

welcome

Save today. Save tomorrow.





Improved ICRP Theme 1: Use of ALF

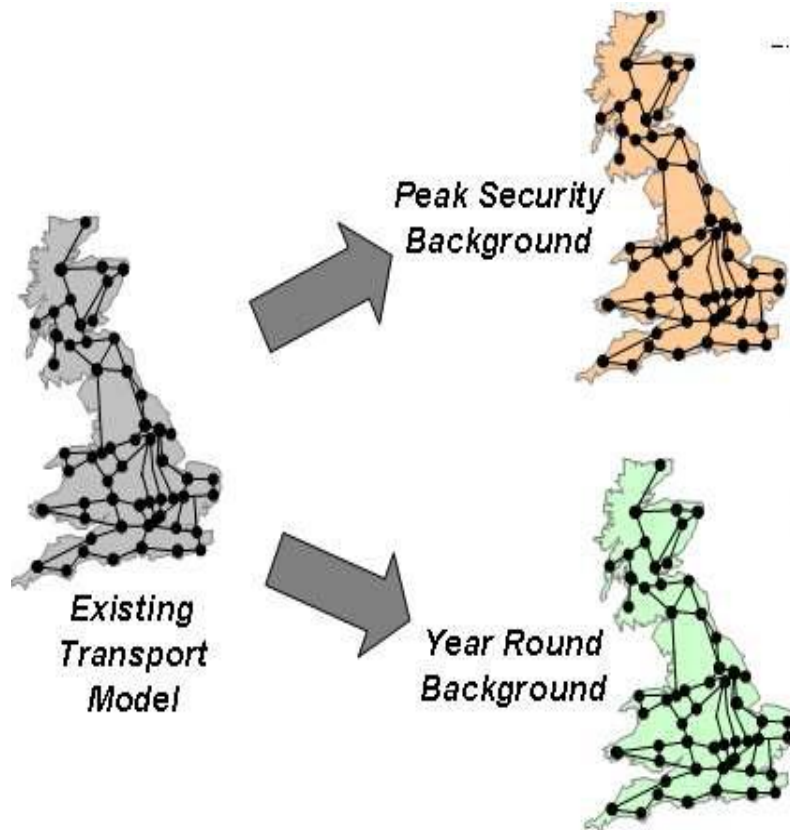
30th August 2011

Contents

- Principles in GSR009
- Applying GSR009 to ICRP
- Should Annual Load Factor be used for transmission charging?
- Reviewing the relationship between ALF and constraints
- Concluding comments for discussion



GSR009 considers two scenarios



- System required to meet peak demand
- System required to meet year round/ economic/ constraint optimisation
 - This acts as a simplification / proxy for a full cost benefit analysis



Using the principles of GSR009 in the proposed Improved ICRP

- If GSR009 were approved then the principles of ICRP should be reviewed to maintain consistency with SQSS
- Proposed improved ICRP identifies lines required for peak and those for year round requirements
- Two locational charges are developed based on the different system requirements
- In NG's proposal this creates two sets of tariffs for generators
 - Peak security (applicable to conventional only and charged on TEC)
 - Year round (applicable to all generators and scaled by historic load factor)
- The TransmiT sub-group has considered this latter stage in more detail



• Should a signal for future transmission charges be based on historic load factors?

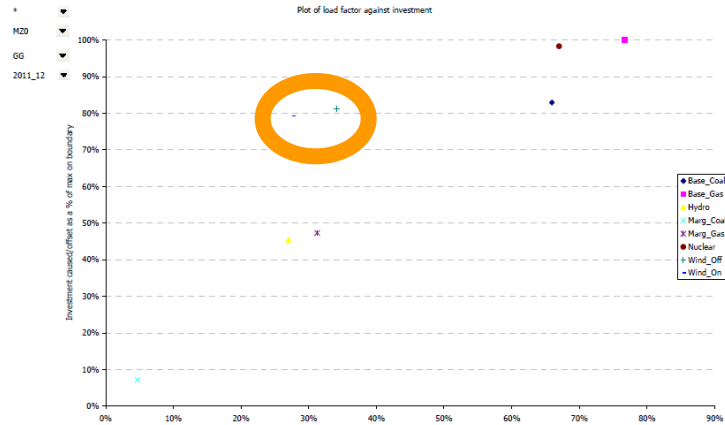
Why are future costs being allocated based on historical annual load factors?

- Concerns have been raised with NG's proposal to allocate future costs based on historical annual load factors
 - Particularly as the system is being designed and built using very different assumptions on required transmission capacity
- NG are proposing to use historical annual load factors as a proxy to identify which plant is triggering investment behind a boundary
 - This is because from NG's perspective the use of the SQSS scaling factors as a simplification for a full CBA is correct at a GB level but not at a zonal level
 - Annual load factor is used as a proxy to identify the impact on constraints that a particular generator has – this acts as a simplification for a full demand and load curve analysis
- The load factor approach requires a diverse plant mix behind the boundary to share TEC

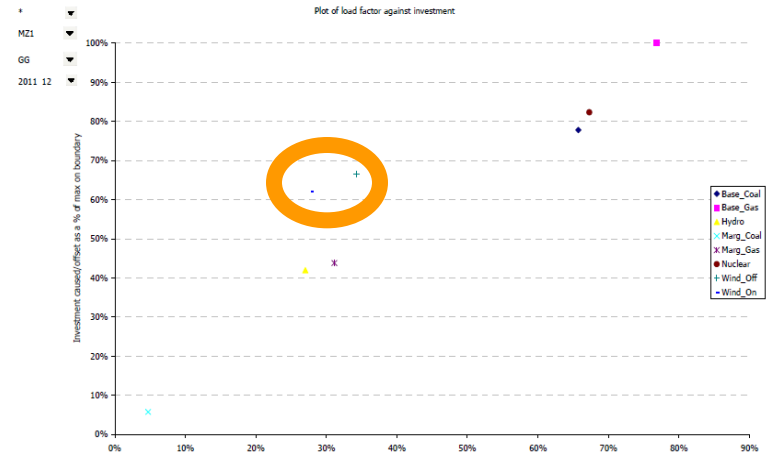


How good a proxy is annual load factor for constraint costs?

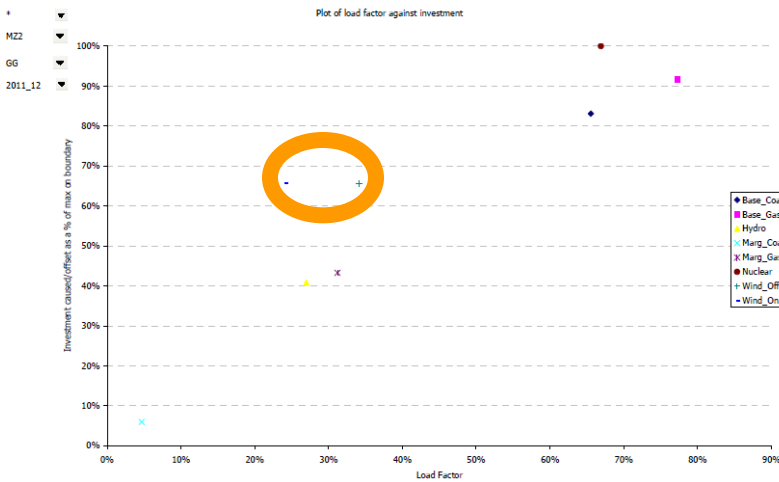
Zone 0 – NW SHETL



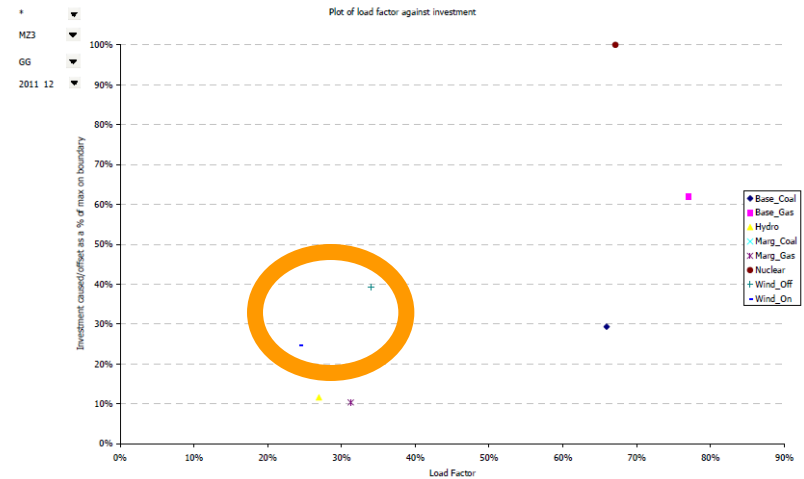
Zone 1 – SHETL



Zone 2 – SPT

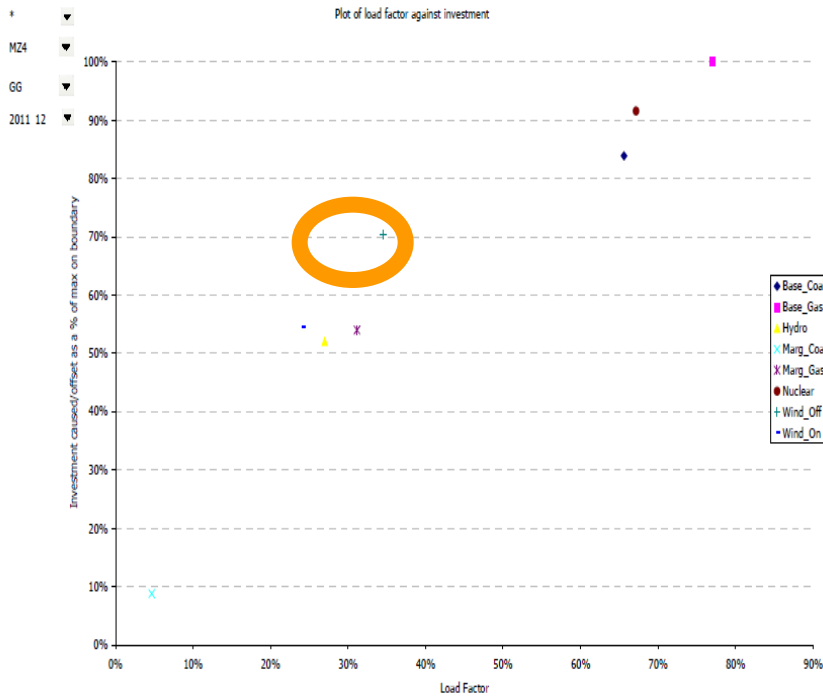


Zone 3 – Upper Northern England

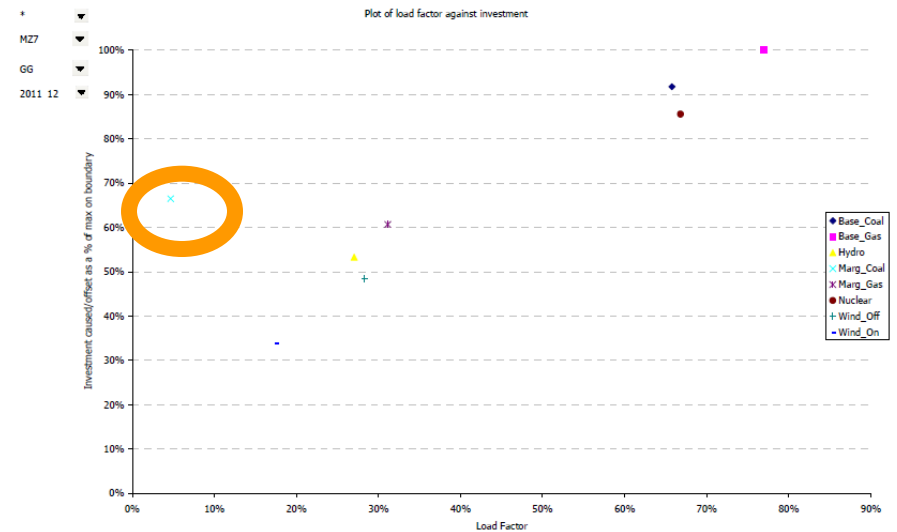


How good a proxy is annual load factor for constraint costs?

Zone 4 – Northern England

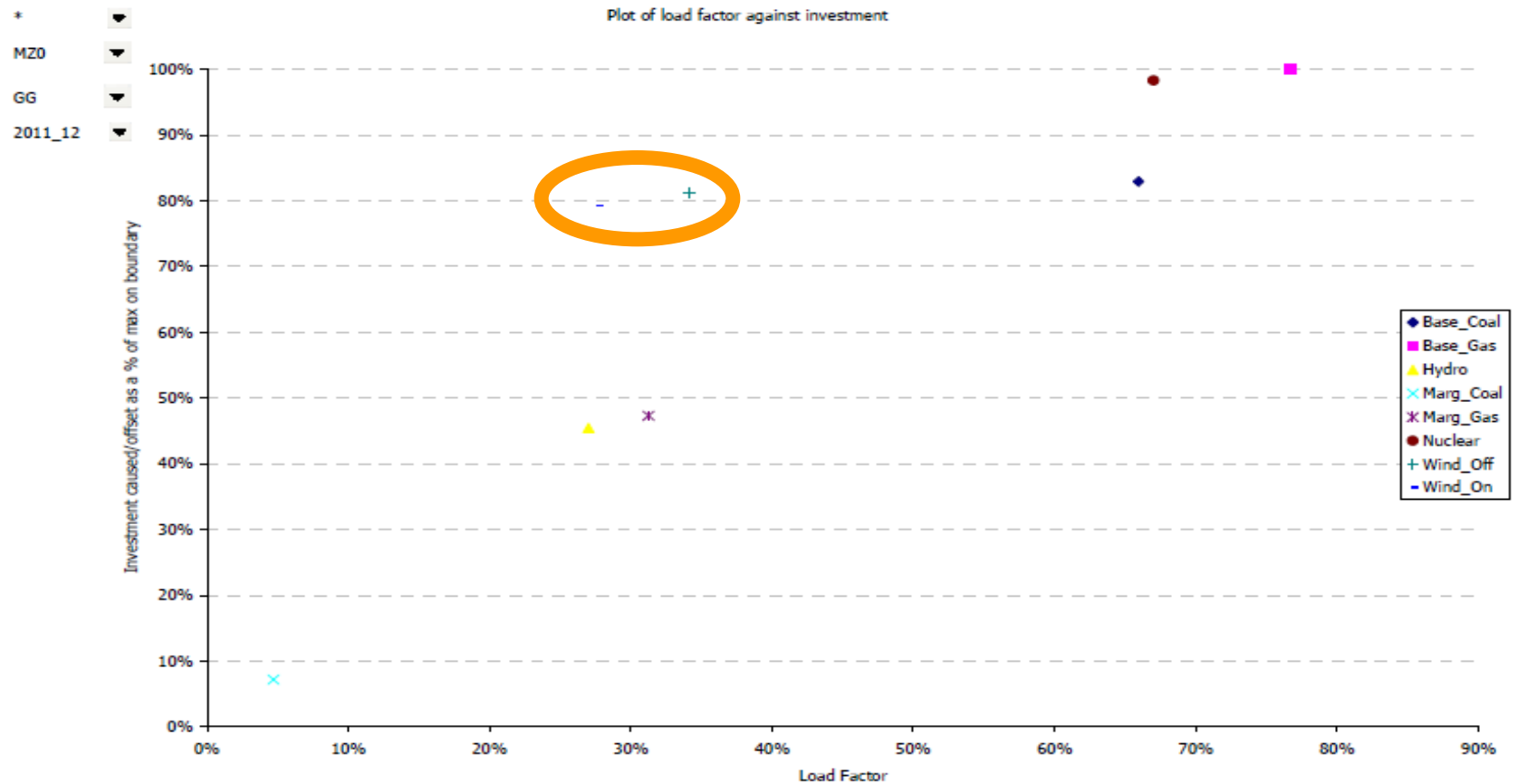


Zone 7 – Southern England



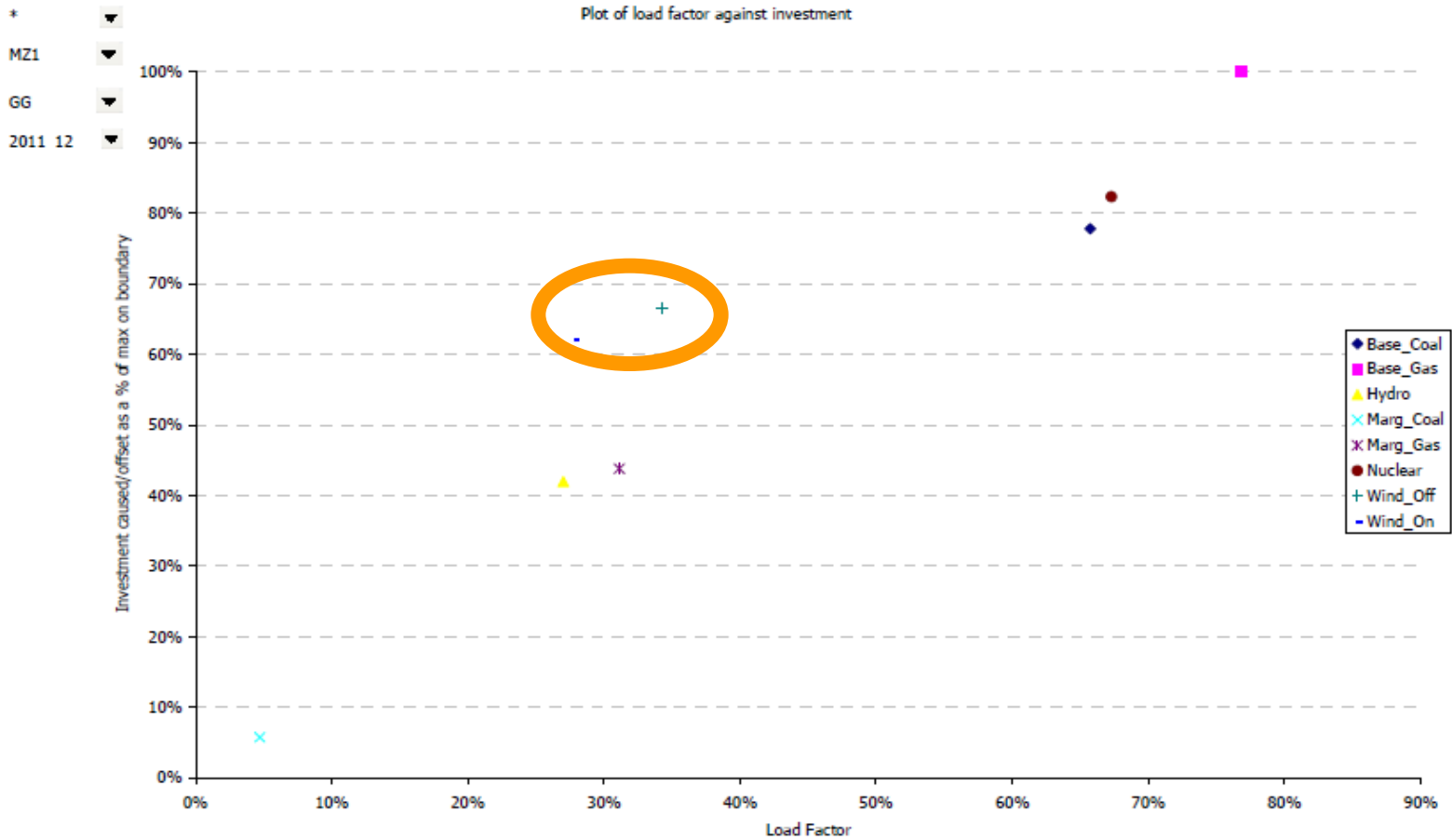
Issues with correlation in zone 0

Zone 0 – NW SHETL



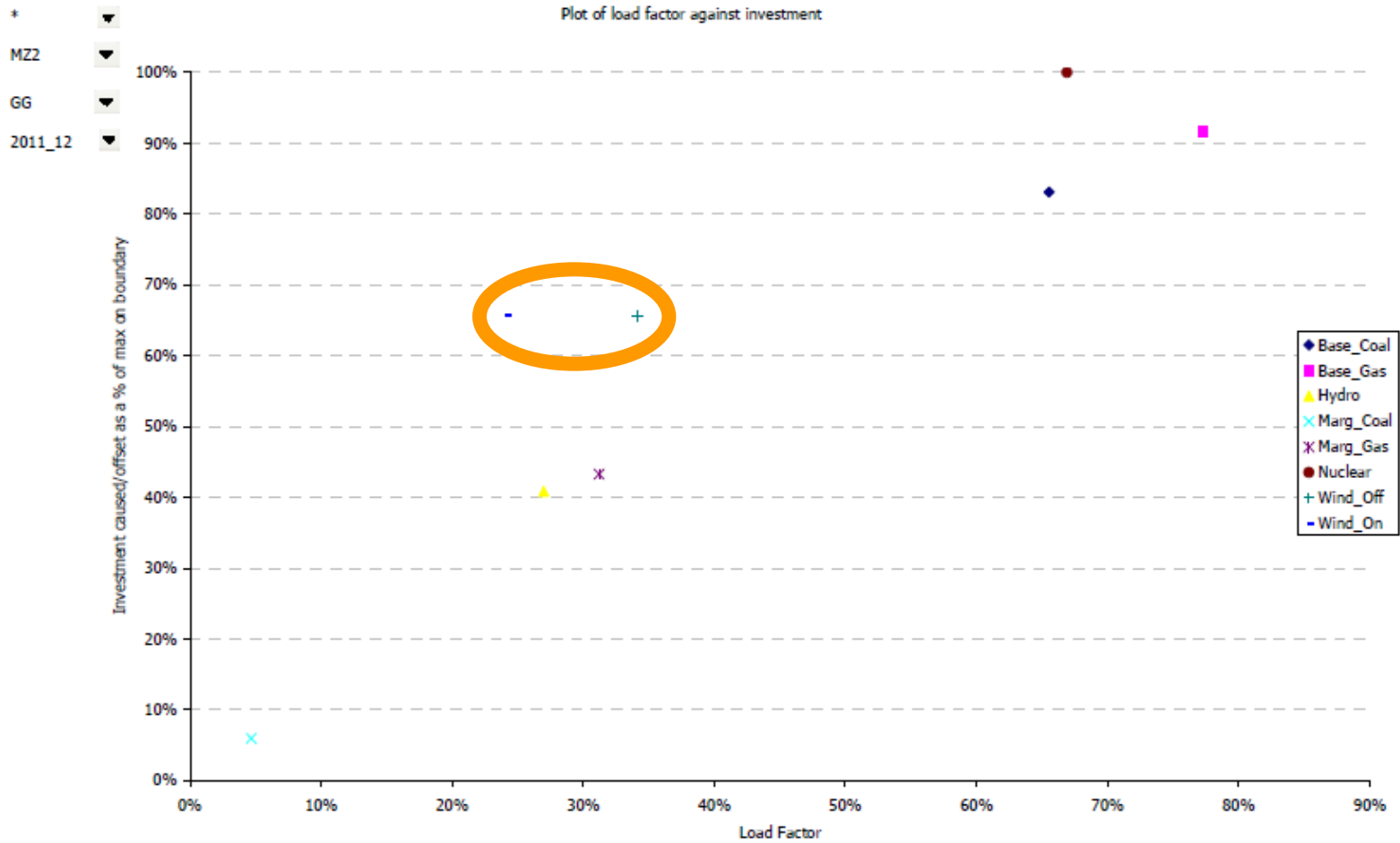
Issues with correlation in zone 1

Zone 1 – SHETL



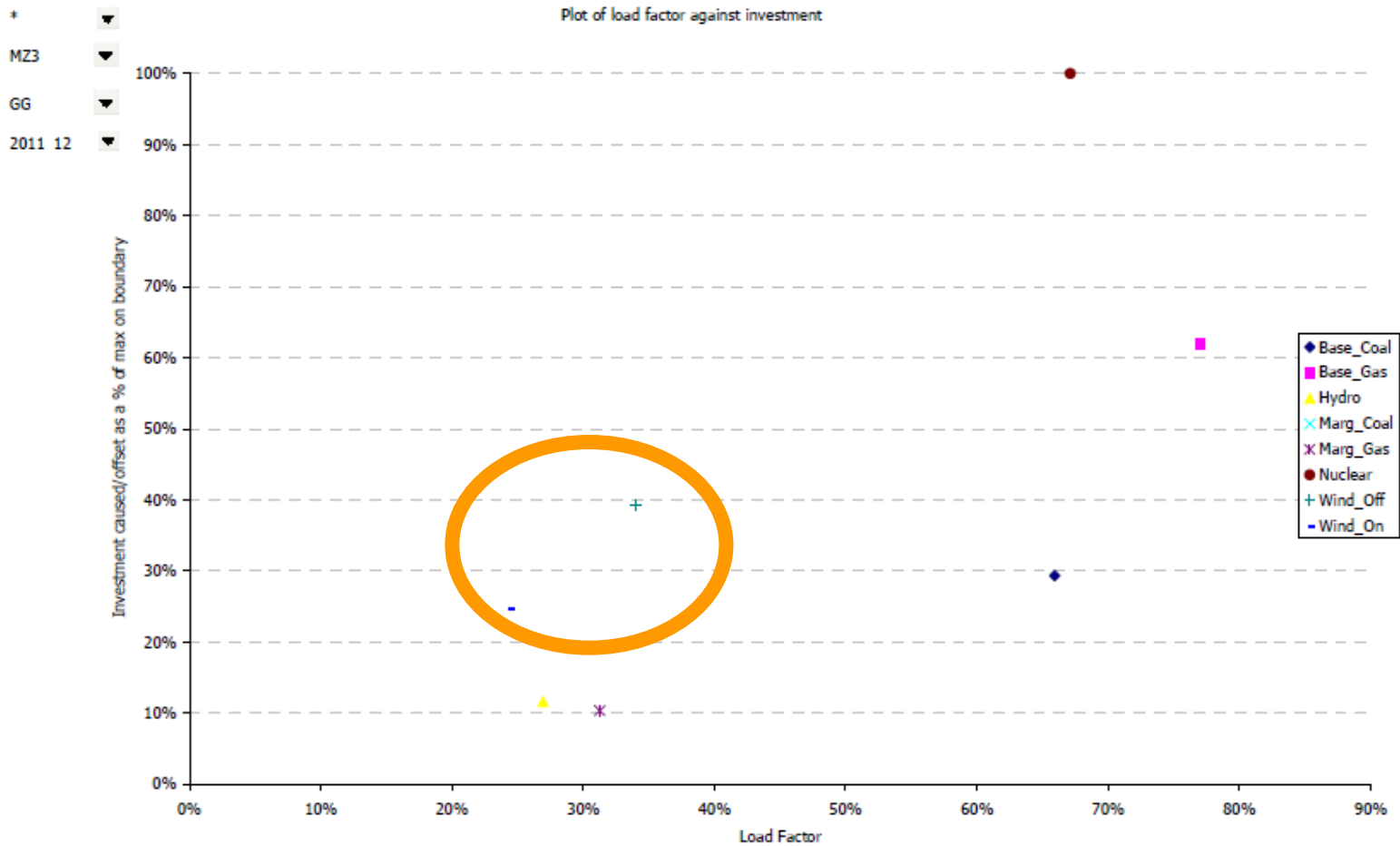
Issues with correlation in zone 2

Zone 2 – SPT



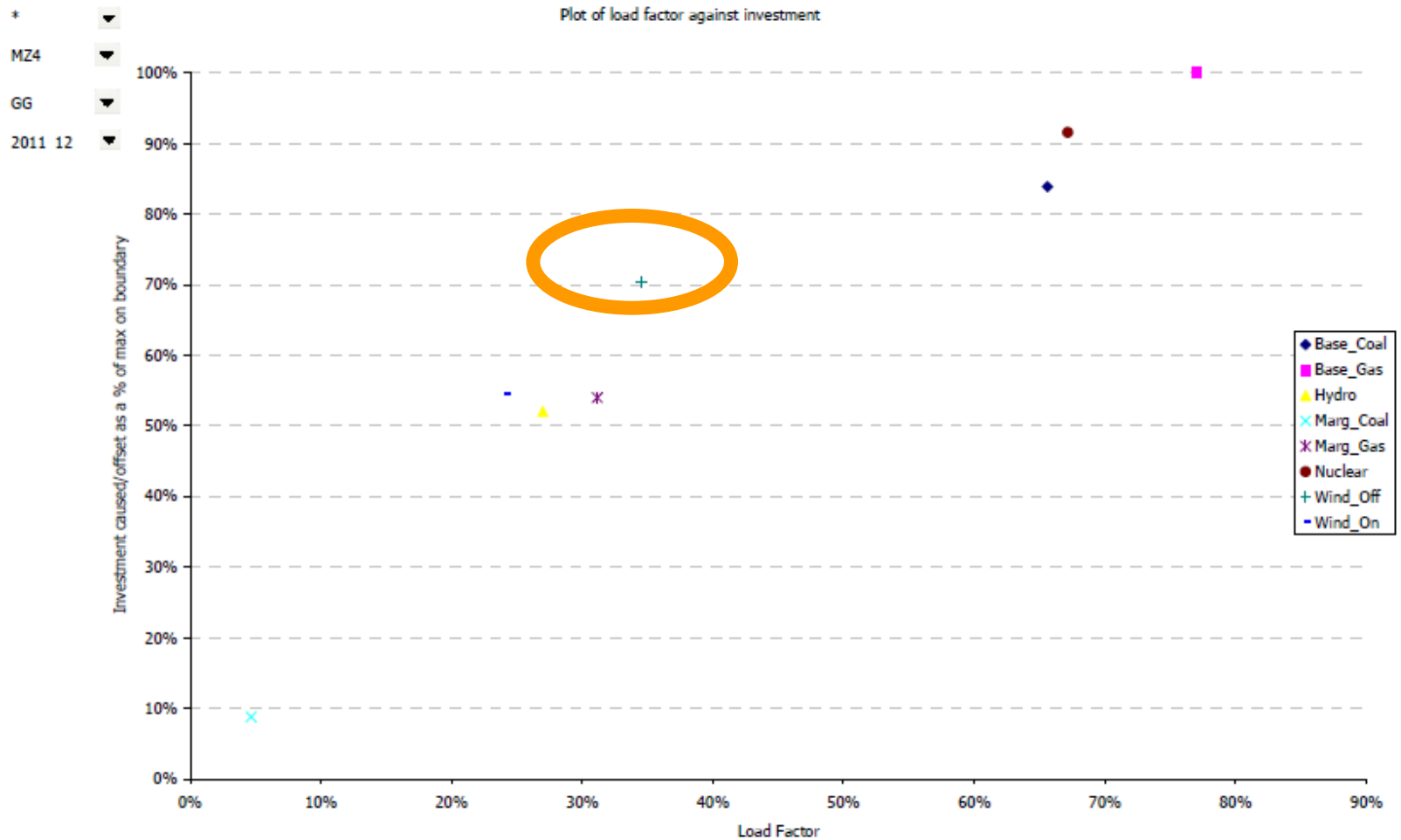
Issues with correlation in zone 3

Zone 3 – Upper Northern England



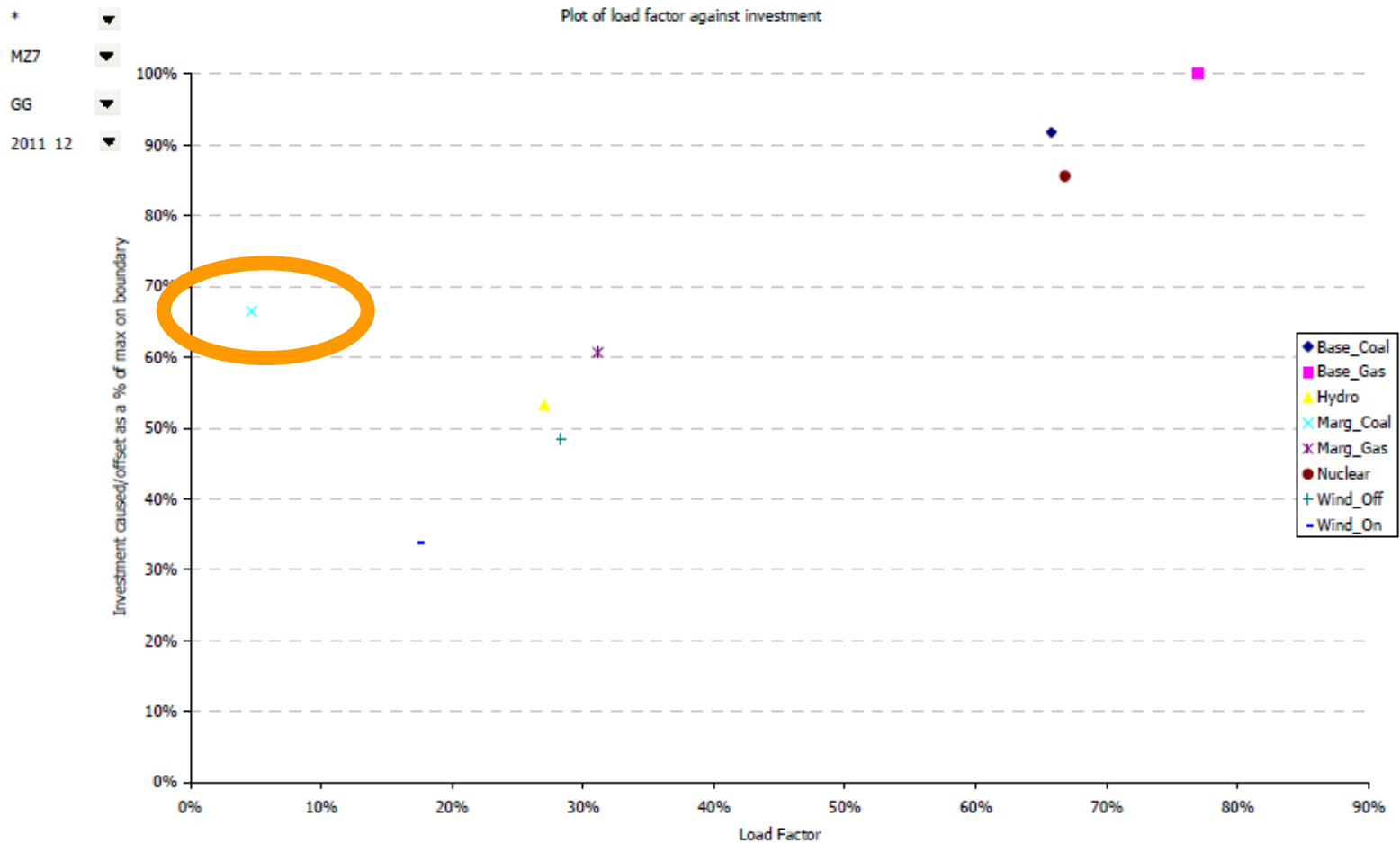
Issues with correlation in zone 4

Zone 4 – Northern England



Issues with correlation in zone 7

Zone 7 – Southern England



Concluding comments for discussion

- Any proposals should be appropriate for today and remain valid in the future
- TransmiT should be delivering enduring charging principles to provide medium to long term investor certainty within TNUoS
- European regulations may have an impact on GB charging however setting out to deliver a temporary solution will ensure that new arrangements have to be developed in the medium term
- What other options can be considered?
 - Uniform scaling/TEC only
 - Options developed in the TransmiT sub-group (24th August)
 - Further analysis of accuracy of relationships including potential zonal figures
- A balance of accuracy, cost reflectivity, predictability and stability are all important considerations



thank you