

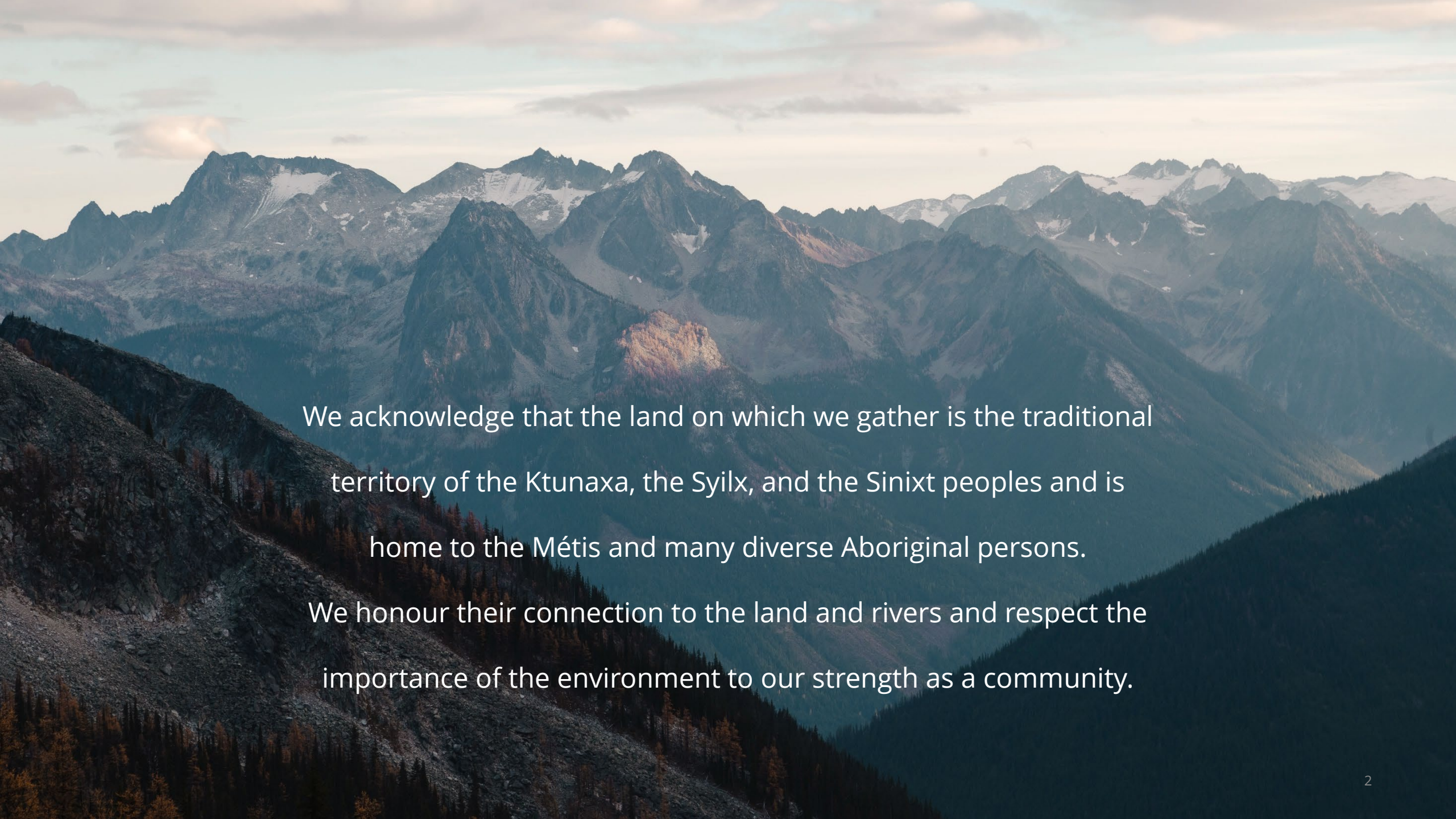


Advanced Metering Infrastructure

Public Information Session

City of
NELSON

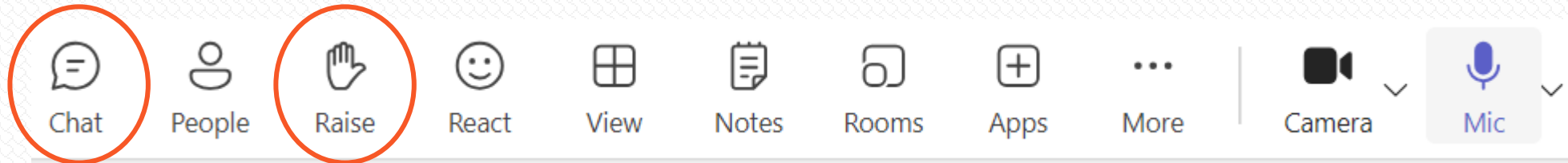
September 9, 2026

A wide-angle landscape photograph of a mountain range. In the foreground, a steep, rocky slope descends from the left, covered with dark evergreen trees. The middle ground features a series of jagged, snow-dusted mountain peaks. The background shows more distant, hazy mountain ranges under a sky with soft, wispy clouds. The overall tone is serene and majestic.

We acknowledge that the land on which we gather is the traditional territory of the Ktunaxa, the Syilx, and the Sinixt peoples and is home to the Métis and many diverse Aboriginal persons. We honour their connection to the land and rivers and respect the importance of the environment to our strength as a community.

EVENT MANAGEMENT

- Online participants will remain muted during the presentation.
- If you have a question, please use the chat or raise your hand.



- We will be recording the meeting and making it available online.
- Please turn off cell phones and other devices.

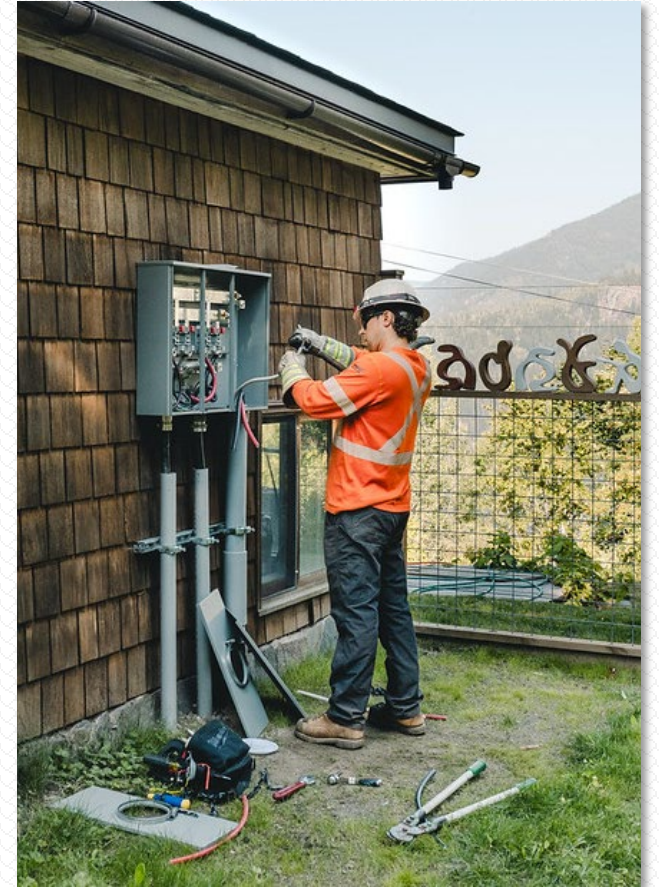
AGENDA

1. Welcome and Introductions
2. Background and Drivers
3. Regulatory Environment
4. Current Situation
5. How AMI Works and AMI Benefits
6. Radio Off Option
7. Implementation
8. How to Give Feedback



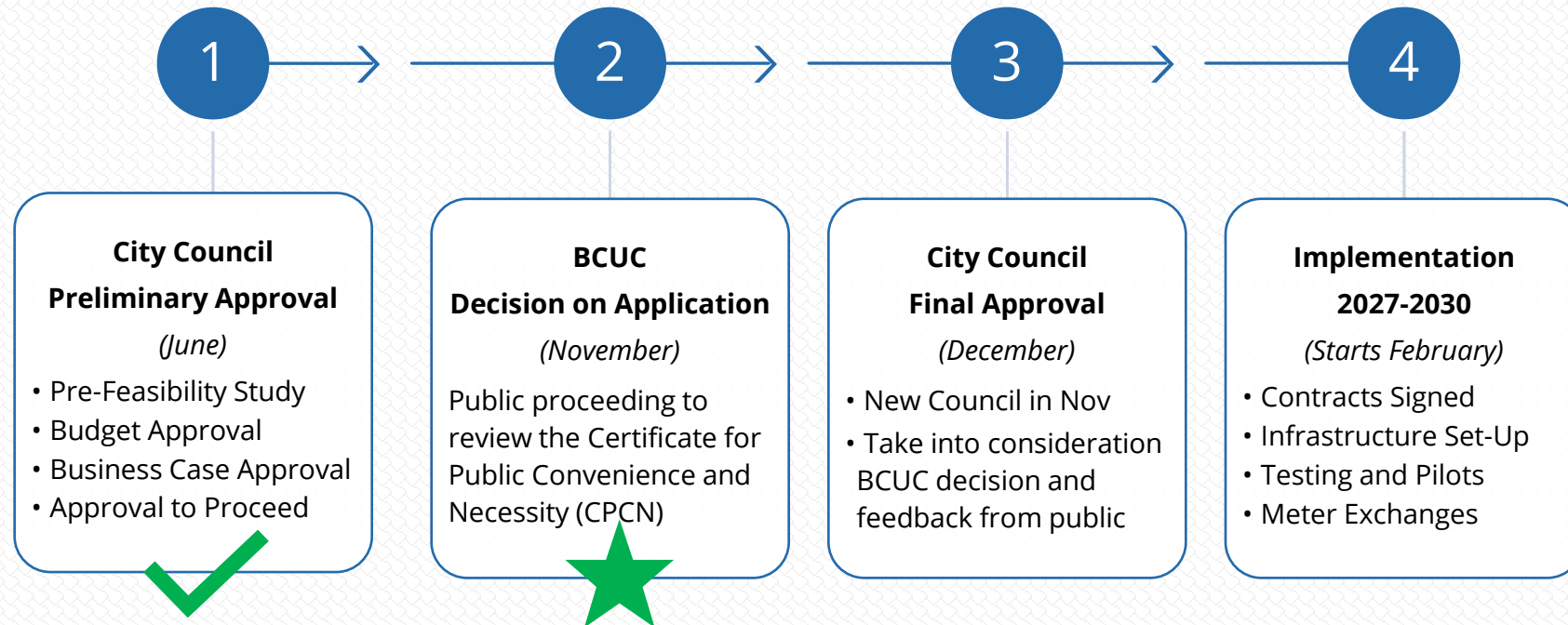
BACKGROUND & DRIVERS

- Our 11,500 meters are more than 20 years old.
- We must replace them. This is standard utility practice.
- Continuing to test and certify old meters to meet current standards is not economical.
- AMI is the industry standard. There are > 15 million in Canada.
- AMI gives the utility room to grow and offer different services and rates to our customers.



REGULATORY ENVIRONMENT

- **Rural** areas around Nelson (RDCK) are regulated by **BCUC**.
- **Urban** area (City of Nelson) is regulated by **City Council**.

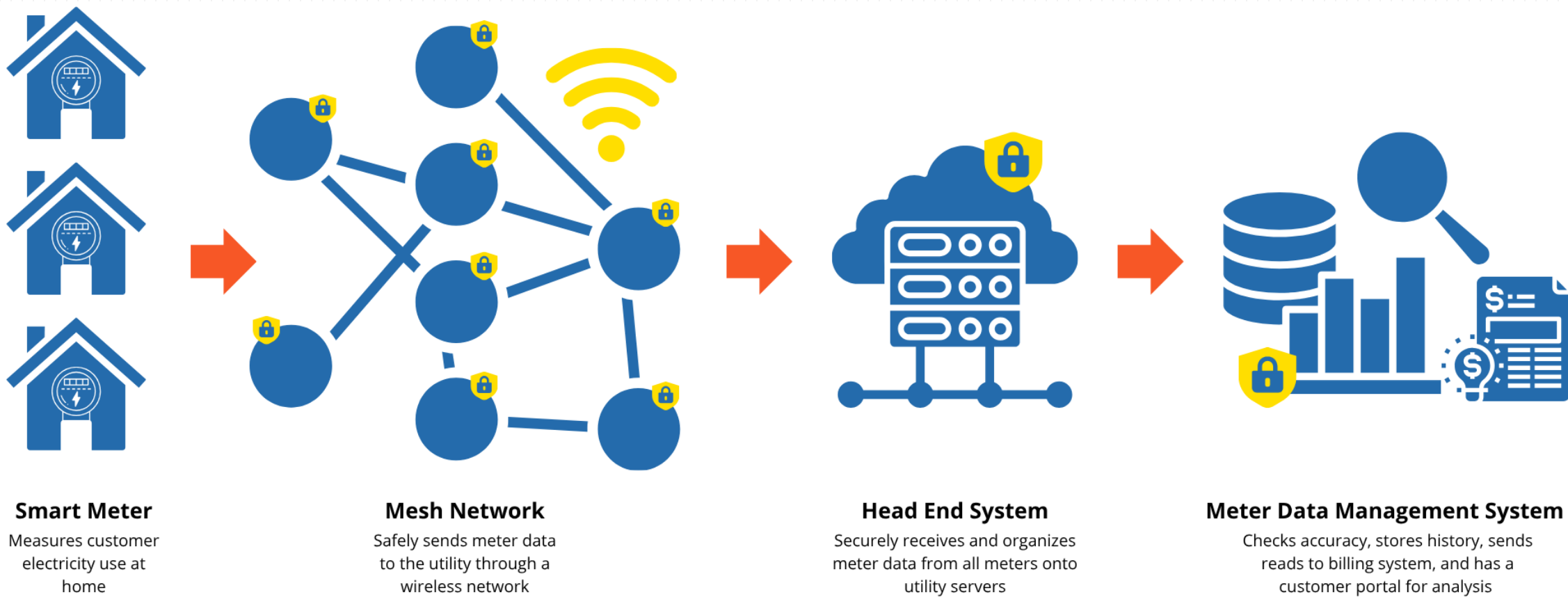


CURRENT SITUATION

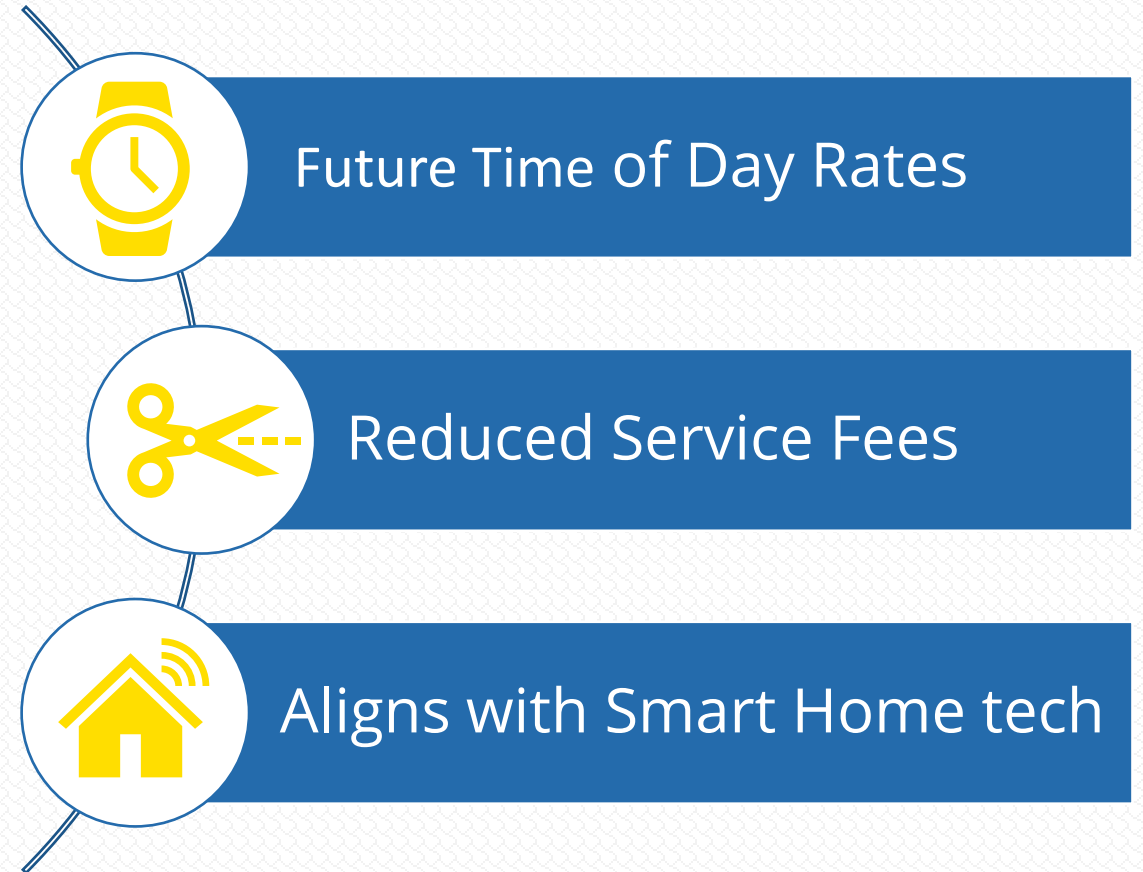
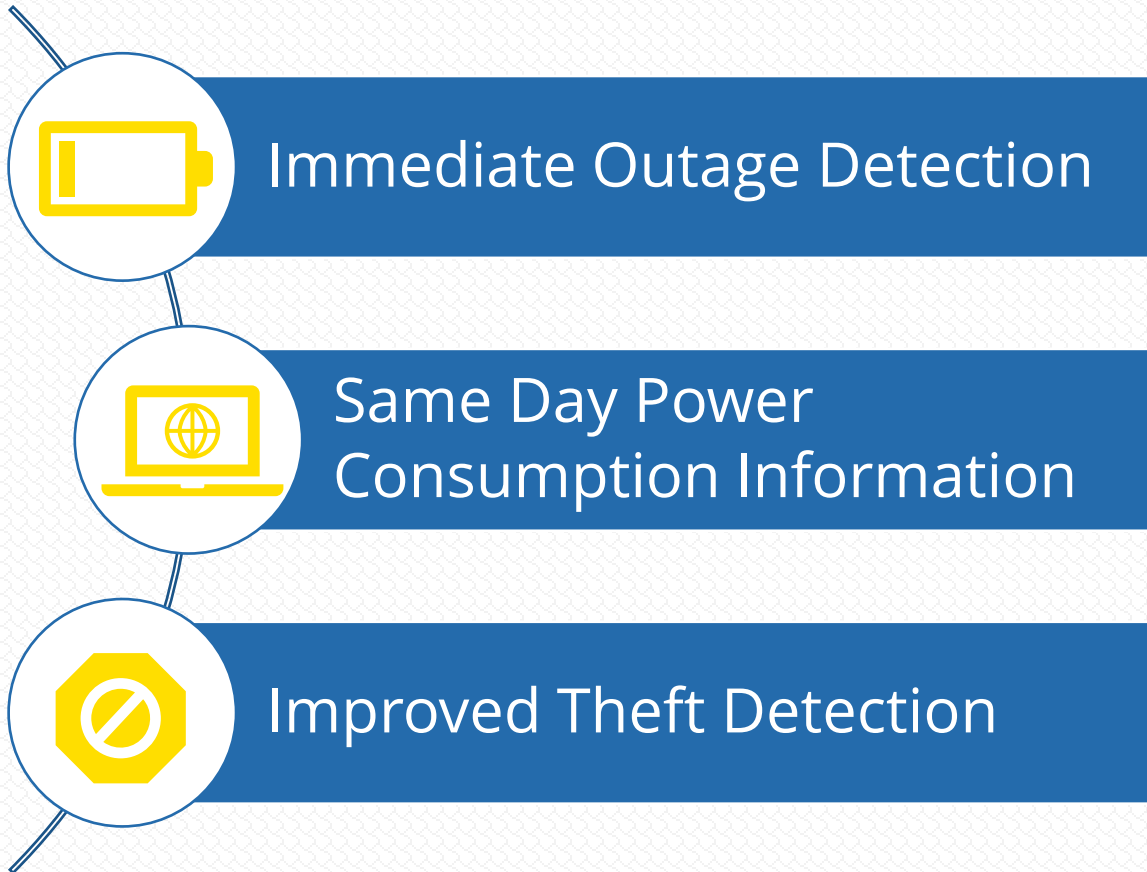
- Our current meters are like a flip-phone....they still work but they have limited functionality.
- We understand there are concerns with increased electricity rates, fire hazards, privacy of data, and with electromagnetic frequencies.
 - **Rates** -> 0.1% incremental rate increase.
 - **Privacy** -> AES: advanced encryption standard (like a bank transaction). FOIPPA: protection of privacy act (collect/disclose/use).
 - **Health** -> Health Canada: set the standards for the province/city. Smart meters have low-levels of EMF lower than Wi-Fi routers or cell phones.
 - **Fire** -> Supercapacitor back-up is used instead of lithium batteries



HOW AMI WORKS



AMI Benefits

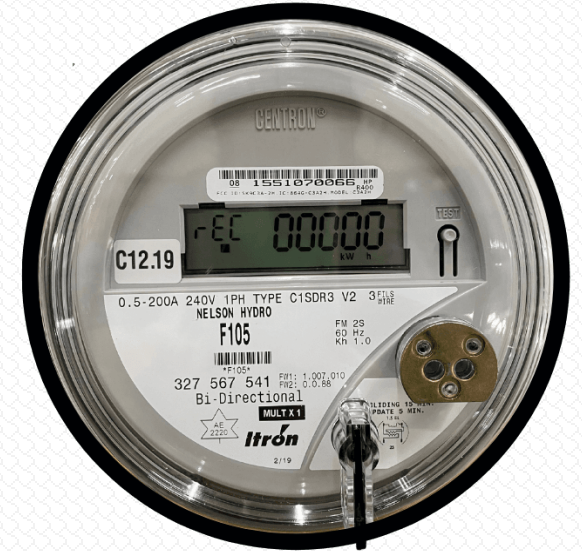


RADIO-OFF OPTION

You cannot decline the smart meter installation as per the bylaw, but there is the Radio-Off Option to not link the smart meter to the mesh network.

If you choose the Radio Off option, you have two choices:

- a) to send meter reads through the cellular network (one-time up-front costs and ongoing bi-monthly costs)
- b) have a meter technician read the meter in-person (one-time up-front costs + ongoing bi-monthly costs)
 - you will have to notify us of your power being out
 - you will be charged higher fees for in-person meter services
 - you will wait 2-months to see your electric consumption data online
 - you won't qualify for future programs like time-of-day rates



IMPLEMENTATION

- Replacement will be completed gradually by neighborhood starting as early as the end of 2027 or early 2028.
- We'll do a pilot to make sure our network is working before billing customers.
- New meter roll-outs will be scheduled by community.



HOW TO GIVE FEEDBACK



**Submit Comments
to Council**

Submit your comments by Sep 22nd

Do you live in the City? > **Council**

Do you live in the RDCK? > **BCUC**



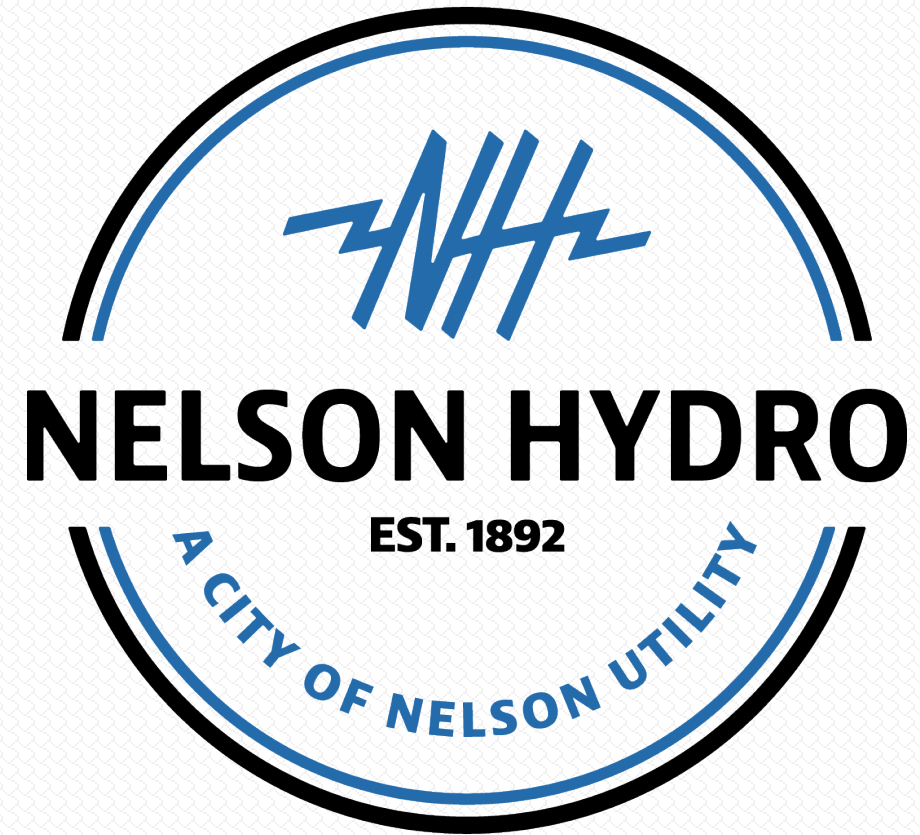
**Submit Comments
to BCUC**

For more information and to comment on the AMI project, visit

<https://letstalk.nelson.ca/AMI-Project>

FORTIS BC GAS METER PROJECT

- FortisBC is replacing their gas meters in Nelson from October 2026 to June 2027.
- The Nelson Hydro project is unrelated to the FortisBC project.
- FortisBC questions can be directed to [1-888-224-2710](tel:1-888-224-2710) or advancedgasmeters@fortisbc.com
- Additional information can be found at www.fortisbc.com
- Radio-Off option information and costs available on website.





Extra Content for Detailed Questions

FIRE CONCERNS

- No lithium batteries are used.
- Supercapacitors store energy electrostatically preventing chemical thermal ignition.
- Supercapacitors are safer than lithium batteries.

Energy/ Billing (Delivered/Received/Net)		Category	A4R		
		Load Profile (LP) Channels	4–6		
		LP Sources	~20 (Energy, Demand, Current, Voltage)		
		LP Storage	~15 days		
		LP / IP Interval Options	1-15 min		
		Energy Sources	kWh (D/R/N)		
		Reactive Energy	kVARh (D/R)		
		Apparent Energy	kVAh Delivered		
		Demand Sources	kW Demand (Delivered) kVAR Demand (Delivered)		
		Power Factor (kW/kVa)	Yes		
		Voltage	Phase A, Phase B, Phase C		
		Current	Phase A, Phase B, Phase C		
		Instrumentation (Phase A, B, C) & PQM Sources		IP Sources	Voltage (A/B/C), Current (A/B/C), Frequency
				IP Purpose	Basic diagnostics
IP Storage / Entries	~30 days /1000				
Power Quality		Neutral Current	Optional		
		Frequency	Yes		
		Line Loss Metrics	Optional		
Outage		Holdup Time	5-10 minutes (real-time clock)		
		Backup	Supercapacitor		
		Max Outage Events	~200		
		Detail Level	Basic		
		Integration	OMS (basic)		

HEALTH INFORMATION

- National library of medicine, peer reviewed article:
<https://pubmed.ncbi.nlm.nih.gov/30883437/>

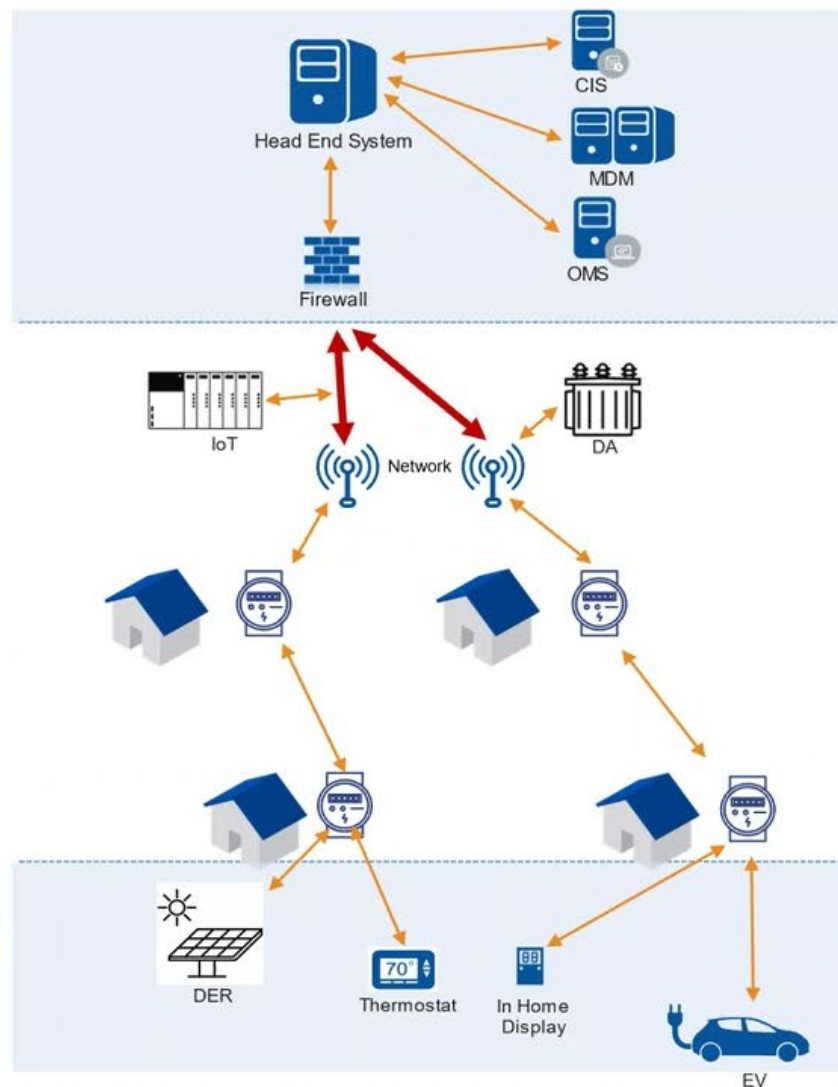
"Emissions from Smart Meters and Other Residential Radiofrequency Sources"

Radiofrequency emissions from 55 residential devices were measured in 10 residences (Belgium and France) and compared to environmental levels, emissions from 41 mobile phones, and international standards.

- WHO: "no scientific basis currently exists for a connection between EHS and exposure to EMF." (December 2005) They are doing more studies on low-level EMF (non-ionizing) from meters, cell phones, Wi-Fi, and microwaves.

AMI Standards: Examples and Organizations

Category	Organization	Domain	Current Standard
Safety	MC	Meter install	S-E-08 (Rev. 2)
	UL	IT Enterprise	60950-1 Edition 2
	UL	FAN - Meters	UL 2735-C*
Performance	MC	FAN - Meters	S-E-02 (Rev. 5)
	ANSI	FAN - Meters	C12.10, C12.20
Security	NIST	IT Enterprise	SP 800-53 Rev. 5
	NIST	FAN	AES 256
	ITU	Multiple	X.509 (PKI)
	IEC	FAN - Meters	61850
Interoperability	NERC	NAN	CIP-012-1 (R1)
	ANSI	FAN	C12.19 + C12.22
	IEC	IT Enterprise	619689
	Wi-SUN Alliance	FAN	Wi-SUN FAN 1.0
	DMTF	IT Enterprise	CIM 2.54



Safety	Performance	Security	Interoperability
Underwriters Laboratories 60950-1 Edition 2		National Institute of Standards and Technology SP 800-53 Rev. 5	COMMON INFORMATION MODEL CIM Version 10 IEC 619689
IEEE 2023 NESC	IEEE	X.509 (PKI)	IEC 62052-11
IEC 60364-nn	IEC 62052-11		IEC 62052-11
Canada S-E-08 (Rev. 2)	Canada S-E-02 (Rev. 5)	National Institute of Standards and Technology AES 256	Wi-SUN FAN 1.0
Underwriters Laboratories UL 2735	American National Standards Institute C12.10 + C12.20		American National Standards Institute ANSI
Underwriters Laboratories Various		Underwriters Laboratories Various NERC CIP-012-1 (R1) National Institute of Standards and Technology NISTIR 7628	TALQ Version 2 2030.5 (SEP) ZigBee 2.0 IEC 62548:2016 SAE J1772

Nelson Hydro CPCN for Advanced Metering Infrastructure Project

[Home](#) > [Our Work](#) > [Proceedings](#) > [Nelson Hydro CPCN for Advanced Metering Infrastructure Project](#)

NELSON HYDRO

Certificate of Public Convenience and Necessity for Advanced Metering Infrastructure Project

In Progress

Nelson Hydro has applied for a Certificate of Public Convenience and Necessity for the Advanced Metering Infrastructure Project. The Project will replace Nelson Hydro's existing Automated Meter Reading system with modern advanced meters and associated communications, data management and system integration capabilities.

Most documents listed below are in Portable Document Format (PDF) and best viewed using Adobe Acrobat Reader.

Timetable

SUBJECT	DATE 
Nelson Hydro confirmation of compliance with public notice requirements, except social media posts	Tuesday, August 4, 2026
BCUC Information Request (IR) No. 1 to Nelson Hydro	Tuesday, August 25, 2026
Nelson Hydro responses to BCUC IR No. 1	Tuesday, September 15, 2026
Letters of comment deadline	Tuesday, September 22, 2026
Nelson Hydro confirmation of compliance with social media reminder posts	Tuesday, September 29, 2026
Nelson Hydro final argument and responses to letters of comment, if any	Wednesday, October 14, 2026