BCUC 2012 Generic Cost of Capital

FORTISBC UTILITIES UNDERTAKING No. 9

HEARING DATE: December 13, 2012

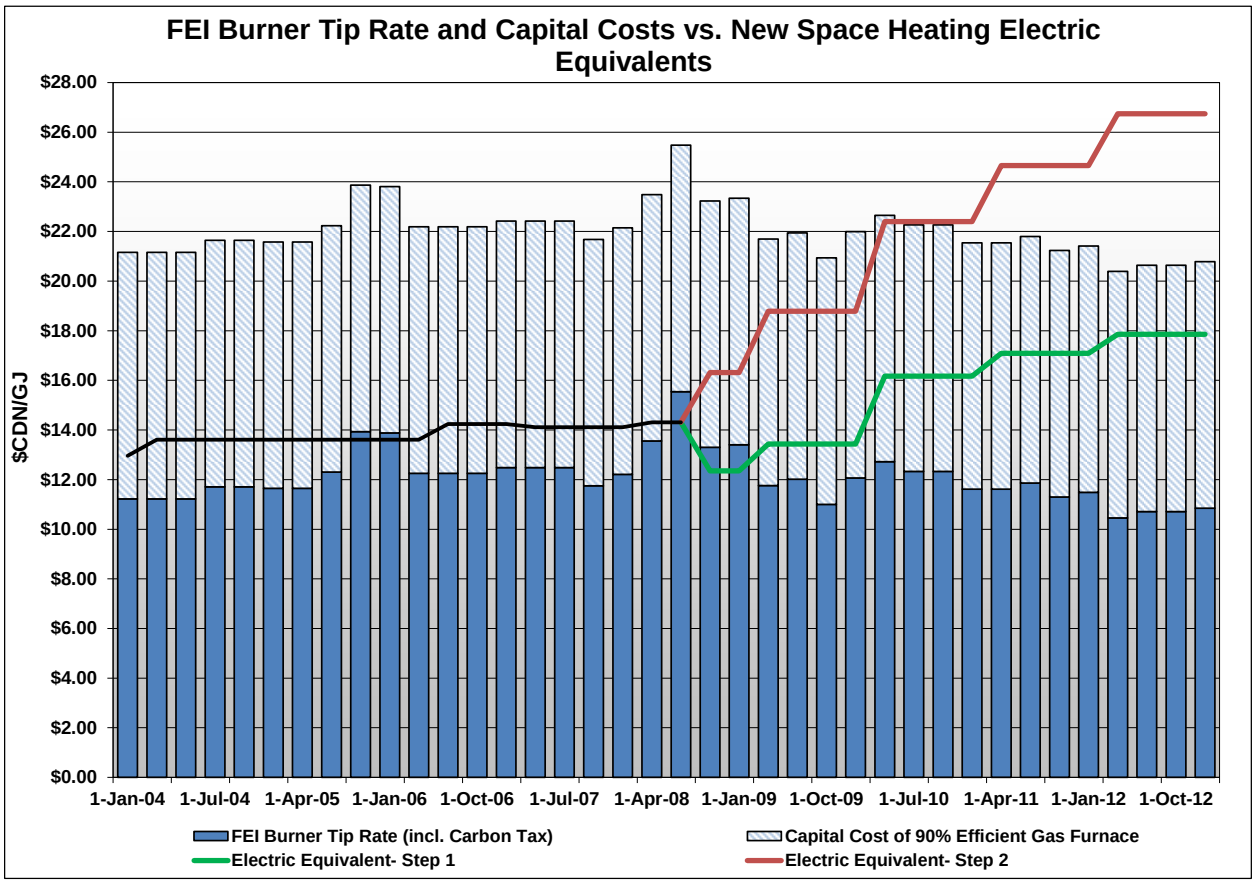
TRANSCRIPT REFERENCE: At the Hearing on December 13, 2012 at approximately 9:20am

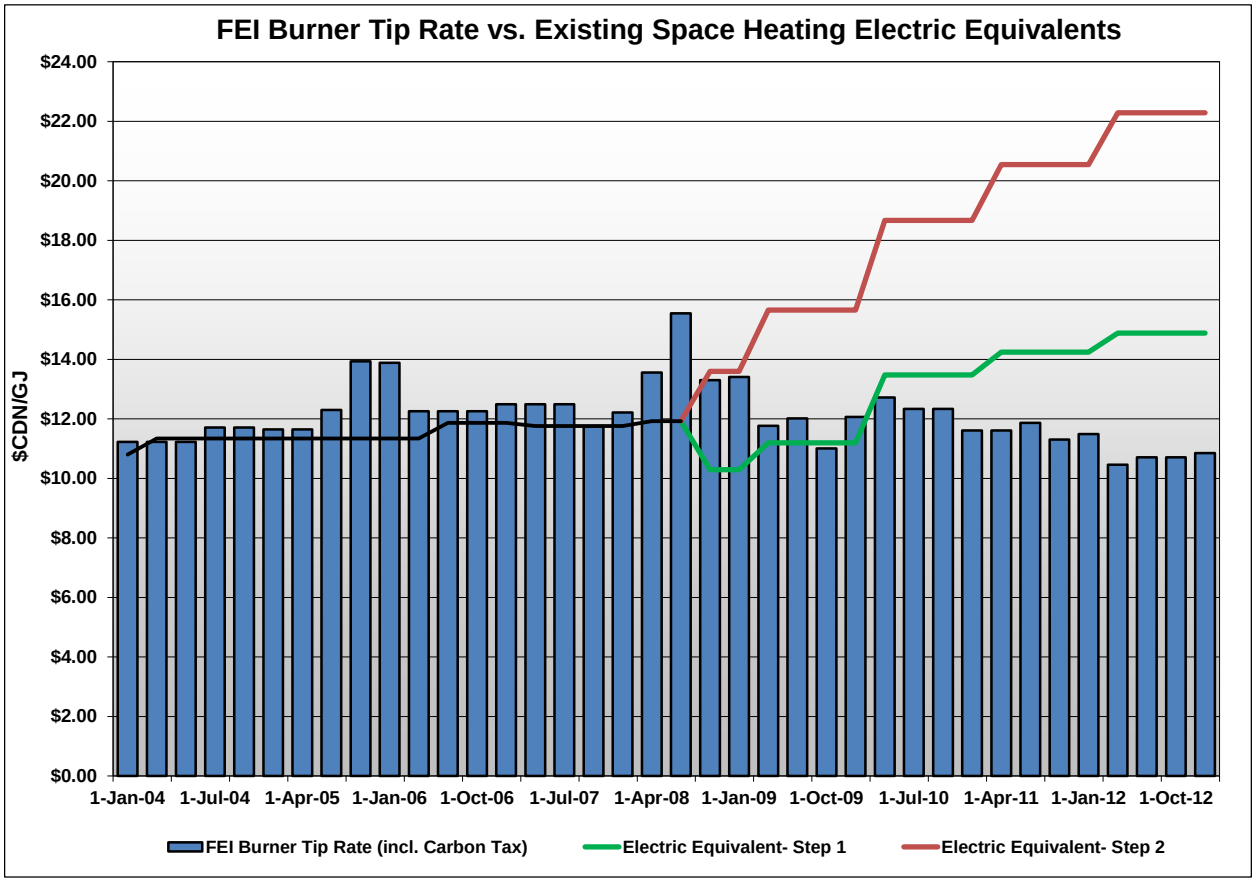
REQUESTOR: Mr. Fulton

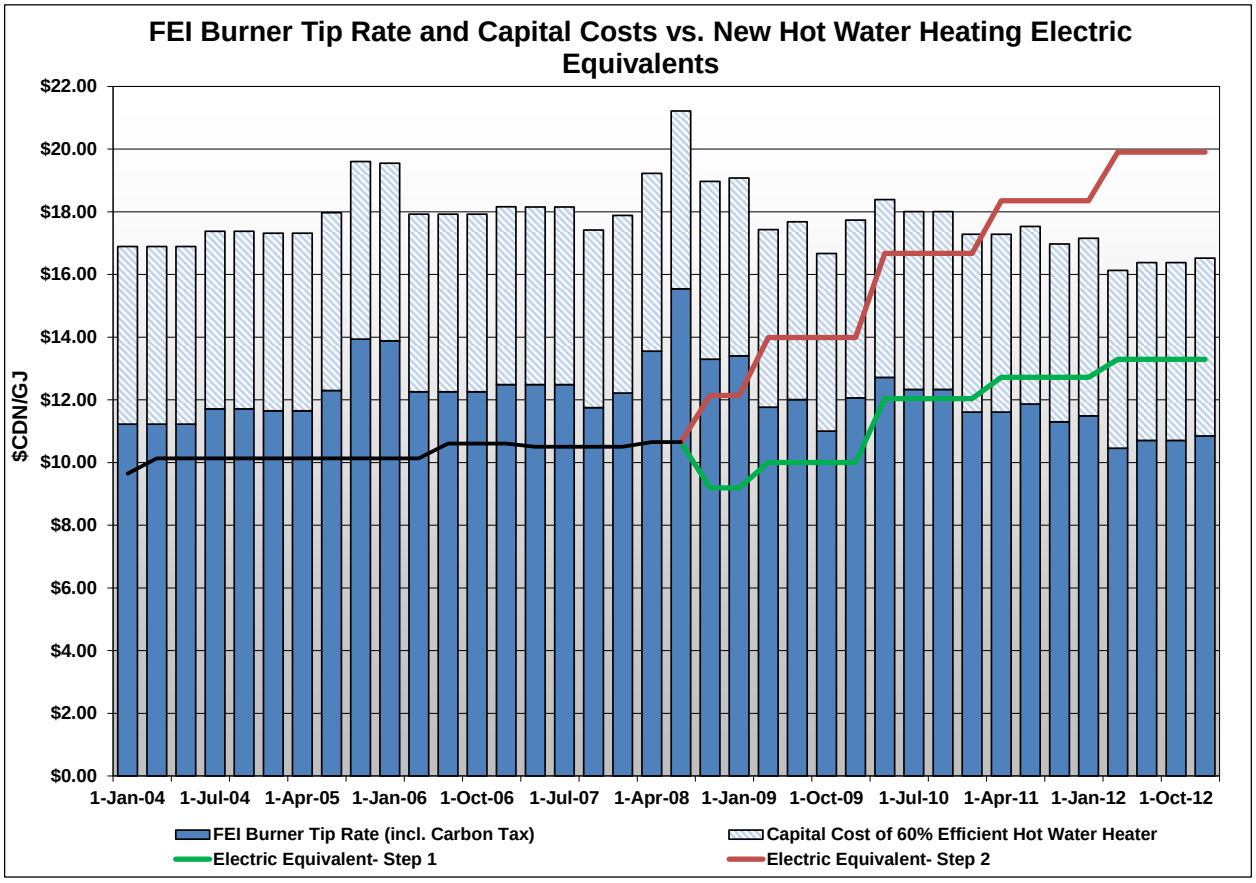
WITNESS: Mr. Stout

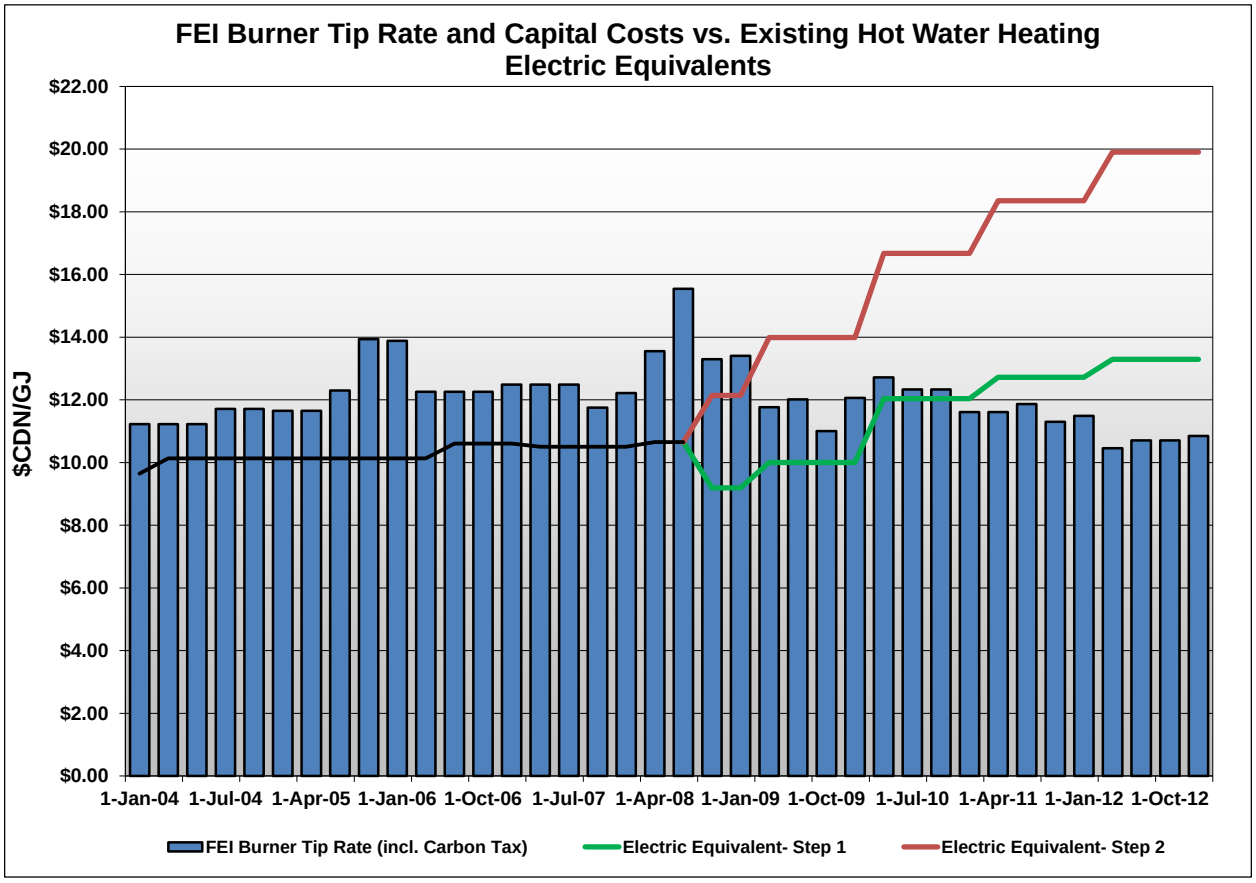
QUESTION: Update the graphs in FEU's Evidence (Exhibit B1-9-6) Appendix H up to 2013 current rates (4 graphs) and update the second graph in Dr. Booth's Evidence (Exhibit C6-12) on page 38.

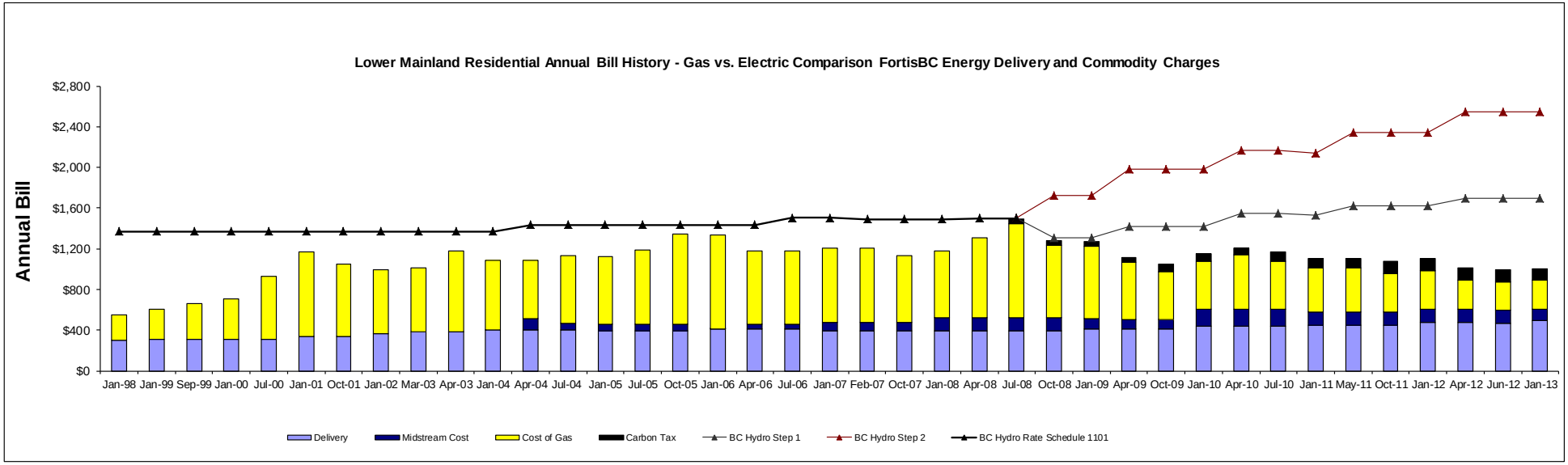
RESPONSE:




FEI Burner Tip Rate vs. Existing Space Heating Electric Equivalents
$CDN/GJ
$24.00
$22.00
$20.00
$18.00
$16.00
$14.00
$12.00
$10.00
$8.00
$6.00
$4.00
$2.00
$0.00
1-Jan-04
1-Jul-04
1-Apr-05
1-Jan-06
1-Oct-06
1-Jul-07
1-Apr-08
1-Jan-09
1-Oct-09
1-Jul-10
1-Apr-11
1-Jan-12
1-Oct-12
FEI Burner Tip Rate (incl. Carbon Tax)
Electric Equivalent- Step 1
Electric Equivalent- Step 2


FEI Burner Tip Rate and Capital Costs vs. New Hot Water Heating Electric Equivalents
$CDN/GJ
$22.00
$20.00
$18.00
$16.00
$14.00
$12.00
$10.00
$8.00
$6.00
$4.00
$2.00
$0.00
1-Jan-04
1-Jul-04
1-Apr-05
1-Jan-06
1-Oct-06
1-Jul-07
1-Apr-08
1-Jan-09
1-Oct-09
1-Jul-10
1-Apr-11
1-Jan-12
1-Oct-12
FEI Burner Tip Rate (incl. Carbon Tax)
Capital Cost of 60% Efficient Hot Water Heater
Electric Equivalent- Step 1
Electric Equivalent- Step 2


FEI Burner Tip Rate and Capital Costs vs. Existing Hot Water Heating Electric Equivalents
$CDN/GJ
$22.00
$20.00
$18.00
$16.00
$14.00
$12.00
$10.00
$8.00
$6.00
$4.00
$2.00
$0.00
1-Jan-04
1-Jul-04
1-Apr-05
1-Jan-06
1-Oct-06
1-Jul-07
1-Apr-08
1-Jan-09
1-Oct-09
1-Jul-10
1-Apr-11
1-Jan-12
1-Oct-12
FEI Burner Tip Rate (incl. Carbon Tax)
Electric Equivalent- Step 1
Electric Equivalent- Step 2



Assumes:

Graph is based on total natural gas consumption of 95 GJ

Efficiency of gas equipment is 90% relative to 100% for electricity

FortisBC amount includes the basic charge

Not all space heating load will be priced at the BC Hydro Step 2 rate, the actual rate will be determined by the total use of electricity within the home

There needs to be an operating cost advantage for FEI so that there is a pay back of the capital cost difference and the maintenance costs (approximately $500) for a single family home at 2,500 square feet