L1.VECC.5

Reference: PEG Study, page 17-25-

Preamble: PEG notes a number of deficiencies with the Ma study, including the use of OHS (as opposed to GD) for the capital quantity measurement and lack of gas utility data in the study and the exclusion A&G costs. Numerous other concerns are set out at pages 25 through 37. At page 36 the sum of corrections (using OHS) appears to be a TFP trend of +0.85%. Nonetheless the PEG study authors conclude that "t*he 0% base TFP growth trend that Dr. Makholm proposes is in our view reasonable*." (page 2)

a) How is this conclusion reached in light of the various deficiencies identified with the Makholm Study?
b) Why would an x factor of 0.49% (page 48) not be more appropriate?

Response: The following response was provided by PEG.

a) The +0.85% TFP trend using PEG's upgrades to NERA's methodology is for an unusually lengthy sample period that may not reflect the long-run TFP trend. The 0.49% trend for the 2001-2016 period is probably more pertinent. However, Dr. Makholm's study addresses the TFP trend of power distribution, not gas utilities that provide transmission, storage, and customer care services in addition to gas distribution services. Dr. Lowry reports a cost efficiency trend of only -0.23% for US gas utilities. The 0.0% base productivity trend that he proposes if there is consolidated indexing of OM&A and capital revenue is well above this.

b) Please see the response to VECC.5 a.