



**MEETING EDE 72-20-26**

**STANDING COMMITTEE ON  
ECONOMIC DEVELOPMENT AND ENVIRONMENT**

**THURSDAY, MARCH 5, 2026  
EAGLE ROOM  
10:30 AM**

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**AGENDA**

1. Call to Order
2. Prayer/Reflection
3. Review and Adoption of Agenda
4. Declarations of Conflict of Interest
5. Public Matters
  - a) Public Technical Briefing on Utilizing Residual Heat with NTPC
6. In Camera Matters
  - a) Debrief
  - b) 2026-02-26 ConocoPhillips Canada Resources Corp.
  - c) Workplan
7. New Business
  - a)
8. Date and Time of Next Meeting: To Be Determined
9. Adjournment

# NTPC Residual Heat System Overview

Presentation to the Standing Committee  
on Economic Development and Energy

March 5, 2026

# What is a Residual Heat System?



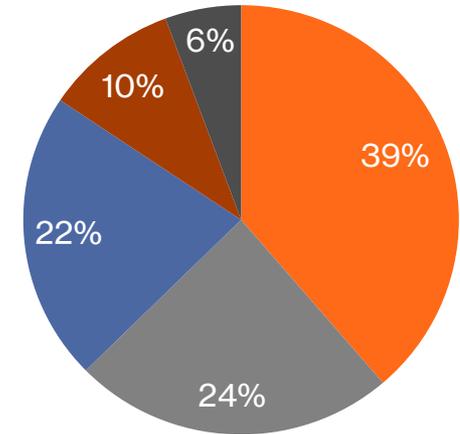
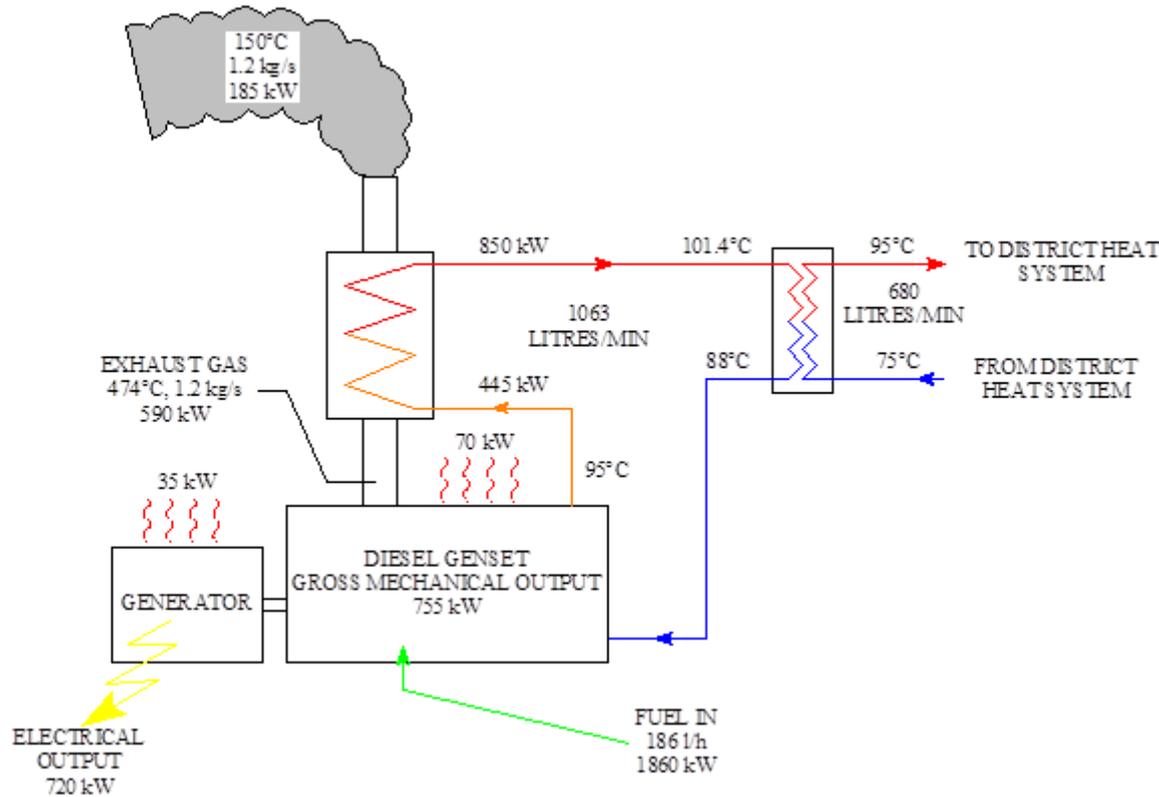
A residual heating system – uses residual (waste) heat from electricity production.

The hot water/glycol mix is carried through a network of pipes, pumps, heat exchangers and valves.

Provides building heat for the power plants, as well as engine block heat for generators that are offline.

Can be used for building or process heating of nearby infrastructure.

# How it works



- Electrical Energy
- Heat from jacket water
- Recoverable heat from exhaust gases
- Unrecovered exhaust gas heat
- Friction, radiant heat, and vibration (noise)

# Typical System Layout



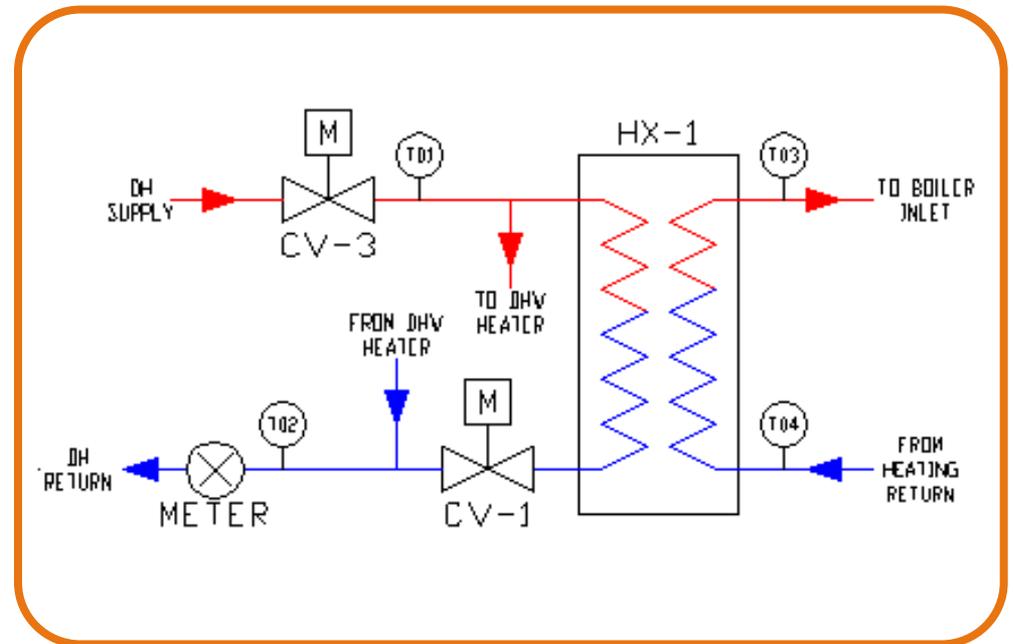
# Energy Transfer

Water/glycol mix is NOT shared between heating systems

Heat is transferred from one system to another with a heat exchanger

Heat exchangers pass hot water (source) by cooler water (demand) through tubes/plates keeping the fluids separate

Water flow and temperature can be metered to determine the amount of energy transferred



# Control and Metering



- Flow and temperature of water is measured within the supply/return piping.
- Automated valves and sensors can coordinate heat delivery between the two sources.
- Can interconnect with the customer's boiler system.
- Consists of energy transfer station at the customer's site.

# Benefits of Residual Heat Systems

Improved power plant efficiency

Can reduce heating costs for customers

Overall reduction of greenhouse gas emissions

Improved system reliability

Integrates the power plant into the community



# Residual Heat System Challenges

Mismatched heat production vs heat demand

Proximity of power plant to heat load

Locating plants outside the community reduces likelihood of nearby residual heat customers

Capital and operational costs

Types of heat loads



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# Thank You

