

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

Technical Advisory Group Meeting 30 September 2016 MINUTES

Attendees: John Etherington (Chair), Andrew Barrett, John Barry, Vera Bratkova, Jan Bygdevoll, Roger Dixon, Steve Griffiths, Dominique Salacz, Alexander Shpilman, Harikrishnan Tulsidas and Charlotte Griffiths

Apologies: Alistair Jones and David MacDonald

Approval of Draft Agenda

1. The draft agenda was modified to include several additional items including: Injection projects, UNFC Nordic Project Proposal, Competent Person update, and G-axis Survey.

Minutes of TAG meeting of 22 August 2016

2. The draft minutes of the 22 August 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. The Bridging Document was presented to the media in Russia on the afternoon of 30 September by the Minister of Natural Resources and Environment and a UNECE press release was issued.

5. Alex Shpilman indicated that Belarus will adopt the bridged RF-2013 classification for their national reporting of petroleum resources.

6. 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 of Solid Minerals Classification preparation. It is proposed to develop the document aligned both with the NAEN Code and UNFC-2009. Additional information on this project was requested from GKZ staff.

Status Update: Chinese Petroleum Classification Bridging Document – Dominique Salacz

7. Dominique Salacz attended the China Mining Congress and Exposition, 22-25 September 2016 in Tianjin and had an opportunity to review a preliminary update of the Petroleum Bridging document with Yang Hua. The overall direction in this draft is to link approved volumes to 111; all volumes associated with non-approved projects are linked to

various combinations of category F2 and beyond. There is a concern that uncertainty in recoverable quantities is not fully considered.

8. The document is currently under review by the MLR and may not be released for some time. The MLR's understanding of UNFC is limited. A presentation by Scott Foster on the UNFC at the Congress was well received but additional interaction is required. This is very important if the MLR needs to approve every step. A workshop was proposed to assist them tentatively scheduled for March 2017. It is noted that an SPE Applied Technology Workshop on PRMS is also tentatively scheduled in China for early 2017; if combined this could aid in defraying travel expenses for the foreign attendees.

9. 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

10. 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

11. The Committee on Sustainable Energy in their 28 September session approved both the updated Specification for the Application of UNFC-2009 to Renewable Energy Resources and the Specifications for the Application of UNFC-2009 to Geothermal Energy Resources.

12. Given the expansion of UNFC to incorporate renewable energy, the Committee on Sustainable Energy recommends that the next update of UNFC-2009 document should be amended to better reflect this shift of focus and, in particular, the title of UNFC.

13. 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 are under study.

Status Update: Bioenergy Project – Alistair Jones

14. No further update.

Status Update: Injection Projects

15. 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.

16. Karin Ask, Chair of the Injection Projects Task Force, continues to liaise with several 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

- ISO Technical Committee (TC265) looking at CO₂ capture, transportation, and geological storage.

17. Andrew Barrett will be participating in the Carbon Sequestration Leadership Forum meeting, 3–7 October in Tokyo. He will announce that the Injection Project Specifications have been approved by the UNECE's Committee on Sustainable Energy

Status Update: Uranium/Thorium Best Practices and Case Studies – Harikrishnan Tulsidas

18. Drafting of the Best Practices texts is in progress.

19. During the UNFC Workshop held in Ulaanbaatar in August, participants proposed a number of new case studies (in the order of 25), a number of which will be prepared before November 2016 and reviewed by the Task Force, before being submitted for TAG approval by January 2017.

20. The Mineral Resources and Petroleum Authority of Mongolia plans to establish a national working group that will look at bridging the existing Mongolian systems for minerals and petroleum to UNFC-2009.

Other Business/Projects

E-axis Study Group – Status Update – John Etherington

21. No further update.

Competent Person Study – Status Update - Harikrishnan Tulsidas

22. The project Terms of Reference are still undergoing revision. This project was discussed in the Ulaanbaatar workshop and many participants, especially from Africa, expressed a desire to see more detailed guidance in UNFC.

23. An underlying question is whether EGRC will establish the qualifications for a Competent Person to produce a UNFC-2009 compliant report. This issue came up again in the Geothermal public comments. There has been some indication that the user community expects EGRC to provide more guidelines up to issuing a check list.

Oil and Gas Case Studies – Status Update - Jan Bygdevoll

24. 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 issued for TAG review; comments should be submitted to Jan by 7 October. Specifically there is discussion whether to include an example of direct application of UNFC-2009 without using the existing bridging documents to aligned systems.

25. While a timetable will be defined in the ToR, it is expected that the petroleum case studies document will not be fully completed until late 2017 or early 2018 but a project update will be made available for the 8th EGRC session in April 2017.

G-axis Survey

26. It is recognized that the G-axis as currently defined in terms of geological knowledge and potential recoverability was designed to support extractive activities. Since then, there has been an expansion of the classification system encompassing both renewable energy resources and injection projects, and it is clear that the name and associated guidelines of the G-axis are no longer sufficiently generic to apply to all commodities or applications of the system. As part of its study, the working group issued a survey to the EGRC members to investigate the potential for revising the G-axis name so that it can apply more broadly. The survey concluded on 30 September and the input is under review.

Update on Nordic UNFC Project– Jan Bygdevoll

27. The Nordic UNFC project proposal was presented by Sigurd Heiberg at the EGRC 7th 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. The study will examine incorporation of business issues from the government and private company perspectives including legal, regulatory (environmental), contractual, infrastructure support, financing, financial reporting and capital allocation.

Next Meeting

28. It was proposed to schedule the next TAG meeting the week of 31 October 2016. Charlotte Griffiths will issue a Doodle poll to define an exact date.
