

Microgrids, Resiliency, and Critical Infrastructure



**Metropolitan Water
Reclamation District
of Greater Chicago**

AEG Chicago Q1 Stakeholder Challenge: Critical
Infrastructure & Resilience

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COMMISSIONER

Metropolitan Water
Reclamation District



Big Picture Questions:

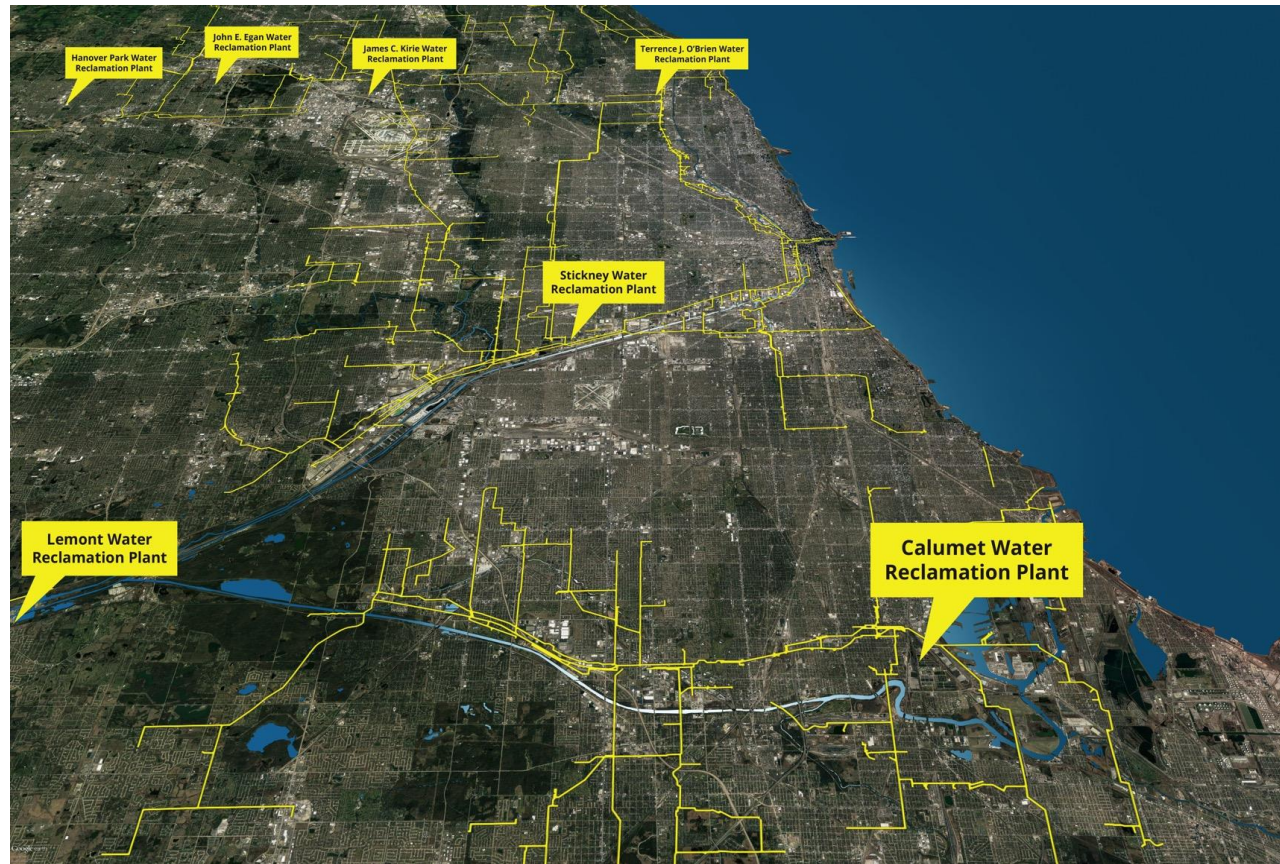
- Why not take back our own energy fate here at home?
- Why rely on Washington, D.C.?
- How do we take advantage of our financial and regional strengths?
- What are we waiting for?



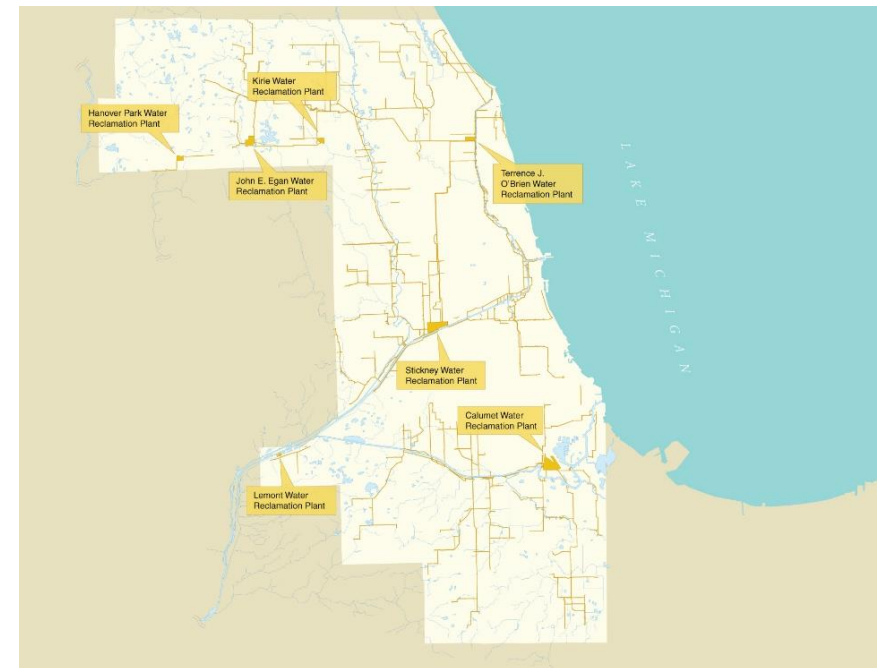
Background:

METROPOLITAN WATER RECLAMATION DISTRICT

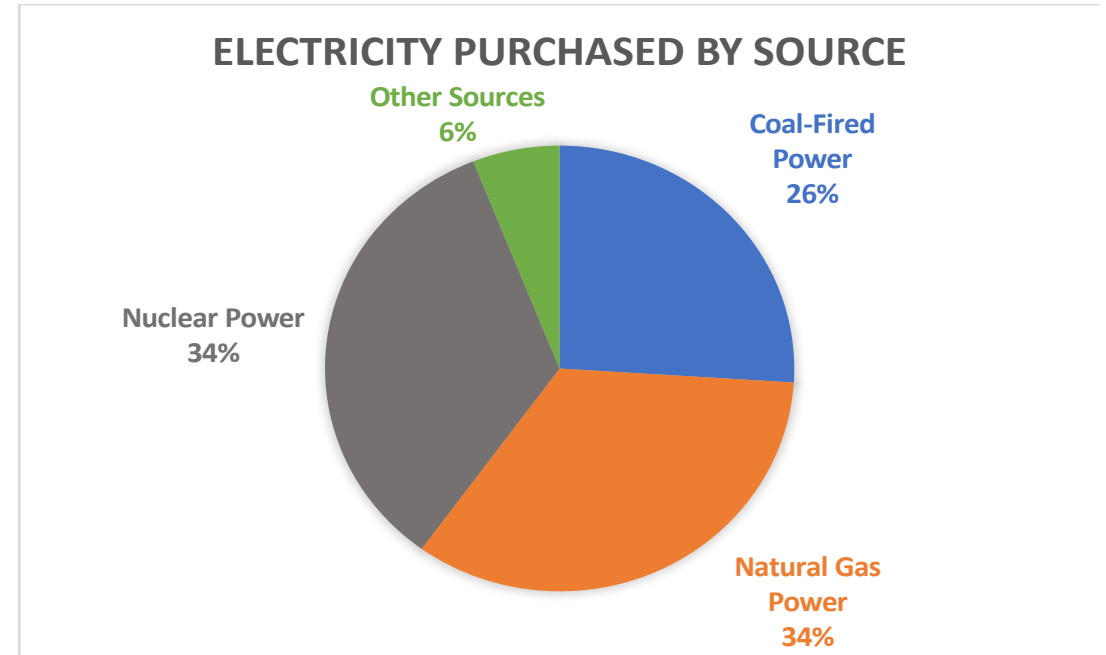
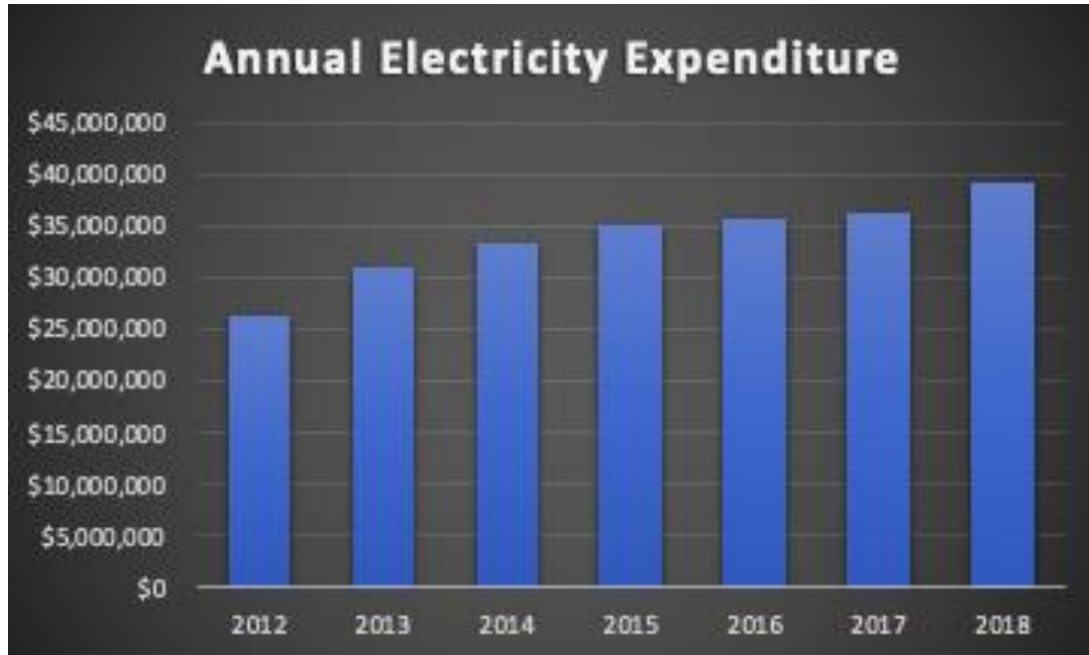
Mission: Protect the health and safety of the public, protect Lake Michigan water quality, improve water quality in watercourses, protect communities from flood damage.



Service Area	Population (2019)	Water Reclamation Plant Treatment Volume
882.1 sq. mi.	5,102,186	450 billion gallons (annually)



MWRD Electricity Use



Challenge Basis

POTENTIAL Roadblocks

- Financing
- Cheap traditional energy sources
- Existing infrastructure
- New technology/process risks
- MWRD Policy
- Increased energy needs and demands over time

POTENTIAL Benefits

- Financing
- Increased cost savings to Cook County residents over time
- Environmental Justice
- Influence regional energy market transition
- Security and Resilience



CHALLENGE QUESTION

Microgrids-Resiliency-Critical Infrastructure

Regarding resilience and the decarbonization of Chicago by 2050, we must address:

How the Metropolitan Water Reclamation District can structure its energy use to support regional decarbonization.

