



enel x

DR Auction: Path to Success in the TCA

April 25, 2019

The Enel Group Worldwide

A multinational power company and leading integrated player in the world's power and gas markets



Publicly Committed to UN Sustainable Development Goals



\$84 B
Annual Revenue



65,000
Employees



31
Countries
in 5 continents



42 GW
Renewable Capacity



50+ Yrs
Experience



No. 28
Fortune's
Change the World List

Enel X

The leading global provider of demand response and customer-sited flexibility solutions



6.8 GW of curtailable load



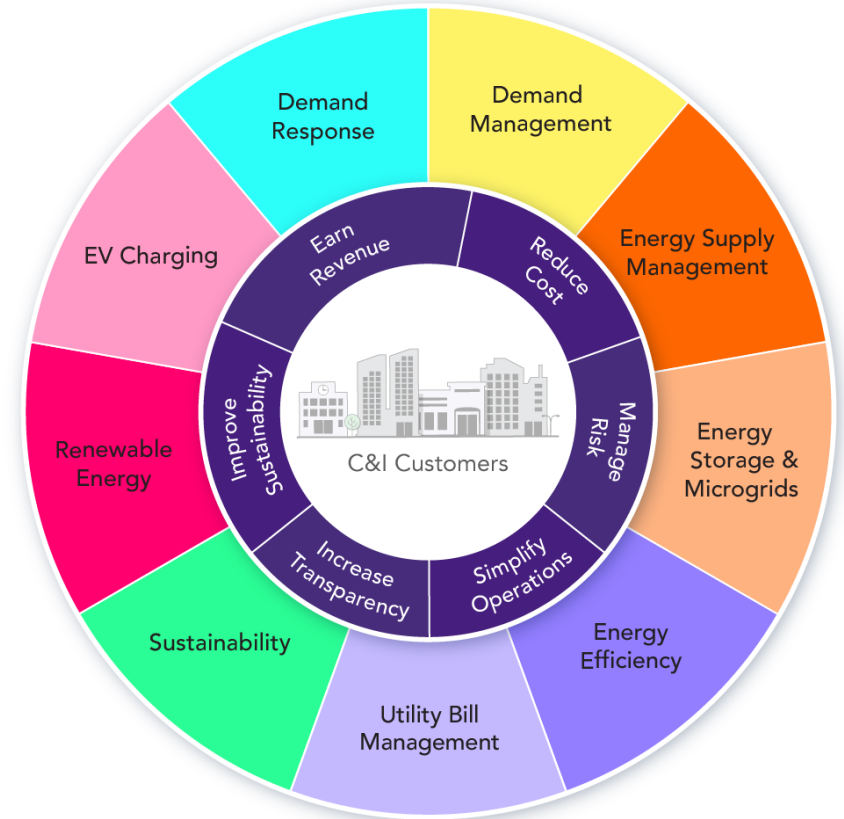
\$1B in customer savings to date



50+ DR programs in **10** countries



3,600 bus. partners in North America



Purpose of Today's Discussion

Removing Barriers and Improving Efficiency



- Demand response (DR) will soon compete with traditional generation for the rights to provide capacity in the Transitional Capacity Auction (TCA)
- For DR to be competitive on a level playing field, burdensome rules and unnecessary costs must be examined. Aggregators are disproportionately exposed to these costs compared with traditional generation
- These costs add up to **tens of millions of dollars year** for today's 850MW resource
- Now is the time to adopt these changes so DR can be ready to compete in 2020 and beyond

Principles for Rulemaking



1. Program rules should be designed to **ensure reliability** in meeting Ontario's system needs **at the lowest cost** to ratepayers
2. Unnecessary **barriers to entry** to market participation **should be removed**
3. Access to all products should be provided to ensure a **fair and equal competition** in the Ontario energy market

Topics for Today



Meter Data
and Audits



Measurement
& Verification



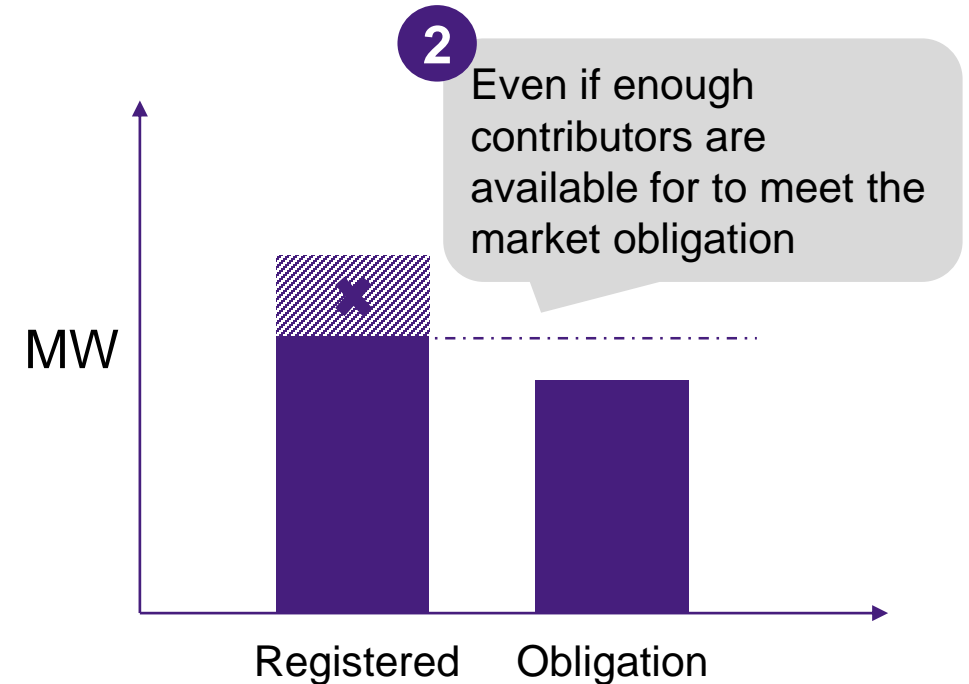
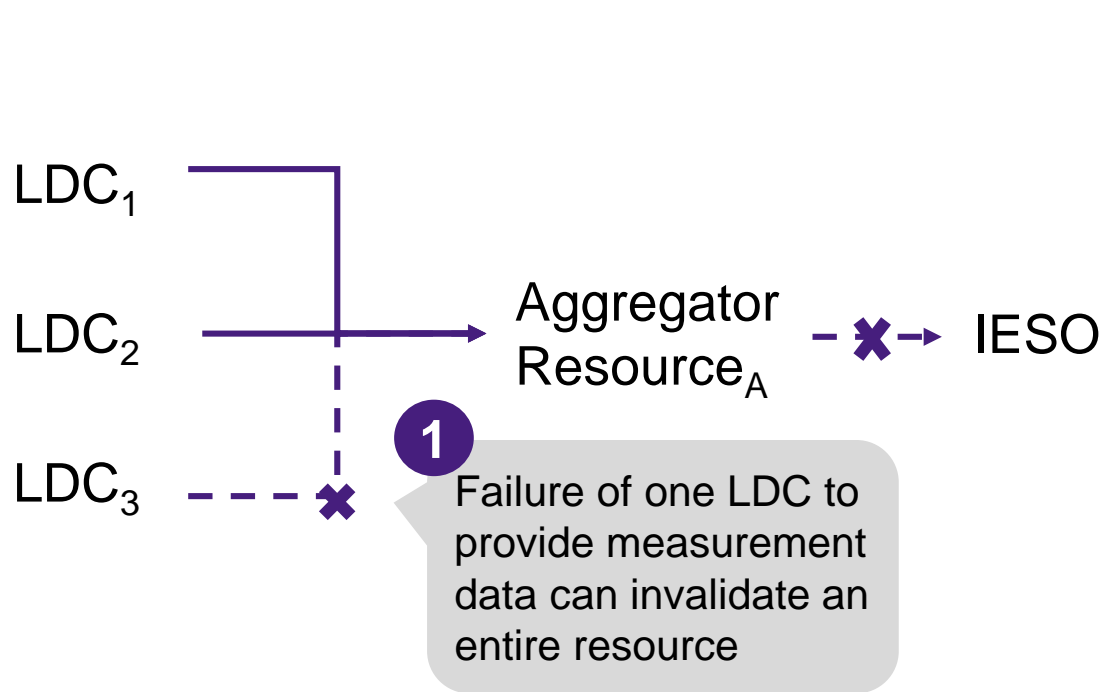
Testing and
Energy
Payments



Obligation
Transfers

Meter Data and Audits

Data submission rules must consider the unique characteristics of aggregations: challenge under current market design



Meter data submission rules limit the ability of customers to participate depending on which LDC serves them

Meter Data and Audits

Best practices drawn from other jurisdictions



*Most mature DR market operators accept **granular** meter data with **clearly defined rules** for accuracy, or collect directly from LDCs*



	IESO	CA	PJM	NYISO	ISO-NE
Meter data provided at contributor-level	✗	✓	✓	✓	✓
Meter data only required for activations	✗	✓	✓	✓	✗
Meter data provided directly via LDC	✗	✓	✗	✗	✗
At least 45 days to submit and/or amend data	✗	✓	✓	✓	✓
LDC meter data treated as source of truth in audits	✗	✓	✓	✓	✓
Non-revenue grade data allowed within clearly defined threshold	✗	N/A	✓	✓	✓
Multiple M&V methods can be selected	✗	✓	✓	✓	✗

Meter data submission rules impose unnecessary costs on the collection of meter data

Measurement & Verification

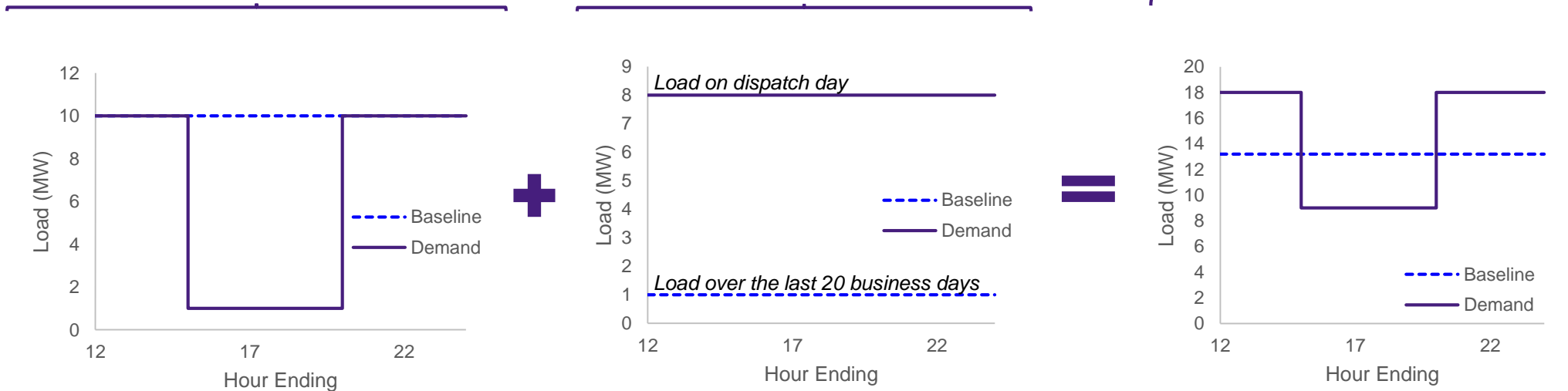
Illustration – measuring performance at the aggregation-level can produce erroneous results



1 One contributor enacts load reduction plan per usual

2 But another experiences an outage leading up to the DR activation, is unable to participate

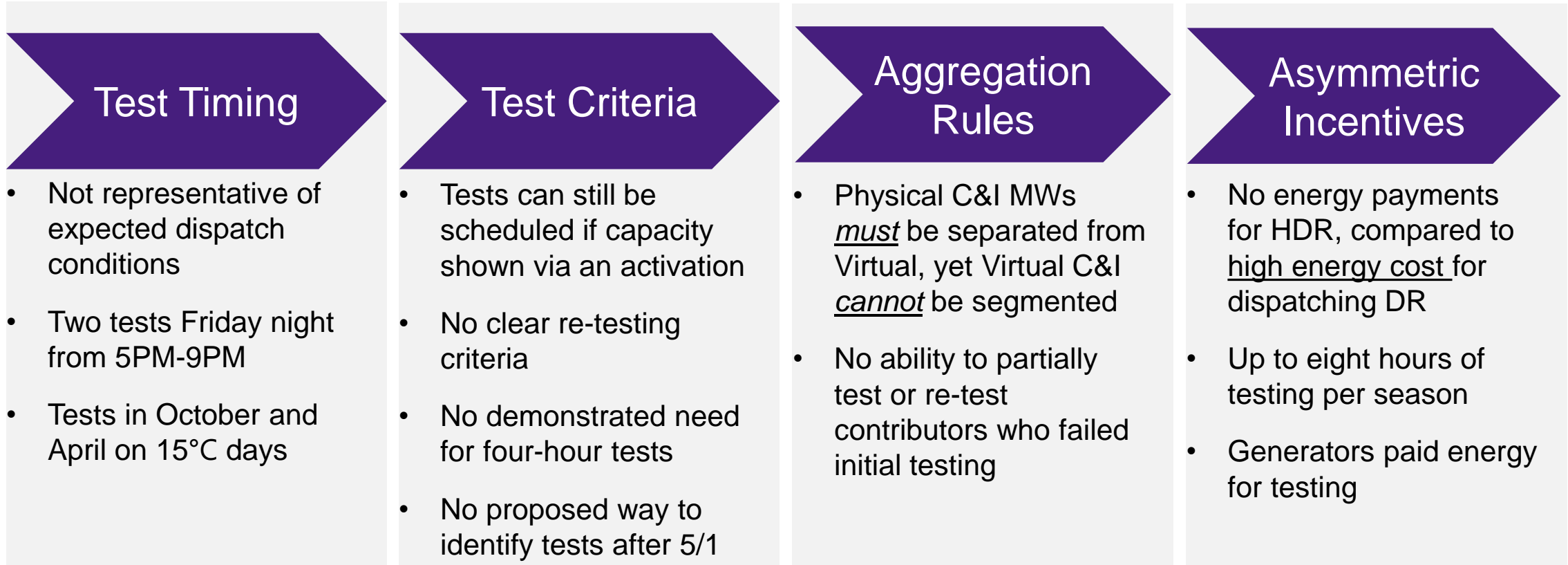
3 Rather than measuring 9MW reduction, IESO sees 4.2MW reduction



Measuring performance at the contributor level will **more accurately** measure reductions

Testing, Re-testing, and Energy

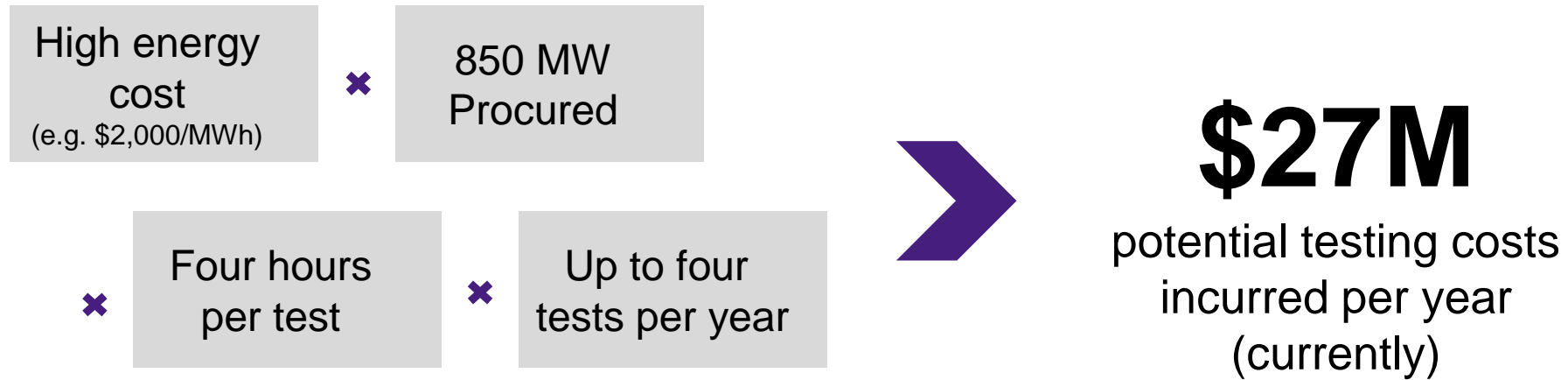
Proving installed capacity performance at least-cost



Current testing and aggregations rules **raise the cost** of delivering a demand response resource

Testing, Re-testing, and Energy

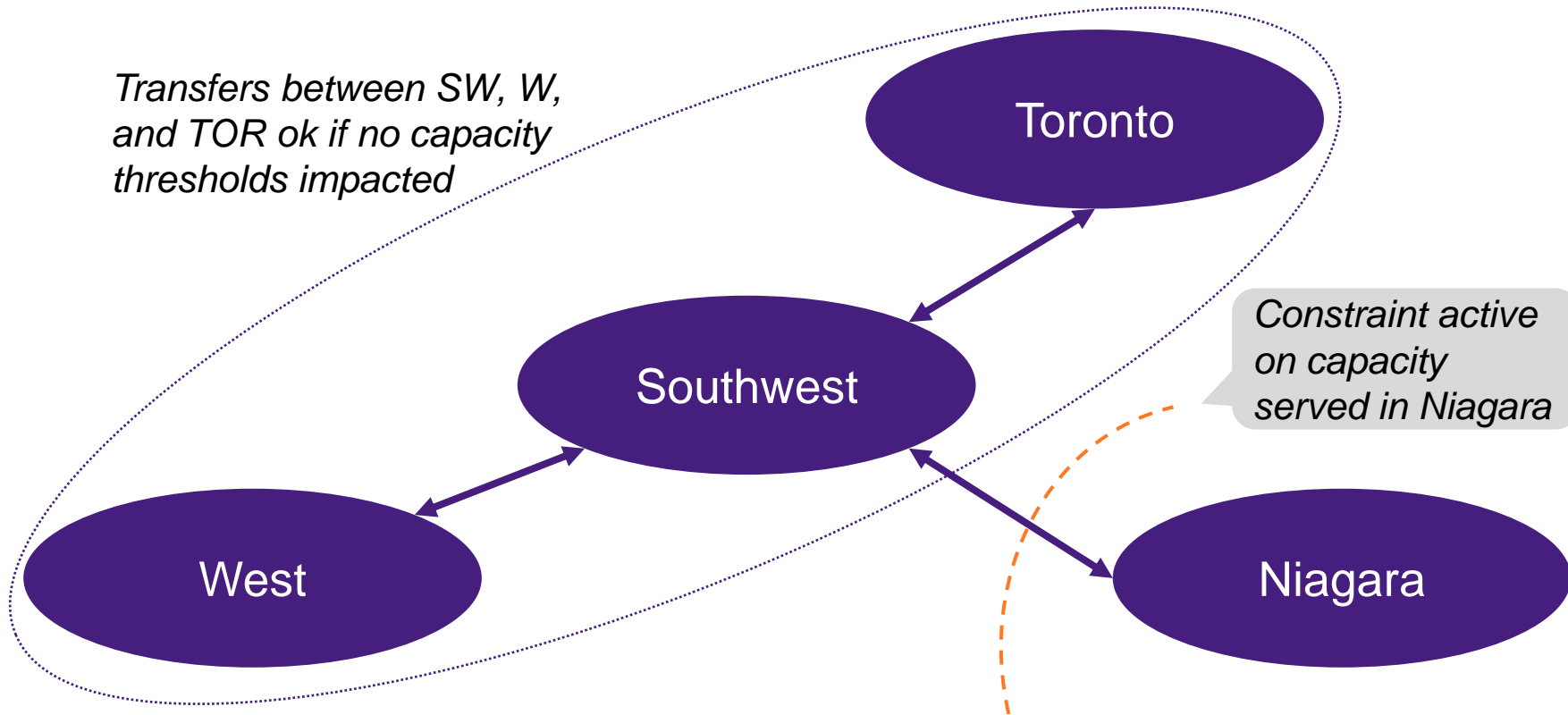
Demonstrating capacity performance at least-cost



Clearer testing rules and energy payments will **reduce the high costs** of demonstrating capacity for which aggregators are not currently compensated

Obligation Transfers

Transferring like-for-like should be allowed as long as it does not impact auction supply limitations



Allowing like-for-like transfers will **increase efficiency** in the auction clearing process and maximize the ability for customers to access the market

Summary & Recap



- DR will soon compete with traditional generation for capacity rights in the TCA. Current rules on **data collection and auditing, M&V, testing, energy payments, and obligation transfers** present roadblocks to this happening effectively
- We propose changing market rules in a way that **removes barriers to participation** and **ensures reliability at lowest cost**
- We believe a few key changes will accomplish this and help ensure DR is ready to compete in 2020 and beyond
- We look forward to working with the IESO and stakeholders to implement these changes in time for the TCA

