

Short Circuit

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Liaison Group – November 2013



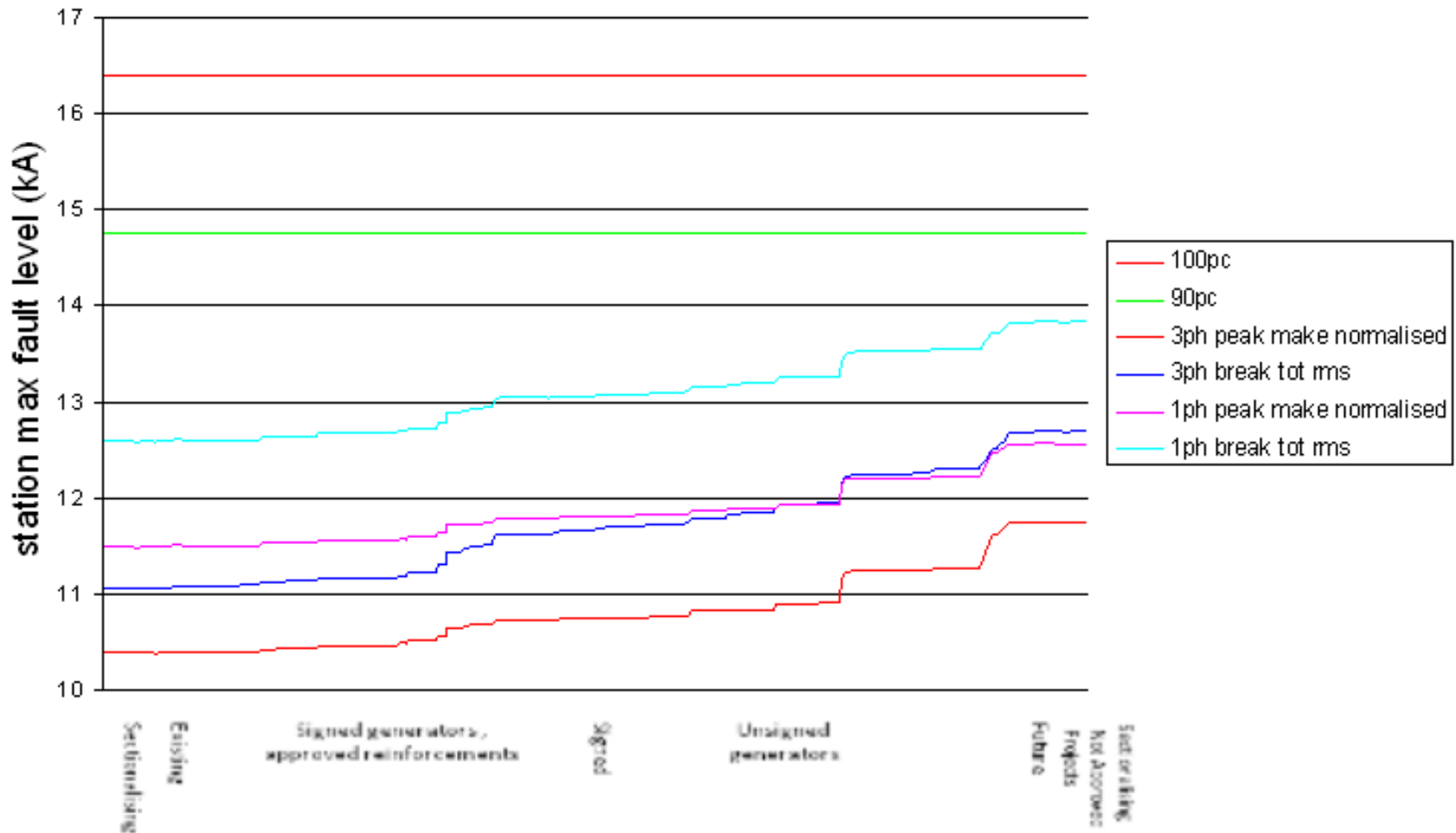
EirGrid Short Circuit Review



- Can generators safely connect?
- Prioritise and sequence short circuit reinforcements
- Small generators, large lists of short circuit associations
- Graphical presentation of short circuit info



Sample – Carrick on Shannon



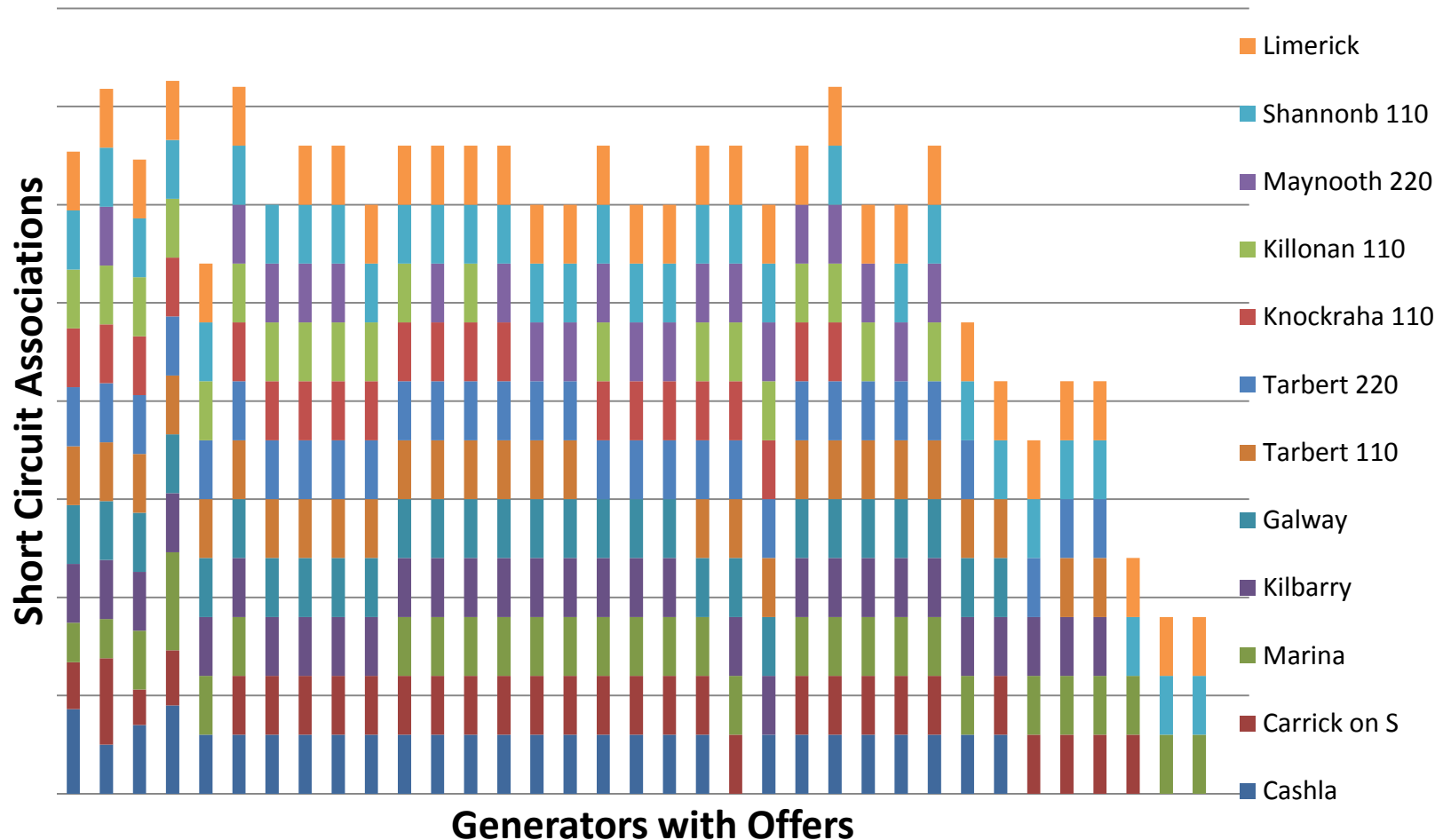
1. Proposed Revision to Short Circuit Associations

Short Circuit Review

For illustrative purposes only

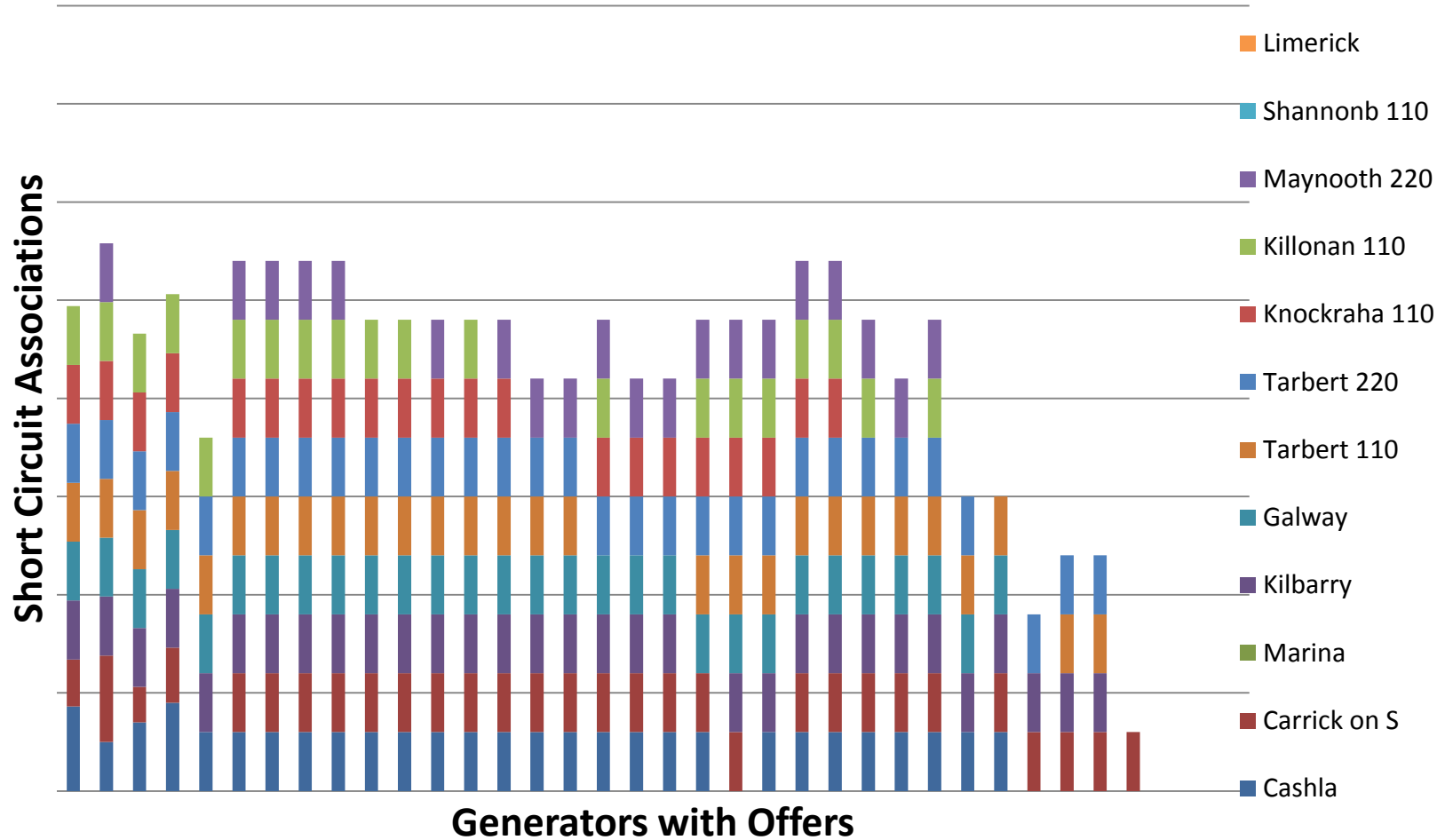
No accurate values in the following slides

Short Circuit Associations - today



Next .. Reinforcements complete in 2013

Associations – after Reinforcements Complete in 2013



Next .. Reduction in Future Short Circuit Levels

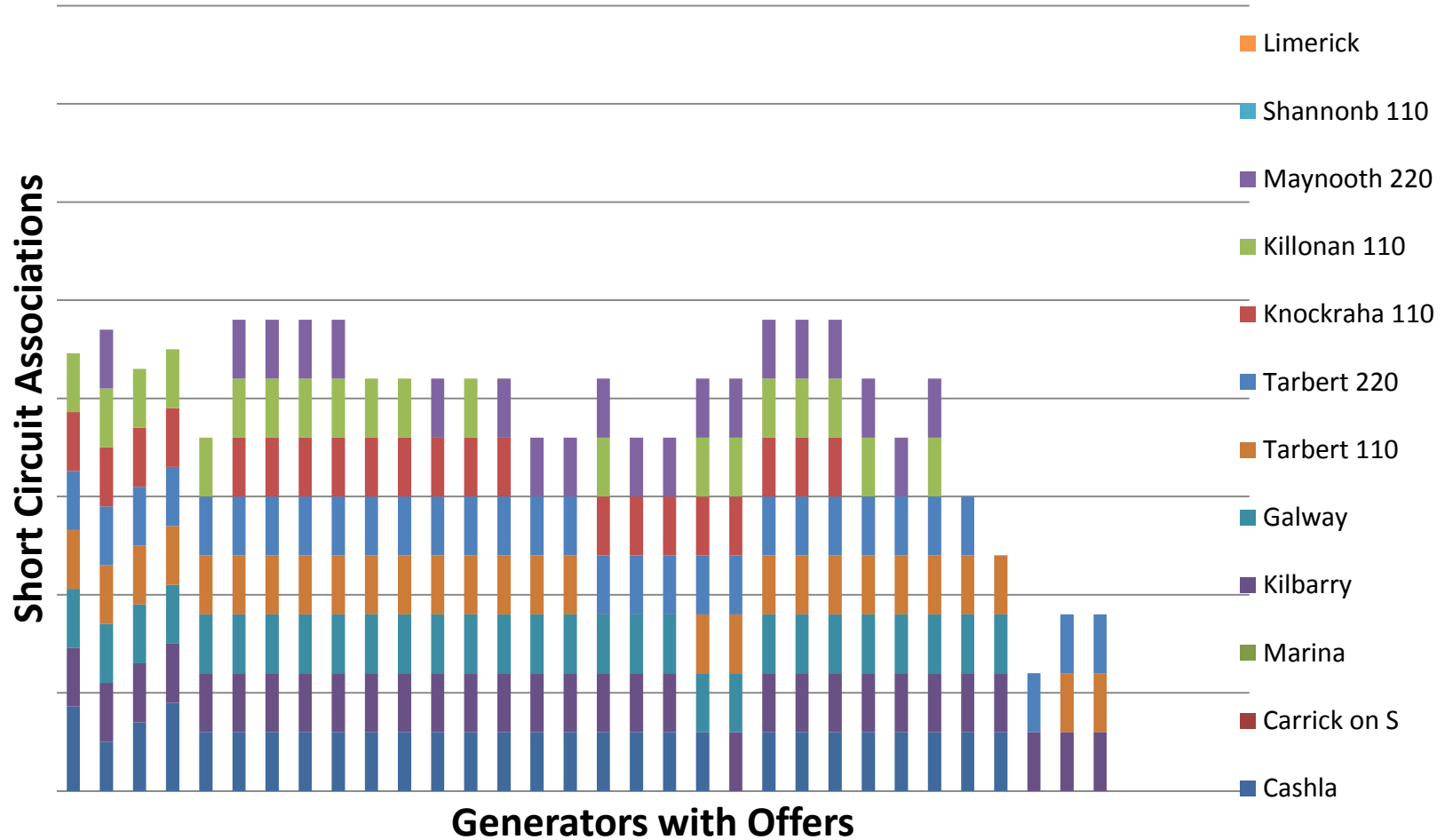
Projected short circuit levels have fallen



- Network optimisation
 - Some reinforcements now not needed
- Generator Technical Parameters
 - Assumed Data is prudently conservative
- Retirement of existing generators
- Non take up of some connection offers

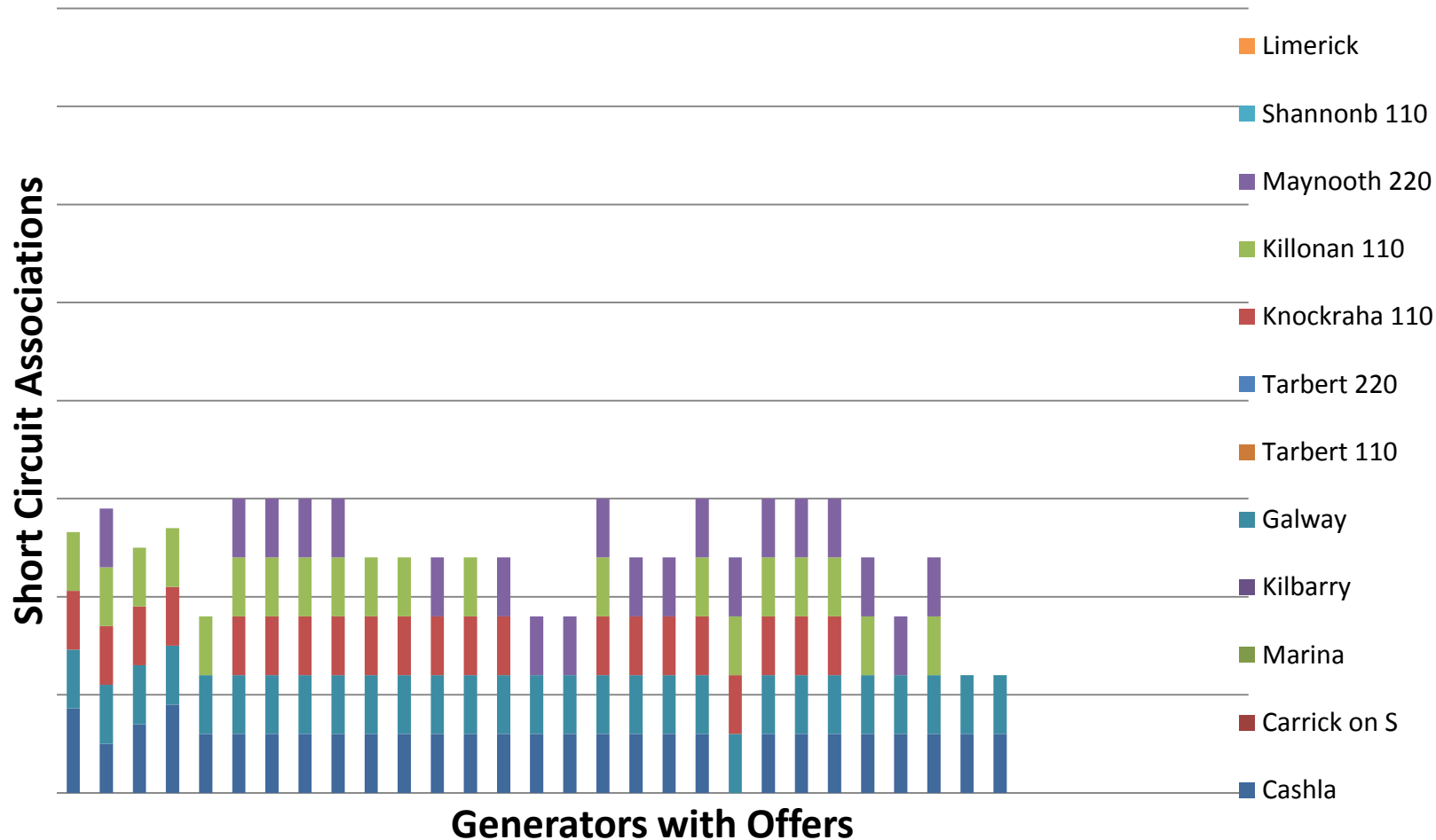


Associations – after Reduction in Future Short Circuit Levels



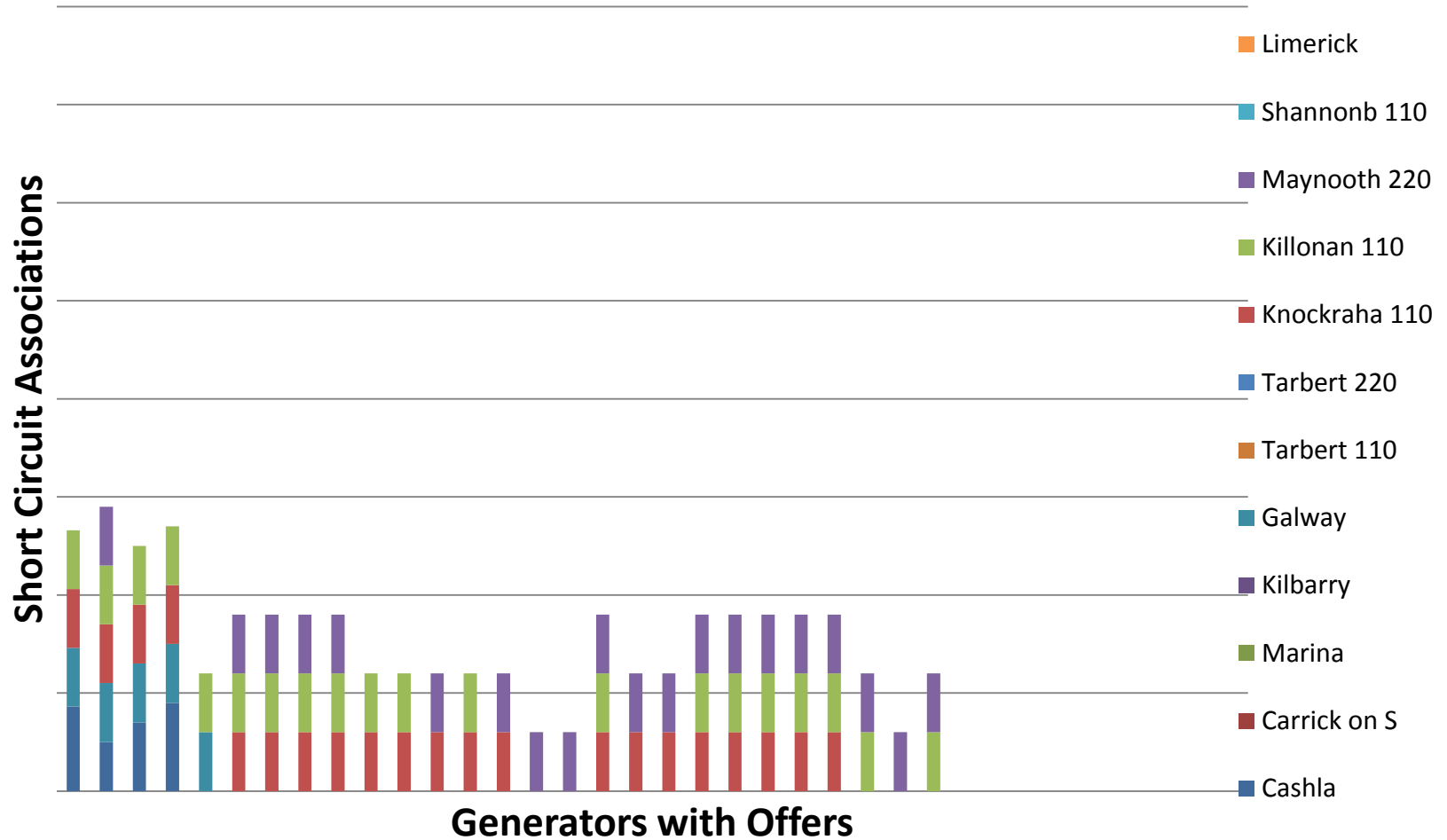
Next .. Alignment of Associations with Reinforcement Optimisation

Associations – after Alignment of Associations with Reinforcement Optimisation



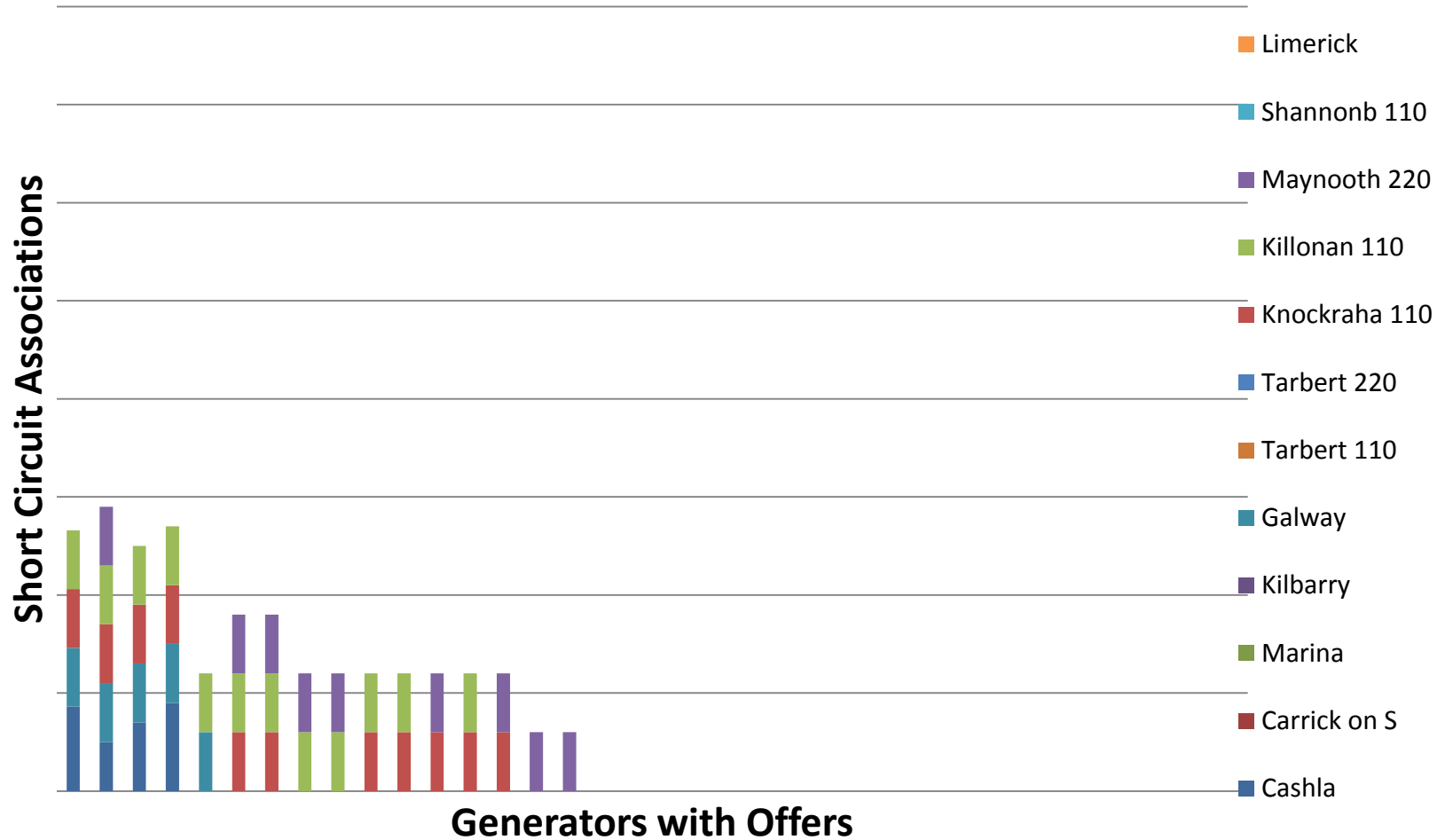
Next .. Dominant Generators

Associations – after Dominant Generators



Next .. Threshold Value

Associations – after Threshold Value



Proposed Update to Short Circuit Associations

2. Reinforcement Delivery

Progress in Reinforcement Delivery



- Grouped by Station, reinforcements in six stations are complete, in another three stations are approved. Another two stations, need is reducing or gone.
- EirGrid to publish Target Completion Dates for Reinforcements that are Short Circuit Associations. Propose to Defer until after communication of revised associations



3. Those that Remain Associated but may be able to connect ...

Using Existing Spare Short Circuit
Capacity ...

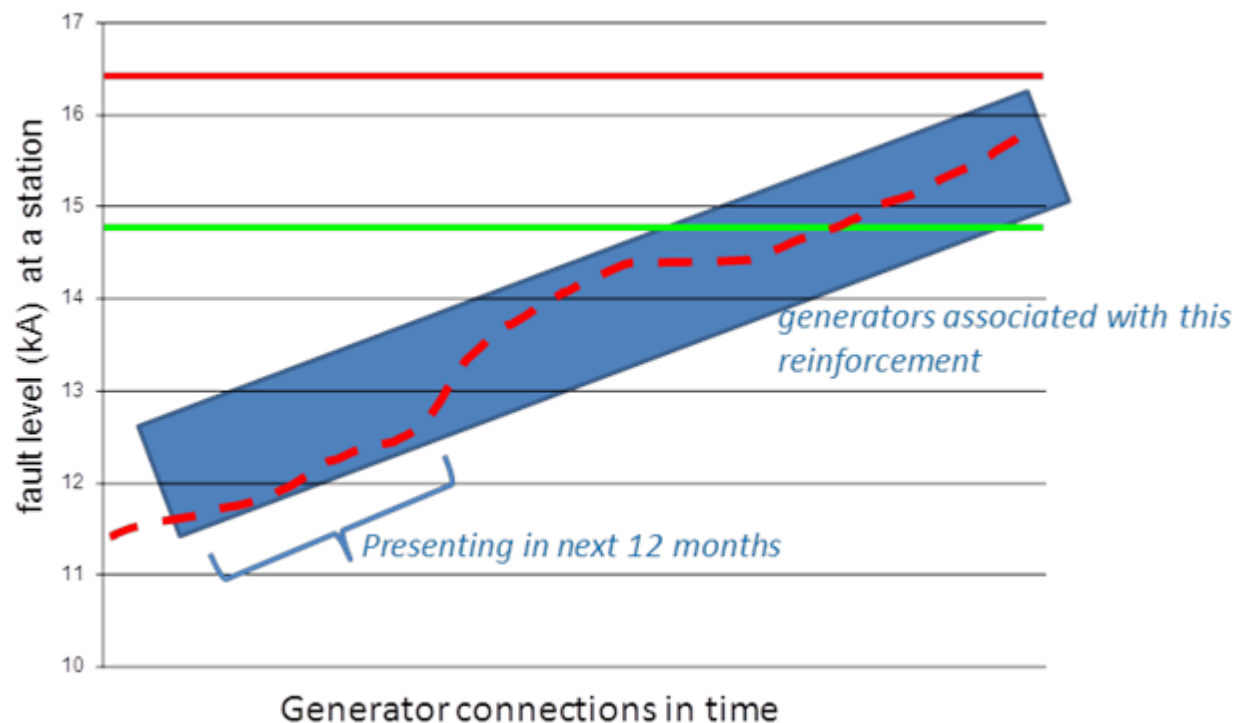
Associated but may be able to connect ...



- Use existing spare short circuit capacity
- Delivery of reinforcements and roll out of generator connections
- Letter of Comfort

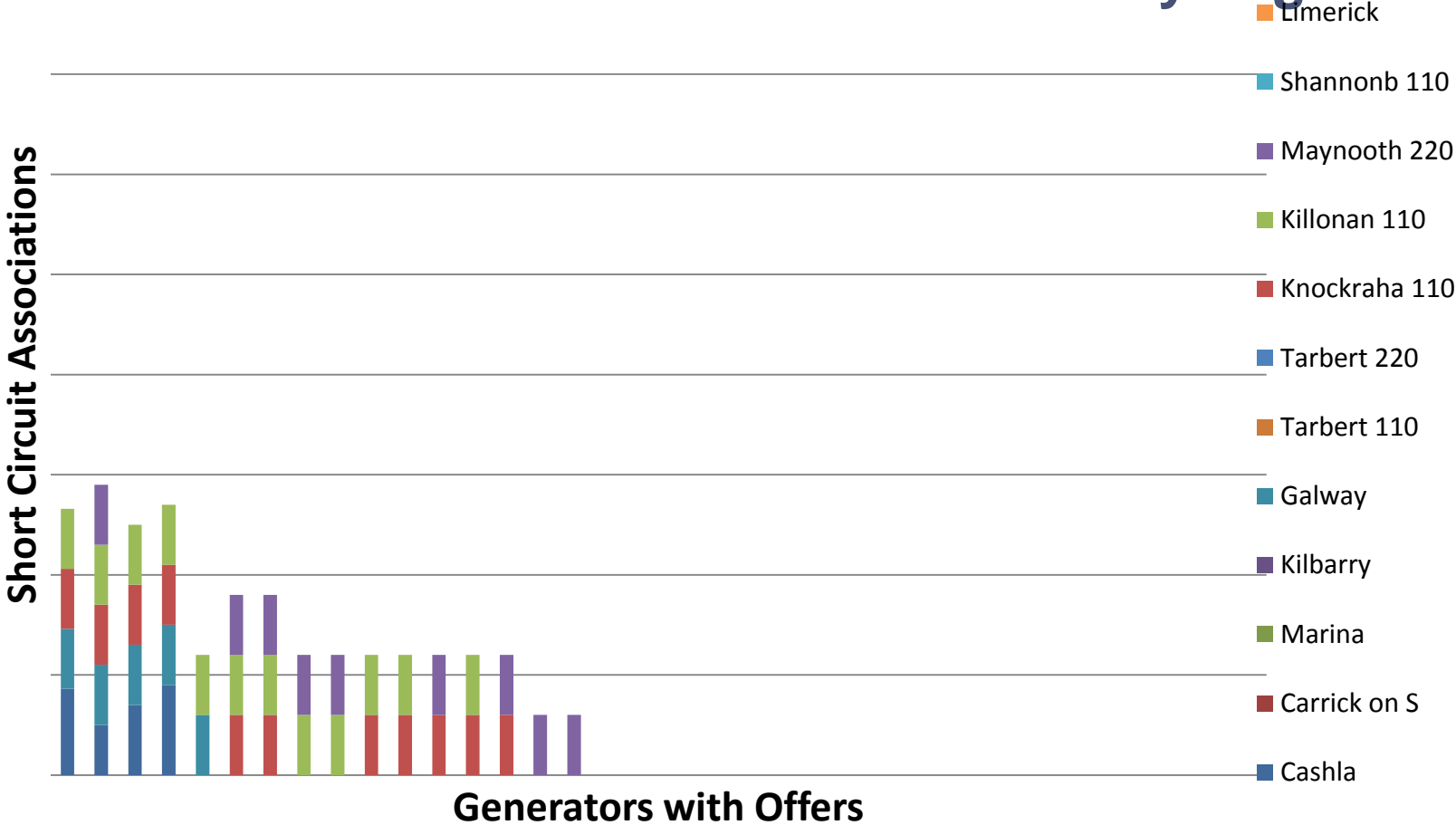


Use Existing Spare Short Circuit Capacity



- Group processing changes what a short circuit association means
 - Safe to do so, fair to other generators
- Generators may be able to connect before their short circuit association is complete. Check with EirGrid!

Using Existing Spare Short Circuit Capacity – a lot of these can connect without delay anyway – possibly all if generator roll out and reinforcement delivery align



Letters of Comfort



- How do we handle those generators who still have some associations but because of spare capacity and because of roll out rates of both reinforcements and generators, may be permitted to connect
- Assessment and Letters of Comfort?
- Need more information on programme of generator connections / EirGrid review



3. Conclusion and Next Steps

Conclusion



- Reinforcements being approved and delivered
- Projected short circuit levels are lower now
- Recommend revised short circuit associations
 - Several Refinements to the Approach allows removal of associations
- Generators with remaining associations may be able to connect in advance of short circuit associations being complete



Next Steps and Timeline



- Subject to Comments / Feedback on this Presentation
 - Do we wish to revise the short circuit associations?
- Complete Assessment arising from Gate 3 take-up / latest information and finalise Revised Short Circuit Associations,
- **End of Quarter 1, 2013**
- Communicate Revisions / Update Contracts
- Publish Associated Reinforcement Completion Dates
- Communicate findings about Assessment re: Letters of Comfort

