

GSR016/GSR022 Update

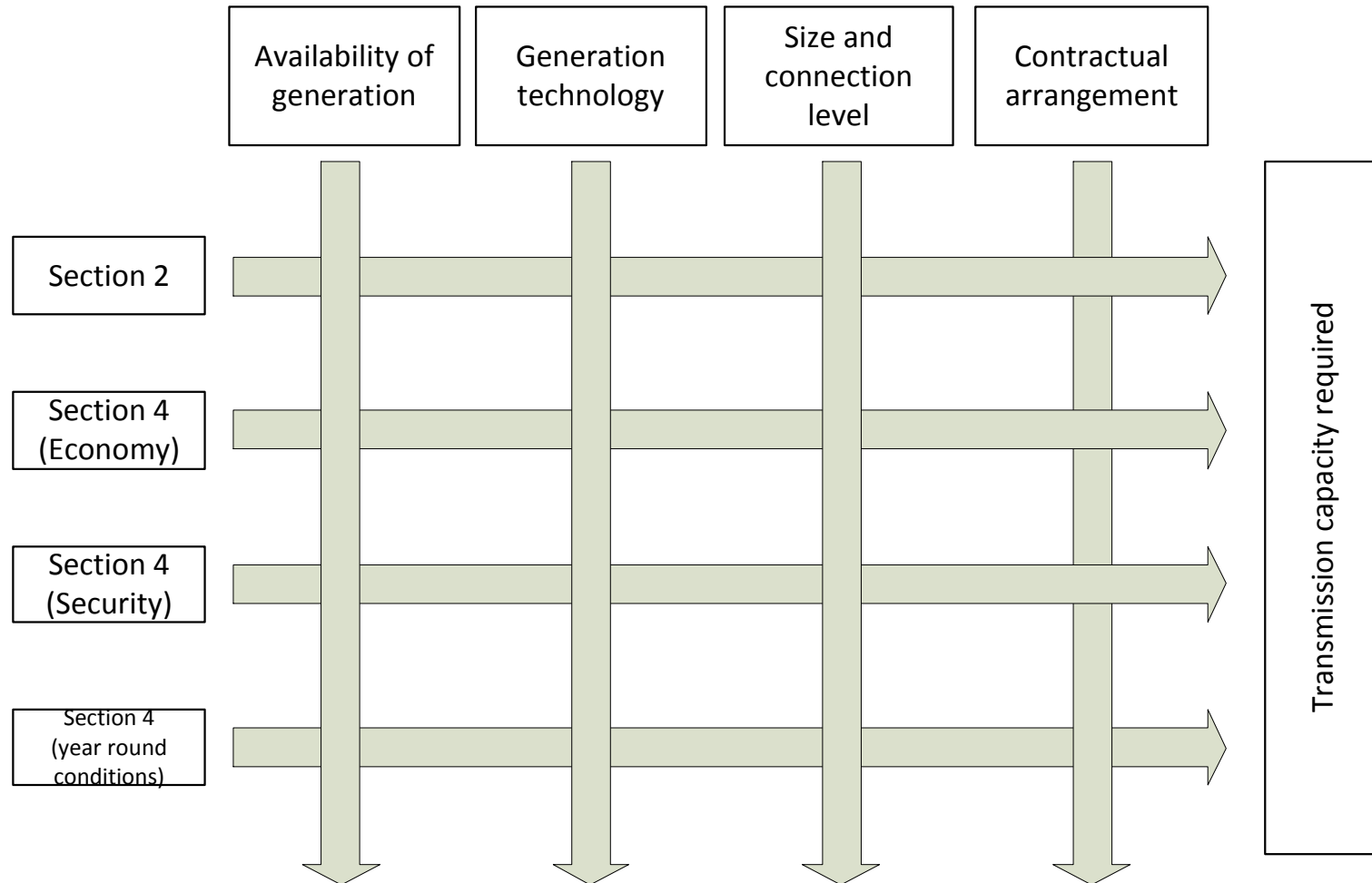


Bieshoy Awad

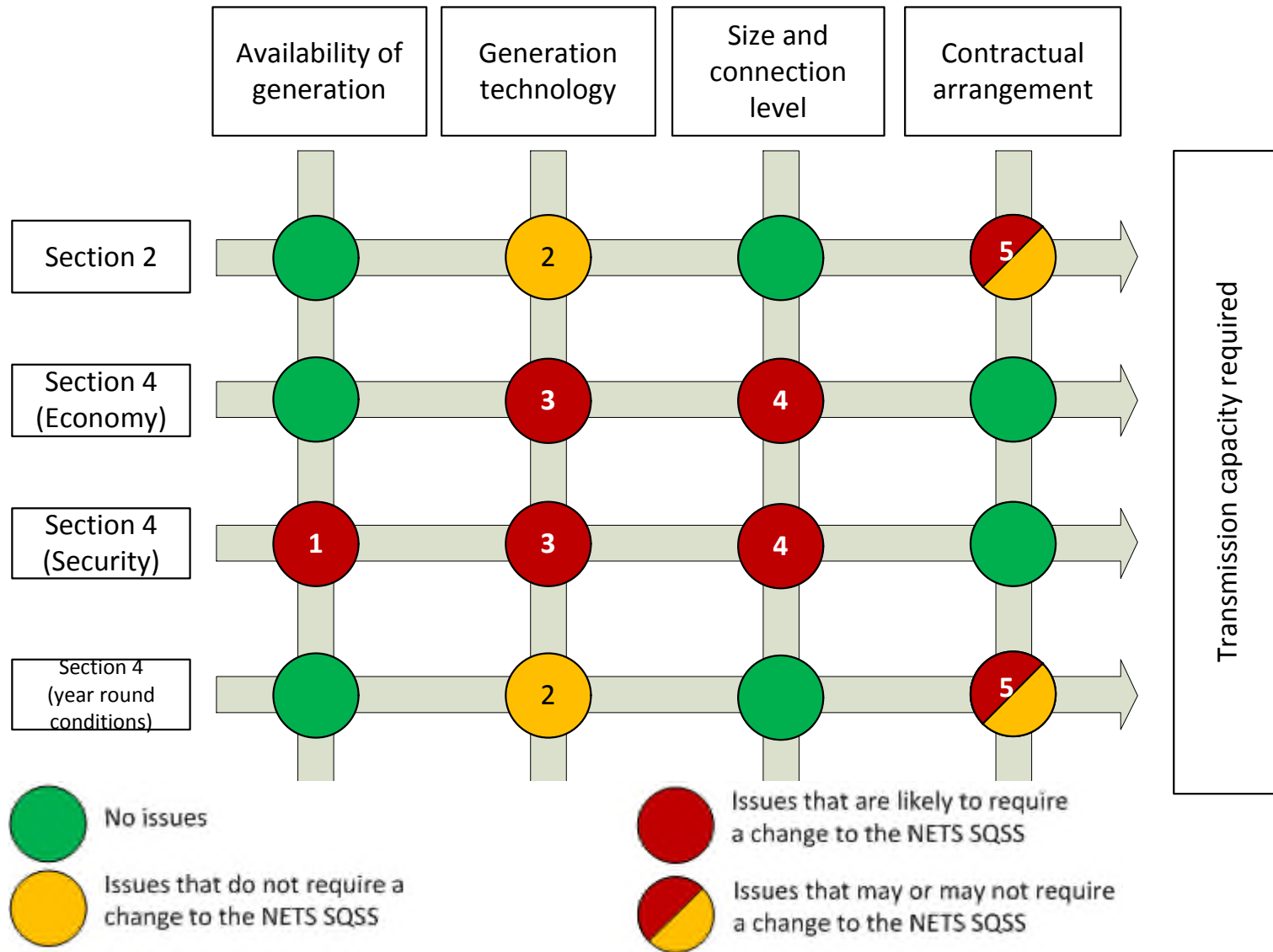
Contents

1. Background
2. Issues that need to be addressed
3. Who is to address these issues
4. GSR016
5. GSR022
6. Timescales

Background

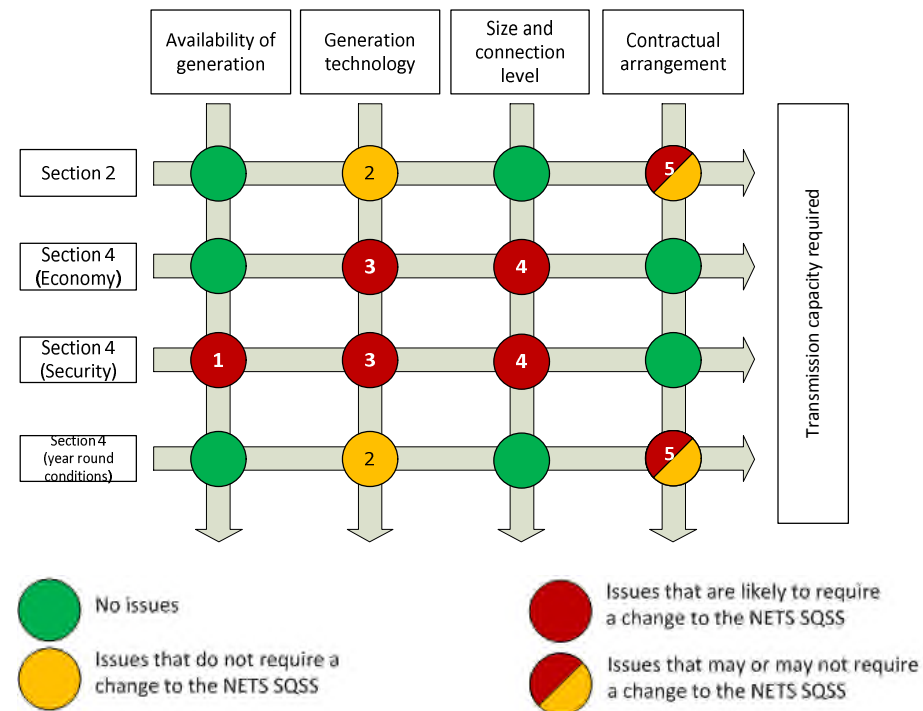


Background



Summary of issues that need to be addressed

1. Under the defined background assumptions, there is not enough generation to meet demand.
2. Not familiar with the operational regimes of some new generation technologies.
3. The assumptions made on contributions from different types of generation maybe out of date. Some are not modelled at all.
4. The inclusion of Small and Medium Embedded Power Stations in the Security and Economy background is subject to interpretation.
5. Lack of BM participants make certain boundaries inoperable.



Who is to address these issues

Three groups with almost the same workgroup members

Issues 1 and 3

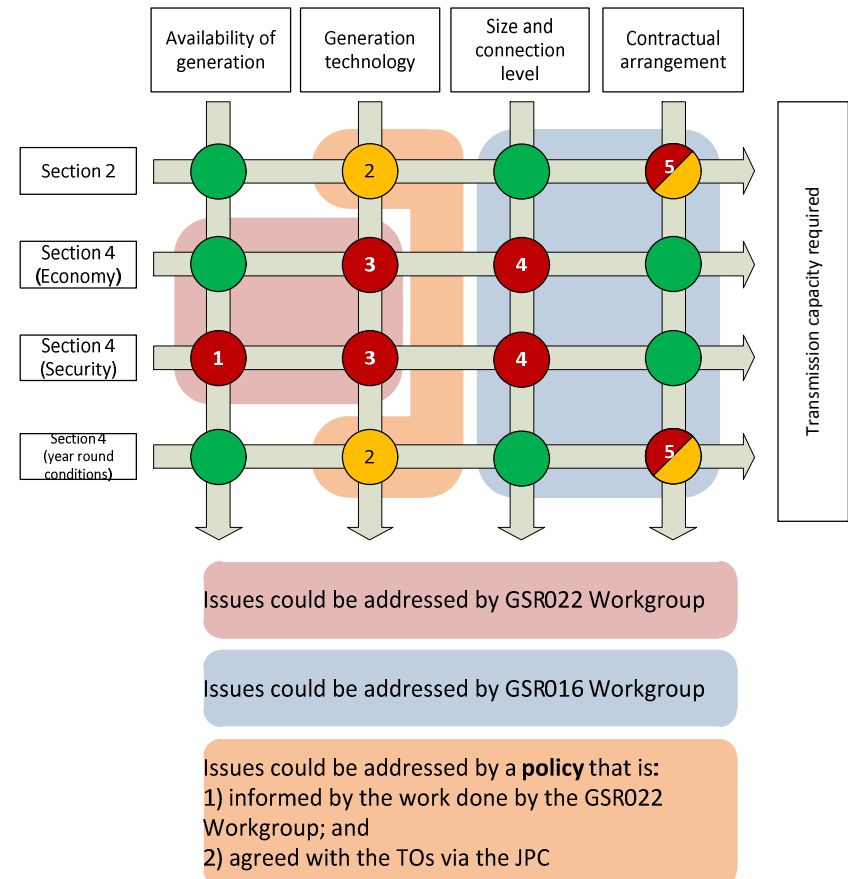
- GSR022: **New Workgroup**
Review of Security and Economy
Planned Transfer Conditions

Issues 4 and 5

- GSR016 **Existing Workgroup**
Embedded Generation Assumptions and
Application of Economy Criteria

Issues 2

- The SO/TOs need to keep their assumptions up to date.
- Provisionally internal workgroup within NGET.
- Seeking input from /collaboration with Scottish TOs via the JPC as required.
- Updates to the JPC and NETS SQSS Review Panel as necessary.



GSR016: Embedded Generation

Assumptions and Application of Economy Criteria

Workgroup to agree the following:

- Should we include Small and Medium Embedded Generation in Section 4 Economy Planned Transfer conditions?
- Should we include Small and Medium Embedded Generation in Section 4 Security Planned Transfer conditions?
- Should we have a criteria to ensure the system is operable with high output of non-BM generation and combinations of outages?
- What data is required to ensure the change is effective?
- What process change is necessary to ensure data is communicated to Scottish TOs

Yes

Yes

Maybe

TBC

CPA/FES

Expected change to the NETS SQSS

- Change of the ACS Peak Demand definition
- Removal of one exclusion of Small and Medium Embedded Power Stations
- An Operability criteria

Certain

Certain

Maybe

GSR022: Review of Security and Economy Planned Transfer Conditions

Two separate work streams

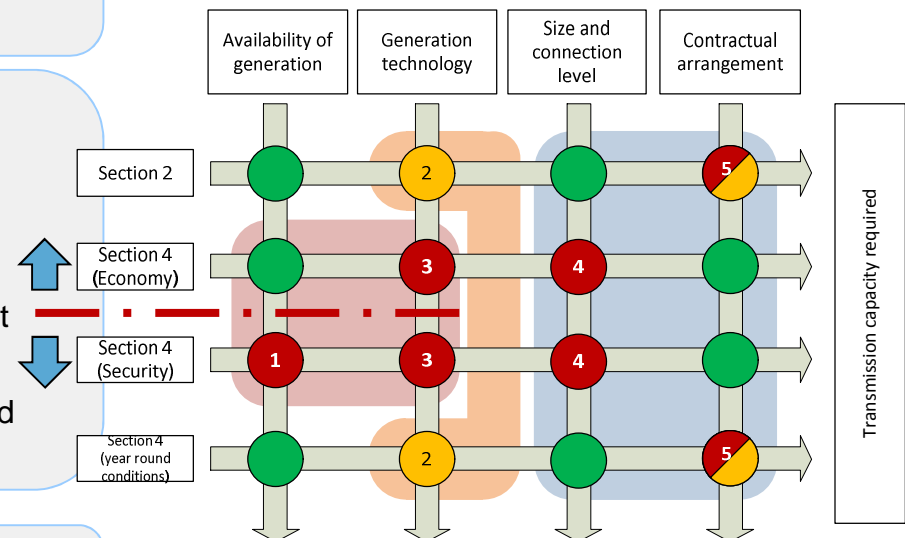
■ Security Planned Transfer

- Decision mainly political
- Some analysis is required

■ Economy Planned Transfer

- Decision mainly economic
- Required understanding of the operating regimes for different types of plants
- Comprehensive statistical analysis and Cost Benefit Analysis studies are necessary
- The introduction of an additional background should not be ruled out at this stage

It is proposed that the Workgroup reports on each work stream separately.



GSR022- WS1:

Security Planned Transfer Conditions

- What is it that we are trying to achieve, and what are the expectations of our stakeholders?

Providing transmission capacity to ensure that the peak demand can be supplied by generation that might be available in a different part of the network

vs.

Providing transmission capacity to ensure that the peak demand can be supplied by generation that we are 100% certain is available

- Potentially a criteria that applies differently for different areas could be used (large vs small area or importing vs exporting area)
- Ongoing discussions to agree the detailed scope of this work stream.

GSR022- WS2:

Economy Planned Transfer Conditions

- Is a need to change existing scaling factors?
- What is the most suitable way to model new technologies (solar, storage, ...etc.)?
- What is the level to which all types of generation should be dispatched at?
- How to address scenarios with generation being in excess of demand?

- Ongoing discussions to agree the detailed scope of this work stream.

Has there been any change to assumptions that were used to specify the current scaling factors?

To what extent did the CPA conducted by the GSR009 workgroup consider different boundaries.

Is there any discrepancy between the methodology used by GSR009 workgroup and that used by different TOs to support the need case for their investment?

Is there any discrepancy between the methodology used by GSR009 workgroup and NOA?

Do we need a new set of Planned Transfer Conditions or is it sufficient to modify the Economy Planned Transfer Conditions?

What methodology should we use for CPA?

What scenarios should be covered by the CPA?

What are the "new" scaling factors?

What data do we have regarding all different types of generation

What are the advantages/disadvantages of a locational criteria (large vs small area or importing vs exporting area)

Timescales

GSR016

- 6 to 9 months

GSR022 – WS1

- 12 to 15 months

GSR022 – WS2

- 24 to 30 months

Discussion

- Any questions, comments, feedback?