



KX keeps Canadian system operator at the forefront of innovation

“Unlocking the Value of Smart Meter Data requires utilities to invest in data analytics that can handle data retrieval and analytics requests that are outside the core operation of the MDM/R.”

Organization: **Leading Canadian System Operator**
Geography: **North America**
Industry: **Energy**
Employees: **800+**

This Canadian system operator works at the heart of Ontario, Canada’s power system – ensuring there is enough power to meet the province’s energy needs in real time while also planning and securing energy for the future. Its Smart Meter solution operates the smart meter data processing service (MDM/R) for 70 distribution systems operators and the 14.5 million people in Ontario.



Supports future demands for advanced analytics in Ontario’s energy sector with the ability to rapidly aggregate and perform statistical analysis on all historical data



CANADIAN SYSTEM OPERATOR

THE CHALLENGE

This Canadian system operator was faced with a large database of smart meter data (over 250 billion meter reads and growing at over 100 million per day), growing volume and variety of data retrieval and analytics requests, and the need for providing processed data to utilities in a timely manner. The existing transaction system and its relational database system were not originally designed to handle these increased requirements, and needed to be offloaded so as not to impact the core operation of the MDM/R.

WHY KX

This Canadian system operator needed a technology that could handle large volumes of time series smart meter data efficiently and at the lowest total cost. The solution needed to handle simultaneous data ingestion, transformation, and data retrieval requests, and be synchronized in near real-time with the source database system. After conducting market research, evaluations and proof of concept testing, this Canadian system operator found that KX delivered very high levels of performance at the lowest total cost of ownership. The testing of technologies involved simulated data representing 260 billion meter reads for 5 million meters and over 5 years. Over 25 tests were made on this data, including data ingestion, on demand retrievals, aggregations and research analytics.

 **Expanded data availability from 100 to 365 days for data retrieval**

THE BENEFITS



100x faster
response time



24x7 availability
to meter data



Enabled **ad-hoc investigation and analysis**



Enhanced on-line access to data **from 27 months to 10+ years**