Integrated Resource Planning

Fall 2023 Regional Update Webinar

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

Northern Region
Nov. 23, 2023

Megan:
Thanks to everyone who has joined today's call. We are looking forward to sharing more information about IRP with you as well as the needs and potential projects that have been identified in your region.
My name is Megan Robinson – Senior Advisor, Community Engagement IRP. Also, on the call presenting today are:

- **Chris Ripley**
  - Manager Integrated Resource Planning
- **Kurtis Lubbers**
  - Supervisor Distribution Optimization Engineering
- **Whitney Wong**
  - Specialist Integrated Resource Planning
- **David Moffat**
  - Advisor, Integrated Resource Planning

Winter weather driving

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

Ensure your vehicle is ready for winter weather

- Install winter tires.
- Keep washer fluid full.
- Pack a winter safety kit.
- Maintain proper tire pressure.
- Keep the gas tank at least half-full.
- Clean all debris from your vehicle.
- Keep your rear window defroster in working order.

2

Megan:
Before we move on to the agenda, it is practice at Enbridge to begin each meeting with a safety moment. Today we will review 7 vehicle tips that can help with winter weather driving:

1) Installing winter tires – driving with all-season tires in winter conditions doesn't offer the maximum performance that you may need throughout the winter months.
2) Keeping your washer fluid full – a large amount of fluid can be used during a single storm so its best to keep it topped up.
3) Packing a winter safety kit – a kit could include a matches, first aid kit, flares, flashlight & batteries, ice scraper, warm clothing, extra antifreeze, jumper cables, a small shovel, non-perishable food and water.
4) Maintaining proper tire pressure- a general recommendation is 30-35 PSI in winter temperatures.
5) Keeping the gas tank at least half full – if you find yourself stranded, it can help keep your engine running until help arrives.
6) Making sure you're cleaning all debris from your vehicle – by not doing this you can obstruct your vision and that of another drivers.
7) Keeping your rear-window defroster in working order – unsafe driving conditions occur when you can't see what is behind you.

Agenda

- Engagement process and webinar objectives
- Energy transition
- Integrated Resource Planning (IRP)
- Regional update
- Pilot project update
- Regional project discussion

3

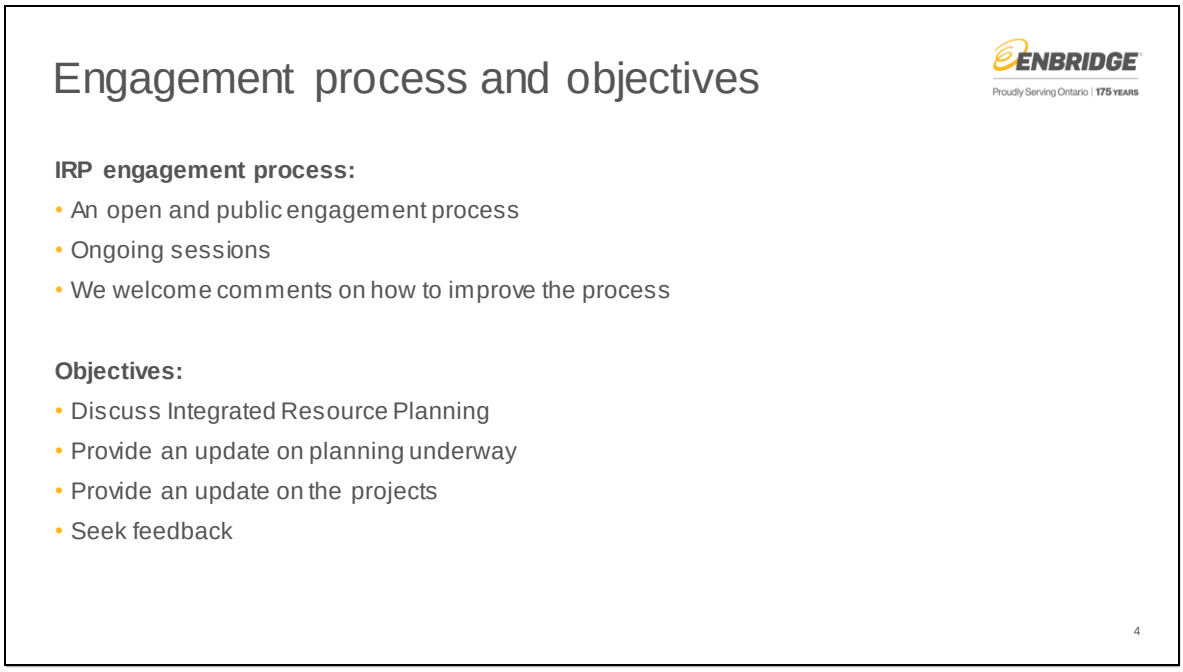
Megan:
Today's agenda consists of:

- the engagement process and webinar objectives
- Energy Transition
- Integrated Resource Planning
- A regional update
- Pilot project update, and
- Regional project discussion

You can participate in this webinar by asking questions in the chat function.

The moderator will address questions at the end of the presentation.

We will also be posting all questions and responses on the regional planning website.



Megan:
This webinar is part of an ongoing series of IRP engagement sessions that are intended to promote dialogue with attendees to help inform regional planning.

The IRP engagement process includes:

- An open and public engagement process where participation and feedback is encouraged.
- Ongoing engagement sessions.
- And, comments on how to improve the process. Feedback can be shared with IRP team members or through the 'Have Your Say' online feedback form.

The objectives of this webinar are to:

- Discuss Enbridge Gas' Integrated Resource Planning (IRP) Initiatives
- Provide an update on natural gas planning underway within the region
- Provide an update on the Pilot Project and other potential projects, and
- We're also seeking feedback on the demand forecast for the region to confirm current customer growth information

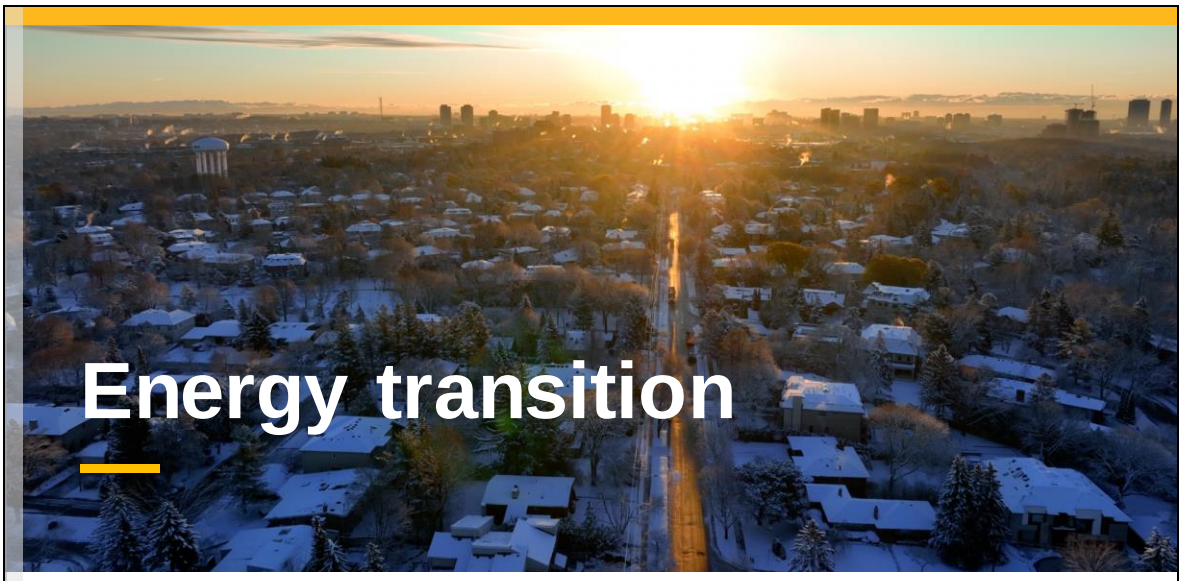
As a reminder

- We are not here to debate government, environmental or regulatory policy.
- We will not be seeking feedback on regulatory proceedings or facility projects that are already in flight or part of an ongoing Leave to

Construct (“LTC”) proceeding.

- We are not opening additional lanes of inquiry for projects that have filed their LTC or are in LTC proceedings.

Enbridge Gas is committed to supporting the achievement of federal and provincial emissions targets and today Chris Ripley will talk about integrated resource planning and the role it plays in supporting the energy transition. Chris.



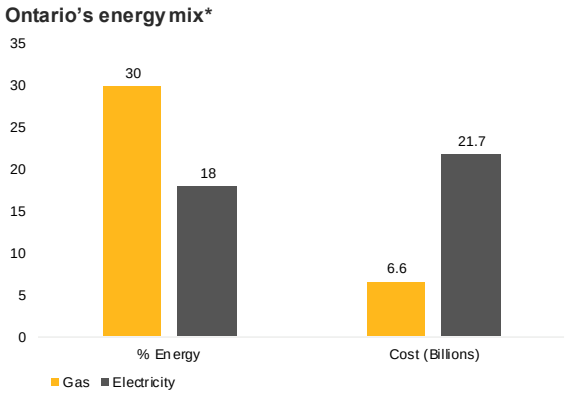
Energy transition

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

Ontario's energy systems

Ontario's energy system reality

Natural gas provides almost twice the energy needs of Ontarian's at less than ⅓ the cost



*% Energy: Canada's Energy Future 2023 report's database. Cost Electricity: $18.6B operating revenues, OEB's 2022 yearbook and $3.1B Renewable Cost Shift Subsidy estimate, Financial Accountability Office of Ontario's Report, Ontario's Energy and Electricity Subsidy Programs, February 2022. Cost Gas: Total operating revenues for Ontario's gas distributors, OEB's 2022 yearbook.

6

Chris:
Natural gas is a critical component of Ontario's current energy supply. Approximately 75% of Ontario homes rely on natural gas for home and hot water heating. Overall, 30% of Ontario's energy, almost double that of electricity, is served by natural gas at less than 1/3 of the cost.

Ontario has a reliable electricity supply today because of natural gas-fired generation. Electricity can't be efficiently stored, and renewable power requires a backup that can ramp up quickly to meet Ontario's energy needs when the wind doesn't blow, the sun doesn't shine, or above-ground infrastructure is impacted by climate events like ice or high winds.

Within the next 20 years, energy demand is set to increase by 25 % as forecasted by the International Energy Agency (IEA). At the same time, we recognize residents of Ontario are concerned about reducing carbon emissions. Under the Paris Agreement, Canada committed to a target to reduce GHG emissions by 30% below 2005 levels by 2030. In April 2021 Prime Minister Trudeau increased Canada's 2030 emissions reduction target to 40-45%.

Some say a simple solution to reduce emissions would be to eliminate fossil fuels and electrify everything. Enbridge believes a focus on achieving net zero via only electrification overlooks market-ready, low and zero-carbon solutions. These can affordably support near-term emissions reductions by leveraging the existing gas and electric infrastructure versus an electric-only option.

In our view, a coordinated approach to energy system planning – between natural gas and electricity - is required for a successful energy transition

Enbridge Gas' role in Ontario's energy transition

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

With approximately 30 percent of Ontario's emissions coming from the use of natural gas, Enbridge Gas will have an important role in energy transition.

Enbridge Gas is committed to supporting government with the achievement of their clean energy plans.

- Actively working on solutions to help meet Ontario's energy needs, while reducing emissions cost effectively.
- Enbridge Gas has set a net zero by 2050 target for emissions from our own operations, with an interim goal of reducing emissions intensity.

The gas distribution system in Ontario is a resource that can be leveraged to enable further greenhouse gas (GHG) reductions beyond 2030, including net zero.

7

Chris:
We recognize that energy transition is starting to unfold in Ontario and there are aggressive emission reduction goals set by Canada. We also recognize that our natural gas system and the product that we deliver will need to change to support these emission reduction goals – given that approximately 30% of Ontario's emissions are from the use of natural gas.

We are committed to supporting energy transition in Ontario, and we have taken the following steps so far:

- We are actively investing in low-carbon solutions that support cost-effective emission reductions – while continuing to safely and reliably meet Ontario's energy needs
- We have set net-zero targets for emissions from our own operations

Enbridge Gas's distribution, transmission and storage assets are vast and invaluable in providing reliable and resilient energy to Ontario. Our system can support a net-zero future – and the extent to which our system can be utilized in the transition must be further analyzed and understood before any decisions are made with regards to the best pathway forward in Ontario. Enbridge has the scale and experience to support the transition to a net-zero future and is delivering innovative solutions across the sector.

Integrated Resource Planning

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

Actions to achieve net zero

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

"Safe-bet" actions to take today to reach net zero:

Maximize energy efficiency

Reduce energy use.

Optimize energy system planning

Co-ordinate electric and gas system planning.

Invest in low-carbon gases

Transition to increasing amounts of renewable natural gas (RNG) and hydrogen over time.

Utilize carbon capture and storage

Invest in carbon capture and storage (CCS) for heavy industry and blue hydrogen production.

9

Chris:
Whichever pathway the province takes to achieve net zero, there are some actions that Enbridge Gas believes are safe bets. These actions are considered safe bets because they can deliver near-term GHG reductions, and/or maintain flexibility until the best pathway is chosen.

Safe bet actions include:

- Continuing to focus on delivering energy efficiency programs, with a focus on maintaining alignment with federal, provincial and municipal programs to ensure the costs and impacts are minimized.
- Optimizing and integrating gas and electric systems through coordinated system planning and through physically integrating systems in buildings through hybrid heating.
- Investing in carbon capture, utilization and storage for heavy industry and hydrogen production.

Integrated Resource Planning

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

The energy landscape in Ontario is evolving

Integrated Resource Planning (IRP) is an enhanced planning strategy and process.[1]

Enbridge Gas evaluates non-pipeline alternatives that could be used to defer or avoid implementing a traditional pipe project to meet a system need.

Consideration is given to safety, cost-effectiveness, and the ability of alternative solutions to meet customer demands reliably.

[1] IRP Framework was published by the OEB on July 22, 2021.

10

Chris:
As the energy landscape continues to evolve, there is a growing interest in low carbon alternatives to meet energy needs and as the largest natural gas distributor in Ontario, Enbridge Gas knows it will play a meaningful and integral role in the province's path towards energy transition.

So what is integrated resource planning? IRP is an enhanced planning strategy and process where we evaluate non-pipeline alternatives that can be used to defer or avoid implementing a traditional pipeline project to meet a system need. Consideration is given to safety, cost-effectiveness, and the ability for alternative solutions to meet customer demands reliably. In other words, it helps us to find alternative ways to meet customer demand for energy without increasing our pipeline infrastructure

Enbridge Gas is committed to supporting the province, municipalities, and Indigenous communities in achieving their clean energy goals. Annual IRP stakeholder activities like these will support ongoing dialogue between all parties to ensure energy and climate plans are known and factored into Enbridge Gas's system planning.

IRP regional stakeholder activities are important to better understand the local initiatives and policies that may affect natural gas demand. The learnings from stakeholder sessions are then incorporated into our demand forecasting processes and allows us to plan for the future.

IRP alternatives (IRPAs)

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

Non-pipeline alternatives can include:

- **Demand side alternatives:**
  - Enhanced Targeted Energy Efficiency (ETEE) programs
  - Demand Response programs
- **Supply-side alternatives:**
  - Compressed natural gas (CNG) or liquified natural gas (LNG)
  - Carbon-neutral renewable natural gas and hydrogen
  - Adding supply through upstream deliveries

Alternatives can be implemented individually or in combination to meet the system need cost-effectively and within the required timeframe.

11

Chris:

In 2021, The Ontario Energy Board approved several IRP alternatives including:

Demand side alternatives that focus on lowering peak hour energy use through energy efficiency programs such as Enhanced Targeted Energy Efficiency (ETEE) programs or Demand Response programs. Enbridge will offer a variety of programs to help reduce peak consumption including upgrades to building envelope and more efficient heating equipment.

Demand Response is a program where Enbridge will install smart thermostats in a customer's home and controlling the thermostat during a very cold event by preheating the home's temperature or lowering the temperature by a few degrees during peak times. While this may seem small, if enough homes and businesses in an area participate it can lower the peak hour consumption helping to defer or downsize pipeline projects.

The OEB also approved supply side alternatives that focus on bringing more energy to a region through the use of compressed natural gas (CNG) or liquified natural gas, carbon-neutral renewable natural gas or additional supply through other pipelines.

These alternatives just mentioned can be implemented individually or in combination to meet the system need cost-effectively and within the required timeframe.

How we are planning our system today With IRP

- Demand forecast
- System modelling
- Asset management plan (AMP)
- IRP and LTC assessment process

12

Chris:
To plan our system Enbridge follows an annual process that includes reviewing the future natural gas demands, modelling how those demands impact our natural gas system and then determines where new projects are required to meet system demands.

Following the identification of new system needs, Enbridge scopes and documents new facility projects that are required over the next 10 years and include those in a document called the Asset Management Plan.

Following the identification of projects in the AMP Enbridge starts the process of evaluating the projects for IRP alternatives.

IRP assessment process

Enbridge Gas uses a four-step IRP assessment process to determine the best approach to meet system needs:

1. Identification of constraints
2. Binary screening criteria (pass/fail)
3. Two-stage evaluation process
   - Technical evaluation
   - Economic evaluation
4. Periodic review

The IRP assessment process allows Enbridge Gas to focus on investments where there is a reasonable expectation that a proposed project could efficiently and economically meet the system need.

13

Chris:
The IRP assessment process consists of 4 steps including:

Identification of Constraints in the AMP as noted on the previous slide . There are over 3000 projects in the AMP which would require significant time if Enbridge had to evaluate every single project. Therefore, the OEB approved a set of screening criteria to make sure Enbridge can focus on projects where IRP alternatives can be applied.

Said another way, the screening criteria help us reduce the number of projects from the IRP assessment process. These criteria include emergency projects, customer specific projects were the customer is paying for the entire project or if the projects are too small in dollar value that we can't add any value.

For all of the projects that pass the screening phase we move to a Two-Stage Evaluation Process

- The technical Evaluation stage is where we assess the technical viability of potential IRPAs to reduce peak demand to the degree required to meet the identified system need, using best available information to determine whether an IRP Plan including one or more alternatives would be a viable option.
- Economic Evaluation – The three-phase economic test that compares the IRP plan(s) to the pipeline option to determine which alternative is optimal.

Following the assessments, we then conduct Periodic Reviews to evaluate whether future project needs have changed or if the IRP alternatives can meet the system need

Technical evaluation process

1. Review and confirm if the existing scope should be modified prior to the evaluation of an IRP alternative.
2. Determine the feasibility of supply-side alternatives.
   - Considerations for CNG: Location of injection and flow rates required
   - Considerations for market-based supply side options: Availability of additional natural gas capacity or pressure upstream to impact project scope
3. Determine the feasibility of demand-side alternatives.
   - Considerations for ETEE: Demand reduction required, time horizon to achieve reductions, firm contract demand on the system, theoretical potential ETEE reductions, system-specific constraints
4. Determine the overall technical feasibility of IRPA implementation.

Growth driven projects have the highest IRP value

14

Chris:

I am going to dive a little deeper into the technical evaluation process. For each project that passes the technical screening Enbridge will review the project scope, timing and confirm the forecast for that particular area to ensure that the correct project need is being evaluated. Enbridge will meet with municipalities, local electric utilities, and large customers and Indigenous groups to understand the future energy needs for the area, including the review of any community or municipal energy plans that exist for the region.

We will then look at all the potential alternatives to determine if one or more in combination can defer or downsize the facility project. Energy efficiency programs for customers take time to develop and implement so there will be projects where Enbridge will need to implement a supply side alternative for a few years to help defer a project, until the energy efficiency programs are implemented and reducing the peak demands on our system.

Following completion of the technical evaluation Enbridge Gas will compare the facility project and IRP alternatives from an economic perspective. The most optimal solution, technically and economically, will be brought forward to the OEB for approval.

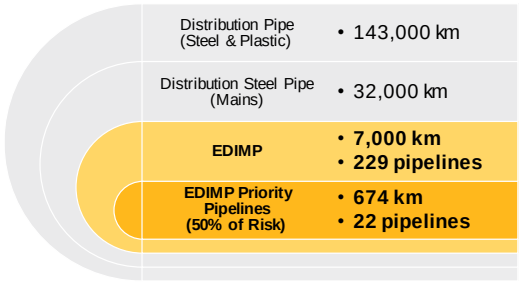
EDIMP

Enhanced Distribution Integrity Management Program (EDIMP) aims to implement targeted programs to manage the integrity threats of higher priority distribution pipelines by improving the understanding of:

- Asset condition
- Fitness for service
- Risks associated with the operation of those assets

If the results of these targeted integrity programs impact the pipeline replacement project scope in the AMP, IRP will re-evaluate the feasibility based on the updated scope.

Distribution populations



Values are estimates and may change based on the EDIMP population refinement.

15

Chris:

New for this year is the EDIMP program, which stands for Enhanced Distribution Integrity Management Program (EDIMP)

Enbridge Gas is implementing the EDIMP to target the management of integrity concerns on our higher priority distribution pipelines. This requires Enbridge Gas to conduct integrity related assessments on these higher priority distribution pipelines to improve our understanding of:

- The condition of the asset
- Whether the asset is fit for service
- And if there are any risks associated with operation

The EDIMP related work may determine that a full replacement of the pipeline is not warranted, saving ratepayers money, based on enhanced asset health findings. On the other hand, it could also determine that significant unexpected issues requiring planned capital investments or urgent intervention is required to address the integrity concerns on the pipeline.

If the results of these targeted integrity programs impact the pipeline replacement project scope in the AMP, IRP will subsequently re-evaluate of feasibility of IRP implementation based on the updated scope.

There are no projects currently within the scope of EDIMP in the (**Northern**) Region.

Pilot project update

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

IRP pilot overview

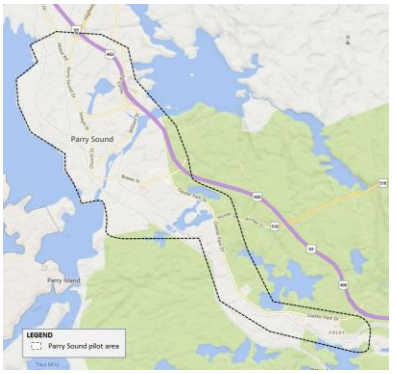
Enbridge Gas has filed an application for two IRP pilot projects as directed by the OEB – one of which is located in the Town of Parry Sound.

Key pilot objectives

- Develop an understanding of how to design, deploy and evaluate Enhanced Targeted Energy Efficiency (ETEE) programs.
- Gain insight into how ETEE measures impact peak-hour demand.

IRPAs

- Demand side: ETEE
- Supply side: Market-based supply and compressed natural gas (CNG)



Application filed, awaiting decision

17

Whitney:
Under the direction of the OEB, Enbridge Gas has developed and filed an application for two IRP pilot projects. One of which is located in the Town of Parry Sound.

The key focus of these pilots will be to explore and gain learnings around ETEE (enhanced targeted energy efficiency) programs, and how they impact peak hour demand

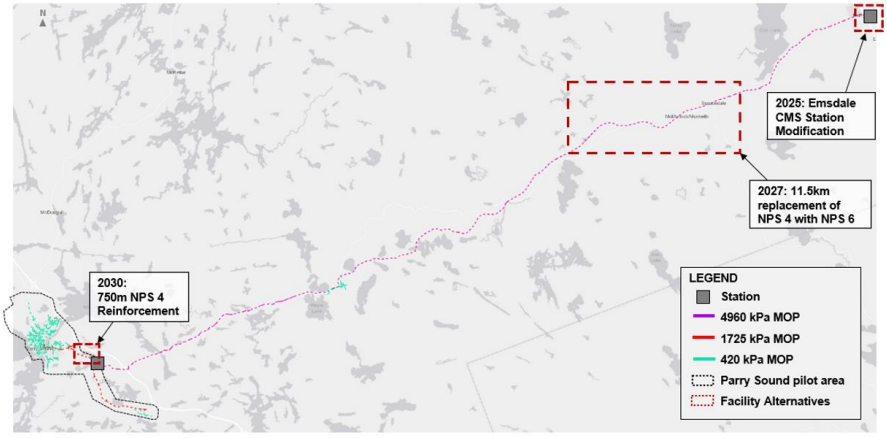
To provide a bit more insight into what ETEE is, it involves offering targeted energy efficiency programs, such as providing incentives towards energy efficiency equipment to home owners and businesses within a specific geotargeted area, in efforts to reduce the peak period natural gas demand in that area. The ETEE program itself could look at incremental incentives to traditional energy efficiency programs, or could look at introducing new offerings and technologies as well.

So while some of you may be familiar with our traditional energy efficiency programs, as those have been in place for some time now , and they're available to all Enbridge Gas customers today, the concept of enhancing them and using them to reduce peak demand requires more investigation. These pilots will aim to better understand how to design, deploy and evaluate an ETEE program, as well as understand the impact these programs have on the peak hour demand, eventually looking to see whether the resulting peak hour reduction can defer or offset an infrastructure project within the area.

On the supply-side, market based supply and compressed natural gas (CNG) also will play a part in this pilot, but it will leveraged in the background as needed while we test ETEE in this area.

Parry Sound system overview

Parry Sound Baseline Facility Projects



18

Whitney:

This is just a schematic for a zoomed out view of the entire system, where the town of Parry Sound can be seen on the left and is the focus of the IRP Pilot Project.

The reinforcement projects on this system are located upstream of Parry Sound on the higher-pressure system. And with the deployment of ETEE in the town of Parry Sound, we are looking to evaluate the magnitude of those peak hour reductions and how those changes impact the project scope and timing of reinforcement projects upstream.

We are also looking to install hourly measurement on each customer meter in this area. This will have no impact on the customer side of things, but what it allows us to do is collected more granular data at a customer level, as to how different ETEE measures can impact customer's demand.

IRP pilot regulatory update

- **July 19:** Enbridge Gas filed the IRP Pilot Projects Application with the OEB.
- **Sept. 26:** OEB Staff, intervenors and Enbridge Gas filed submissions on the proposed issues list.
- **Oct. 20:** Written interrogatories (IRs) filed with the OEB.
- **Nov. 3:** Enbridge Gas filed written responses to IRs with the OEB.
- **Nov. 10**: OEB Staff, intervenors and Enbridge Gas filed comments regarding the need for a technical conference.
- **Nov. 17:** OEB issued PO No.3 to put this proceeding in abeyance, pending the filing of updated evidence by Enbridge Gas in light of recent market changes that impact the ETEE program design and budget.

19

Whitney:

In terms of where we are with this Pilot Project, this application was filed with the OEB earlier this year in July. We're currently going through the standard regulatory steps, including defining an issues list, and responding to interrogatories sent in by intervenors. There has been some recent changes in the market that does impact the ETEE program design and budget, and so the OEB has placed this proceeding in abeyance and on pause in order to provide time for Enbridge to make the necessary updates to the application.

Regional project discussion

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

Northern regional overview

Investment Category	IRP Value
Growth	High
Non-Growth	Low

The Northern Region currently has 20 growth related and 65 non-growth-related investments in the AMP.

Growth related investments

- 16 have been technically evaluated
- 4 remain to be evaluated by the end of 2023

Non-growth related investments

- 32 have been technically evaluated
- 33 remain and results to be reflected in the 2025 - 2034 AMP

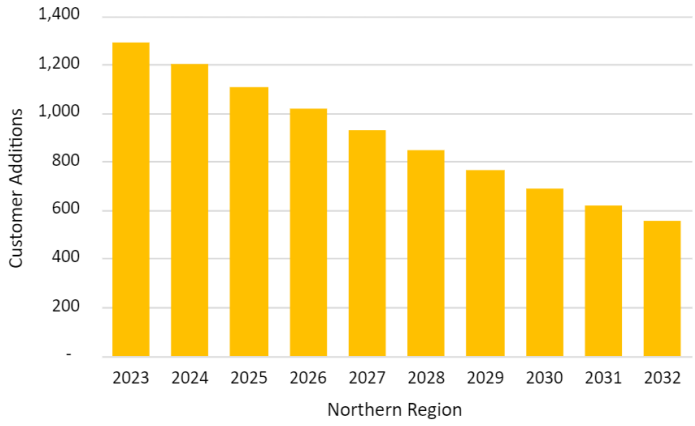
21

Kurtis:
My name is Kurtis Lubbers and I work in the Distribution Optimization Engineering team at Enbridge Gas, and what we do primarily is hydraulic modelling of the systems across the franchise, and now this includes supporting IRP initiatives.

Today I'll be speaking a bit more about the Northern Region and some of the Technical IRP Evaluations we are performing as one of our accountabilities.The Northern Region is circled and shown in blue on the slide.
This region covers a vast geographic area stretching from Kenora and Thunder Bay at the northwest extent, to Orillia at the southern extent.

As noted, this region has 20 growth related and 65 non-growth-related investments in the AMP.
We have already reviewed a significant amount of the projects in this region, and are aiming to complete the growth project review by year end and the remainder of the non growth in early 2024.

Regional needs



Gradual decline in the forecasted rate of customer additions over the years

22

Kurtis:
The northern region customer attachment forecast is shown here, and I do want to note these values are based on the 2022 long range planning forecast.
As you can see, there is a gradual decline in the forecasted rate of customer additions over the years which is critical to our assessments.
This has been accounted for in the IRP assessment process when modelling for the demand reductions required by various IRPAs.

A number of factors are considered when evaluating future customer additions and natural gas demand forecasts.
Enbridge Gas appreciates stakeholder feedback to help inform our areas of focus for potential IRP projects to confirm the demand forecast as well as information that may affect implementation.

Enbridge Gas is accepting feedback through the form that will be delivered to you following this webinar as well as on our webpage through the “Have Your Say” function.

Key projects: Northern Region

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

Growth and system expansion related

To provide reliable, secure and affordable natural gas supply to meet the growth in demand of the respective systems.

Investment name	In service date
SRP North Parry Sound Seguin Trail Reinforcement	2027

23

Kurtis:
Now I will briefly discuss a few projects. Whitney just spoke a bit about this Parry Sound reinforcement. It was chose as one of the IRP Pilot Projects currently under review for approval with the Ontario Energy Board. It passed the Technical Review because it can potentially be reduced and deferred using CNG and ETEE.

After more detail and due to supply pressure changes, this project need and scope has changed and is now currently forecasted as three different projects with varying timelines. Ongoing updates will be provided as part of the Pilot projects with the OEB and Technical Working Group (TWG) as well as he outcome of the regulatory filing.

As the residential and commercial growth in the Northern region is less than some of the southern and eastern regions, there are not a lot of other large growth projects to discuss.

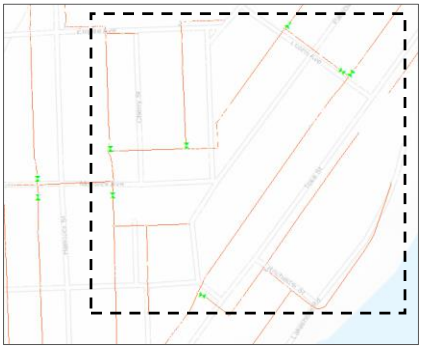
Hart St-Timmins-1559

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

This investment is part of the Vintage Steel Mains Replacement program.

Scope

- Replace 850m Nominal Pipe Size (NPS) 2" Steel, 750m NPS 4" Steel and 206 services
  - Timing planned for 2032, current estimate is $4.7 million (including overheads).
- Entire project can be replaced with NPS 2" polyethylene 420kPa
  - This fails the Technical Review, no IRP is required.



Pipe to be replaced in Timmins.

24

Kurtis:
Shown here are some summary points regarding a pipeline replacement project in Timmins, around Hart Street.
The general area of pipeline replacement is within the highlighted black box in the figure.

The project is currently planned as a replacement of 2” and 4” Steel vintage pipes and the associated services, approximately 200 for this project.

The reason this project fails Technical review from an IRP perspective is because Enbridge Gas can replace all these pipes with 2 inch, therefore no IRPA is required as we would not install smaller pipe main in the road allowance.

It should be noted that although we can replace with all 2 inch, Enbridge may install some larger pipelines along critical paths to maintain system resiliency but this will be determined in the future during a detailed design phase.

Key projects: northern region (part 2)

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

Integrity and condition related

Projects required as part of the integrity management program to mitigate risks of corrosion, vintage steel main, pipeline failure and geohazards.

Investment name	Potential In service date
Redrock Retrofit	
Marks St S-Thunder Bay-1537	
4th Ave S-Kenora-1562	
George St-Hearst-1558	
Spruce St-Kapuskasing-1565	
Hart St-Timmins -1559	

25

Kurtis:
In the Northern region there are quite a few pipeline replacement projects that are currently planned in the later years of the AMP.
We have already reviewed a significant amount of them as shown on one of the previous slides. A few examples of these types of projects are shown in the Table here.

The Red Rock Retrofit is an example of an integrity project that fails the Technical Review.
It is planned for 2024 and the primary scope is to install permanent inspection facilities and retrofit the existing pipeline for integrity and inspection purposes.

George Street in Hearst, and Hart Street in Timmins are examples of some of the replacement projects that have been evaluated that I will show in the next few slides.

George St-Hearst-1558

This investment is part of the Vintage Steel Mains Replacement program.

Scope

- Replace 2500 m Nominal Pipe Size (NPS) 2" Steel, 400 m NPS 4" Steel and 173 services
  - Timing planned for 2032, current estimate is $5.2 million (including overheads).
- Entire project can be replaced with NPS 2" polyethylene 420 kPa
  - This fails the Technical Review, no IRP required.

Project area in Hearst.

26

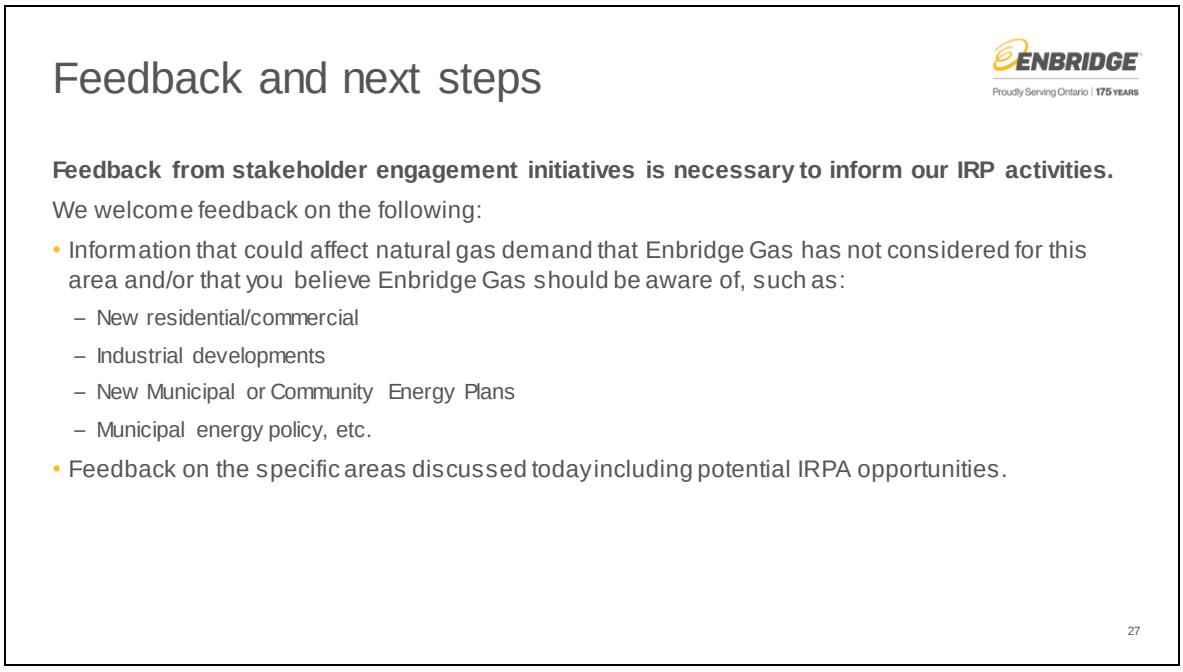
Kurtis:
This project is another vintage steel main replacement project but this one is located in Hearst, Ontario.

The general area of pipe replacement is within the highlighted black box in the figure which includes George St and associated nearby streets.
This project is also planned as a replacement of 2" and 4" Steel vintage pipes and the associated services which are just over 170.

Again, the reason this project fails Technical review is because Enbridge can replace all these pipes with 2 inch pipe currently, therefore no IRP is required. Similarly to the previous project, Enbridge may install some larger pipelines along critical paths but this will be determined in the future during a detailed design phase.

As you can see, these are the types of replacement projects that are being reviewed from a Technical perspective, but unfortunately fail IRP Tech Reviews.

Moving forward, Enbridge Gas is very excited to focus on the Parry Sound pilot project in the Northern Region, as this is a very large growth project and passed the Technical Review early on. This pilot project provides a great opportunity to test and demonstrate IRPAs in a single sourced, sensitive system. I will now pass it back to David.



David:

Thanks Kurtis!

- Feedback is an important part of informing our IRP activities and is a driving force behind these sessions.
- We're always looking for feedback on:
    - Information that could affect natural gas demand that we might not have considered for this area or that you believe we should be aware of, such as:
        - New residential or commercial developments
        - Industrial developments
        - New Municipal or Community Energy Plans, and
        - Municipal energy policy, etc.
- We would also like to hear feedback on the specific area's discussed today including potential IRPA opportunities.

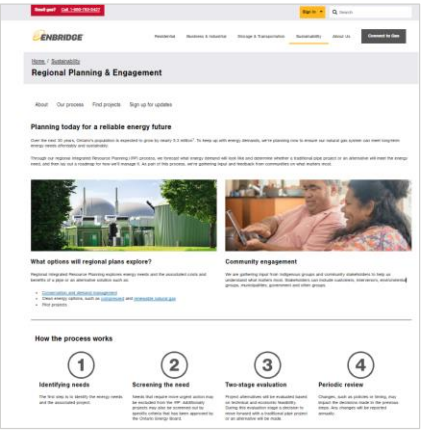
How to stay involved

ENBRIDGE
Proudly Serving Ontario | 175 YEARS

Visit our Regional Planning webpage to:

- Sign up for email updates to receive information on upcoming stakeholder events and webinars.
- Register for events.
- Review regional pages that include all IRP projects in your community.
- Submit feedback through 'Have your Say'.
- Search for other IRP information as required.

Sign up for email updates today!



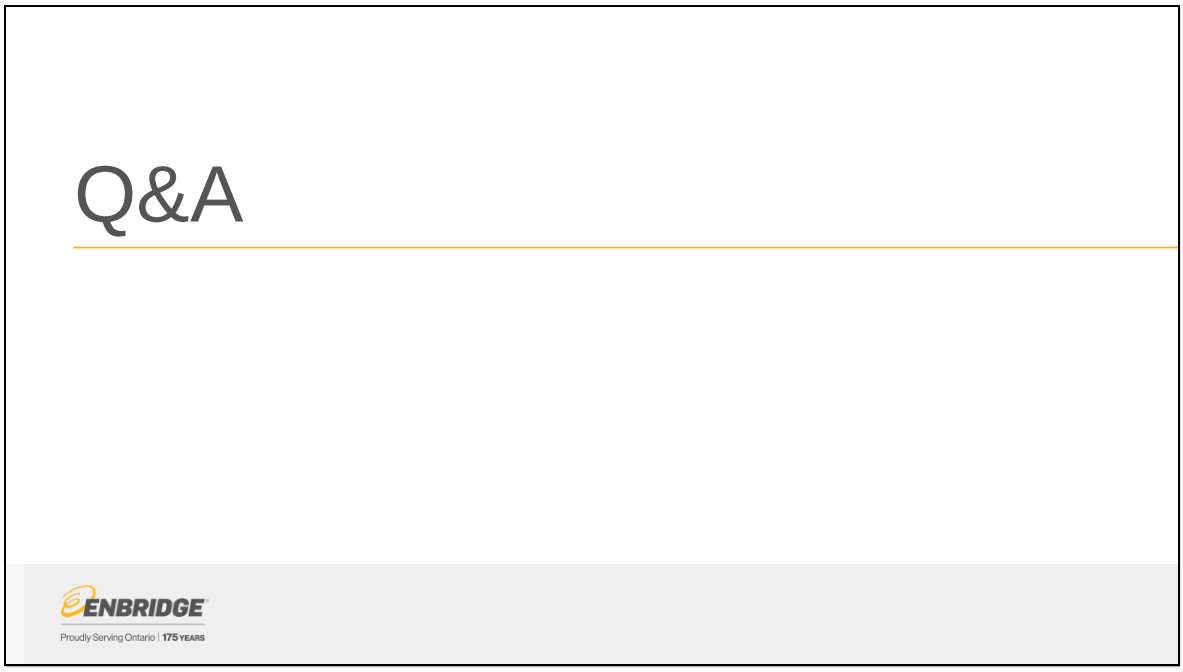
enbridgegas.com/sustainability/regional-planning-engagement

28

David:

The best way to stay involved is to visit our Regional Planning webpage where you can:

- Sign-up for email updates to receive information on upcoming stakeholder events and webinars
- Register for events
- Review regional pages that include all IRP projects in your community
- Submit feedback through the 'Have your Say' form on our webpage, and
- Search for other IRP information as required



David:

Q: If our understanding is correct, there are capacity constraints in and around Parry Sound. What current limitations are there in relation to serving new and large housing developments (at 1, 3, 5, 10 years)?

A: As noted, there are constraints on the system we forecasted over the next 10 years. Hence why we're recommending these projects or these facility projects. Enbridge Gas builds those systems based on the forecast we showed in the diagram. It always depends on the size of the demand or development, as well as location on the system. So, I would encourage everybody to follow the typical process and go through Get Connected, or your local region to request service and depending on the size, Enbridge will review that development, location and provide the assets. We will explore the economics as part of the normal process, but depending on the size, we're hoping to continue using the supply side alternative that Whitney and Chris talked about a little earlier with CNG. In the meantime, we're approving loads that defer the project need and worked through that with the economics as part of this entire pilot. It's a great question and we're going to have to explore how to maintain some of these developments moving forward throughout this process.

Q: With the home energy rebate on its way out, does Enbridge still have plans to continue making incentives available for use/GHG reductions? Incentives like these are crucial to the success of municipal community climate action plans?

A: We still have our demand-side management team. So they're the ones who run this home energy rebate, the HER+ Program. I guess what's on its way out, is the federal portion of the extra funding. But the HER program is still available. The residential team is still looking to see how to restructure it now

that the federal portion is out of the picture, but I think for sure we're still looking and committed to providing incentives for energy efficiency projects for all customer segments across the market, whether that's residential, commercial or industrial. So for sure, those programs will still be available, it just might look a little different or take a different shape. But our goal is to continue to provide those programs to all customers within the Ontario area.

Q: This morning, The Ontario Government announced it will boost its electricity grid with hydrogen. Is the blending of fuels on the roadmap for Enbridge for either electricity generation, home/business heating etc?
A: Yes, Enbridge is looking at using hydrogen as another alternative. We actually have a pilot project underway and we are definitely investigating the use of hydrogen to supplement natural gas supply as a greener way of serving our customers. So great question and the answer is yes, more to come on that, probably in one of our next webinars.

Thank you

ENBRIDGE

Proudly Serving Ontario | 175 YEARS