

ITC, Inter TSO Compensation mechanism

CISG

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Agenda

- ◆ Background
- ◆ Impact on GB charging methodology
- ◆ Options
- ◆ Proposal / discussion
- ◆ Example
- ◆ Next steps

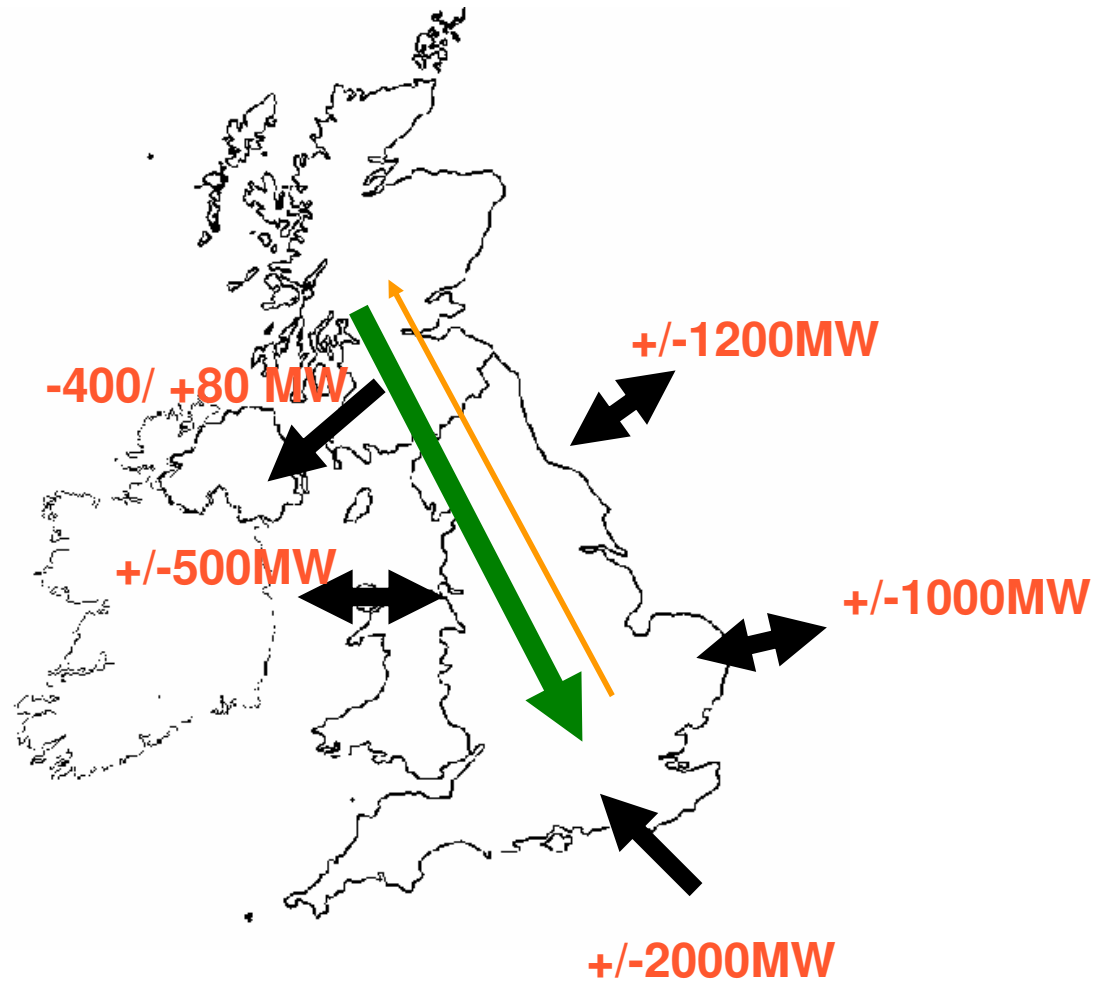
Background

- ◆ Implementation date 1 January 2008
 - ◆ runs for two years
 - ◆ Based on IMICA studies / WWT
 - ◆ Adjustment fund
- ◆ Border fee increase
 - ◆ €1.4/MWh and Bi-directional
 - ◆ Previously €1/MWh for injections
- ◆ GB contribution as perimeter country would increase from €2m to €18m
- ◆ GB contribution in scheme based on IMICA and WWT €12m
 - ◆ Reduced to €9.3 through adjustment fund

The proposed scheme

- ◆ Infrastructure Based on IMICA studies
 - ◆ Network assets - regulatory value
 - ◆ Ex-ante, fixed for two years
 - ◆ Based on studies carried out in 2007
- ◆ Losses
 - ◆ Losses – forecast market price / regulatory value
 - ◆ WWT - variable

Flows



Review charging methodology

- ◆ Required to take account of regulation in our tariffs
- ◆ Required to review under licence
- ◆ Under ITC scheme
 - ◆ ITC provides compensation for transits (-ve)
 - ◆ Need to review GB charges for transit
- ◆ Not all imports and exports lead to transits
 - ◆ 80% of import for national use

Methodology issues

- ◆ Number of options
 - ◆ Danger of discrimination & double accounting
- ◆ ITC only covers transits (physical not transaction)
- ◆ Generation / load split
 - ◆ In Europe weighted strongly towards load
 - ◆ In GB 27% of TNUoS paid by generation
- ◆ Locational signals
 - ◆ GB fairly unique with locational network costs
 - ◆ Seek to preserve locational signal
- ◆ Robust
 - ◆ New interconnectors

Options

- ◆ Combination of changes to locational and residual elements – discussed previously
- ◆ For each option, apply to
 - ◆ All imports and exports or Transits only?
- ◆ Legal requirements (licence and regulation)
 - ◆ No explicit border fee
- ◆ Relevant objectives – C5
 - ◆ Facilitate Competition & Cost Reflective
- ◆ Consistency across Europe / ITC / GB
- ◆ TNUoS and /or BSUoS?

Proposal

- ◆ Interconnector should still be subject to charges
 - ◆ TNUoS and BSUoS
- ◆ ITC will be taken account of in TNUoS Adjust the TNUoS charge for interconnector parties:
 - ◆ Establish a transit level
 - ◆ Subtract from chargeable TEC / chargeable demand
 - ◆ Sharing for more than 2 interconnectors / bi-directional
- ◆ All revenue is passed through TNUoS

Transit level

- ◆ How aligned do the charging values have to be?
- ◆ Demand – Triad 3 system peaks, not interconnector flow peaks
- ◆ Generation - TEC annual right / three highest peaks 10 days apart
- ◆ ITC - revenue is based on 72 snapshots
- ◆ Avoid demand discount focused on peak
 - ◆ Removes incentive to take
- ◆ Propose to use half hourly values
 - ◆ 72 snapshots
 - ◆ Do not want to incentivised take on peak

Transit level proposal

- ◆ Take hourly flows throughout the year
 - ◆ ITC method is proxy for all periods
 - ◆ Could use snapshot timings, but may create unstable behaviour
- ◆ Calculate the average transit
 - ◆ Transit = Minimum { ΣP_{exi} , ΣP_{imj} }; with:
 - ◆ P_{exi} = P of X node with positive active power #i
 - ◆ P_{imj} = -P of X node with negative active power #j
 - ◆ Minimum of export or import in any half hour

Adjusting metered volume

- ◆ Subtract the transit volume from chargeable volumes to establish deemed chargeable volume
- ◆ Charges to be based on deemed chargeable volume
- ◆ Both imports and export adjusted by transit separately
- ◆ Adjustment is proportional to an individual interconnectors contribution to the transit
 - ◆ Take account of import and export
 - ◆ Take account of Triad adjustment (benefit already included)
- ◆ Share weighted by contribution in any half hour to transit taking account of direction.....example:

Scenario

I/C	Status	TEC	Gen tariff £/MWh	Demand tariff £/MWh	Gen charge £k	Demand charge £k
A	Mostly imports	2000	2000	20000	4000	0
B	Mostly exports	100	10000	5000	1000	2000
C	Exports and imports about equal	1000	5000	15000	5000	0

Data

	interconnectors					
	A	B	C	Sum Import	Sum Export	Transit
Triad	2000	-400	300	2300	-400	400
	2000	-40	-300	2000	-340	340
	1500	50	100	1650	0	0
	1800	-400	-100	1800	-500	500
	1200	-400	50	1250	-400	400
	2000	-20	-50	2000	-70	70
	-500	-400	30	30	-900	30
	-500	40	-30	40	-530	40

Results

I/C	TEC discount	Demand discount MW	Gen discount £k	Final Gen charge £k	Gen charge reduction	Demand discount £k	Final demand charge £k	Demand charge reduction
A	205	-7	410	3590	10.26%	0	0	0%
B	5	-159	50	950	5.00%	796	1204	60%
C	12	-57	61	4939	1.23%	0	0	0%

- ◆ Discount weighted by
 - ◆ Contribution in each period to transits; &
 - ◆ Period contribution to overall transit

Next steps

- ◆ Discuss revenue with Ofgem in parallel
 - ◆ Does not affect published tariffs 08/09
 - ◆ Impacts on chargeable volumes
 - ◆ Kt
- ◆ Test on 06/07 data
- ◆ Pre-consultation required?
- ◆ Consultation March 08