

**To:** Members of the Technical Advisory Group  
**From:** John Etherington, TAG Chair

<b>Technical Advisory Group Meeting</b> <b>3 November 2016</b> <b>MINUTES</b>
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*Attendees:* John Etherington (Chair), Andrew Barrett, Vera Bratkova, Jan Bygdevoll, Roger Dixon, Steve Griffiths, Alistair Jones, Dominique Salacz, Alexander Shpilman, Brad Van Gosen, Charlotte Griffiths and Harikrishnan Tulsidas

*Apologies:* John Barry and David MacDonald.

### **Approval of Draft Agenda**

1. The draft agenda was modified to include discussions on additional renewables projects, the UNFC update project, the Nordic Study and changes in the Nuclear Fuel Resources Task Force.

### **Minutes of TAG meeting of 30 September 2016**

2. The draft minutes of the 30 September 2016 meeting were approved and can now be posted on the website.

### **Status Update: GKZ Petroleum Classification Bridging Document – John Etherington**

3. The Bridging Document between the Oil and Fuel Gas Reserves and Resources Classification of the Russian Federation of 2013 and UNFC-2009 was approved by the Committee on Sustainable Energy on 30 September 2016.

4. Igor Shpurov (GKZ) has indicated that work is proceeding to update the Russian Solid Minerals classification. After its approval (tentatively in 2017), GKZ will be ready to start work on its harmonization with UNFC-2009. The NAEN Code is not a Russian national classification, but GKZ will actively use the agreements reached on the Code during the process to update the Solid Minerals Classification. It is proposed to develop the document to be aligned both with the NAEN Code and UNFC-2009. Roger Dixon will be the TAG liaison.

5. A UNFC workshop has been proposed for late-June 2017 in Moscow, including to present the Petroleum Bridging document and review the progress towards a solid minerals Bridging Document. Invitations would be issued to near or neighbouring countries that are using variations of the Russian classification system for national reporting.

### **Status Update: Chinese Petroleum Classification Bridging Document – Dominique Salacz**

6. This project is progressing but more slowly than was originally anticipated. The document is currently under review by the MLR and may not be released for some time. The TAG is available to review any interim reports and provide any additional technical guidance that might be needed. A workshop is tentatively scheduled for March 2017. It was noted that an SPE Applied Technology Workshop on PRMS is also tentatively scheduled in China in 2017 but the timing has not been finalized.

7. Given the above, it is unlikely that a final TAG endorsed China Petroleum Bridging document will be 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. No timing for a second TAG review has yet been scheduled.

**Status Update: Geothermal Project – Andrew Barrett**

9. The Committee on Sustainable Energy at its 28–30 September session approved both the updated Generic Specifications for the Application of UNFC-2009 to Renewable Energy and the Specifications for the Application of UNFC-2009 to Geothermal Energy Resources.

10. Given the expansion of UNFC to incorporate renewable energy commodities, the Committee on Sustainable Energy recommended that the title of UNFC-2009 should be amended to better reflect this shift of focus.

11. The Geothermal Working Group will continue to refine the Case Studies based on comments received in the public review period. Additional guidelines on quantifying estimates will be developed in coordination with the International Geothermal Association (IGA).

12. Under the MOU signed between the IGA and UNECE, it is proposed that a member of the IGA be represented on the TAG.

**Status Update: General Renewables - Alistair Jones**

13. The following update on renewables includes two new projects:

- Generic renewable specifications and Geothermal Specifications were approved by the UNECE Committee on Sustainable Energy on 30 September
- Held successful session on Renewable Energy classification at the 7th International Forum on Energy for Sustainable Development in Baku on 21 October
- A Renewables Task Force Workshop will be held on 5–6 December at Cranfield University, UK
- The Task Force is investigating candidates for the Wind Working Group, with the aim of starting the Working Group in January 2017
- Terms of Reference will be developed, over the next few months, for a Hydropower Working Group.

14. The documents the Renewables Task Force is planning to submit for the EGRC eighth session in April 2017 include:

- The latest draft of the Bioenergy Specifications (see below)
- A first draft of the Solar Specifications (see below)
- A draft proposal for UNFC-2009 revision, including changes in G-axis definition and any other key points required to fully accommodate Renewable Energy in the revised version of UNFC.

### **Status Update: Bioenergy Project – Alistair Jones**

15. Work is proceeding with completion targeted prior to the April 2017 EGRC meeting.
- Modifications to Part II of the Bioenergy Specifications as suggested by the TAG Review in June have been incorporated into the revised draft.
  - Work is well underway on drafting text/guidance on the E, F & G Axis as well as the remaining additional sections. The aim to get a draft to TAG for review by the end of the year. The document at this stage will be largely complete.
  - The programme of work for early next year leading up to the EGRC session in April when the final draft will be presented will consist of finalizing the draft specification document (e.g. writing the introduction and ensuring consistent pagination / formatting), and finalizing the supporting case studies.

### **Status Update: Solar Project: Alistair Jones**

16. A Solar Working Group has been established with Jeremy Webb as its Chair. Membership is increasing.
- The Chair of the Solar WG has prepared a short explanatory video which has helped to secure interest in the WG. The solar video is available [here](#). The Bureau was highly complementary of the video and recommended it be expanded to cover solid minerals, uranium and petroleum, and made visible on the UNFC website.
  - A workshop meeting of the Solar Working Group was held at Sunbury (and virtually) on 6–7 October. Alistair joined for the first day.
  - A zero draft of the Solar Specifications has been prepared and was discussed at the meeting. The intent is to present a first draft at the EGRC eighth session

### **Status Update: Injection Projects**

17. The Specifications for the application of UNFC-2009 to injection projects for the purpose of geological storage were approved by the Committee on Sustainable Energy on 30 September 2016.
18. Karin Ask, Chair of the Injection Projects Task Force, continues to liaise with two groups addressing carbon capture and storage:
- the CCS Working Group 3 (CCS-WG3) of the Oil and Gas Climate Initiative (OGCI)
  - the SPE SRMS (Storage Resource Management System) based on PRMS.
19. Andrew Barrett promoted the Injection Projects Specifications at the meeting of the Carbon Sequestration Leadership Forum (CSLF) in Japan, 3–7 October. This is a high level committee with representatives from 25 countries focused on sharing the technologies involved in carbon capture and storage.

### **Status Update: Nuclear Fuel Resources Projects – Harikrishnan Tulsidas**

20. Subsequent to Hari Tulsidas leaving IAEA, Adrienne Hanly has taken over as the Chair of the Task Force. In addition, Brad Van Gosen will replace Hari as the representative on the TAG. As part of his new role at UNECE, Hari will work on UNFC and EGRC issues, including coordinating with the TAG and identifying external funding for UNFC work.

21. The Best Practice document on application of UNFC to U/Th is progressing and a number of chapters have been drafted. A draft of the case study on application of UNFC to uranium resources of Jordan has been prepared by experts from Jordan Uranium Mining Company. This will be shortly reviewed by the Task Force before submission to the TAG.

22. 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. As with prior case studies, the TAG will enlist external experts to assist in its review.

23. It was discussed that the TAG needs to identify the key factors that should be considered in TAG reviews of case studies (including but not restricted to Nuclear Fuel Resources projects). Hari Tulsidas and Charlotte will prepare draft guidance.

### **Other Business/Projects**

#### **E-axis Study Group – Status Update – John Etherington**

24. Two documents are being prepared and will be submitted for TAG review in early 2017: (1) An update on terminology, and (2) A recommendation on changes to E-Axis categories and supporting explanations.

#### **Competent Person Study – Status Update - Harikrishnan Tulsidas**

25. David MacDonald will replace Hari Tulsidas as the Chair of the UNFC and Competency Working Group. Members include: Jim Ross, Roger Dixon, Vitor Correia (EFG), Isabel Fernandez (EFG), Mike Gusev (NAEN Consultant, Russian Federation), Aleksander Pisarnitskiy (Chair of the Eurasian Union of Experts on Subsoil), Charlotte Griffiths and Hari Tulsidas. Frank Denelle has recently joined to represent Renewables.

26. The Working Group is working to produce: (i) a short guidance note on CP for UNFC; and (ii) a more expansive guidance note detailing the issues around defining a competent person that will be published under the EGRC.

27. An underlying question is whether the EGRC will be establishing qualifications of the Competent Person to produce a UNFC-2009 compliant report. Note that the CRIRSCO Template as applied for regulatory reporting provides guidance. PRMS does not include such guidance but it is included in a companion SPE document on reserves audit standards. The issue of CP qualifications and how they are enforced continues to be a “hot topic” in all areas of reserves and resources reporting.

#### **Oil and Gas Case Studies – Status Update - Jan Bygdevoll**

28. Jan Bygdevoll is chairing a working group to develop petroleum case studies. Alexander Shpilman and Steve Griffiths will participate from the TAG and Jan will seek assistance from other experts. A draft Terms of Reference document has been finalized and work is proceeding. It was noted that application of the new RF-2013 guidance is in early stages given its entry into force on 1 January 2016 and few examples are yet available.

29. It is recognized that companies with Russian properties that are listed on stock exchanges routinely report reserves using PRMS or SEC guidelines and there may be an opportunity to

compare results to their GKZ filings. Steve Griffiths will investigate if this information is available in sufficient detail to assist in this study.

30. Dominique Salacz offered to join the working group.

### **Update on Nordic UNFC Project– Jan Bygdevoll**

31. The Nordic UNFC project was presented by Sigurd Heiberg at the EGRC 7<sup>th</sup> session in Geneva. The focus is to develop more detailed guidelines to collate petroleum and mining national inventories for the Nordic region under a single reporting system based on UNFC-2009. At an upcoming meeting in Trondheim, Sweden will discuss the relationship between its national reporting system for solid minerals and UNFC (note that the Nordic countries do not use the CRIRSCO Template for national reporting).

### **UNFC-2009 Update Project**

32. 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 inclusion of renewables that may impact category definitions.

33. John Etherington will collate issues identified by the TAG and has requested input from the full TAG by year-end 2016.

### **TAG 2017 Review Timetable**

34. John Etherington will work with the Secretariat to develop a timetable of TAG reviews leading up to the 2017 EGRC meeting in April. The TAG foresees a large number of projects requiring its attention in early 2017.

35. The TAG needs to schedule its annual meeting in Geneva at the 8<sup>th</sup> EGRC session, 25–28 April. Typically, the TAG meets the day before the EGRC session. TAG members are asked to advise of their availability on 25 April so that a time and room for the meeting can be booked.

### **Next Meeting**

36. It was proposed to schedule the next TAG meeting the week of 19 December 2016. Hari Tulsidas will issue a Doodle poll to define an exact date.

