

# MICROGRID KNOWLEDGE™

2023 CONFERENCE

# LIGHTS ON!

May 16-17, 2023 | Anaheim, CA

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MICROGRID  
KNOWLEDGE™



# Case Study: Nemiah Valley community microgrid Location: British Columbia, Canada



Powering Business Worldwide

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# Microgrid Case Study: Nemiah Valley - British Columbia, Canada

## Microgrid system highlights:

- 3- 95 KW Diesel Generators (existing)
- 1,000 KW Lithium Battery Storage System
- 250-300KW PV system(s)
- Inverter/PCS System
- Power Xpert Microgrid Controller

## System performance:

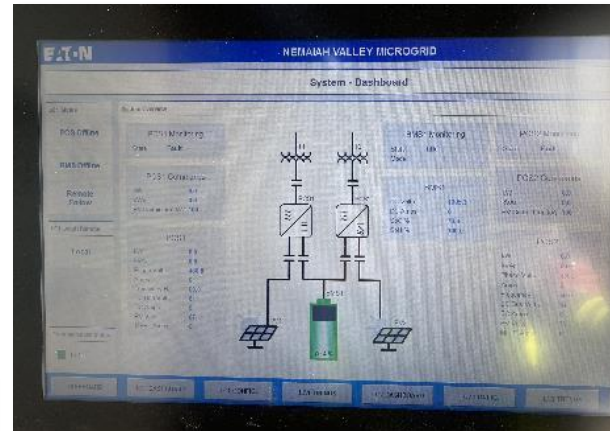
- 60-70% less diesel fuel needed
- Cost of power to residents significantly reduced
- 4,200T less carbon emissions annually
- Additional residences can be connected
- Sustainable, resilient power for the community



Remote, off-grid  
community microgrid



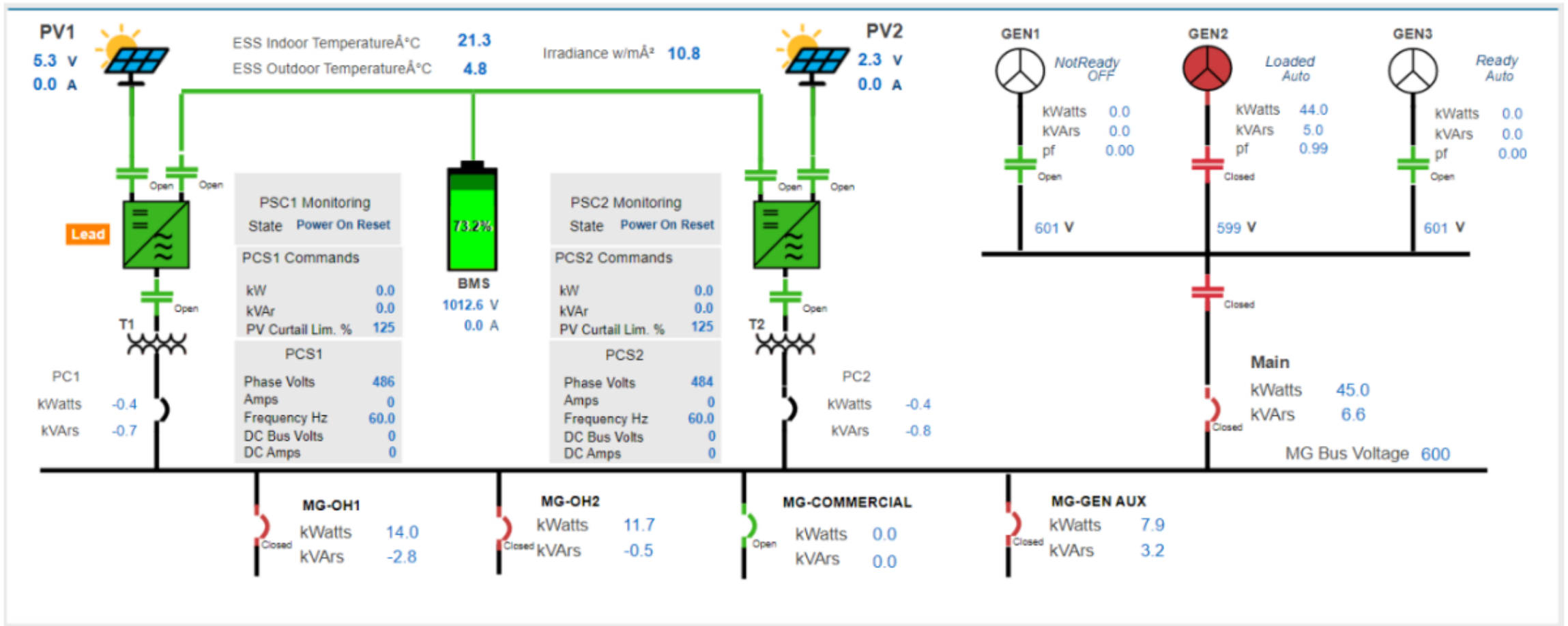
Xeni Gwet'in First Nation community



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# Nemiah Microgrid System



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# Powering Northern and Remote Communities in Canada

## Canada has hundreds of communities without grid access

- Canadian Government is investing \$2.5B on Clean Power with a specific focus on remote northern communities
- Roughly 400 communities currently running only on diesel power

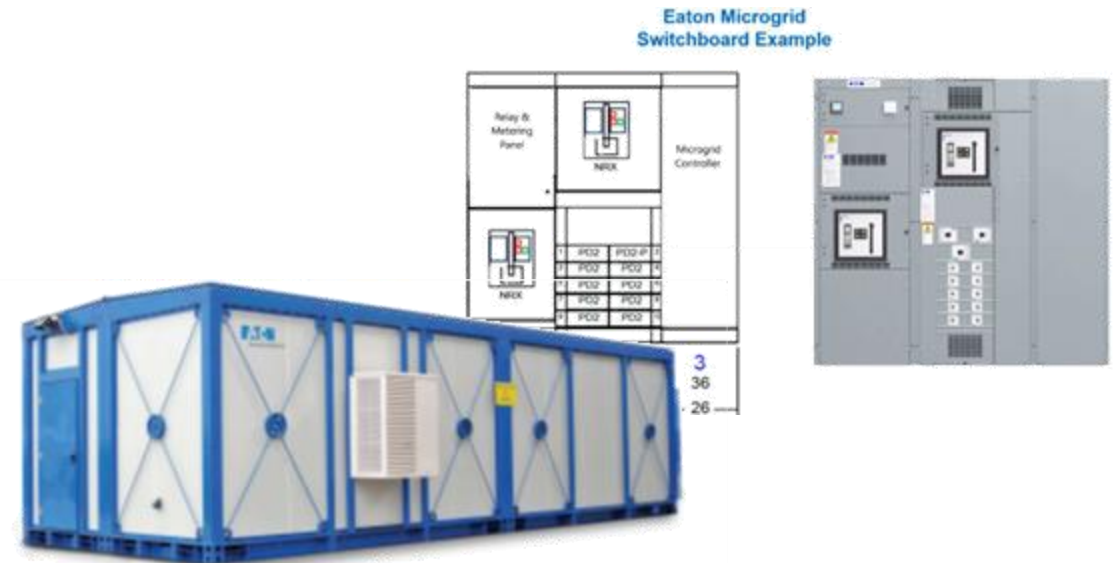


## Environmental / Community involvement benefits

- Partnering with First Nations contractors/suppliers supports the economic stability of underserved Indigenous communities suffering from energy poverty
- Eaton / ICE scholarship program tied with a Services Co-op placement supports Indigenous educational assistance needs
- Green energy solutions such as wind and solar can help these communities lessen their dependency on fossil fuels and decrease their overall energy costs

## Benefits of modularity, scalability and portability

- Modular/scalable IPA design that contains the microgrid controls, battery system and switchgear and is suitable for transportation on ice roads or barge
- Microgrid switchboard that incorporates the microgrid controller for an integrated solution
- Complete engineering, design, installation, startup, commissioning and project management



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# What questions do you have?



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