# Acadia University Heating System

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#### Campus Wide Consumption

- \$1.81 million in electricity consumption last year
   (16.4 million kWh)
- \$1.97 million annually in heating consumption last year (Natural Gas)
- 30 million gallons of water consumed last year (down from a peak of 52 million)

#### Residence Consumption

- \$366 thousand in electricity consumption last year (20.3% of campus consumption)
- \$785 thousand in heating consumption last year (39.8% of campus consumption)
- 36.7% of water consumption was by residences

#### Central Heating Plant



#### Boilers



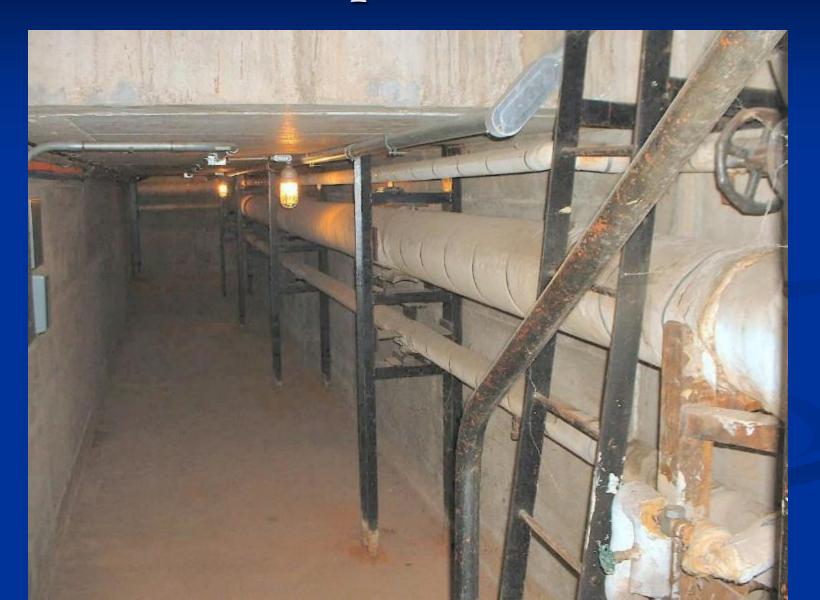
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#### Output Info

- 24/7 operation
- 5 operators, 1 Chief Eng
- 2750 total horsepower
- Steam pressure 75 psi
- Oil cost of \$2.6 million 2013 Forecast
- 2016 Natural Gas consumption \$1.97 million

#### Steam Pipes in Tunnel



#### Steam Pipe Connects to Building



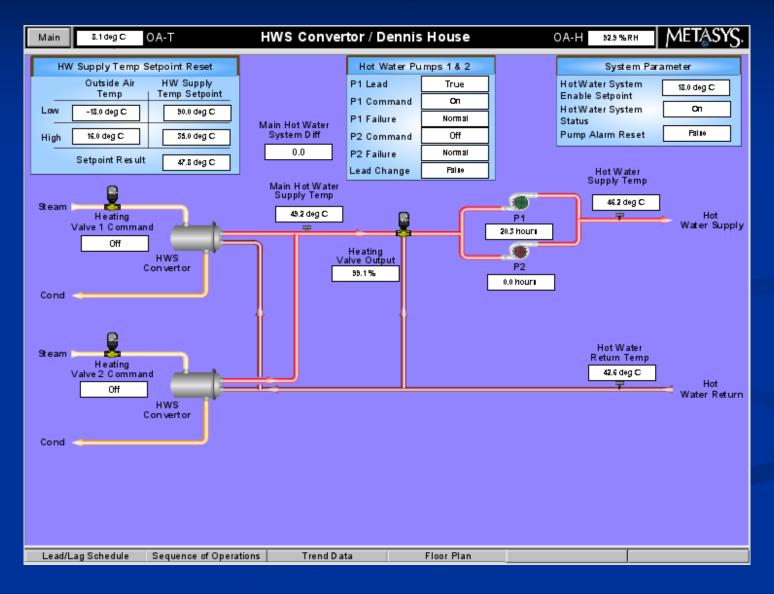
#### Distribution Piping



#### Heat Exchanger Cut-a-way



#### Heat Exchanger Controls



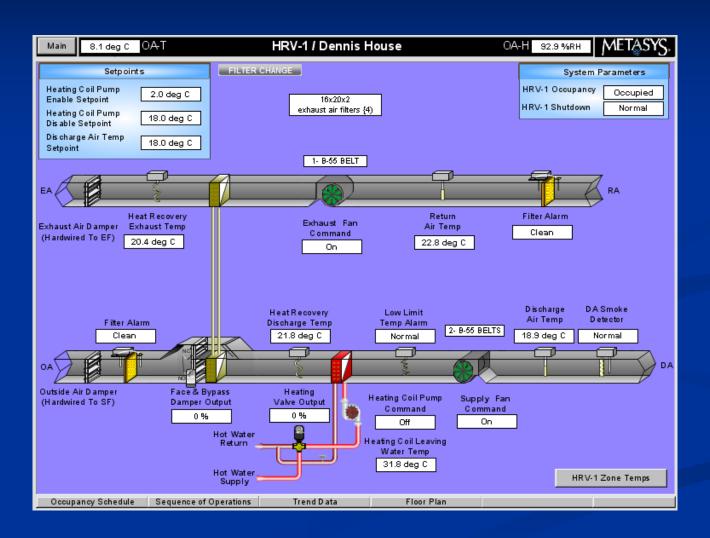
#### Air Handling Unit

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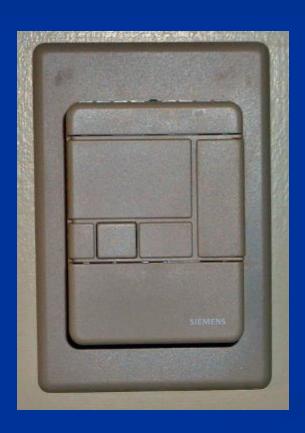
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#### Air Handling Unit Controls



#### Room Temperature Control

#### Roy Jodrey Hall





### Dennis, Eaton, Christofor Hall and Whitman







#### War Memorial House, Raymond, Crowell Tower, Seminary







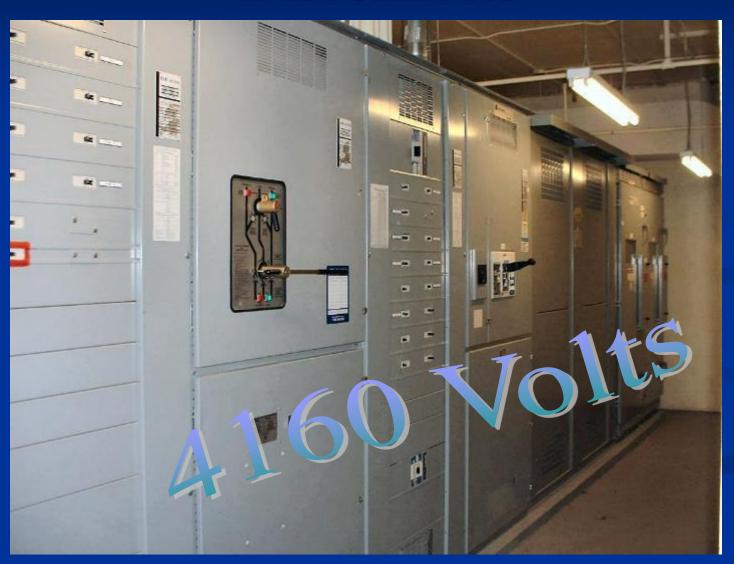
#### Chase Open Window in Feb

Use your thermostat!





## Main Electrical Distribution Disconnects



#### Electrical & Alarm Panels

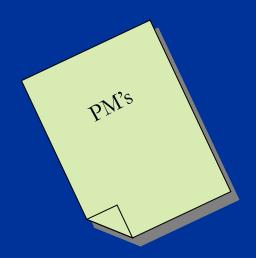


#### Work Order Types

- <u>Urgent</u>: This type of maintenance service request is such that failure to act immediately will endanger University operations procedures for urgent corrective action are by the fastest means with anticipated response the same day.
- Routine: Specified maintenance required. This type of maintenance work request is such that the main University functions will not be significantly affected. Response time will be 5 working days or less, and work will be completed within 10 days
- <u>Planned</u>: Routine maintenance required. These work orders are subject to resource allocation and may be combined with other work orders

#### Maintenance & Repair Requests

- Approx. 750 work orders per month
- Approx. 350 Preventative Maintenance work orders per month





#### Physical Plant Hours of Operation

- Full Maintenance & Admin Staff
  - Monday to Friday 8:00-4:30
- Minimum Maintenance & Admin Staff
  - Monday to Friday 4:30pm-10:00pm
  - Saturday & Sunday 8:00am-4:30pm
  - Holidays (to be determined based on occupancy)
- Urgent After Hours Requests
  - Call Security ext. 1103 or 542-7111
  - Security is 24/7 operation



#### Work Request Communication

- Receiving Work Order Requests (Residence Internal)
  - ☐ Point person- SRA/alternate
  - □ Review/inspect work requests (duplication, non-issue, urgent/non-urgent, damage)
- Submitting Work Order Requests (to Physical Plant)
  - □ Call or email Physical Plant ext. 1444 (physical.plant@acadiau.ca)
  - □ Web Request (InSite) when available to SRA's

### Questions???