

Clarification of the application of Transmission Entry Capacity (TEC) within Charge Setting

Introduction

During the discussions within the Working Group for CAP069 (“Users’ Forecasts used in the calculation of TNUoS charges”), a number of the Working Group members believed that there had been a lack of clarity in the process for the calculation of TNUoS tariffs for 2004/05. This stemmed from the fact that this was the first time the calculation had been undertaken since the introduction of TEC in April 2003 and there was some confusion over the values to be used in the transport model and the tariff model. In particular, Users may not have understood that the TEC values in the SYS October update were to be used in the ICRP transport model and therefore Users may not have notified any changes to their TEC in time for this to be taken into account in the calculation of charges for April 2004.

National Grid believes that the process had been undertaken in accordance with the Statement of the Use of System Charging Methodology, but accepts that the text of the Statement may benefit from additional clarification. National Grid has therefore undertaken to produce this clarification note to Users to confirm how the tariffs for 2004/05 have been calculated.

CAP069 Issues

Paragraph 3.10.1 of the CUSC states;

“On or before the end of the second week of December in each **Financial Year**, each **User** shall supply **NGC** with such data as **NGC** may from time to time reasonably request pursuant to the **Charging Statements** to enable **NGC** to calculate the **Transmission Network Use of System Charges** due from the **User** to **NGC** or from **NGC** to the **User** (as the case may be) including the data specified in the **Charging Statements**.”

Following on from this, paragraph 6.1 of the Statement of the Use of System Charging Methodology asks for a forecast of TEC from Users;

“Users who are Generators or Interconnector Asset Owners shall provide to National Grid a forecast for the following Financial Year of the highest Transmission Entry Capacity (TEC) applicable to each Power Station or Interconnector for that Financial Year. This data is required by National Grid as the basis for setting TNUoS tariffs. National Grid will request these forecasts in the November prior to the Financial Year to which they relate, in accordance with the CUSC.”

Both the CUSC and Charging Statements were confirmed by a letter sent by National Grid to Users in November 2003;

“...if you do expect that the TEC for any power station in 2004/05 will be significantly different to its current TEC, you should submit a forecast of the maximum TEC in 2004/05.”

National Grid uses this User’s forecast to help it arrive at the best view of the generation most likely to run at the time of system peak. This User’s forecast is

confidential and is only used to inform the National Grid view of the generation charging base which is used in the tariff model. This was explained in the November 2003 letter;

“Setting TNUoS tariffs is a two stage process. Firstly, marginal costs are derived through the use of a transport model. The nodal generation data used in the transport model is the Transmission Entry Capacity (TEC) at each node. For reasons of transparency, this is taken from the Seven Year Statement, including all updates to the October prior to the start of the charging year. However, when converting these marginal costs into final TNUoS tariffs, NGC must use the most accurate forecast possible of the generation charging base, to ensure correct revenue recovery.”

And confirmed in section 2.27 of the Statement of the Use of System Charging Methodology;

“The next step is to multiply these initial transport tariffs by the expected metered triad demand and actual generation capacity to gain an estimate of the initial revenue recovery. As noted above both of these latter parameters are based on forecasts provided by Users and are confidential.”

The above confirms where the User’s forecast of maximum TEC is used in the Charging process. To complete the picture, the only other use of TEC (the contracted amount) within the charging process is in the Transport model.

How TECs are registered and revised

In the CUSC, TEC is defined as the figure specified as such as set out in Appendix C of the relevant Bilateral Connection Agreement or Bilateral Embedded Generation Agreement.

Users may apply to revise their TEC as set out in CUSC 6.30, however, the basic principles are that a User makes a formal application for an increase in TEC accompanied with a firm or indicative fee. For a change requiring no works to be done the application is turned around in 28 days and for an application requiring works to be done the application turn around time is 90 days. A decrease in TEC is free of charge and requires 7 days notice, however, any decrease will not become effective until 1st April of the following financial year (CUSC 6.30.1.3).

TECs may be registered for future years by signing a bilateral agreement with National Grid.

TEC in the Transport Model

As already mentioned, due to issues of transparency as the transport model is made available to all Users so that they may confirm or calculate their own tariffs, the TEC used is taken from the publicly available SYS data. Paragraph 2.4 of the Statement of the Use of System Charging Methodology states;

“The nodal generation data for the transport model for charging year "t" is taken as the Registered Capacity, at each node (based on the forecast for year "t" in the April Seven Year Statement in year "t-1" plus updates to the October of year "t-1"). The forecasts in the Seven Year

Statement include all plant belonging to generators who have a Bilateral Connection Agreement with National Grid. For example for 2001/02 charges, the nodal generation data is based on the forecast for 2001/02 in the April 2000 Seven-Year Statement plus any data included in the quarterly updates to October 2000). For 2003/04, the derivation of TNUoS tariffs was based on Registered Capacity, as at the time of tariff setting, no TEC data was available. It is proposed to change the nodal data used in tariff setting to utilise TEC to calculate tariffs applicable from April 2004 onwards.”

The TEC data could only be published for the first time in the October 2003 SYS update, following Grid Code modification A/03. Please note that as TEC is “evergreen”, the current value of TEC as listed in the October update is the contracted value of TEC for all future years, unless National Grid is formally notified of a change. (At the freeze date of the SYS October update no application for decreases to TEC, which would be effective from 1st April 2004, had been received). The October 2003 SYS Update therefore contained both the current TEC and the contracted TEC applicable for 2004 in the same number. To avoid any confusion in the future, the 2004 SYS plans to have a Table of Contracted TEC with an additional column showing the contracted TEC value for the following financial year. To illustrate this, the October Update tables A1 and A2 have been revised in this format and are included in the Appendix to this note. This change to the SYS will give greater clarity for those formally notified changes to TEC.

In addition, it is proposed to clarify paragraph 2.4 of the Statement of the Use of System Charging Methodology so that Users are clear that the TECs used in the transport model are the contracted values. Any reference to forecast will be removed to avoid confusion with the Users’ forecast of maximum TEC described in section 6.1 of the Statement. Please note, however, that the contracted TEC, regardless of the freeze date, is by definition a “forecast” as Users may submit changes to their TECs at any time (but decreases shall only take effect on the first of April of the following year). The proposed text for paragraph 2.4 is shown below¹:

“The nodal generation data for the transport model for charging year “t” is taken as the contracted Registered-Transmission Entry Capacity (TEC), at each node (based on the forecast-applicable value for year “t” in the April Seven Year Statement in year “t-1” plus updates to the October of year “t-1”). The forecasts-contracted TEC in the Seven Year Statement include all plant belonging to generators who have a Bilateral Connection Agreement with National Grid. For example for 20012005/02-06 charges, the nodal generation data is based on the forecast-contracted TEC for 20012005/02-06 in the April 2000-2004 Seven Year Statement plus any data included in the quarterly updates to October 20002004). ~~For 2003/04, the derivation of TNUoS tariffs was based on Registered Capacity, as at the time of tariff setting, no TEC data was available. It is proposed to change the nodal data used in tariff setting to utilise TEC to calculate tariffs applicable from April 2004 onwards.”~~

Condition C7.8 of National Grid’s Transmission Licence allows National Grid to periodically revise the Statement of the Use of System Charging Methodology with

¹ Note: the above amendment is change marked from the April 2003 Statement of the Use of System Charging Methodology, Issue 3 Rev 1, which was approved by the Authority, and not from the illustrative draft issued with proposed modifications on 12 September 2003.

the approval of the Authority. Furthermore, at least once a year National Grid should make such revisions as may be necessary to ensure that the information set out in the Statement shall be accurate in all material respects. This clarification is proposed to be included in the Statement of the Use of System Charging Methodology which National Grid intends to submit for industry comment in February 2004, prior to seeking approval from the Authority. We believe the paragraph above is a non-material change as we are only seeking to refine the existing description.

Appendix

The following table lists the Transmission Entry Capacity (TEC) Values for existing power stations as of 28 October 2003. In addition there is an applicable station TEC column for 2004 to take account of any notified decreases in TEC (see CUSC 6.30.1.3) plus planned commissioning power stations in 2004.

Plant Type	Station Name	Owner	Current Station TEC (MW)	Station TEC applicable for 2004 (MW)
Nuclear Magnox	Dungeness A	BNFL Magnox Electric	440	440
Nuclear Magnox	Oldbury	BNFL Magnox Electric	470.4	470.4
Nuclear Magnox	Sizewell A	BNFL Magnox Electric	458	458
Nuclear Magnox	Wylfa	BNFL Magnox Electric	1006	1006
Nuclear AGR	Dungeness B	British Energy	1056	1056
Nuclear AGR	Hartlepool	British Energy	1207	1207
Nuclear AGR	Heysham 1&2	British Energy	2406	2406
Nuclear AGR	Hinkley Point B	British Energy	1261	1261
Nuclear PWR	Sizewell B	British Energy	1190	1190
Large Unit Coal + OCGT	Aberthaw B	Innogy	1557	1557
Large Unit Coal + OCGT	Cottam	London Electricity	2000	2000
Large Unit Coal + OCGT	Drax	AES Drax	3885	3885
Large Unit Coal + OCGT	Eggborough	Eggborough Power Limited (BE)	1940	1940
Large Unit Coal + OCGT	Ferrybridge C	AEP Energy Services	1981	1981
Large Unit Coal + OCGT	Fiddlers Ferry	AEP Energy Services	1987	1987
Large Unit Coal + OCGT	Ironbridge B	PowerGen	964	964
Large Unit Coal + OCGT	Ratcliffe on Soar	PowerGen	2021	2021
Large Unit Coal + OCGT	Rugeley B	Rugeley Power	1018	1018
Large Unit Coal + OCGT	West Burton	London Electricity	2003	2003
Medium Unit Coal + OCGT	Tilbury B	Innogy	1061	1061
Small Unit Coal	Fifoots	AES Fifoots Point	363	363
CCGT	Baglan Bay	Baglan Operations Ltd	552	552
CCGT	Barking 1	Barking Power	1000	1000
CCGT	Barry	AES Barry	245	245
CCGT	Brigg	Regional Power Generators	268	268
CCGT	Brimsgate	Enfield Energy Centre	392	392
CCGT	CDCL	CDCL	400	400
CCGT	Connahs Quay	PowerGen	1380	1380
CCGT	Corby	Corby Power Ltd	401	401
CCGT	Coryton	Coryton CoGen (Intergen)	720	720
CCGT	Damhead Creek	Damhead Creek Power	805	805
CCGT	Deeside	Deeside Power Limited	495	495
CCGT	Derwent	Derwent Power	232	232
CCGT	Didcot B	Innogy	1500	1500
CCGT	Great Yarmouth	Great Yarmouth Power	420	420
CCGT	Immingham CHP stage 1	Immingham CHP LLP	375	375
CCGT	Keadby	Keadby Generation Ltd	735	735
CCGT	Killingholme 2	Killingholme Power Ltd	665	665
CCGT	Kings Lynn	Centrica KL	340	340
CCGT	Little Barford	Innogy	665	665
CCGT	Medway	Medway Power Ltd	700	700

Plant Type	Station Name	Owner	Current Station TEC (MW)	Station TEC applicable for 2004 (MW)
CCGT	Peterborough	Centrica PB	405	405
CCGT	Rocksavage	Rocksavage Power Company Ltd (Intergen)	735	735
CCGT	Roosecote	Lakeland Power	229	229
CCGT	Rye House	Scottish Power	715	715
CCGT	Saltend	Saltend Cogeneration Company	1100	1100
CCGT	Seabank	Seabank Power Ltd	1234	1234
CCGT	Sellafield CHP	Fellside Power Heat & Power Ltd	155	155
CCGT	Shoreham	South Coast Power	400	400
CCGT	Shotton	Shotton Combined Heat & Power	215	215
CCGT	South Humber Bank	Humber Power Ltd	1285	1285
CCGT	Spalding	Spalding Energy Company Ltd (Intergen)		0
CCGT	Staythorpe C stage 1	Innogy		0
CCGT	Staythorpe C stage 2	Innogy		0
CCGT	Staythorpe C stage 3	Innogy		0
CCGT	Staythorpe C stage 4	Innogy		0
CCGT	Sutton Bridge	London Electricity	803	803
CCGT	Teesside	TPL	1875	1875
Oil + OCGT	Fawley	Innogy	1036	1036
Oil + OCGT	Grain	PowerGen	705	705
Oil + OCGT	Littlebrook D	Innogy	1475	1475
OCGT	Cowes	Innogy	99.9	99.9
OCGT	Didcot A GT	Innogy	100	100
OCGT	Fawley CHP	Innogy CoGen Trading	158	158
OCGT	Indian Queens	AES Indian Queens	140	140
OCGT	Taylor's Lane	PowerGen	144	144
Dual Fuel	Didcot A	Innogy	2084	2084
Dual Fuel	Kingsnorth	PowerGen	1966	1966
Pumped Storage	Dinorwig	First Hydro	1644	1644
Pumped Storage	Ffestiniog	First Hydro	350	350
Interconnector	French Link	EdF	1988	1988
Interconnector	Scottish Interconnector	SP, SSE	2000	2000
Offshore Windfarm	Barrow Offshore Windfarm	Barrow Offshore Wind Ltd		99.9
Offshore Windfarm	Robin Rigg East	Solway Offshore Ltd		99.9
Offshore Windfarm	Robin Rigg West	Offshore Energy Resources Ltd		99.9
Embedded	Burwell	Energy Power Resources Limited	38	38
Embedded	City Road/Beech St	Citigen London Limited	30	30
Embedded	Cwm Dyli	Innogy	10	10
Embedded	Dolgarrog	Innogy	39	39
Embedded	Cwm Rheidol	PowerGen	50	50
Embedded	Keadby	Fibrogen Ltd	15	15
Embedded	Kemsley	Grovehurst Energy Ltd	36	36
Embedded	Maentwrog	Magnox	30	30
Embedded	Redditch	Cinergy Global Power (UK)	29	29
Embedded	Sheffield City	Sheffield Heat and Power	5.5	5.5
Embedded	Sizewell	Fibropower Ltd	14	14
Embedded	Thetford	Fibrothetford Ltd	41	41

Plant Type	Station Name	Owner	Current Station TEC (MW)	Station TEC applicable for 2004 (MW)
Embedded	Various	Smartest Energy	30	30
Embedded	Weaver	ICI Chemicals & Polymers Ltd	37	37
Embedded	Weston Point	ICI Chemicals & Polymers Ltd	46	46