# nationalgrid

# GC0096 Storage – Terms of Reference

#### Governance

- 1. The Storage workgroup was established by the Grid Code Review Panel (GCRP) at the 18 May 2016 GCRP meeting.
- 2. The Workgroup shall formally report to the GCRP.
- 3. The Code Administrator and NGET Lead representatives shall ensure the deliverables of GC0096 remain in-line with the outcomes of the BEIS/Ofgem call for evidence on Flexibility. BEIS/Ofgem representation in the Workgroup will therefore be requested.

#### Membership

4. The Workgroup shall comprise a suitable and appropriate cross-section of experience and expertise from across the industry, which shall include:

Name	Role	Representing
Ryan Place	Chair/Technical Secretary	Grid Code - Code Administrator
Richard Woodward	Lead	National Grid System Operator
Antony Johnson	Technical Expert	National Grid System Operator
TBC	X4 Industry	Storage Developers/Operators
	Representatives	
ТВС	X2 Industry	X2 Existing Generation/Demand Users
	Representatives	looking to co-locate Storage
TBC	Industry Representative	DNO
Deirdre Bell	Authority Representative	Ofgem
Rachel Cooper	Policy Representative	BEIS

#### **Meeting Administration**

#### **Representative Workgroup at National Grid House, Warwick**

- 5. The dates for the workgroup meetings are provided later in this document at point 13. This timetable has been formed to meet the scope and objectives of the work being undertaken in a timely manner.
- 6. The Grid Code Code Administrator will provide Chair and Technical Secretary resources to the Workgroup. They will also handle administrative arrangements such as venue, agenda and minutes.
- 7. The Workgroup will have a dedicated section on the National Grid website to enable information such as minutes, papers and presentations to be available to a wider audience.

## Coordination meeting via teleconference/Webex

8. A remote 'Coordination meeting' will be established to provide wider input to the Representative Workgroup. It shall meet (dates TBC) in advance of each of the

Representative Workgroup meetings, and will be facilitated by Teleconference and Webex Online meeting, run the Grid Code - Code Administrator

9. It will utilise the same section of the National Grid website as mentioned in point 7.

#### Scope

10. The focus of the Workgroup is to define 'Storage' in the Grid Code, where currently only 'Pump Storage' is considered. It will then seek to establish suitable technical requirements to allow this classification of users to connect and safely operate on the GB National Electricity Transmission System (NETS).

#### Workgroup meeting one: "Definitions"

We will determine which Storage categories shall be the focus of the workgroup; either "Energy Storage" or "Electricity Storage", or both. Once agreed, we will form a *high-level* working definition (noting the link to the BEIS/Ofgem call for evidence) to set the context for delivering the next workgroup deliverables. We will also consider how this definition links with existing Transmission Generation or Demand users looking to co-locate with Storage.

#### Workgroup meeting two-to-three – "Technical and Planning Requirements"

We will form the minimum Grid Code technical requirements applicable to Storage equipment defined above - either via a stand-alone connection or co-located with an existing user, ensuring consistency and transparency with other classes of Transmission System user.

#### Workgroup meeting four – "Structure"

Consideration of how (or if), the outcomes from the previous workgroup meetings need to be structured in the Grid Code via legal text changes.

### Workgroup meeting five - "Next steps"

This will be an **open attendance meeting** allowing a full review of the outputs from the previous workgroups to confirm what will be written up in reports/consultations to progress any Grid Code mod proposals. It will also check the outcomes of GC0096 against the BEIS/Ofgem call for evidence published outcomes (if available). This meeting will also set out what additional arrangements (see 'Out of Scope' below) may need to be considered in other GB frameworks to support Storage, and recommend items for escalation if not currently being considered.

#### Out of scope

The scope of the Workgroup shall not include:

- Charging arrangements for Storage; network charging is defined in other GB codes
- Commercial services for Storage; whilst the Grid Code sets certain technical requirements to deliver response services, the delivery of services is discharged via contractual agreements. This includes procedures to facilitate Aggregation and virtual Power Plants
- Connection requirements for Distribution Code; however we will coordinate with the DCRP and our DNO colleagues to ensure that GC0096 proposals are compatible

- 11. The Workgroup will provide updates and a Workgroup Report to the Grid Code Review Panel which will:
  - Detail the findings of the Workgroup;
  - Draft, prioritise and recommend changes to the Grid Code and associated documents in order to implement the findings of the Workgroup; and
  - Highlight any consequential changes which are or may be required by other Code Administrators

#### Timescales

- 12. It is anticipated that this Workgroup will provide an update to each GCRP meeting and present a Workgroup Report to the May 2016 GCRP meeting.
- 13. If for any reason the Workgroup is in existence for more than one year, there is a responsibility for the Workgroup to produce a yearly update report, including but not limited to; current progress, reasons for any delays, next steps and likely conclusion dates.
- 14. An indicative timetable for GC0096 milestones is shown below.

30 <sup>th</sup> January 2017	Workgroup meeting 1 (full day)	
13 <sup>th</sup> February 2017	Workgroup meeting 2 (full day)	
27 <sup>th</sup> February 2017	Workgroup meeting 3 (full day)	
13 <sup>th</sup> March 2017	Workgroup meeting 4 (full day)	
27 <sup>th</sup> March 2017	Workgroup meeting 5 (full day)	
May 2017	Submit final Workgroup Report to Panel	
May 2017	Workgroup Report at Grid Code Panel	
June 2017	Code Administrator Consultation published	
July 2017	Deadline for responses	
August 2017	Final Modification Report at Panel	
August 2017	Final Modification Report submitted to the Authority	
September 2017	Indicative Authority decision	
September 2017	Indicative Implementation	