

July 22, 2025

Ontario Energy Board ATTN: Ritchie Murray 2300 Yonge Street, 27<sup>th</sup> Floor Toronto, ON M4P 1E4

Via Email: <a href="mailto:DSOcapabilities@oeb.ca">DSOcapabilities@oeb.ca</a>

Subject: Distribution System Operator Capabilities – Stakeholder Consultation (EB-2025-0060)

On behalf of GridSmartCity (GSC), we appreciate the opportunity to provide written feedback to the Ontario's Energy Board's (OEB) Distribution System Operator (DSO) capabilities stakeholder consultation.

GridSmartCity is a consortium of 18 local distribution companies (LDCs), and 22 partner organizations. Collectively, these LDCs manage over \$3.64 billion in assets and deliver electricity to approximately 1 million customers in more than 60 communities across the province. Our purpose is to continuously increase value through a collaborative framework that reflects the importance of local community. Since 2009, we have worked to lead sector innovation synergistically and will continue to deliver on this mandate as we seek to prepare Ontario's electricity grid for the future.

Please accept our enclosed GSC DSO Readiness Strategy, defining the pathway to transform our members collective networks into an integrated, intelligent, and customer-driven system. Developed over two years with the help of technical experts, the plan enables a phased rollout towards a common services platform aligned with existing policy initiatives.

With the active participation of all GridSmartCity LDC members, the GSC DSO Readiness Strategy is designed to integrate seamlessly with the work underway by the OEB, Independent Electricity System Operator (IESO), and the Ministry of Energy and Mines. By aligning with broader provincial goals around decarbonization, electrification, and grid modernization, the GSC DSO Readiness Strategy ensures that the distribution system is moving towards a modernized grid while always maintaining customer value and reliability standards.

GridSmartCity is ready and eager to collaborate with the OEB as part of this consultation to unlock new efficiencies and support of the grid of the future.

Sincerely,

**Art Skidmore** 

President, GridSmartCity & GridSmartCity Cooperative

Encl: GSC DSO Readiness Strategy, May 2025



# DSO Readiness Strategy Report

Prepared by:







## **Overview**

GridSmartCity (GSC) is a consortium of 18 partner LDCs, serving approximately 970,000 customers. With a focus on smart grid technologies and streamlined processes, GSC collaborates with its member LDCs to develop unified strategies for technology adoption and grid modernization. This collaboration informed the creation of a coordinated DSO Readiness Strategy that reflects both policy mandates and the practical realities of modern distribution systems.

To understand the readiness of each utility member for full-scale DSO transition, GSC conducted an in-depth assessment of current technologies, processes, workforce capabilities, and other key operational factors. This assessment revealed that most GSC member LDCs remain in the early stages of DER integration.

The GSC DSO Readiness Strategy was developed over the course of 2024 with active participation from 100% of GSC Utility Members and the support of Electric Power Engineers and Sussex Strategy Group. It examines several operational models and provides a clear path to transition to an advanced Distributed System Operator (DSO) paradigm. It is designed to align seamlessly with the work already underway by the system operator, energy regulator and Ministry of Energy. The GSC DSO Readiness Strategy leverages three-stages:





The following foundational principles align the strategy with policy trends, allow for favorable economics, and drive value for customers:









#### Customized

- Designed based on GSC specific configurations and operations
- Considers current state of GSC and LDCs
- · Considers both current state and desired final state with path to get from one to the other

#### **Flexible**

- Can scale from basic DSO functionality to total DSO
- Can scale as more capabilities are developed by LDCs and GSC
- Can scale at different speeds to consider unique growth of LDCs

#### Standardized

- Provides common standards and processes across all LDCs
- Enables efficiency and improvement
- Ensures consistent customer experience

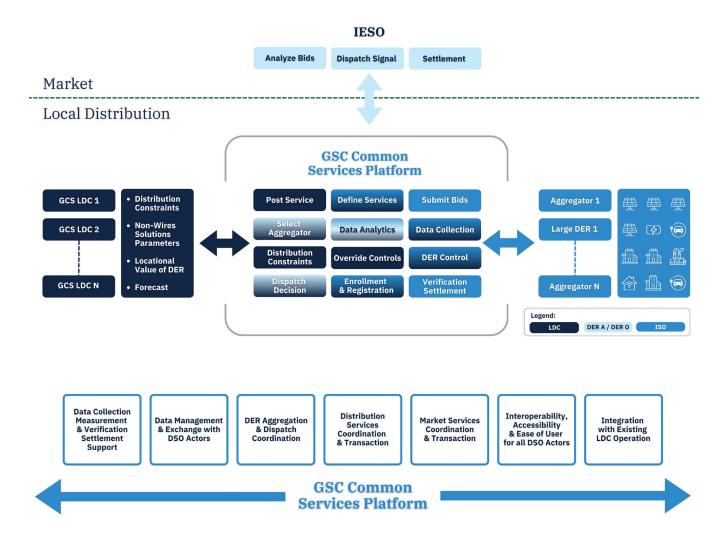
# **Cost-Effective**

- Efficient technology strategy to minimize potential redundancy
- Optimizes technology where possible
- Collaborative approach allows efficiencies by learning from each other



# **Common Services Platform**

The GSC Common Services Platform will serve as an overlay system, providing essential DSO-related functionalities that all member LDCs can access through a standardized, secure interface. This platform will connect LDCs, IESO, DER Aggregators, and DER Operators with a common platform to set up markets, provide distribution and market services, and facilitate transactions seamlessly.



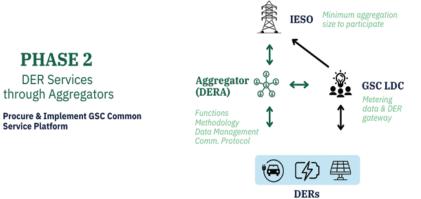




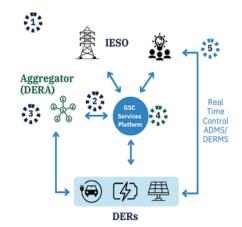
# **Rollout Strategy**

Three phases will define the transition from current state to an operational DSO framework with the GSC Common Services Platform, as follows:













#### **Timeline**



#### Phase 1

#### 1 – Establish Governance Framework & Focus Areas

- Define funding mechanisms, cost recovery strategies, and compensation frameworks
- Streamlining to establish interoperability standards, and standardize data collection

# 2 – Standardize Distribution Service Capabilities & Processes

- Redefine system planning processes
- Time series forecasting to improve load and DER projections, NWA integration, locational value

#### 3 – Standardize DER Aggregation Capabilities

- Functional and operational requirements for aggregators
- Service bidding, compliance with operational constraints, verification, dispatching, settlement

#### Phase 2

## 4 – Procure & Implement the GSC Common Services Platform

- Procure and implement the Common Services Platform
- Technical, functional and communication requirement workbook/guidance document

#### Phase 3

#### 5 – Continuous Improvement & Develop Active DER Management Capabilities

- Improve the operational capabilities
- Active DER management, real time DER control and grid constraint management, performance monitoring, smart inverter functions

#### Conclusion

Through a unified and forward-looking strategy, GridSmartCity is poised to lead its member LDCs toward a seamless DSO transition that is customizable, flexible, standardized, and cost-effective. By addressing current operational realities and anticipating future needs, this approach ensures that member LDCs can integrate DER's efficiently, modernize their processes, and prepare for evolving regulatory and market demands.







# sussex

