

Triad Charging & Interconnectors

Iain Pielage, CISG – 24th February 2010



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Triad Charging – An Initial Review

- ◆ Overview:
 - ◆ Why review methodology now
 - ◆ Initial Analysis
 - ◆ Why use Triad
 - ◆ How effective is it
 - ◆ Impact
 - ◆ Next steps

Background

- ◆ National Grid has received a letter from Ofgem highlighting a number of concerns with the current Triad and Interconnector Charging arrangements
- ◆ Specifically, Ofgem have asked for National Grid's view on
 - ◆ Continued application of Triad charges to Interconnector flows
 - ◆ Use of Triad to derive locational and residual elements of TNUoS in the context of all statutory duties, licence obligations and European Laws
- ◆ National Grid has a duty to keep the methodologies under review

Why Triad?

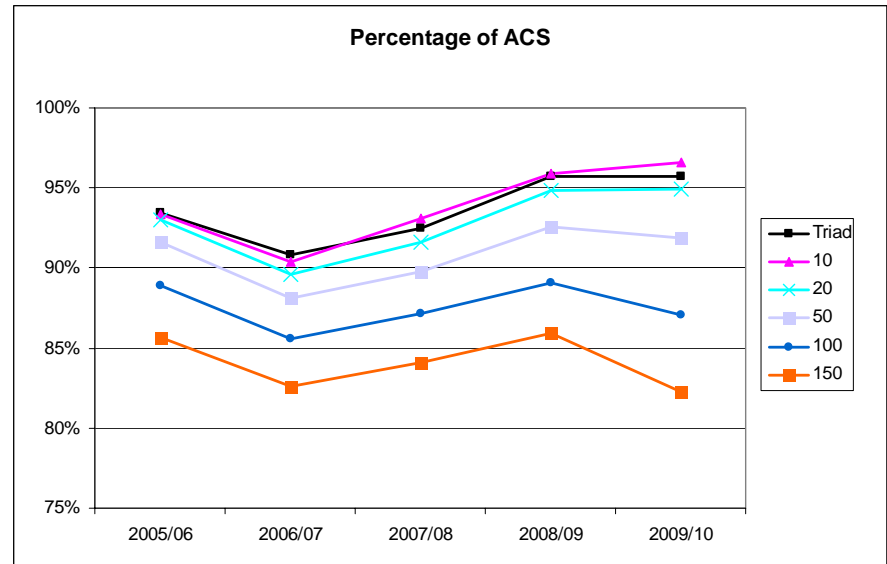
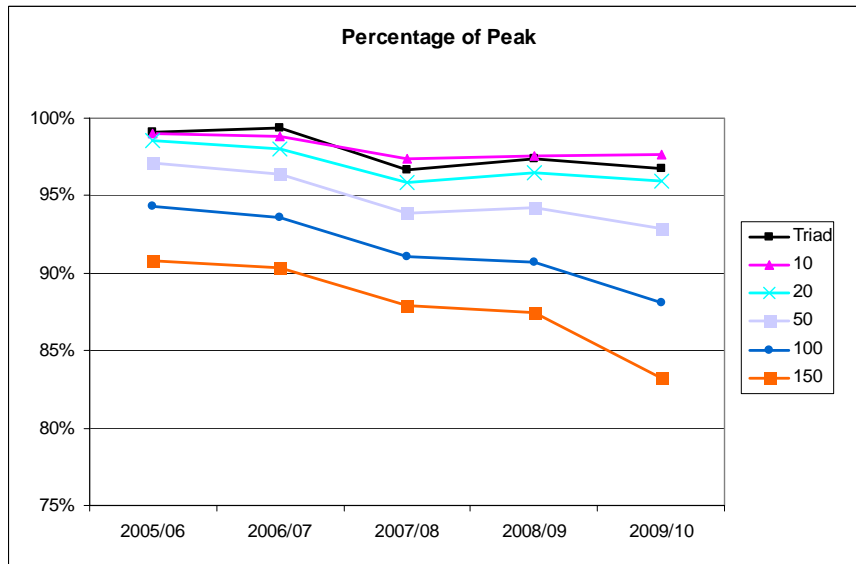
- ◆ Security Standards Requirement:
 - ◆ Transmission system designed to meet ACS peak demand.
 - ◆ Triad used as proxy for peak
 - ◆ (Reminder: Triad = 3 peaks, Nov to Feb, separated 10 days)
- ◆ Triad Questions:
 - ◆ How effective is Triad as a proxy?
 - ◆ Is there an alternative (ex post or ex ante)?
 - ◆ Is it worth changing?

How Effective as measure of Peak Demand?

- ◆ Analysis Approach:
 - ◆ Evaluate Triad demand to annual & ACS peak for years 2005/06 to 2009/10 (Incomplete data for 2009/10)
 - ◆ Benchmark against an using daily demand peaks
 - ◆ Rank daily peak demands high to low
 - ◆ Average demand peaks for top “n” days
 - ◆ Compare with annual & ACS peak as per Triad

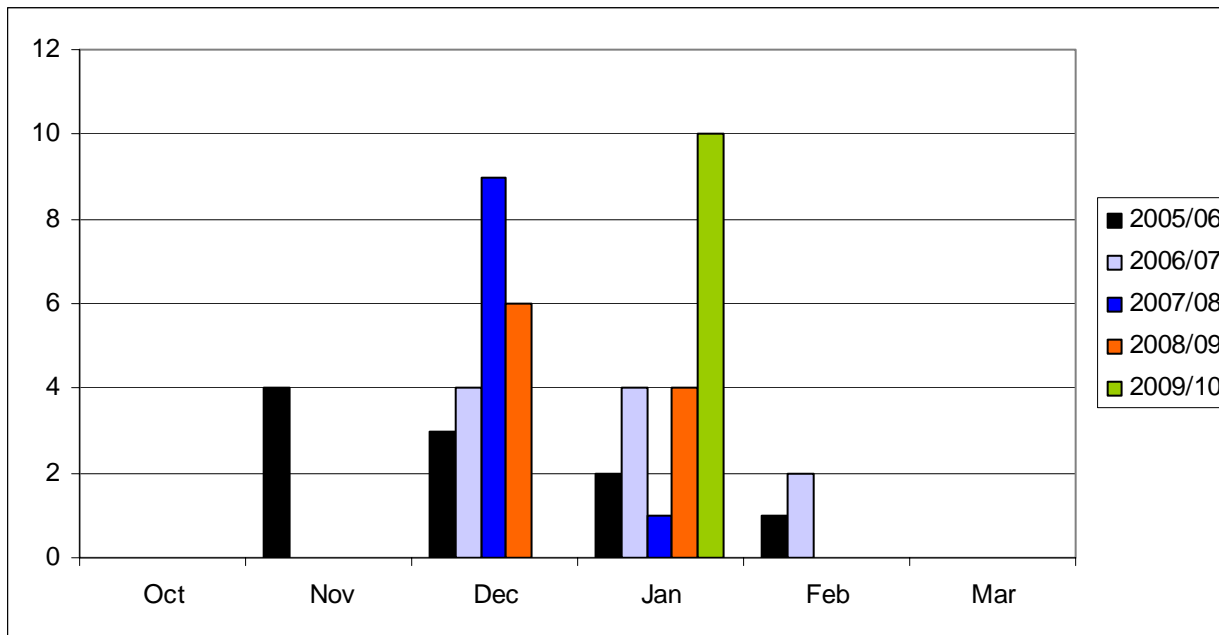
How Effective as measure of Peak Demand?

- ◆ Both Triad and “top 10” daily demands provide reasonable proxy for peak demand.
- ◆ Potentially, 10 days *may* be considered *marginally* more representative if considering annual peak.



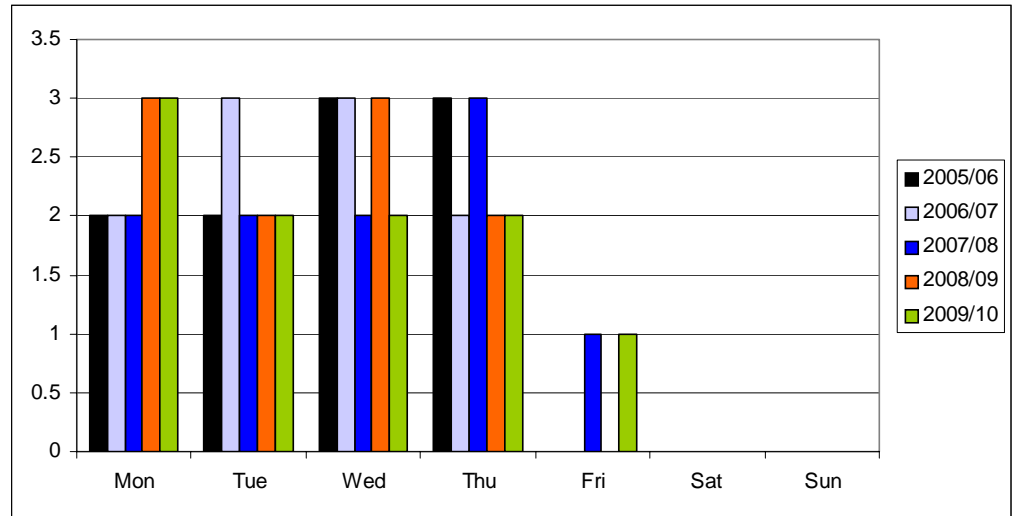
Appropriateness: Triad Period

- ◆ When do peaks occur?
 - ◆ Top 10 Daily peaks, all occurred over Nov. to Feb.



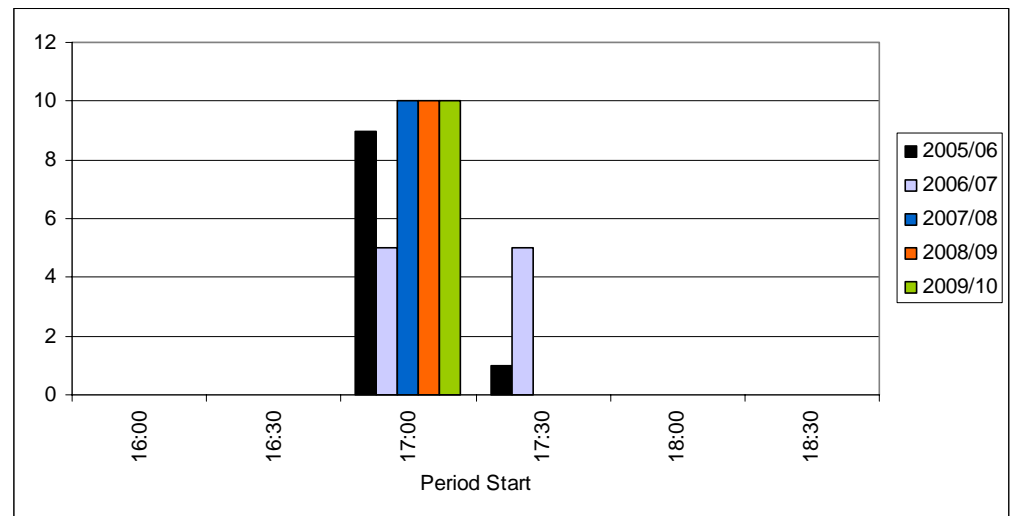
Peak Demand Occurrences

- ◆ Typically, occur:
 - ◆ Monday to Friday

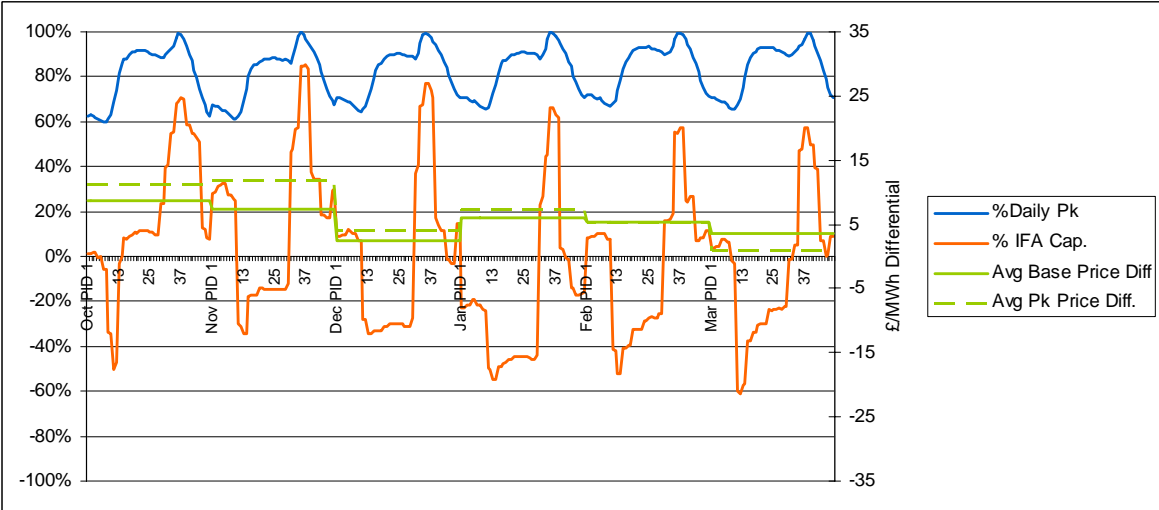
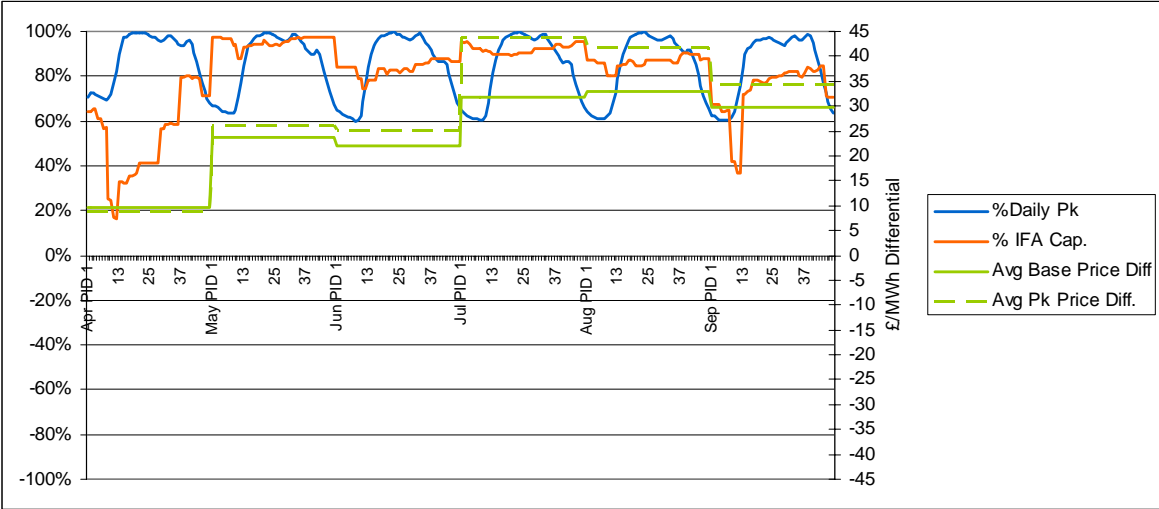


- ◆ Periods starting 17:00 & 17:30

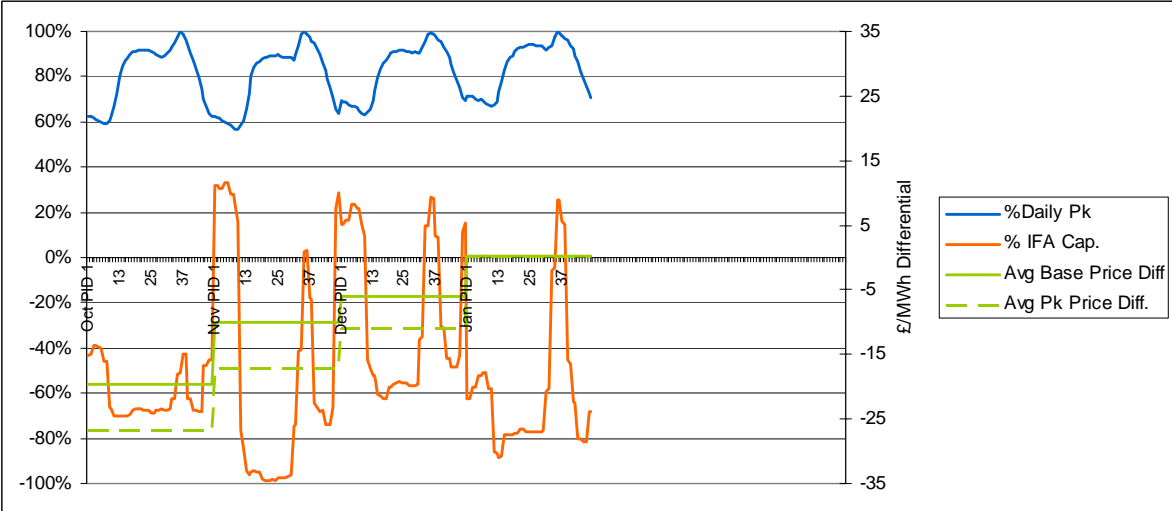
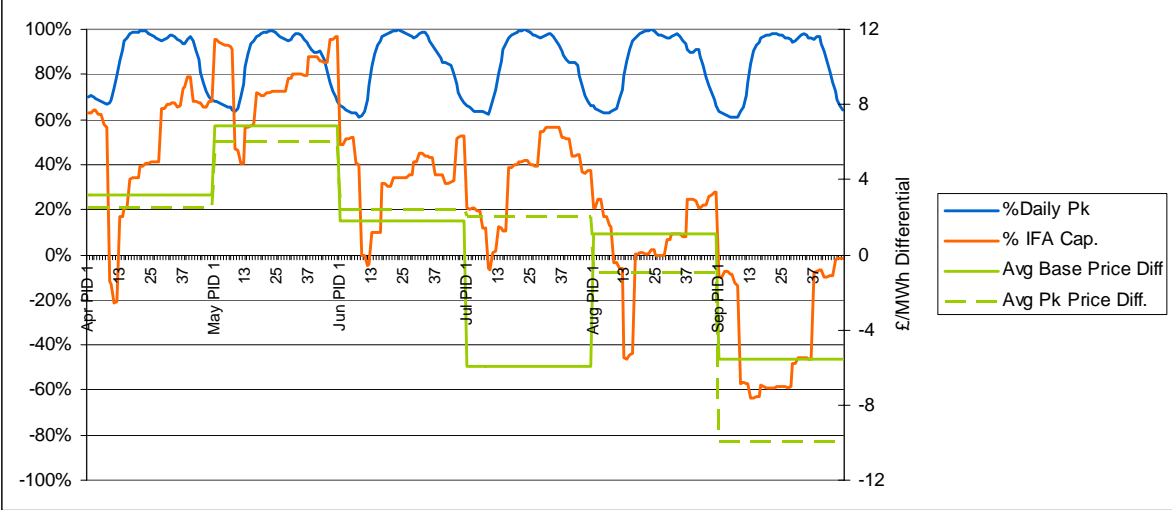
(Based on Top 10 Days)



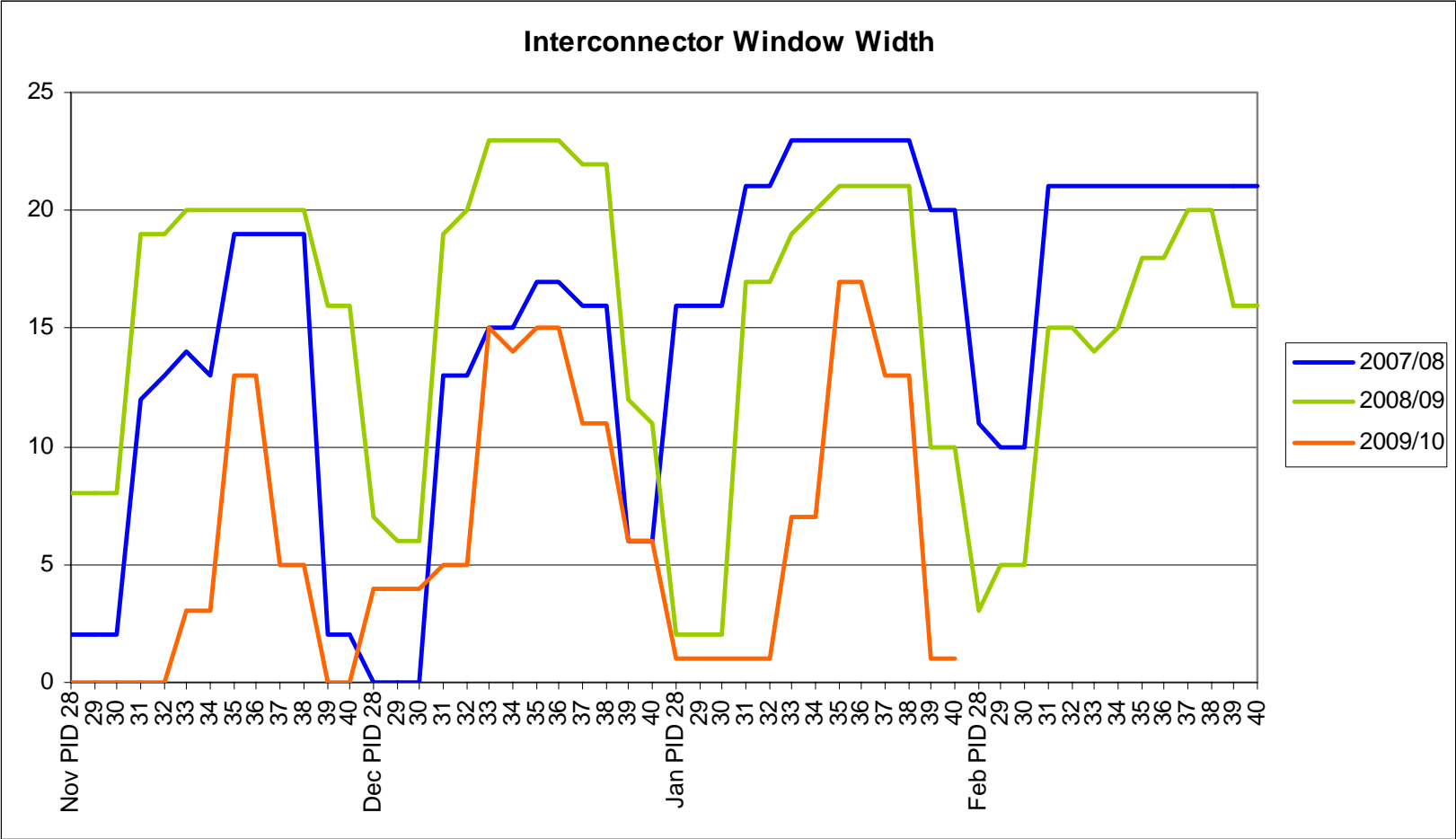
French Interconnector Flows 2008/09



French Interconnector Flows 2009/10



Interconnector: Triad Window



Interim Conclusion & Next Steps

- ◆ Triad still an appropriate proxy for peak demand
- ◆ Changing basis to include more days risks widening “within day” and “across day / month” windows over which user demand would be evaluated.
 - ◆ Unlikely to effect “demand only” users
 - ◆ Not so good for Interconnectors.
- ◆ Next steps:
 - ◆ Consider energy and transmission interaction
 - ◆ Consider interaction with interconnectors
 - ◆ Consider alternatives
 - ◆ Industry Views / Pre-Consultation: May 2010