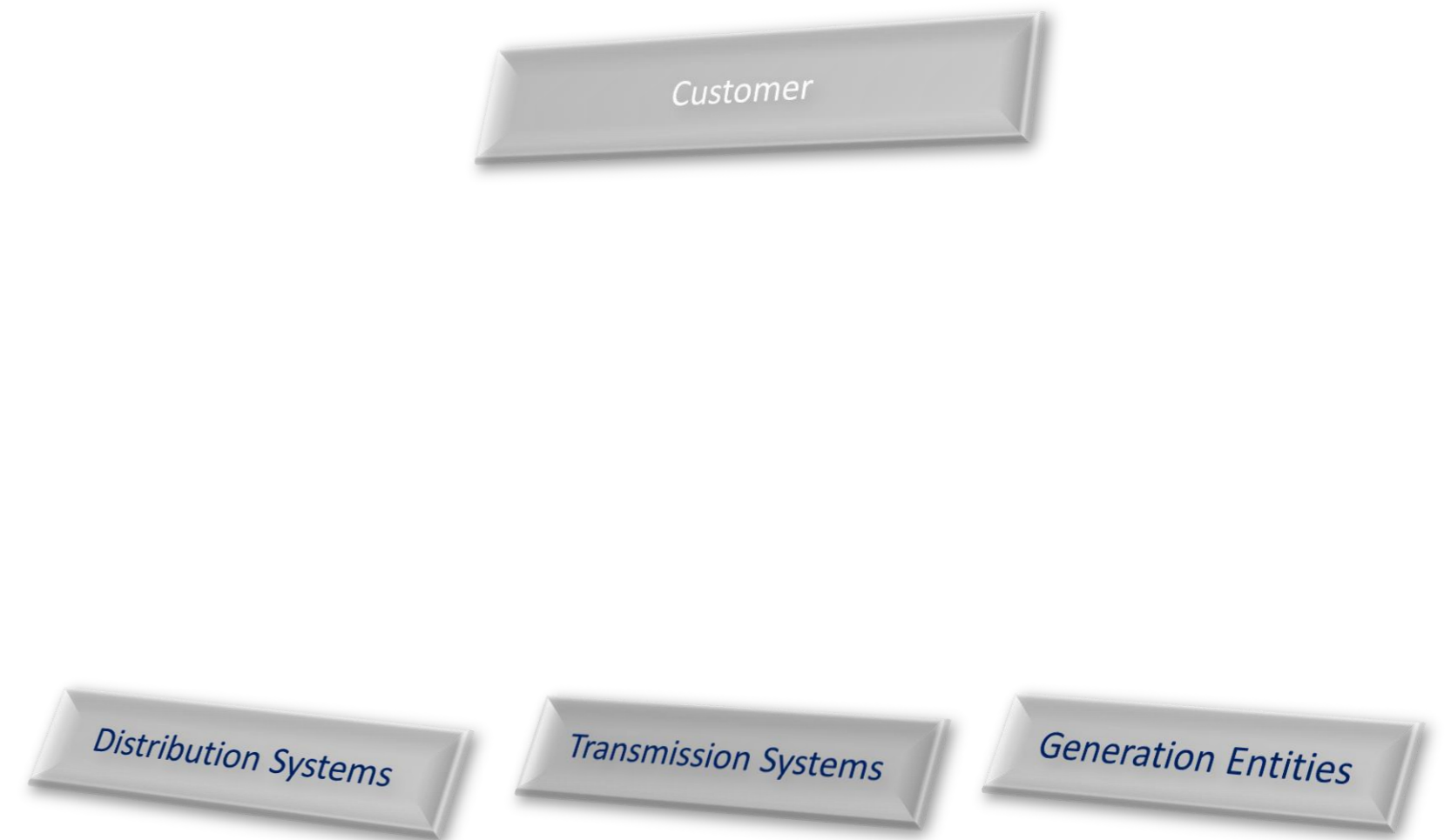


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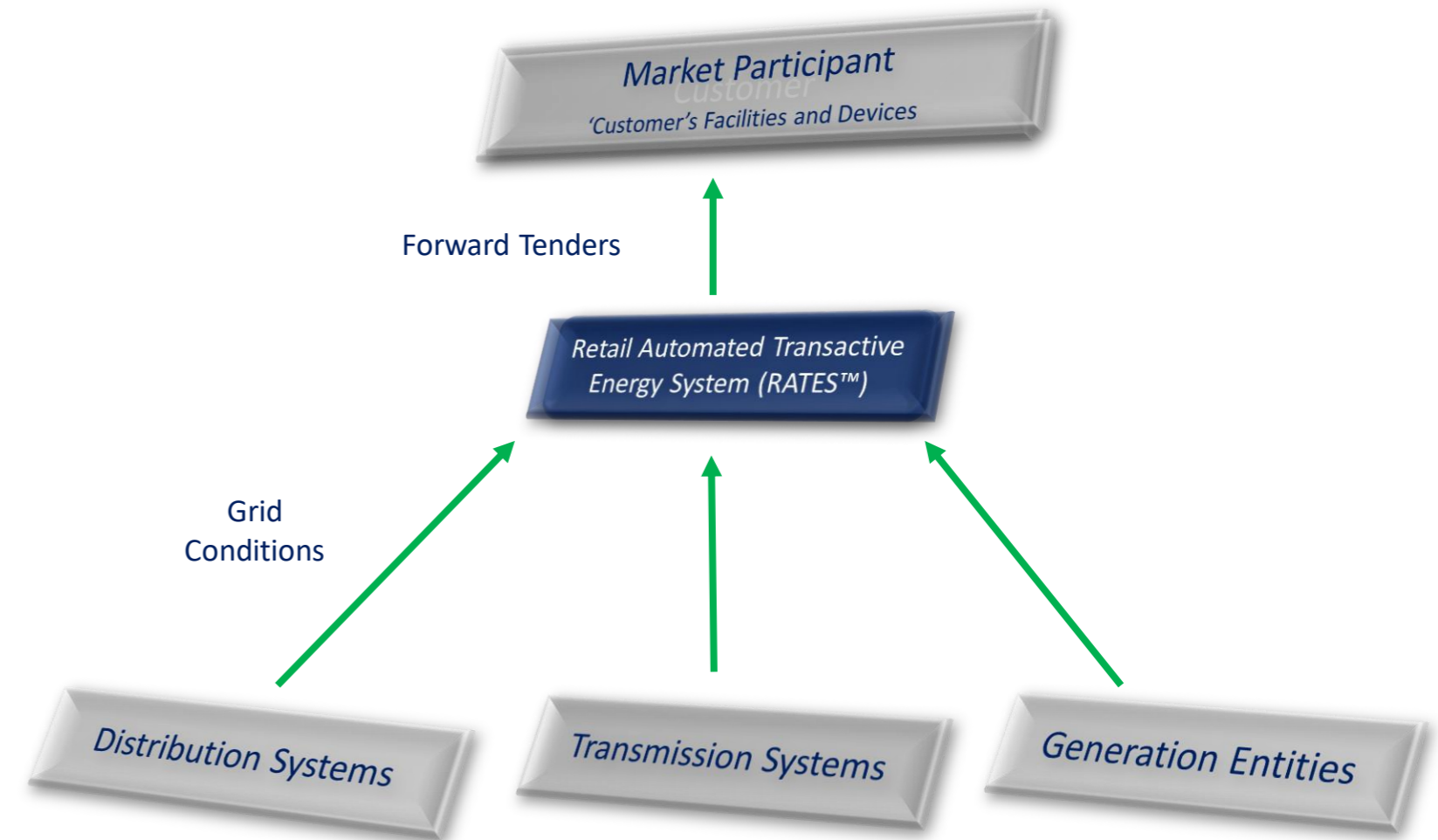


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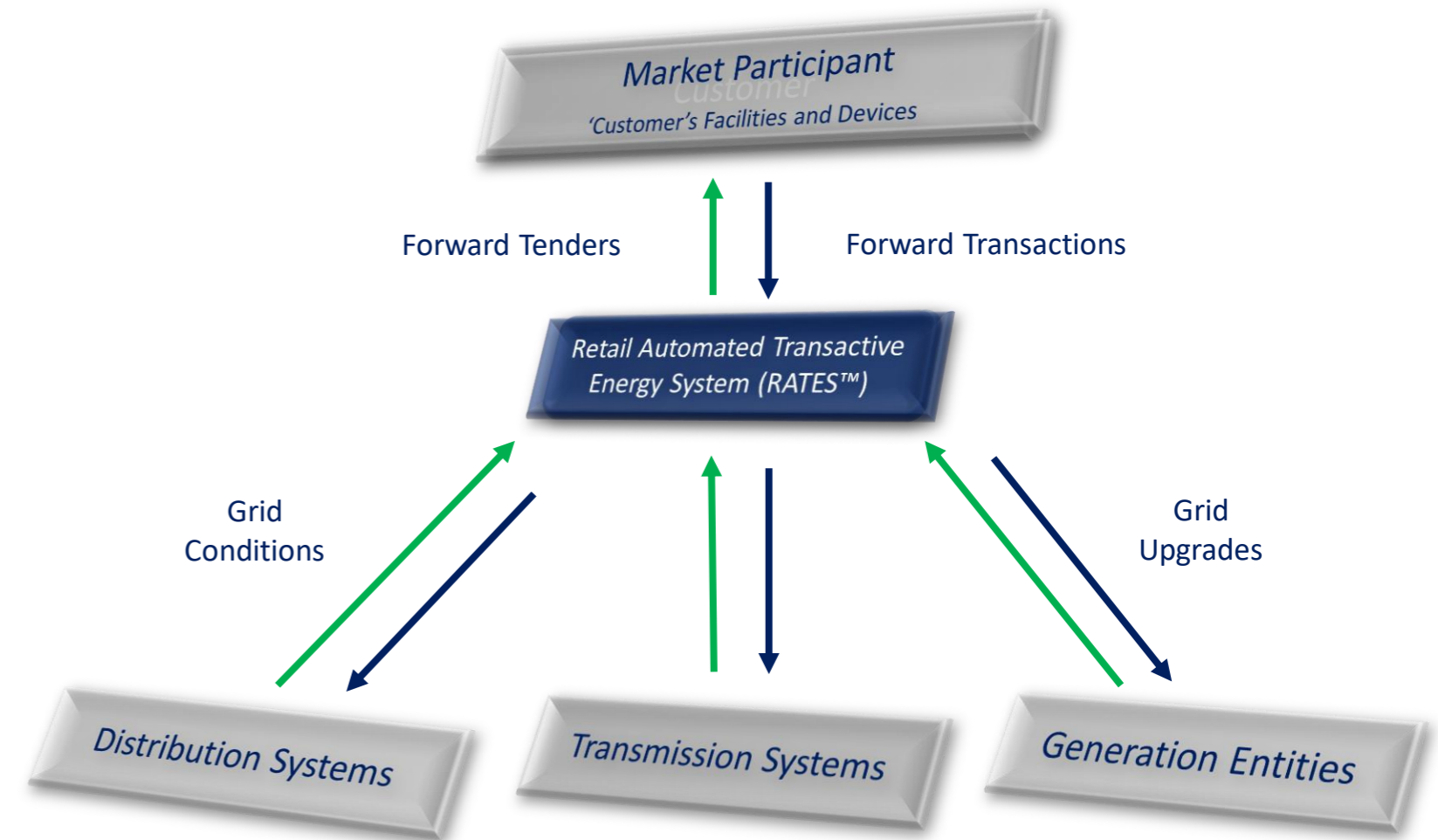


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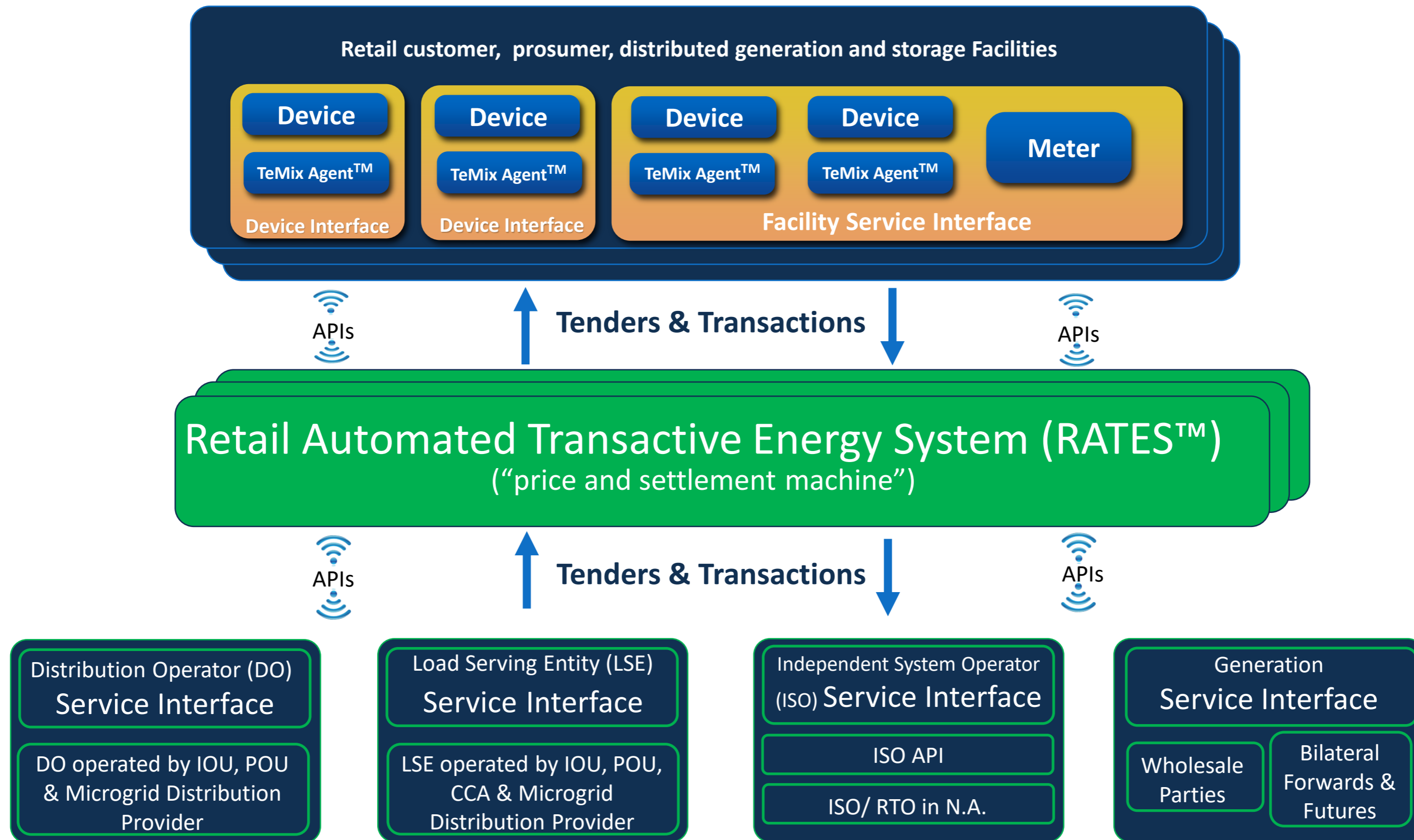
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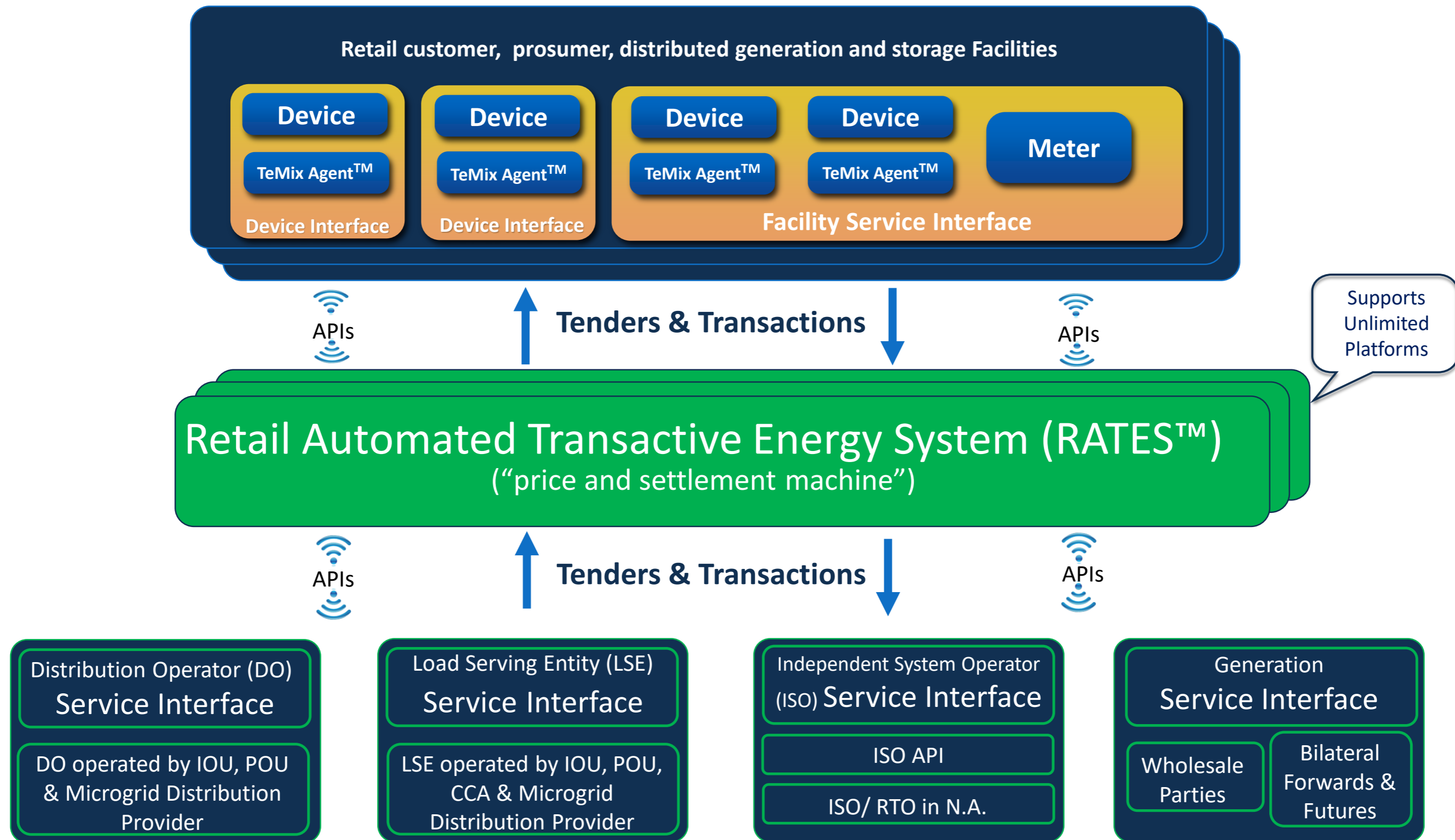
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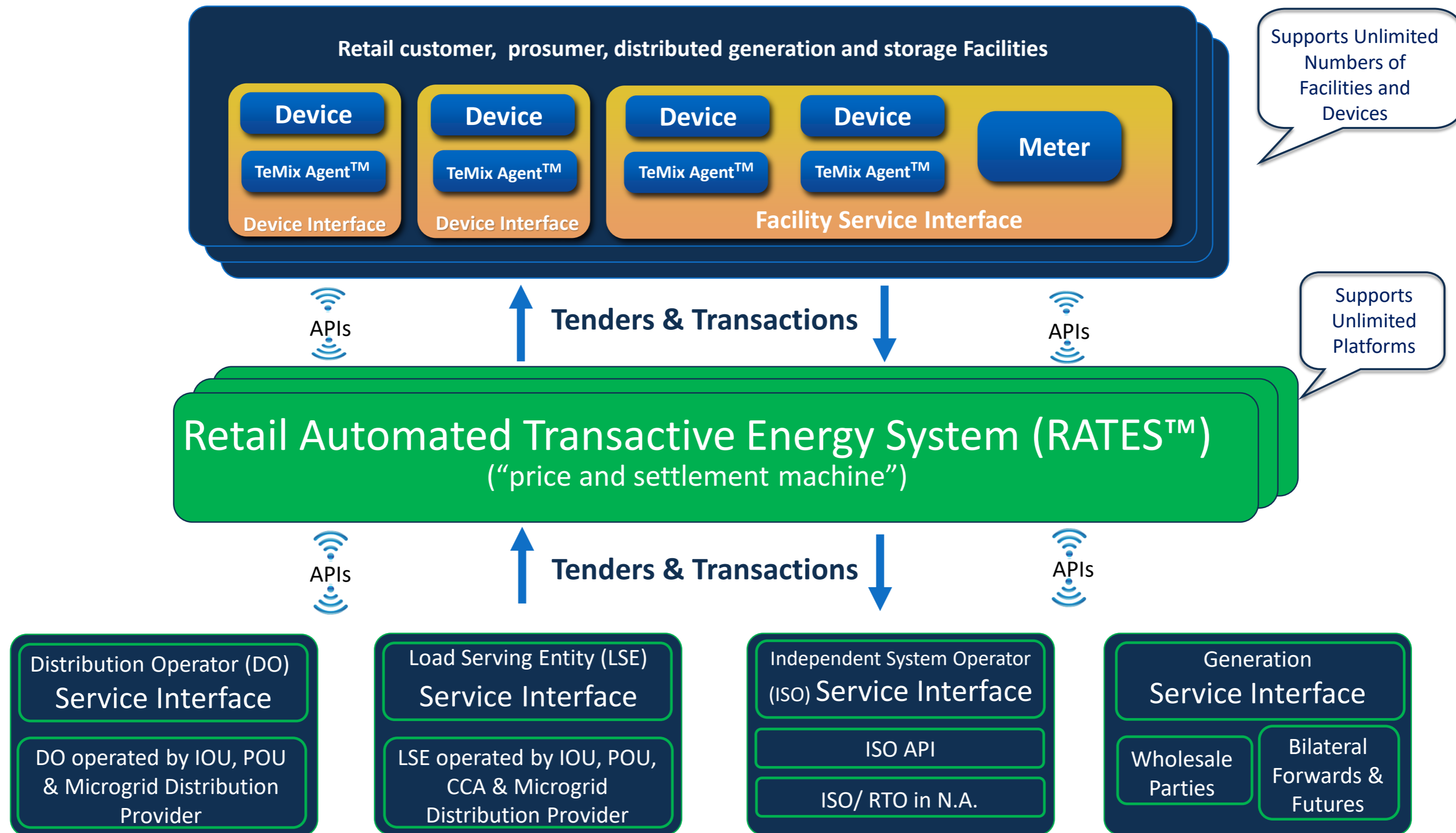
Transactive Energy Architecture



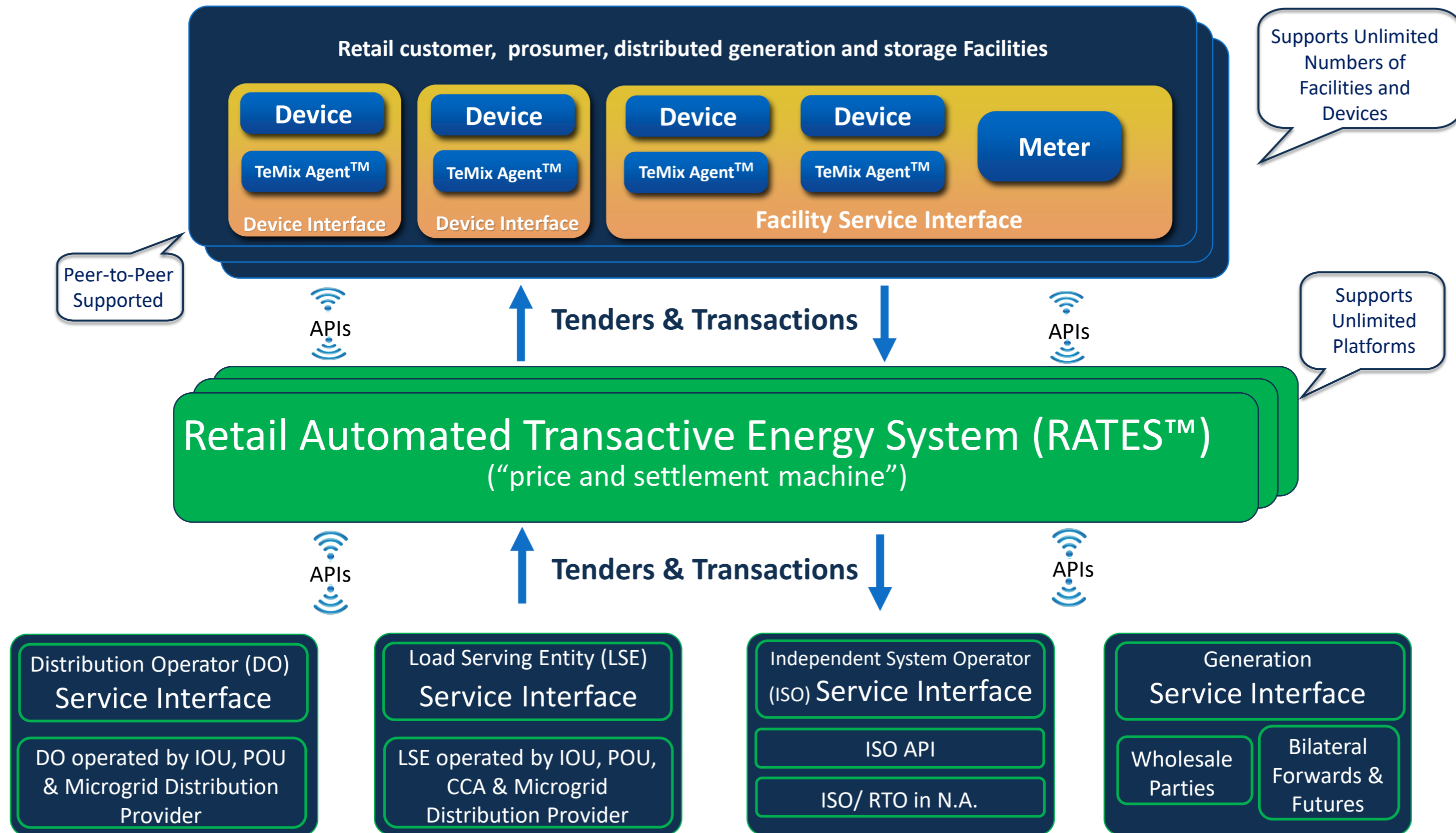
Transactive Energy Architecture



Transactive Energy Architecture



Transactive Energy Architecture



BENEFITS OF TRANSACTIONAL ENERGY

1. Compensates *all* Parties who provide grid services
2. Creates a financial incentive mechanism to speed flexible load and disaggregated (renewable) supply adoption
3. Has *no* technology scaling limitations
4. Reduces overall system costs for all stakeholders:
 - i. Absorbs Stranded Asset costs
 - ii. Maintains low-income discounts
5. Uses short-run grid conditions to determine the recovery price and *a yearly subscription hedges bill volatility*
6. TE *supports*:
 - i. a phased implementation approach, unique to each service territory, by circuit or by flexible device-type (e.g., EVs, Storage, etc.)
 - ii. unique configurations to meet each State's energy goals
 - iii. Opt-in or Opt-out design considerations

--Thank you for your attention--

Happy to Answer Any Questions?

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