

Connection Charges

CEC Before TEC

TCMF

22nd February 2008

Structure

- ◆ Changing Application Strategies
- ◆ Implications for National Grid
- ◆ National Grid Response
- ◆ Examples
- ◆ Issues

Changing Application Strategies

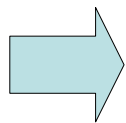
- ◆ National Grid has observed a growing tendency for connection applications to exhibit the following features:
 - ◆ Users are increasingly requesting CEC before TEC in new connection applications
 - ◆ Where Users notify National Grid of delays to a project, requests are made for the CEC to be timed as per the original application, but for TEC to be pushed back into the following charging year
 - ◆ Some Users even requesting “CEC Only”

Implications for National Grid

- ◆ Delivery of or increases to CEC are not cost free
 - ◆ Can involve the construction of a new substation
- ◆ Primary concerns:
 - ◆ Existing charges to accommodate CEC requests are not cost reflective
 - ◆ National Grid effectively financing transmission investment before TNUoS charges received
 - ◆ National Grid investment driver based on TEC, not CEC
 - ◆ Investments carried out to deliver CEC may not be regarded as efficient
 - ◆ National Grid could complete works before they are needed
 - ◆ Construction plans could be amended to deliver works more efficiently

National Grid Response

- ◆ Implementation of the Connection Charging Methodology must be kept under review
- ◆ National Grid is updating how it applies the existing methodology to respond to customer behaviour
- ◆ National Grid has resolved to apply the following treatment to future applications of this nature:
 - ◆ For “CEC ahead of TEC applications”, treat infrastructure assets in the same way as connection assets. Infrastructure works will be identified and charged on a monthly basis until first TEC procured
 - ◆ For “CEC Only” applications, any works identified are charged to the generator as a one-off charge including works on those assets normally considered infrastructure



Reasonable to expect a User to pay for these costs in the absence of an investment driver

nationalgrid

Treatment of Infrastructure Assets as proxy “Connection Assets”

- ◆ Since PLUGS and unlike DNOs, Generators do not have connection assets
- ◆ Appendix G (Transmission Connection Asset Works) of the CONSAG is left blank for Generators
- ◆ Appendix H (Transmission Reinforcement Works) identifies infrastructure works required to be completed before a generator can receive TEC
 - ◆ H1 Part 1 – Sole user works
 - ◆ H1 Part 2 – Shared user works
 - ◆ H2 – Wider reinforcement works
- ◆ National Grid is to treat CAPEX on H1 Part 1 works as if it is a connection asset, until TEC is procured

Example (1) – Application for CEC before TEC

Application: CEC before TEC
CEC: 1000MW Oct 2010
TEC: 1000MW Apr 2011

CAPEX – Miscellaneous Charge

When TEC increase is in a future TEC charging year, total CAPEX of H1 Part 1 transmission investment charged as if it is a connection asset for 6 months between October 2010 and April 2011

- Total CAPEX + Interest During Construction equal to GAV
- Assets assumed to be new
- Depreciated over 40 years (D)
- Rate of Return 6% (R)
- But, unlike Connection Charging Methodology, no SSM or TRC included

$$\text{Monthly Connection Charge} = \frac{D (\text{GAV}) + R (\text{NAV})}{12}$$

Where NAV in first year is $\text{GAV} * (40 - 0.5/40)$

Example (2) – User Defers TEC

Application: CEC & TEC

CEC: 1000MW Oct 2010

TEC: 1000MW Oct 2010

User mod app, TEC deferred to Apr 2011

CAPEX – Miscellaneous Charge

As in Example 1

OPEX – One Off Charge

Charges for demobilisation and remobilisation costs eg:

- site security
- contract deferral costs

Delay costs should not be borne by the wider community

Example (3) – Connection to Existing Substation

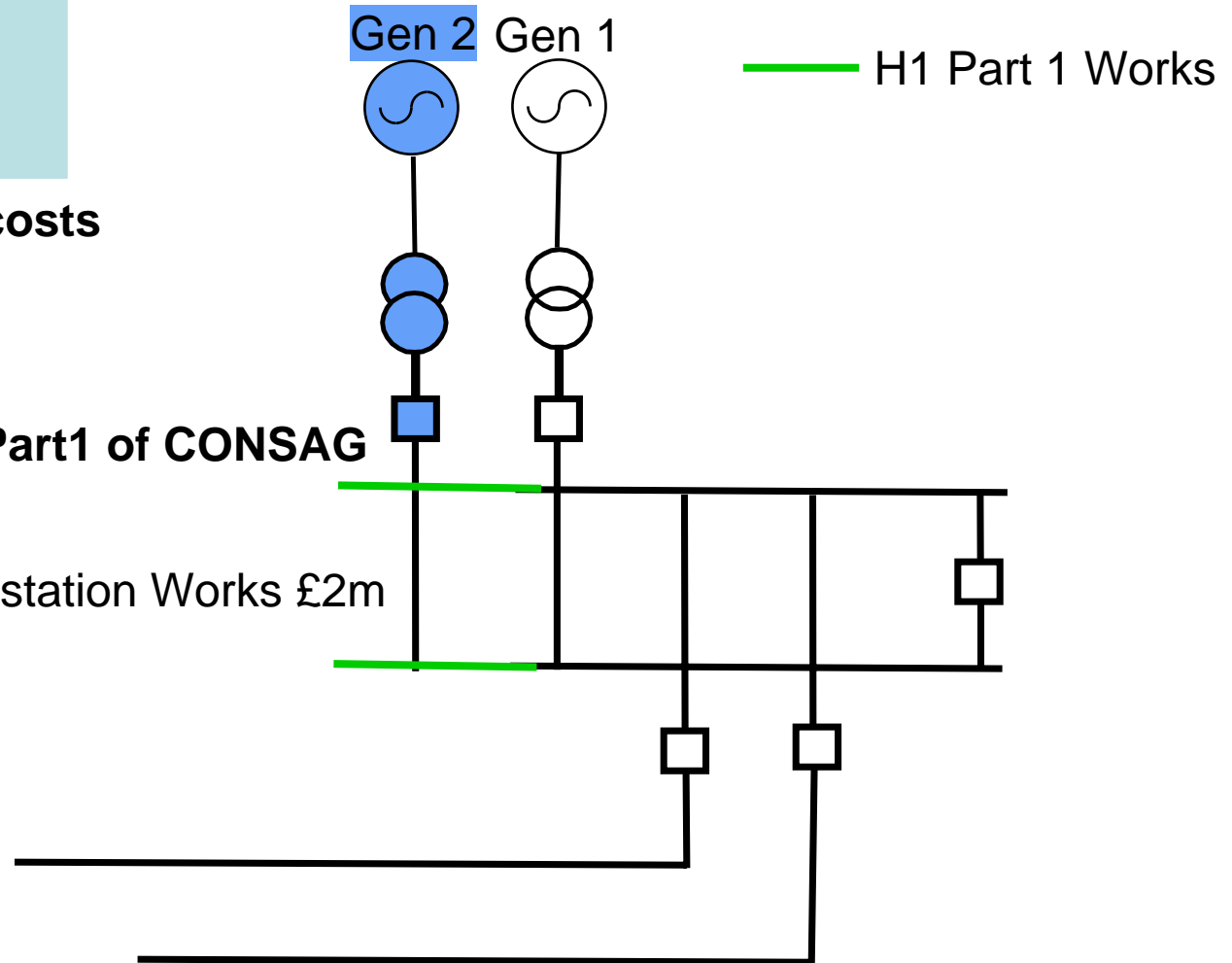
Application: CEC Only
CEC: 1000MW
TEC: 0MW

User to pay all CAPEX costs

One Off Charge: £2m

Works identified in H1 Part1 of CONSAG

Substation Works £2m



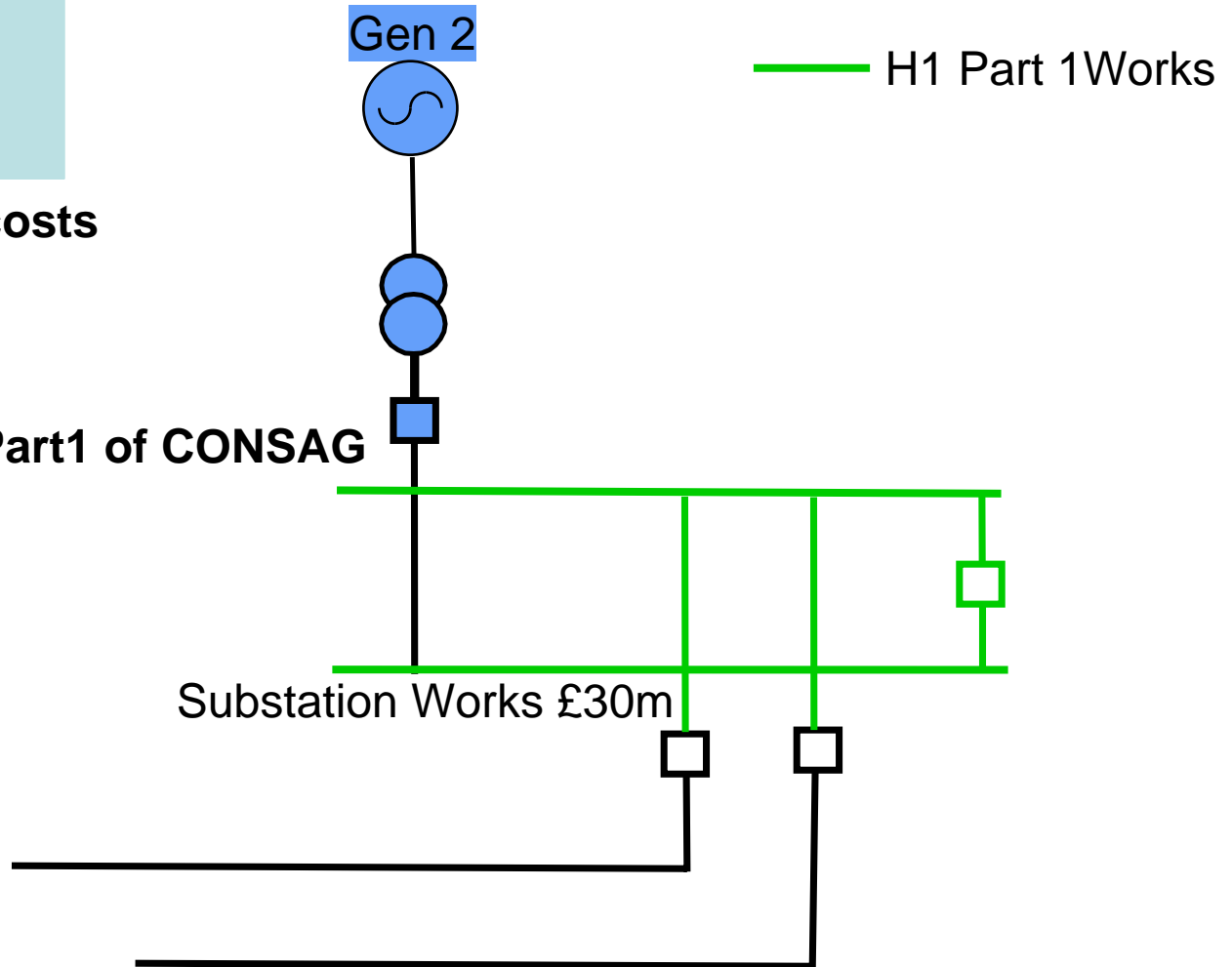
Example (4) – Connection to New Substation

Application: CEC Only
CEC: 1000MW
TEC: 0MW

User to pay all CAPEX costs

One Off Charge: £30m

Works identified in H1 Part1 of CONSAG



Issues/ Questions

- ◆ What happens if a generator requests 1000MW CEC and 1MW TEC in October, with TEC to increase to 1000MW in the following April?
 - ◆ National Grid would need to consider whether this is a competent application and the reason for a need of 1MW
 - ◆ Minimum TEC would be 90% of CEC
- ◆ The charges will be applied on a daily basis, but charged monthly for the duration of the gap between CEC and initial TEC
- ◆ What happens if a User applies for LDTEC?
 - ◆ If a User successfully applies for LDTEC/STTEC capacity the monthly charge will cease
 - ◆ The minimum capacity applied for would be 90% of CEC
- ◆ Early backfeed
 - ◆ Will seek to recover cost to reflect early investment if TEC in different financial year
- ◆ Financial treatment
 - ◆ NAV into RAB when TEC procured and monthly charge ceases

One-Off Charges v Miscellaneous Charges

One Off

- ◆ Costs that although attributable to the connection, may not give rise to additional connection assets
 - ◆ Cannot be capitalised
 - ◆ Non-standard incremental cost incurred as a result of User's request
 - ◆ Termination charge
- ◆ Transmission charge – User pays one-off over a longer period

Miscellaneous

- ◆ Other contract specific charges may be payable by the User
- ◆ Set out in the BCA
 - ◆ 2 in recent memory, only one currently being charged
 - ◆ Both included open-ended timeframes