

## Survey of Decisions Where Regulators Used Benchmarking in Ratemaking

Jurisdiction	Company Name	Service(s)	Decision Date	Case Identifier/Decision Title	Use of Benchmarking in Decision
<b>North America</b>					
Massachusetts	Bay State Gas	Natural Gas	November 2005	D.T.E. 05-27	Help set X factor in PBR plan
Massachusetts	Boston Gas	Natural Gas	November 1996	D.P.U. 96-50	Help set X factor in PBR plan
Massachusetts	Boston Gas	Natural Gas	October 2003	D.T.E. 03-40	Help set X factor in PBR plan
Vermont	Central Vermont Public Service	Electric	January 2011	Docket No. 7627	Help set X factor in PBR plan, updated annually
Vermont	Green Mountain Power	Electric	March 2010	Docket No. 7585	Help set X factor in PBR plan, updated annually
Ontario	All	Electric	September 2008	EB-2007-0673	Help set X factor in PBR plan, updated annually
Ontario	All	Electric	November 2013	EB-2010-0379	Help set X factor in PBR plan, updated annually
<b>Rest of the World</b>					
Austria	All Regulated Companies	Electric Distribution	Unknown	<sup>1</sup> Frontier Economics (2012). Trends in electricity distribution network regulation in North West Europe. Report prepared for Energy Norway, p. 39-55.	Help set X factor in PBR plan
Austria	All Regulated Companies	Natural Gas	Unknown	<sup>1</sup> Haney, A. Brophy and M. Pollitt (2009). <i>Efficiency Analysis of Energy Networks: An International Survey of Regulators</i> . Cambridge Working Paper in Economics 0926. EPRG Working Paper 0915. Table 2.	Help set X factor in PBR plan
Australia	All distributors in National Energy Market	Electric	November 2013	Better Regulation: Expenditure Forecast Assessment Guideline for Electricity Distribution	Evaluation of company forecasts
Belgium	All Regulated Companies	Electric	Unknown	<sup>1</sup> Haney, A. Brophy and M. Pollitt (2009). <i>Efficiency Analysis of Energy Networks: An International Survey of Regulators</i> . Cambridge Working Paper in Economics 0926. EPRG Working Paper 0915. Table 2.	Used to reduce company inefficiency in rate plans
Belgium	All Regulated Companies	Natural Gas	Unknown	<sup>1</sup> Haney, A. Brophy and M. Pollitt (2009). <i>Efficiency Analysis of Energy Networks: An International Survey of Regulators</i> . Cambridge Working Paper in Economics 0926. EPRG Working Paper 0915. Table 2.	Reduce company inefficiency in rate plans
Denmark	All Regulated Companies	Electric	Unknown	<sup>1</sup> Haney, A. Brophy and M. Pollitt (2009). <i>Efficiency Analysis of Energy Networks: An International Survey of Regulators</i> . Cambridge Working Paper in Economics 0926. EPRG Working Paper 0915. Table 2.	Reduce company inefficiency in rate plans
Denmark	All Regulated Companies	Natural Gas	Unknown	<sup>1</sup> Haney, A. Brophy and M. Pollitt (2009). <i>Efficiency Analysis of Energy Networks: An International Survey of Regulators</i> . Cambridge Working Paper in Economics 0926. EPRG Working Paper 0915. Table 2.	Reduce company inefficiency in rate plans
Estonia	All Regulated Companies	Electric	Unknown	<sup>1</sup> Haney, A. Brophy and M. Pollitt (2009). <i>Efficiency Analysis of Energy Networks: An International Survey of Regulators</i> . Cambridge Working Paper in Economics 0926. EPRG Working Paper 0915. Table 2.	Reduce company inefficiency in rate plans

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Finland	All Regulated Companies	Electric	Unknown	<sup>1</sup> Haney, A. Brophy and M. Pollitt (2009). <i>Efficiency Analysis of Energy Networks: An International Survey of Regulators</i> . Cambridge Working Paper in Economics 0926. EPRG Working Paper 0915. Table 2.	Reduce company inefficiency in rate plans
Germany	All	Electric	Unknown	<sup>1</sup> Frontier Economics (2012). Trends in electricity distribution network regulation in North West Europe. Report prepared for Energy Norway, p. 57-71.	Help set X factor in PBR plan
Great Britain	All	Electric Distribution	August 1994	The Distribution Price Control: Proposals	Used to inform the assessment of the scope for efficiency improvements for opex
Great Britain	All	Electric Distribution	December 1999	Review of Public Electricity Suppliers 1998 to 2000 Distribution Price Control Review Final Proposals	Used to inform the assessment of the scope for efficiency improvements for each company and as part of the determination of allowed opex
Great Britain	Transco	Electric Transmission	September 2001	The Review of Transco's Price Control from 2002	Used to inform the assessment of the scope for efficiency improvements for each company and as part of the determination of allowed costs
Great Britain	All	Electric Distribution	November 2004	DPCR4	Used to inform the assessment of the scope for efficiency improvements for each company and as part of the determination of allowed opex
Great Britain	All	Gas Distribution	December 2007	Gas Distribution Price Control Review	Used as part of the determination of the efficient level of opex
Great Britain	All	Electric and Gas Transmission	December 2006	TCPR 2007-2012	Used to inform the assessment of the scope for efficiency improvements for each company and as part of the determination of allowed opex
Great Britain	All	Electric Distribution	December 2009	DPCR5	Used to inform the assessment of the scope for efficiency improvements for each company and as part of the determination of allowed opex
Great Britain	All	Gas Distribution	December 2012	RIIO-GD1	Used to assess company forecasts and as part of determination of efficient cost levels
Great Britain	National Grid Companies	Electric and Gas Transmission	December 2012	RIIO-T1	Used to inform the assessment of the scope for efficiency improvements for each company and as part of the determination of allowed opex

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Great Britain	All	Electric Distribution	November 2013	RIIO-ED1	Assess company forecasts and determine proposals not requiring further scrutiny
Hungary	All Regulated Companies	Electric	Unknown	<sup>1</sup> Haney, A. Brophy and M. Pollitt (2009). <i>Efficiency Analysis of Energy Networks: An International Survey of Regulators</i> . Cambridge Working Paper in Economics 0926. EPRG Working Paper 0915. Table 2.	Reduce company inefficiency in rate plans
Hungary	All Regulated Companies	Natural Gas	Unknown	<sup>1</sup> Haney, A. Brophy and M. Pollitt (2009). <i>Efficiency Analysis of Energy Networks: An International Survey of Regulators</i> . Cambridge Working Paper in Economics 0926. EPRG Working Paper 0915. Table 2.	Reduce company inefficiency in rate plans
Ireland	All Regulated Companies	Electric Distribution	Unknown	<sup>1</sup> Haney, A. Brophy and M. Pollitt (2009). <i>Efficiency Analysis of Energy Networks: An International Survey of Regulators</i> . Cambridge Working Paper in Economics 0926. EPRG Working Paper 0915. Table 2.	Reduce company inefficiency in rate plans
Netherlands	All Regulated Companies	Electric	Unknown	<sup>1</sup> Haney, A. Brophy and M. Pollitt (2009). <i>Efficiency Analysis of Energy Networks: An International Survey of Regulators</i> . Cambridge Working Paper in Economics 0926. EPRG Working Paper 0915. Table 2.	Reduce company inefficiency in rate plans
New Zealand	All Regulated Companies	Electric Distribution	December 2003	Threshold Decisions (Regulatory Period Beginning in 2004)	Help set X factor in PBR plan
Northern Ireland	National Grid Companies	Gas and Electricity Transmissio	October 2012	NIE RP5 Determination	Used to determine acheivable efficiency improvments for allowed opex
Norway	All Regulated Companies	Electric	Unknown	<sup>1</sup> Frontier Economics (2012). Trends in electricity distribution network regulation in North West Europe. Report prepared for Energy Norway, p. 20-27.	Set 60% of costs in revenue cap
Queensland, Australia	Energex, Ergon	Electric Distribution	May 2001	Final Determination, Regulation of Electricity Distribution	Set annual opex efficiency target for building block plan

Notes:

1) PEG Research was unable to obtain the decision in the proceeding where an article was cited.