To: Members of the Technical Advisory Group

From: John Etherington, TAG Chair

Technical Advisory Group Meeting 19 December 2016 MINUTES

Attendees: John Etherington (Chair), Andrew Barrett, John Barry, Vera Bratkova, Jan Bygdevoll, Roger Dixon, Alistair Jones, Dominique Salacz, Brad Van Gosen, Charlotte Griffiths and Harikrishnan Tulsidas

Apologies: Steve Griffiths, Alexander Shpilman and David MacDonald.

Approval of Draft Agenda

1. The draft agenda was modified to include discussions regards the February EFG-UNECE meeting, clarification of process regards case studies, potential changes to the 2017 review schedule, and a target date for a TAG meeting at the April EGRC 8th session in Geneva. Discussion regards a status update on a Russian Solid Minerals Classification Bridging Document was deferred as this project is in initial planning stages.

Minutes of TAG meeting of 3 November 2016

2. The draft minutes of the 30 September 2016 meeting were approved and can now be posted on the website. (Note corrected spelling of Brad Van Gosen.)

Status Update: Chinese Petroleum Classification Bridging Document: Dominique Salacz

- 3. This project is progressing but more slowly than initially anticipated. The document is currently under review by the MLR and will be available for TAG review in January 2017. A workshop is tentatively scheduled in Beijing for February 2017.
- 7. Depending on the results of the February workshop and resulting reviews, it may be challenging to have a Bureau approved China petroleum bridging document available for the April 2017 EGRC meeting in Geneva.

Status Update: Bridging Document to Chinese Solid Minerals Classification: Roger Dixon

- 8. Similar to Petroleum, the Solid Minerals working group has an amended draft based on feedback from the April 2016 Geneva TAG working session that is under review by the MLR and will be available to the TAG in January 2017. The work session in Beijing tentatively scheduled for February will cover both Petroleum and Solid Minerals.
- 9. Depending on the results of the February workshop and resulting reviews, it may be challenging to have a Bureau approved China Solid Minerals bridging document available for the April 2017 EGRC meeting in Geneva.

Status Update: Bioenergy Project: Alistair Jones

10. Work is proceeding with a target to provide a draft specification document to the TAG by 17 January 2017. Assuming an accelerated TAG review and Bureau approval, the final document would be submitted for translation as an official document by 13 February. Supporting case studies will be available as an English only room document by late March.

Status Update: Solar Project: Alistair Jones

11. An initial draft of the Solar Specifications is being prepared for presentation as a room document for the EGRC eighth session. TAG review is planned for March 2017. (See item on accelerated review schedules - paragraph 29.)

Status Update: Wind and Hydro: Andrew Barrett

12. Both Wind and Hydro projects are in the planning phase, and working groups are being assembled. Andrew Barrett has volunteered to provide TAG coordination on these projects.

Status Update: Anthropogenic Resources: John Barry

- 13. A working group under the Mining the European Anthroposphere (MINEA) project led by Soraya Heuss-Aβbichler is planning to develop a draft UNFC specification document for classification and reporting of anthropogenic resources. These are secondary resources in construction and demolition waste materials regained from landfills and mining residues, and solid residues from waste incineration. The MINEA working group expects to develop an early draft of a specification document with supporting case studies for TAG review in March before presentation to the EGRC 8th session in April. (See item on accelerated review schedules paragraph 29.)
- 14. John Barry has volunteered to coordinate this project on behalf of the TAG.

Status Update: Nuclear Fuel Resources Projects: Brad Van Gosen

15. The Best Practice document on the application of UNFC to U/Th is progressing, and a number of chapters have been drafted. A draft of the case study on the application of UNFC to uranium resources of Jordan has been prepared by experts from the Jordan Uranium Mining Company. This case study will be shortly reviewed by the Brad Van Gosen on behalf of the TAG and will be submitted as an official document for the 8th EGRC session.

Other Projects

E-axis Study Group: David Elliott (Bureau Working Group)

16. Two documents are being prepared and will be submitted for TAG review in 2017: (1) a recommendation on changes to E-Axis categories and supporting explanations will be reviewed in January prior to submittal as an official document for the 8th EGRC session, and (2) a second "Concepts and Terminology" document will be submitted later.

Competent Person Study: David MacDonald (Bureau Working Group)

17. A Working Group led by David MacDonald is working to produce: (i) a short guidance note on CP for UNFC; and (ii) a more comprehensive guidance note detailing the issues around defining a competent person that will be published under the EGRC. The study results will impact the use of UNFC-2009 for national inventories and potentially future use in regulatory disclosures.

G-axis Working Group: James Primrose (Bureau Working Group)

18. The working group intends to submit the draft G-axis EGRC report by 13 March to the Bureau/TAG for review.

Oil and Gas Case Studies: Jan Bygdevoll

19. Jan Bygdevoll is chairing a TAG working group to develop petroleum case studies. A Terms of Reference document has been finalized and the project is in initial stages. An update will be presented at the 8th session of the EGRC.

Nordic UNFC Project: Sigurd Heiberg

20. The Nordic UNFC project was presented by Sigurd Heiberg at the EGRC 7th session in Geneva. The focus is to develop more detailed guidelines to collate national petroleum and mining inventories for the Nordic region under a single reporting system based on UNFC-2009. The project is being focused on Finland and Sweden requirements. Sigurd will continue to monitor this project and make the initial review on behalf of the TAG.

EFG-UNECE Conference

21. A joint session of the European Federation of Geologists (EFG) and the UNECE is scheduled for 9-10 February in Brussels (see agenda at http://eurogeologists.eu/efg-unece-conference/. Several representatives of the EGRC will participate in panel discussions and present results of the application of UNFC. There was some concern that TAG members were not fully informed of this upcoming event. A full list of such events is distributed for each Bureau meeting (see attached). The Chair noted he would share such events with the TAG going forwards.

UNFC-2009 Update Project

- 22. The Bureau has established a working group to examine potential changes to UNFC-2009 to be presented for discussion in 2018. Many of the changes will focus on accommodating the inclusion of renewables that may impact category definitions.
- 23. John Etherington will collate issues identified by the TAG and has requested input from the full TAG before the next conference call.

TAG 2017 Review Timetable

24. The attached spreadsheet provides a schedule of dates for delivery of documents for TAG review leading up to the 2017 EGRC sessions, "Deadline" is the date for delivery of the

formatted document by UNECE Secretariat for translation. Working groups should plan delivery to the TAG at least two-three weeks in advance of this date to allow time for TAG review and subsequent approval by the Bureau of recommended final documents.

25. The TAG will schedule review sessions in Geneva with several of the active projects in the two days leading up to the 8th EGRC meeting. The TAG will meet in Geneva on 25 April for its annual meeting (time and room location to be communicated later).

TAG Process Issues

Case Studies

- 26. It is anticipated that up to 25 additional case studies on nuclear fuel resources, renewables, solid minerals, and water may be developed over the next two years. There was a discussion on the review process for this increasing volume of case studies. Initially, case studies were developed by the working groups to test draft versions of Specification/Bridging Documents and were critically reviewed by the TAG as part of those projects. Subsequent case studies are being developed by various member states to illustrate alignment with UNFC-2009 on a wide variety projects and identify any potential issues. These studies are not subject to public comment nor approval of the Committee on Sustainable Energy.
- 27. While the TAG TOR requires ongoing support of members' understanding and use of UNFC-2009, the TAG will be overwhelmed if every case study has to be carefully reviewed. The review of a large number of case studies on a regular basis will also dilute the TAG's key focus to guide the development of specifications and bridging documents. It is suggested that the respective Working Groups, who have the domain knowledge, are the best people to have the case studies reviewed. Storing these case studies in a separate database accessible from the UNECE website will facilitate sharing and learning. The proposed change in process will be discussed in the next Bureau meeting.

Review of Bureau-Led Studies

28. While specifications and bridging documents are developed by external working groups, several special studies (e.g. Competent Person, Project Definition, E- and G-axis revisions) are being developed within working groups led by Bureau members. It would be superfluous to request a separate TAG review and recommendation to the Bureau. Study reports will be simultaneously distributed to both the Bureau and the TAG to collate feedback before finalization and approval within the Bureau.

Accelerated Review Schedules for 2017-18

- 29. The Secretariat is encouraging that every effort is made to complete outstanding bridging and specification documents projects by early 2018 to meet the mid-July deadline for submittal of documents to the Committee on Sustainable Energy for its September meeting. This would apply to the Solar and Anthropogenic specification documents and possibly to the Chinese petroleum and solid minerals bridging documents. The TAG should review early drafts to identify issues so that final reviews can quickly completed. The following schedule is proposed for discussion.
- EGRC-8 comments on initial drafts April 2017
- Final draft by WG June 2017

- Final TAG review July 2017
- Public comments August-Sept/Oct 2017
- Final revisions by WG Nov 2017
- TAG review December 2017
- . Bureau review Jan 2018
- EGRC-9 official documents in 3 languages Feb 2018
- EGRC-9 final review and approval April 2018
- Submission for Committee approval mid-July 2018 Committee approval Sept or Oct 2018
- 30. While the TAG is committed to cooperate in this accelerated timetable, it is cautioned that the rigour of its reviews should not be sacrificed and there may be individual projects where unresolved issues may delay completion within this timeframe. It is noted that Wind and Hydro specifications are also scheduled to be developed in 2018.

Next Meeting

31. It was proposed to schedule the next TAG meeting the week of 25-27 January 2017. Hari Tulsidas will issue a Doodle poll to define an exact date.
