

Considerations for Use-It-or-Lose-It (UloLI) vs. Use-It-or-Sell-It (UloSI) in the Treatment of Interconnector Capacity Reallocated for SEM Intra Day Trading

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1.0 Reallocation of Interconnector Capacity for Congestion Management Purposes

Capacity on an interconnector can be allocated in several ways: on preferential contractual basis; on 'first-come, first-served' basis; by implicitly linking access rights to the spot market; or by an explicit auction method.¹ All these presuppose the existence of congestion. Indeed the thrust of the EU Congestion Management Guidelines (CMG) as a means of improving access to networks for cross-border electricity trades is underpinned by the presence of congestion which is defined as "a situation in which an interconnection linking national transmission networks cannot accommodate all physical flows resulting from international trade requested by market participants, because of a lack of capacity of the interconnectors and/or the national transmission systems concerned"². Hence congestion relates not just to interconnector capacity, but to the interconnected, local system.

Under CMG, interconnector capacity is to "be allocated only by means of explicit (capacity) or implicit (capacity and energy) auctions"³. In addition "[b]oth methods may coexist on the same interconnection...[and] for intra-day trade continuous trading may be used"⁴. Hence only explicit and implicit auctions satisfy EU legislative requirements for interconnector capacity allocation.

Moyle Interconnector, and presumably East West Interconnector when it becomes operational, employs explicit auctions to allocate capacity. Allocated capacity may be used by interconnector units in SEM to trade electricity with BETTA. Where such capacity is not committed to the SEM market schedule, and indeed for capacity that remains unallocated from the auction process, no subsequent opportunities exist for market participants to access such capacity. This is contrary to CMG which requires the ability to "reassign unused capacity for reallocation in [subsequent] relevant timeframe[s] — including intra-day sessions"⁵. It is this deficiency that the Intra Day Modification Proposal currently working its way through the SEM Modifications process aims to address. This paper intends to contribute to that process by examining the basis for reallocation of capacity on the interconnector, subsequent to the initial gate closure period.

¹ Inderst, R., Ottaviani M. *Cross Border Electricity Trading and Market Design: The England-France Interconnector* p.5. Case material of the London Business School, 2004

² Article 2 (2)(c) of Regulation (EC) No 714/2009 on conditions for access to the network for cross-border exchanges in electricity

³ Annex I (2.1) of Regulation (EC) No 714/2009 – *Guidelines on the Management and Allocation of Available Transfer Capacity of Interconnections between National Systems*

⁴ Ibid

⁵ Annex I (2.11) of Regulation (EC) No 714/2009 – *Guidelines on the Management and Allocation of Available Transfer Capacity of Interconnections between National Systems*

2.0 Elements of Congestion Management

Suitability of Explicit Auctioning vs. Implicit Auction for Reallocation of Capacity

Explicit auction mechanisms are widely used to allocate interconnector capacity in the first instance. According to ERGEG, “[e]xplicit auctions are used at most of the European borders for long-term allocation of capacity”⁶. Explicit auctions “are also used for short-term day-ahead allocation in continental Europe”⁷. Given the extended timeframes that prevail under initial capacity allocation conditions, it is easy to accommodate the multi-stage process involved in the explicit auction mechanism. However when time frames shorten, such as is obtained in intra day situations, implicit auctions, which bundle allocation of capacity with energy, provide a more manageable option.

Bearing in mind the tight time gaps between subsequent gate closures, providing for the reallocation of capacity following the initial Gate Closure in SEM may most practically be achieved through an implicit auction mechanism. However it must be noted here that IFA (Brit Ned intends to as well) runs explicit auctions even within tight timelines, often 2 hours apart. (see discussion IFA below)

Two Competing Rules - UIoSI or UIoLI

Irrespective of the reallocation mechanism adopted, two alternative rules are required under CMG – Use It or Sell It (UIoSI) or Use It or Lose It (UIoLI). These two rules are intended to achieve the release to the market, previously held capacity that was not committed for use in electricity flows. UIoSI is not be confused with the ability to sell/transfer capacity in secondary markets. The rationale for secondary trading is that prior to the firm nomination to a relevant SO or the expiration of the deadline to do so, capacity rights conveys an option to the holder which may be exercised or traded on. However once the deadline for nomination expires, and that capacity holder has not used that capacity, then those rights are lost and that capacity is reoffered to the market. Under UIoSI that loss of right is compensated to initial rights holders. Under UIoLI, the loss of those capacity rights is not compensated; any capacity charges raised from the subsequent reallocation of such capacity reverts to the interconnector owner.

UIoSI may also be referred to as the Use It or Get Paid for It rule.

Fundamental Difference between UIoSI and UIoLI

The fundamental difference between UIoSI and UIoLI essentially lies with who gets the proceeds arising from the resale of capacity rights. UIoLI does not imply the absence of resale of capacity nor of capacity charges. A resale occurs, and hence capacity charges arise, under both rules. UIoLI simply means that benefits arising from capacity resale (capacity charges) go to I/C owners, instead of long-term capacity rights holders.

Hence under both rules, reallocation of unused capacity results in capacity charging.

⁶ ERGEG *Compliance with Electricity Regulation 1228/2003 – An ERGEG Monitoring Report* p. 14. July, 2007

⁷ Ibid

3.0 Treatment of Capacity Reallocation on some European Interconnectors

IFA⁸

The IFA has a two-stage nomination process leading up to Intra-day nominations – Long Term (LT) and Day Ahead (D-1).

Unused LT capacity obtained from long-term auctions is released on a UloSI basis subsequent to the LT nomination stage (Gate Opens 1630 D-2; Gate Closes 0930 D-1). This capacity is opened to a daily auction between 0940 and 1000 D-1. Capacity obtained at this stage is eligible for use in the Day Ahead nominations (Gate Opens 1205 D-1; Gate Closes 1400 D-1).

Unused D-1 capacity is subject to UloLI subsequent to the Day Ahead nominations GC (1400 D-1). This capacity then rolls forward to the Intra-Day process which involves auctions for capacity, followed by nominations to use obtained capacity.

Intra-Day Process – 2 Auctions for Capacity & 6 Nominations for Delivery.

Auctions	Contract Period (D)	Gate Open	Gate Close	Nominations	Contract Period (D)	Gate Open	Gate Close
1 st	0000 – 1359	1900 D-1	1930 D-1	1 st	0000 – 1359	1950 D-1	2100 D-1
				2 nd	0600 – 1359	0220	0300
				3 rd	1100 – 1359	0720	0800
2 nd	1400 – 2359	0820	0850	4 th	1400 – 2359	1020	1100
				5 th	1700 – 2359	1320	1400
				6 th	2000 – 2359	1620	1700

Notes:

1. IFA uses explicit auctions right through.
2. Proceeds of sale of unused capacity under UloSI (Day Ahead) is paid to capacity holders.
3. Proceeds of sale of unused capacity under UloLI (Intra-Day) is **not** paid to capacity holders.

BritNed⁹

BritNed Access Rules mirror those of the IFA, save that the BritNed equivalent of the Long Term is the Medium Term.

⁸ IFA Access Rules Issue 7, 2009. See also IFA: Congestion Management Proposals issued under UK-FR-IE Electricity Regional Initiative

⁹ Brit Ned Access Rules Draft v.2

4.0 General Discussions

EREG Draft Framework Guidelines on Capacity Allocation and Congestion

It must be noted that EREG recommends that in order to achieve Efficient Forward Markets (up to Day Ahead), Financial Transmission rights (FTR) or Physical Transmission Rights (PTR) with UIoSI should be implemented for cross-border trading, “unless appropriate cross-border financial hedging instruments are offered in liquid financial markets”¹⁰. In its words “PTR shall be subject to UIoSI at the time of nomination, which means as a default the resale of non-nominated rights. TSOs shall give the total financial resale value of capacity (in case of explicit auction it is equal to the clearing price of the auction, in case of implicit auction it is equal to the price differential between the two zones) back to the market players who are the PTR capacity owners”¹¹.

It must also be noted that EREG makes no reference to UIoSI/UIoLI in its recommendation on Efficient Intraday Market Capacity Allocation. Presumably, it is up to various market implementations to determine at the intra-day stage.

Conditions for Unused Capacity Charging

In promoting cross-border trade, the EU has certain principles that apply to the determination of charges for unused I/C capacity.

One principle is that capacity charges do not act as barriers to trade. This would be the case for example if fixed prices were to be used. Hence the requirement to use market-based auctions, implicit or explicit, in reselling capacity under congestion management guidelines.

The second principle, which is related, is that congestion must be present on the I/C, i.e. demand for capacity must exceed capacity available/on offer. If there is no congestion, the economic value of capacity is essentially zero. Hence the prohibition of reserve pricing, except in certain cases.

Thirdly, there is the principle that, save for reasons of operational security, principles of cost-effectiveness and minimisation of negative impacts, the capacity on offer should reflect as much as possible the technically feasible available capacity; thus I/C capacity should not be limited to solve congestion inside a control area.

Pricing Methods

The underlying price for resale of unused capacity is the auction cleared price. However the value transferred to rights holders under UIoSI may differ slightly. In addition, where an auction is not conducted, say for IT or communications reasons, a different method of calculation has been adopted. The following discusses the pricing methods on IFA and BritNed.

¹⁰ EREG Draft Framework Guidelines on Capacity Allocation and Congestion Management for Electricity (E10-ENM-20-03) p.10, September 2010

¹¹ Ibid

On IFA

1. For unused LT capacity, rights holders are paid based on the Auction Price achieved at the Day Ahead auction.
2. If a Day Ahead auction is cancelled, compensation is made to LT capacity holders for unused units based on the weighted average price of Long-Term units of that capacity holder.
3. If an Intra Day auction is cancelled, no compensation is made.

On BritNed

1. For unused MT capacity, rights holders are paid based on the difference of Power Exchange prices on the British and Dutch APX day ahead markets for the relevant hour(s) minus the flow dependent charges (e.g. TNUoS and BSUoS) and the cost of losses on the I/C and GB transmission grid, subject to a maximum of the weighted average price of the unused MT capacity.
2. If a Day Ahead auction is cancelled, compensation is made to MT capacity holders for unused units based on the weighted average price of Medium-Term units of that capacity holder.
3. If an Intra Day auction is cancelled, no compensation is made.

Issue with Weighted Average of Capacity Price

There is a question as to whether the weighted average of capacity price contradicts EU rules regarding relationship of capacity charge to benefit of trade. This may be an issue if it is used as the primary method for determining the charge for capacity resale. Clearly the use by IFA and BritNed under communications failure events is acceptable.

An Alternative Pricing Method under Implicit Auctioning – Fraction of Profit

Under a bundled resale of capacity and energy, the determination of capacity may be based on fraction of profit obtained from the trade. This may be an arbitrary percentage, say 50%.

In SEM, profit for I/C units may be either determined in a number of ways. Two options are the Infra Marginal Rent (IMR) of each unit in each Trading Period or the difference between the highest accepted bid and SMP.

One issue to be borne in mind relates to the treatment of Superimposed capacity.

Treatment of Resale of Unused Capacity

Unused capacity may be made up of previously sold, but unused, and previously unsold capacity. Indeed one of the critical differences between SEM and other Markets regarding unused I/C capacity arises from the central clearing and dispatch mechanism in SEM, whereby unused capacity may arise not because of non-nomination by the rights holder, but a result of being out of merit or for ramping reasons.

There are different views on the priority of resale of the two types of unused capacity.

One view holds that previously unsold capacity should be cleared first with any resulting capacity charges for the benefit of the Interconnector owner followed by allocation of the previously sold but unused capacity with the value going to the original capacity holders.

An alternate view holds that, at that stage capacity is fungible and should be reallocated on a pro-rata basis with proceeds equally shared on that basis.

A concern expressed on this issue holds the view that if capacity is withheld by the I/C owner for any reason, such capacity should receive the lowest priority in reallocation. However given that CMG prohibits withholding of I/C capacity, this issue most likely does not arise.

Additionally another view relates to any value for superimposed capacity which is required to revert to the interconnector owner.
