alectra
GRE&T Centre

TDWG Meeting #4

Alectra Update Presentation

September 12 2022

Questions from the IESO

- What is Alectra's Outage Communication Process?
  - In particular, what communications take place between LDCs and larger customers?
- What communications take place between LDCs and third-party aggregators in real-time/near real-time today, if any?
- What existing/new processes could distributors use to communicate distribution "override" conditions to customers with DER facilities and DER aggregators that are participating in the wholesale market?

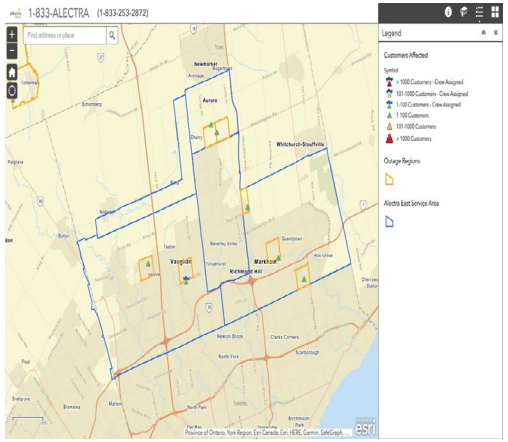
alectra
GRE&T Centre

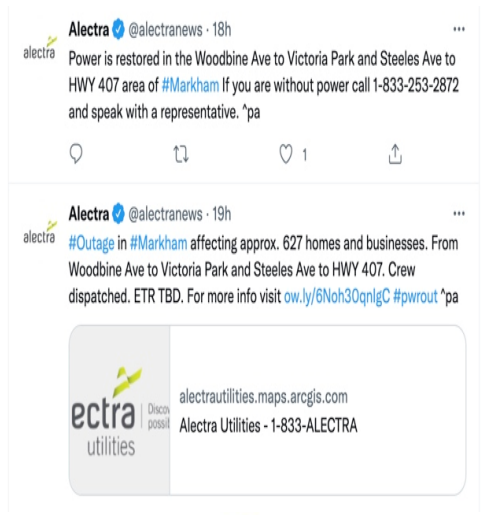
Current process

Outage management

Customer type	Planned Outage	Unplanned Outage
Residential	- Network operations clerks prepare letters; hand delivered to customers - Real time updates (social media, outage maps, website, call centre)	- Real time updates: - Social media (twitter), website updates, outage maps - Call centre updates

Commercial /Industrial (greater than 1 MW)	- Direct communication between Alectra and customer
	  - Between system control team and customer
	  - If necessary, line supervisor and customer
	- Flexibility in scheduling outage
		- Some customers have connection agreements, which would include a direct communication line to the control room
		  - For those without connection agreements, communication via real time updates (social media, outage maps etc.)
		Some large customers have onsite generation facilities that they can utilize during unplanned outages.





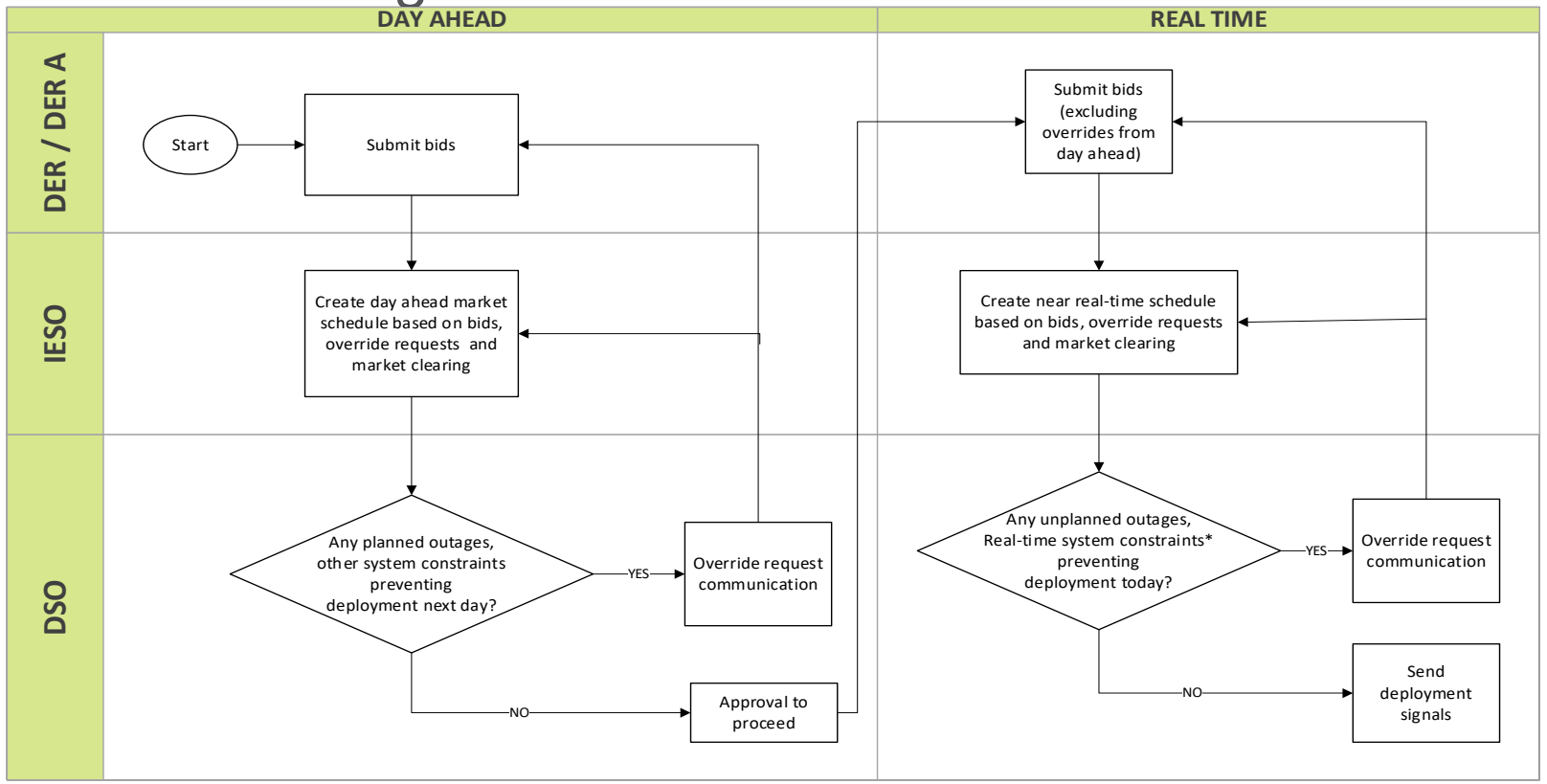
Current process

Communication with large customer and aggregators

- All large customers that have a connection agreement, have a direct communication channel with the control room
- In current state, for large industrial customers (who are also participating in the wholesale market), Alectra can override a dispatch event triggered from the IESO wholesale market
  - This communication takes place on the day of the event; no day ahead visibility at present for Alectra
  - The customer would contact Alectra's control room prior to responding to a dispatch request
  - Depending on real-time system conditions, Alectra may override the dispatch request
- Currently, there is no communication between aggregators and Alectra during an outage
  - Potential challenge with aggregator communication: If aggregation is made up of contributor DERs on multiple feeders, it would be difficult to communicate impact to the aggregator
- With increasing DER penetration, major changes will be required in terms of resources, tools, processes and procedures to holistically support the change

Future process

Communicating distribution overrides



For future processes to be implemented, DSO would require

- Direct communication line between Alectra and DER facility/ DER aggregator
- Visibility into day ahead market from wholesale market participants or the IESO
- Include DERs in the distribution connectivity models

**real time constraints: unplanned outage, congestions, feeder reconfiguration*

Override communication plan for DERs need to be in place for generation assets (CHP, battery storage, V2G etc.). Demand response asset are not relevant in this context

As the distribution entity, we need to operate a reliable grid; direct access to contributor DERs is imperative to run day-to-day operations smoothly between the control room and our customers

alectra
GRE&T Centre

THANK YOU