



2016 CAMPUT Conference

Demand Management – A Blessing or a Curse?

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Snapshot of Nova Scotia

- NS Power owns 95% of the infrastructure
- Installed firm capacity ~ 2450 MW
- Annual electricity requirement of ~11 TWh
- ~ 500,000 customers
- Winter peaking load (650 MW → 2,000 MW)
 - Residential ~45%
 - Commercial ~32%
 - Industrial ~ 23%

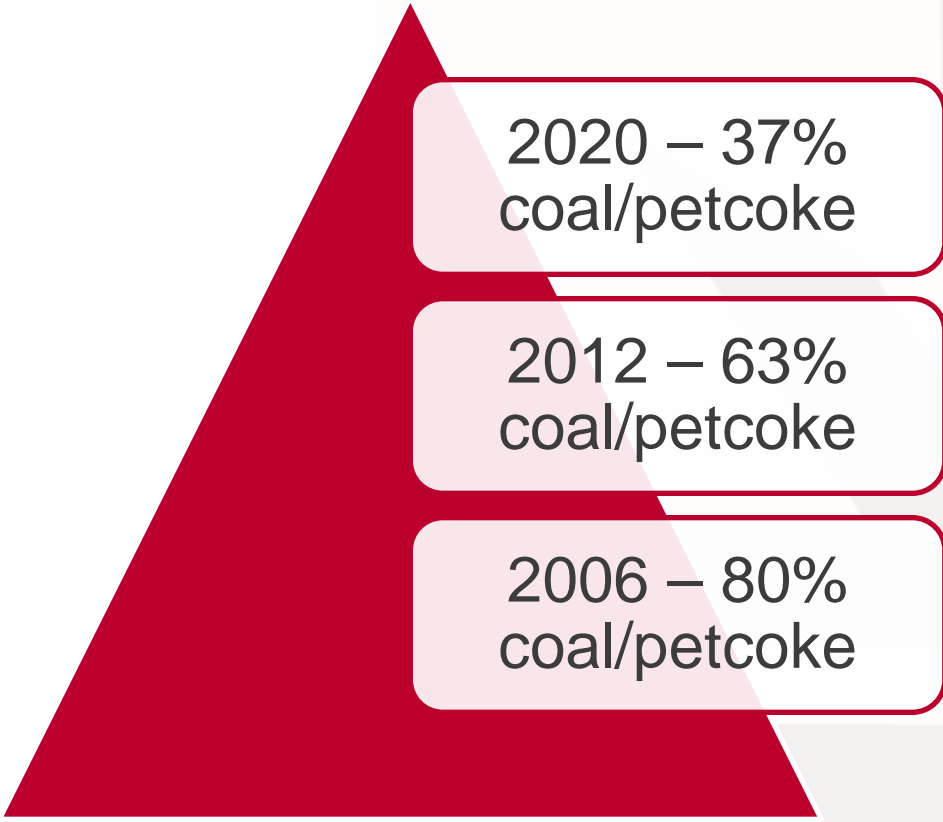
DSM

- Ratepayer-funded since 2008; initially by NS Power
- Currently, independent franchisee: EfficiencyOne
- NS Power mandated to procure all “reasonably available, cost-effective electricity efficiency and conservation activities”.
- NSUARB approved a three-year \$102 million plan 2016-2018 to achieve cumulative energy savings of 405.9 GWh and demand savings of 62.5 MW.

Types of Efficiency and DM in NS

- Primarily energy efficiency and conservation
 - Behavioural changes through education
 - Technological improvements through financial incentives
- Limited demand management through rate design:
 - Interruptible tariff (LI)
 - 1P-RTP
 - Residential TOU (1,000 of ~450,000 only)

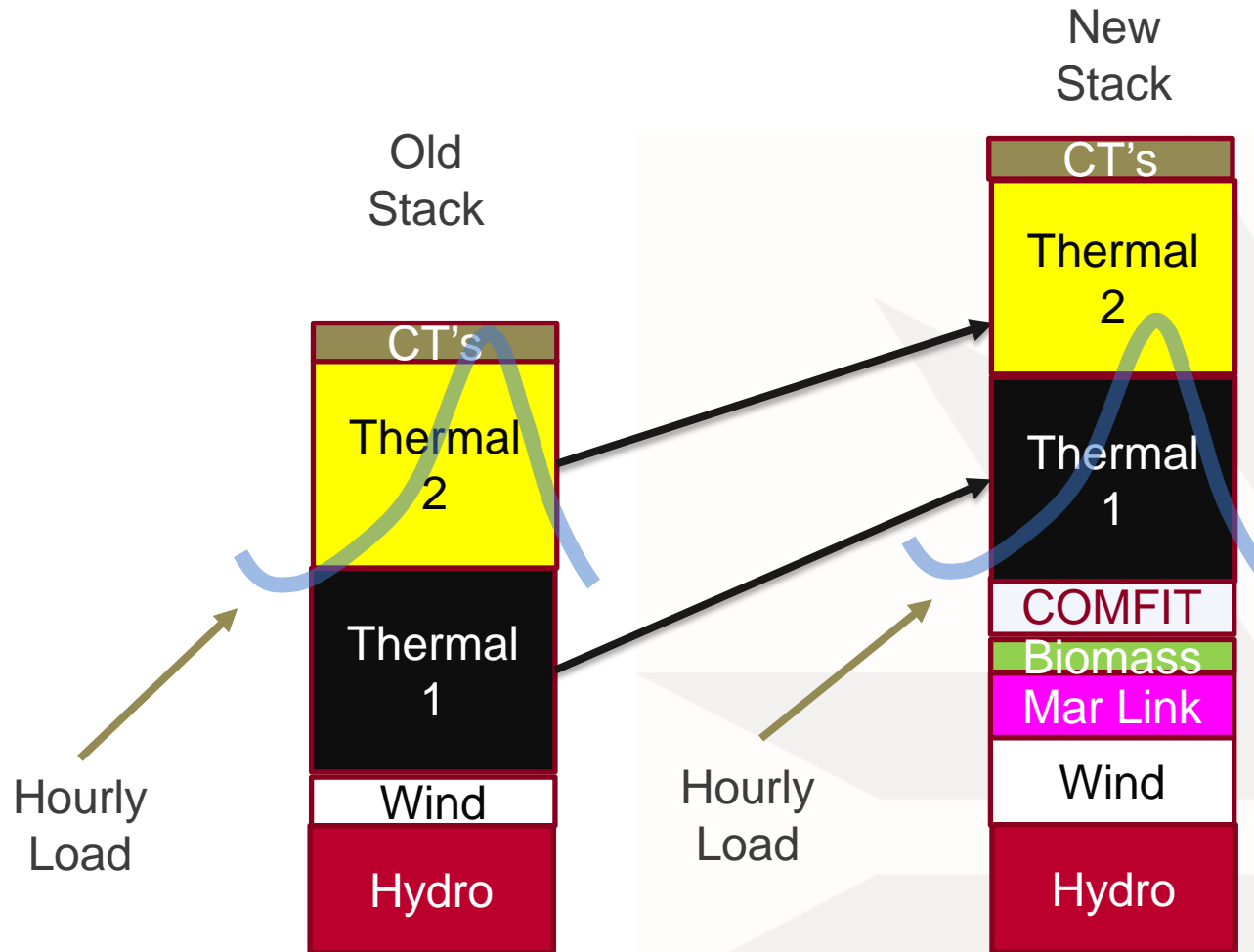
System in Transition



2020 – 37%
coal/petcoke

2012 – 63%
coal/petcoke

2006 – 80%
coal/petcoke





A word cloud of energy-related terms. The words are arranged in a roughly circular shape, with 'ENERGY' being the largest and most central word. Other prominent words include 'GRID', 'DEMAND', 'OPERATOR', 'REDUCTION', 'RESPONSE', 'SOLAR', 'NEGAWATT', 'SYSTEM', 'AUTOMATED', 'COMMUNICATION', 'INTERMITTENT', 'MONITORING', 'UTILITY', 'MANAGEMENT', 'PRIVACY', 'PEAK', 'SUPPLIERS', 'END-USER', 'HYDRO', 'INFRASTRUCTURE', 'INVESTMENT', 'SMART', 'METERING', 'EFFICIENCY', 'ON-PEAK', 'OFF-PEAK', 'BALANCING', 'RESERVES', 'GENERATION', 'TIME-OF-USE', and 'COST'. The words are in various colors including green, blue, purple, red, and yellow.

ENERGY

GRID

DEMAND

OPERATOR

REDUCTION

RESPONSE

SOLAR

NEGAWATT

SYSTEM

AUTOMATED

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