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Transmission Charging Methodologies Forum



Wednesday 10th July 2013

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Introduction & Welcome

Patrick Hynes

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Safety Moment



Jackeline Crespo-Sandoval

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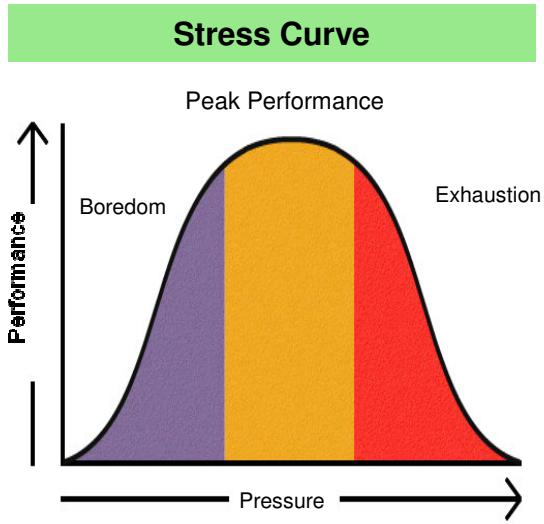
Stress

- Stress is pressure that we come across in our daily lives and it is normal. We need a little pressure otherwise we can become bored and frustrated or less motivated.



- However, too much stress and if it is prolonged or not corrected, it can become an illness, both physically and mentally.

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Tips to manage stress

Maintain good health habits

- stay active - take regular exercise
- eat breakfast and a balanced diet
- get enough sleep
- don't over-use alcohol, sleeping pills or medicines.

Use your time wisely

- set achievable goals, - don't overdo it
- don't put things off
- make a list and prioritise actions
- take short breaks - go for a walk at lunch-time

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Quiz

1. All stress is bad - True or false?

2. Stress is a combination of work and personal factors - true or false?

3. Maintain good _____ habits

4. Set _____ goals

5. Make a _____ and _____ actions

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Actions from previous TCMF



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Actions from previous TCMF

- Action: To contact DCMF Chair to ascertain if attending a meeting to present on the embedded review would be helpful to DGF members

- Contacted chair and agreed to provide regular updates as the work from the focus group continues

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Ongoing modification proposals



Jackeline Crespo-Sandoval

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Ongoing Modification Proposals

- **CMP201: Removal of BSUoS charges from Generation**
  - Majority vote by CUSC Panel in favour of CMP201 on 26th April
  - Panel's preference was for original proposal (implementation 1st April, 2 years following Authority decision)

- **CMP209/10: Allow suppliers to submit negative demand forecasts and payment benefits to be distributed over the year**
  - Authority decision not to direct this modification proposal for implementation

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Ongoing Modification Proposals

- **CMP213: Project Transmit TNUoS Developments**
  - 8 alternatives had majority support as better meeting relevant objectives at May CUSC Panel meeting
  - Final modification report now with Ofgem for consideration

- **CMP215: Removal of references to TNUoS charges for Interconnectors BM Units and requirements to provide security cover**
  - Approved and implemented in May 2013

Ongoing Modification Proposals

- **CMP216: Removal of references to BSUoS charges for Interconnectors BM Units**
  - Approved for implementation in November 2013

- **CMP219: Clarifications to User Commitment Methodology**
  - First Workgroup meeting held on 18 June 2013.
  - Consensus on progressing through Self-Governance.
  - Consultation issued on 8 July 2013 for 4 weeks.

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Update on Review of Embedded Generation Benefits



Andy Wainwright

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Background

- Standard Licence Condition C13
  - Introduced at BETTA (2005)
  - Addressed different treatment of 132kV connected small generation in Scotland (transmission) with that in England and Wales (embedded)
  - Time limited: due to expire 1st April 2016
- Embedded review needs to consider overall implications on GB generation
- Informal industry focus group established Spring 2013

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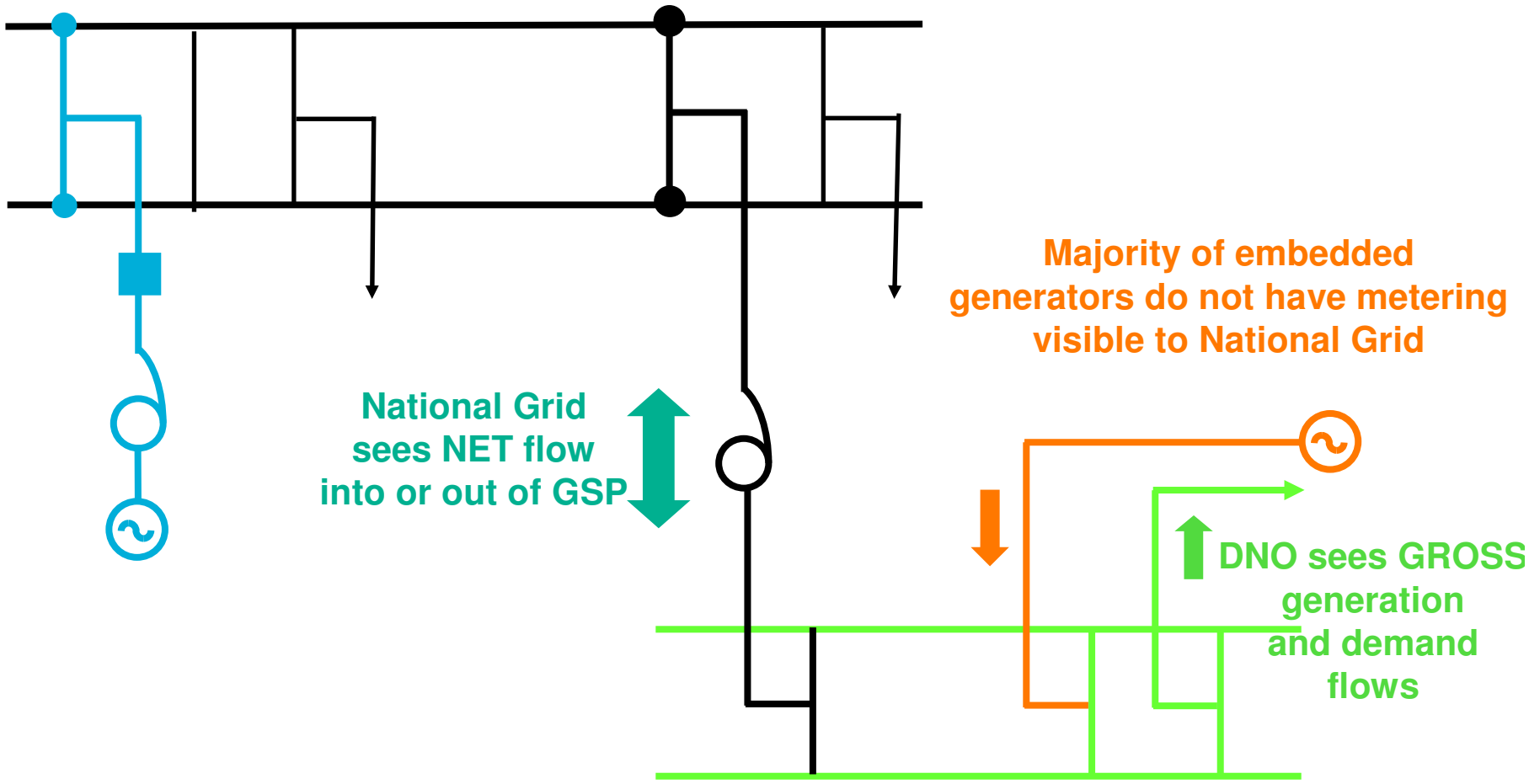
Embedded Generation



Question: In what ways does an embedded generator benefit from the transmission system?

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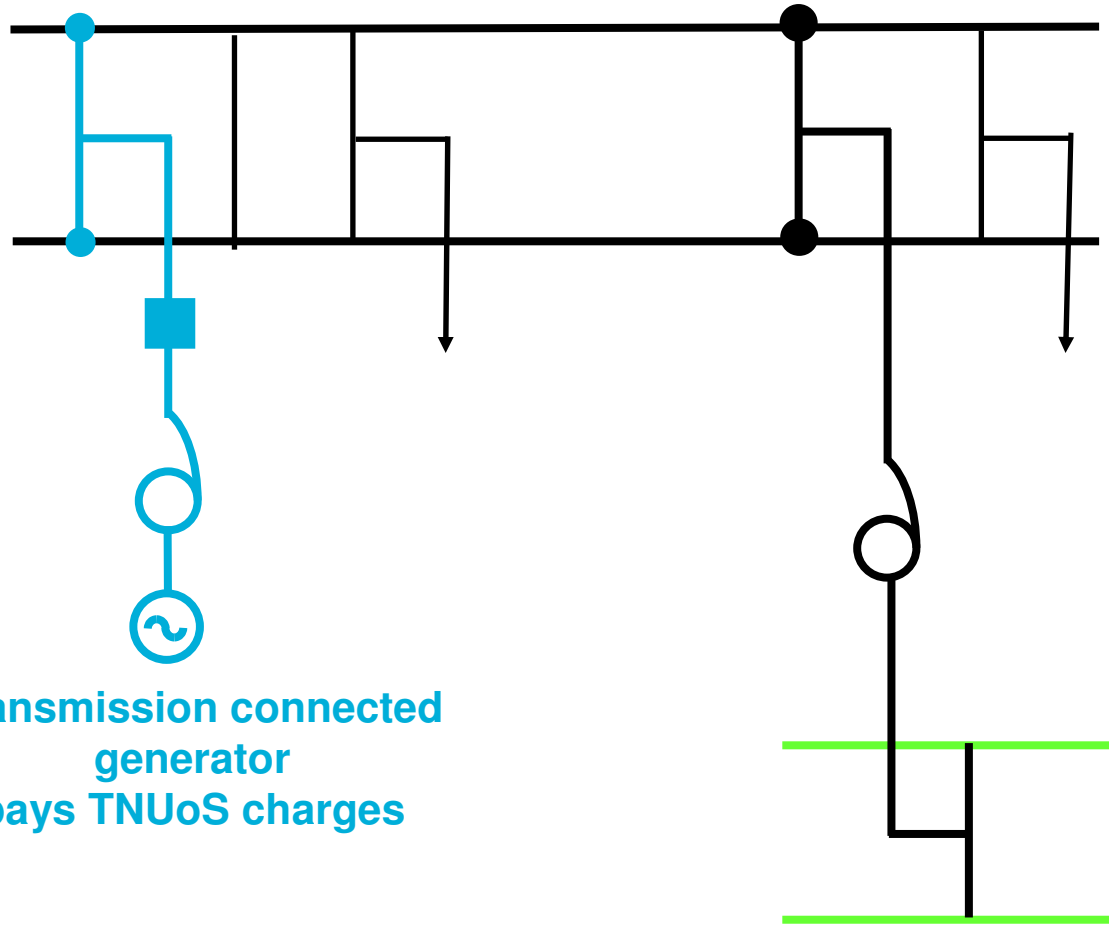
Who pays generation TNUoS charges?

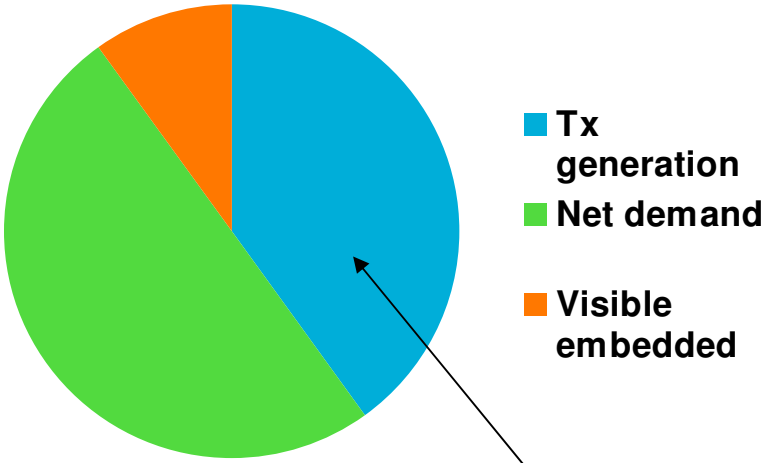


Transmission connected generator pays TNUoS charges

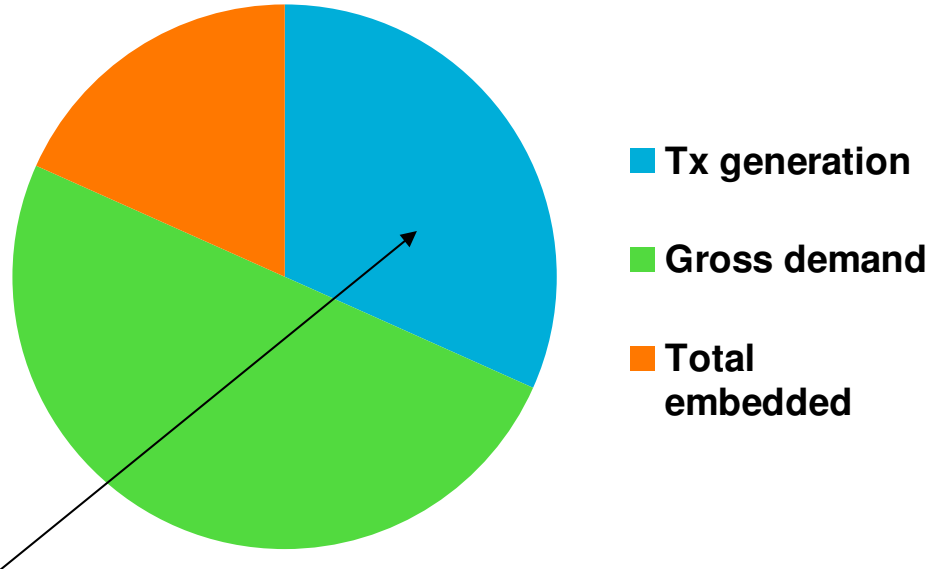
Distribution connected generator (embedded) may or may not pay TNUoS charges

Share of costs (charging base)

Demand and Generation seen by National Grid



Actual Demand and Generation



Same capacity of transmission connected generation

Question: What would be the impact of differing charging bases on the end consumer?

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Objectives of charging

- Cost reflectivity
- Facilitate competition
- Developments in transmission businesses
- Recover transmission costs
- Non-discrimination

Affected transmission 'charges'

TNUoS BSUoS Losses

Focus Group agreement to consider TNUoS first

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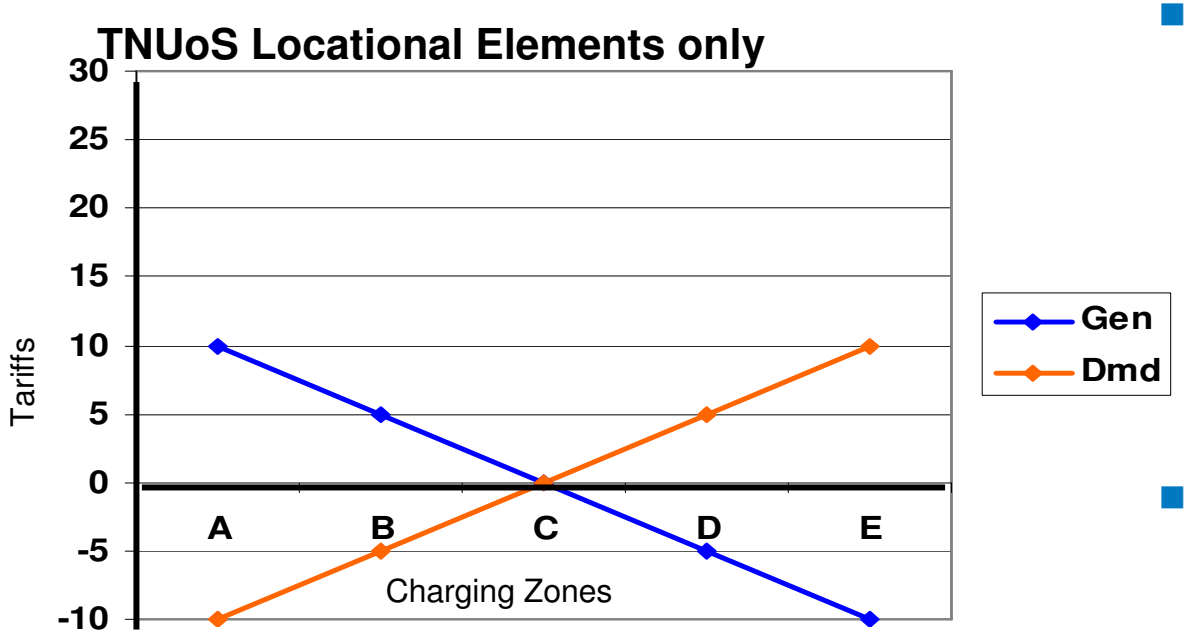
TNUoS

- **Locational element – incremental flows on system**
  - *Cost reflectivity of transmission charges on distribution connected generation*
- **Residual element – allows TO revenue collection**
  - *Impact of transmission charges on competition between transmission and distribution connected generation*

We will consider each in turn….

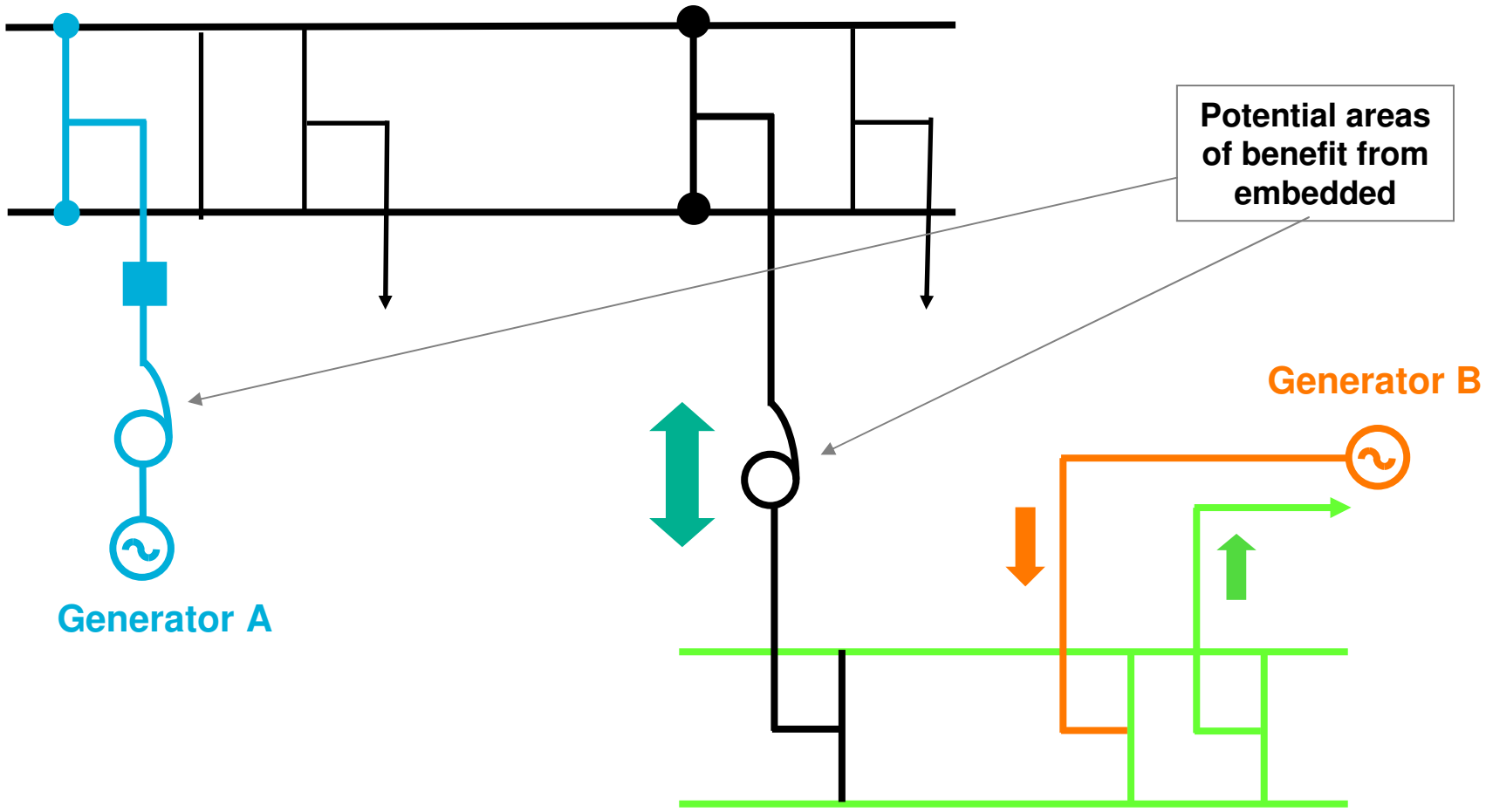
Locational Signal



- Net approach
  - Embedded generation nets with demand
    - Therefore subject to a negative demand locational signal
    - Equivalent to generation signal: zoning limitations
- Gross approach
  - Embedded generation receives same generation signal as transmission connected
  - All demand receives locational signal

Question: Do net and gross approaches provide the same locational signal?

Other savings?



Question: Should both generators have the same locational signal?

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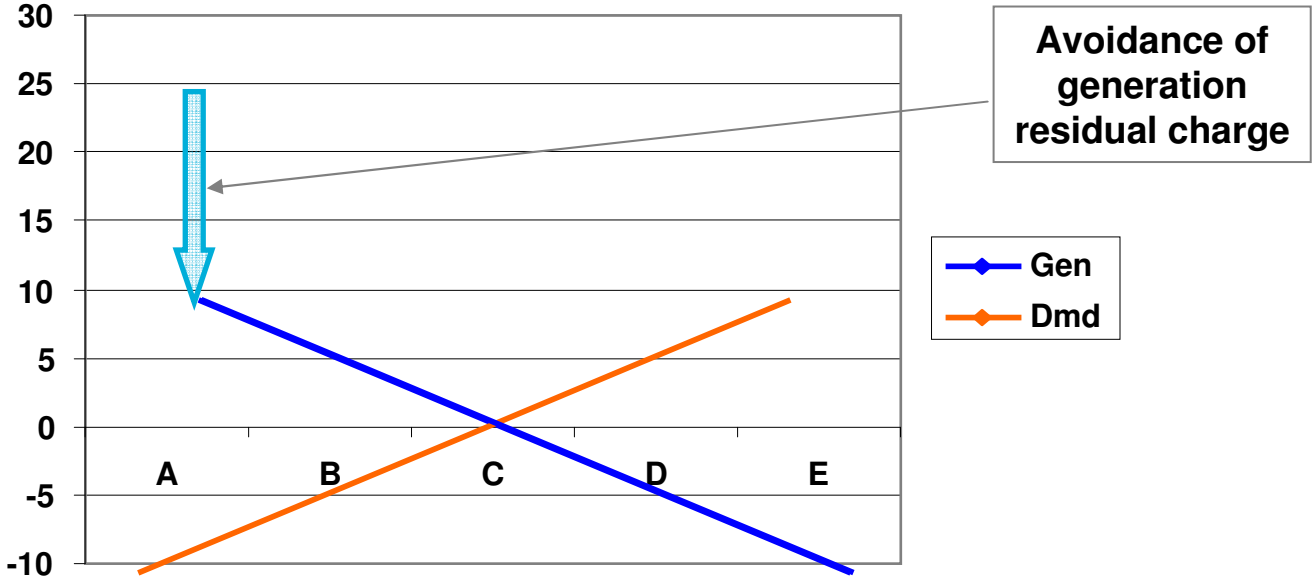
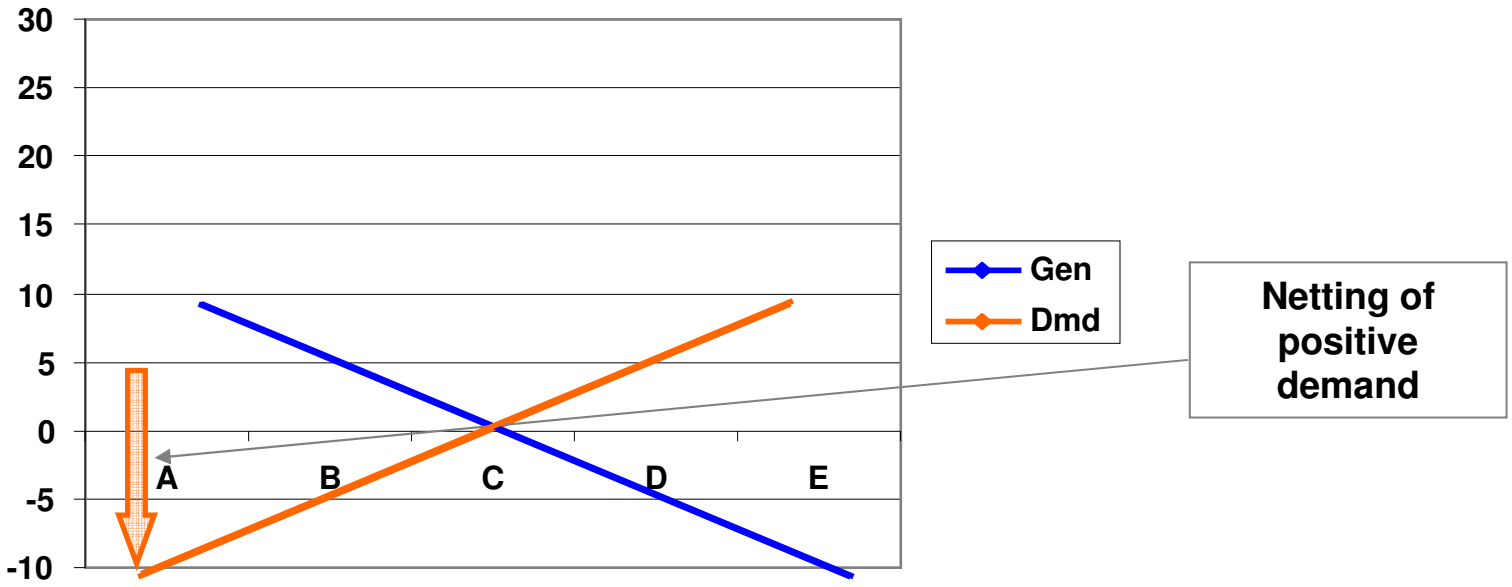
The effect of the generation residual element



- Embedded generator avoids paying generation residual element

Question: How does the avoidance of this element impact on overall market competition?

The effect of the demand residual element



- Positive demand can avoid paying the demand residual element if able to net with embedded generation
- Embedded generation therefore has a value equal to the demand residual element

Question: Does this benefit affect market competition between generation?

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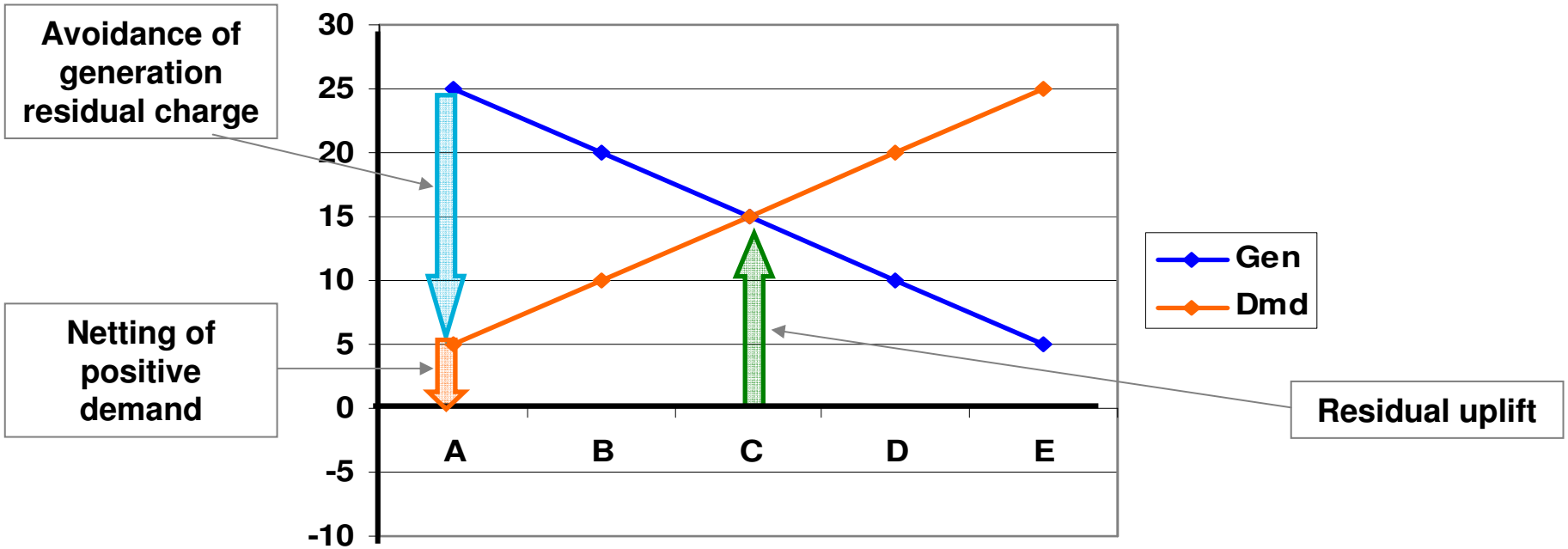
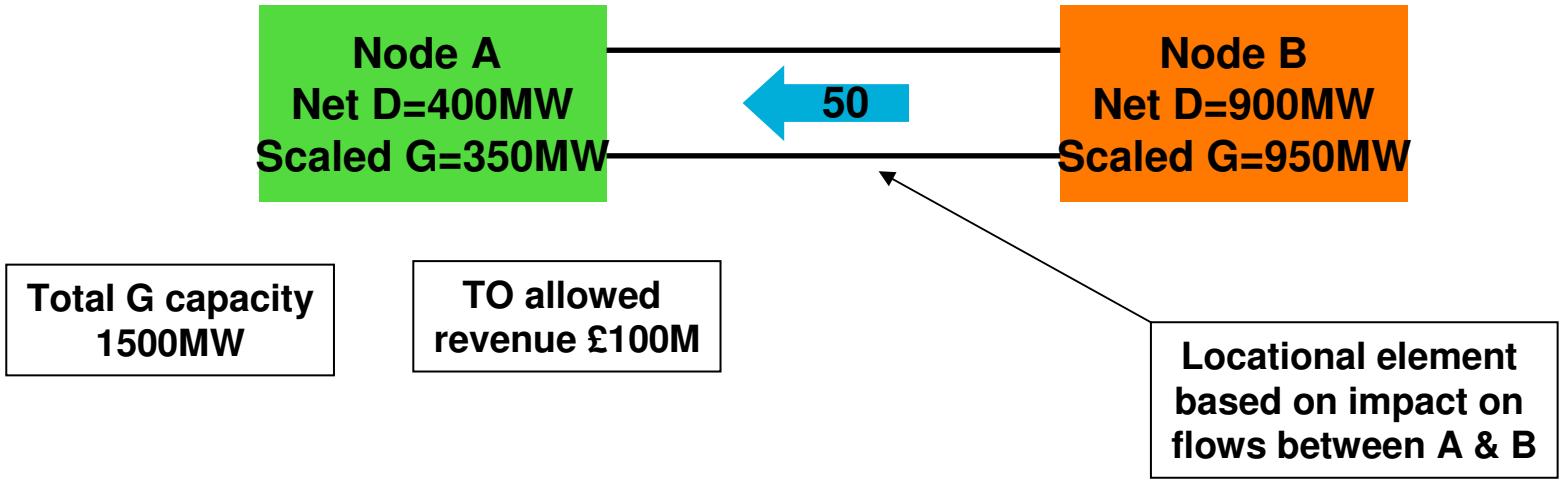
Combination of both residual elements

- In summary, embedded generation can receive TNUoS 'benefit' through two effects on residual elements;
  - netting of positive demand (i.e. reducing demand charge)
  - avoidance of generation residual charge



Question: Are these benefits cost reflective?

Consider a 2 node network



Revenue collected from G = £27M average G charge = £18/kW
Revenue collected from D = £73M average D charge = £56/kW

Embedded benefit = £18/kW + £56/kW = £74/kW

Question: What would be the effect of this benefit of an increase in embedded generation?

Now consider increase of 400MW of embedded generation output

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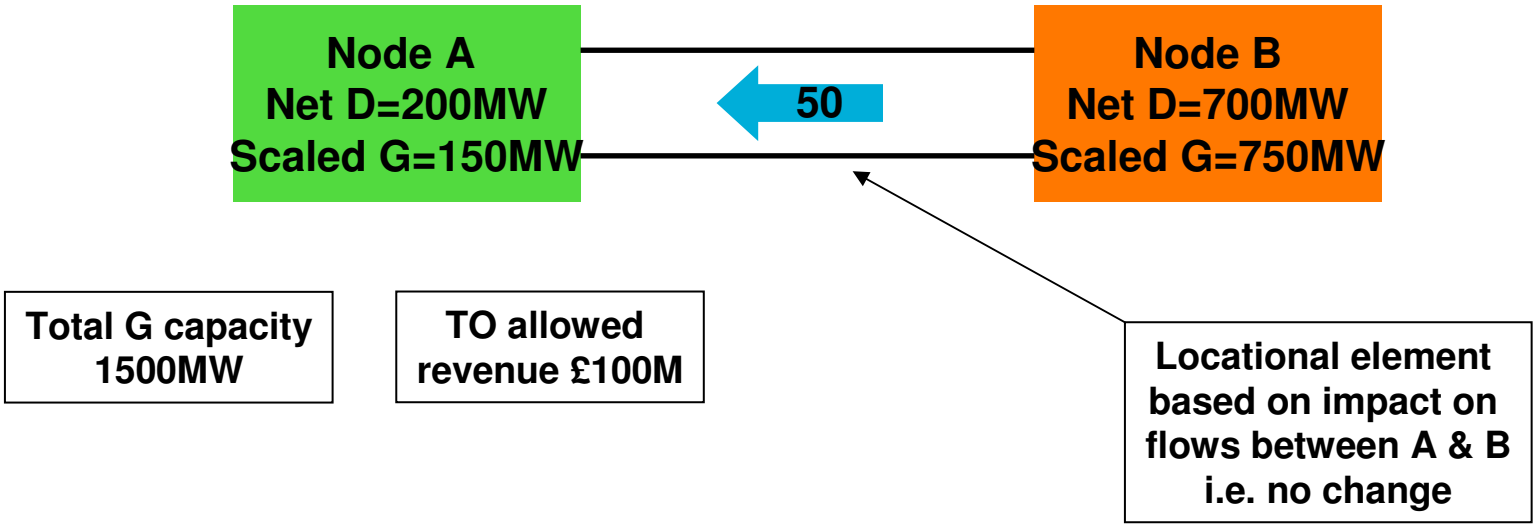

Revenue collected from G = £27M **average G charge = £18/kW**
Revenue collected from D = £73M **average D charge = £81/kW**

Embedded benefit = £18/kW + £81/kW = £99/kW

Question: Could competition between generation be improved through consideration of these effects?

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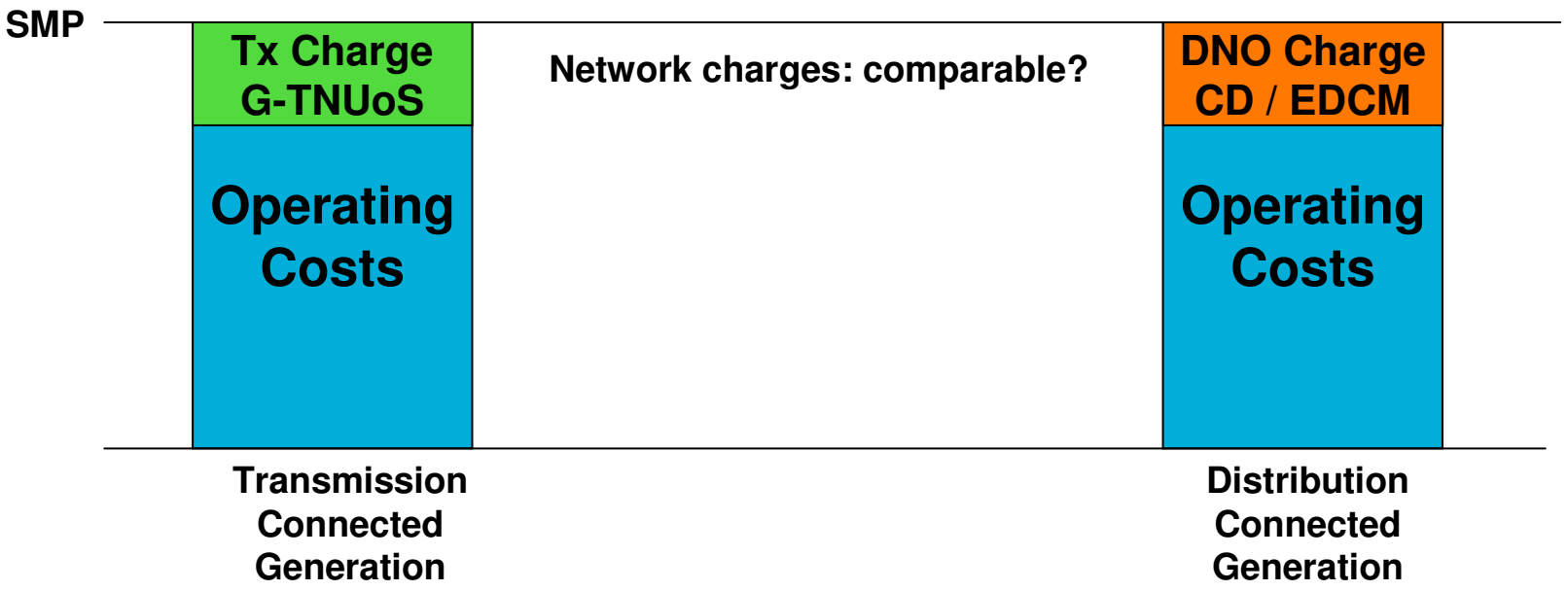
Other network charges

Transmission connected generation do not pay distribution charges; does this levelise effects?



Question: Should distribution network charges be accounted for in consideration of embedded benefit?

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Focus Group – Next steps

- Further meetings in August and September
- Focus group conclusions – September
  - Potential for informal industry consultation
  - Update at September TCMF
- Formal CUSC modification proposal later in Autumn

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Any Other Business

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TCMF meeting dates for 2013

September	November
10	28
Tuesday	Wednesday

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We value your feedback and comments

If you have any ***questions*** or would like to give us ***feedback*** or share ***ideas***, please email us at:

Cusc.team@nationalgrid.com

Also, from time to time, we may ask you to participate in surveys to help us to improve our forum – *please look out for these requests*

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Close