

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

**Technical Advisory Group Meeting**  
**22 February 2017**  
**MINUTES**

*Attendees:* John Etherington (Chair), Andrew Barrett, Jan Bygdevoll, Alistair Jones, Alexander Shpilman, Vera Bratkova, Brad Van Gosen, Charlotte Griffiths and Harikrishnan Tulsidas.

*Apologies:* Steve Griffiths, John Barry, Dominique Salacz, Roger Dixon, and David MacDonald.

**Approval of Draft Agenda**

1. The draft agenda was modified to include discussions of the SPE-SRMS document regarding reporting on injection projects.

**Minutes of TAG meeting of 27 January 2017**

2. The draft minutes of the 27 January 2017 meeting were approved and can now be posted on the website.

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

3. A preliminary draft Petroleum Bridging Document was released to the TAG on 11 February 2017. The document has not yet been formerly approved by the MLR but is being made available for TAG review; comments and potential proposed edits should be sent to Dominique Salacz by 8 March 2017. A workshop tentatively scheduled in Beijing for March may now be deferred.

4. A workshop with the TAG has been scheduled in Geneva on 25 April 2017 to discuss potential updates. A progress report will be available for the EGRC session later that week.

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

5. A preliminary draft Solid Minerals Bridging Document was released to the TAG on 9 February 2017. The document has not yet been formerly approved by the MLR but is being made available for TAG review; comments and potential proposed edits should be sent to Roger Dixon by 8 March 2017.

6. A workshop with the TAG has been scheduled in Geneva on 25 April 2017 to discuss possible updates. A progress report will be available for the EGRC session later that week.

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

7. A draft of the Bioenergy Specifications was reviewed by TAG at the end of January. The Working Group (WG) accepted most of our recommendations and issued an updated version (15<sup>th</sup> Feb). On 21 February 2017 the TAG recommended to the Bureau that the

Specifications are clear, detailed and comprehensive and should be issued for public comment. An English only version will be distributed at the 8<sup>th</sup> EGRC session.

8. Two particular issues had been identified in the previous version: Use for Classification vs. Disclosure and Overlap between E and F axes. The WG accepted the comments and updated the document.

- The Specifications are somewhat clearer on the issue of use for Classification vs Disclosure. There is potentially scope for further clarifying which parts of the Specifications apply only to those making resource disclosures and what those not making disclosures should consider. However, it would be appropriate to consider this issue again following public comment.
- It was noted that the previous version of the Specifications included some overlap on requirements for Project commitment between the E and F axis. The updated document removes this overlap. The maturity of commitment to the project (progress towards Sanction) is now only considered on the F axis and TAG considers this is appropriate.

9. The Bioenergy WG plan to document 5 case studies and to provide these to TAG by 13<sup>th</sup> March for review.

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

10. The Working Group (WG) led by Jeremy Webb had planned to develop a draft Specifications document for the April 8<sup>th</sup> EGRC session. The WG will now focus on finalizing Terms of Reference and prepare position papers addressing the main identified issues. Under the revised timetable, the Solar Specifications will be prepared for approval at the April 2018 along with case studies and estimation guidelines as appropriate.

#### **Status Update: Wind and Hydro: Andrew Barrett**

11. 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. Tom Lefeber will lead the Wind Project and Adrian van der Schoot will lead the Hydro project. Both projects are targeting Specification Documents to be delivered at the 9<sup>th</sup> EGRC session in 2019.

#### **Status Update: Anthropogenic Resources: John Barry**

12. A working group under the Mining the European Anthroposphere (MINEA) project led by Soraya Heuss-Aßbichler. The initial plan was to develop an early draft of a Specification Document with supporting case studies for TAG review by March 10 before presentation to the EGRC 8<sup>th</sup> session in April.

13. Based on discussions with John Barry and Hari Tulsidas on 2 February, this may be an overly aggressive timetable and may be substituted by a short status report for the 8<sup>th</sup> EGRC session.

14. Dr. Radoslav Vukas has been nominated by the EGRC Bureau to become a MINEA Management Committee Observer and will coordinate with the working group and John Barry from the TAG on future updates.

## **Status Update: Nuclear Fuel Resources Projects: Brad Van Gosen**

15. Draft case studies from Nigeria, Mexico and Indonesia are under review. Brad Van Gosen will provide final TAG recommendations. Once approved by the Bureau, these documents are posted in the UNECE website at: <http://www.unece.org/energywelcome/areas-of-work/unfc-and-resource-classification/areas-of-work/case-studies.html>

16. The Best Practice document on the application of UNFC to U/Th is progressing, and some chapters have been drafted. The working group will meet in Geneva in April 2017 to review progress.

## **Other Projects**

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

17. The TAG completed its review of two documents: (1) a recommendation on changes to E-Axis categories and (2) a second “Concepts and Terminology”, both to be presented as official documents for the 8th EGRC session.

18. The following major issues were identified by the TAG:

- In general, we agree with the definitions provided in the companion document on Terminology and Concepts, specifically replacing “economic” with “commercial” in E-axis category descriptions.
- We understand that barriers to achieving project implementation involve resolving economic (achieving target financial performance criteria) and environmental/social issues plus other non-technical contingencies (e.g. political). It may not be useful to separate social/environmental and economic (sense restricted) as they are intertwined under commerciality.
- Assessing chance of commerciality is a fundamental concept in all classification systems. It is not obvious that splitting E2 into 2.1 and 2.2 by “level of effort being applied” to resolve social/economic barriers directly supports this goal.
- The problem is that the proposal provides a measurement of project maturity which is covered under the F-axis.
- It was pointed out that if we replace the word “economic” with “commercial” throughout then, we lose the original meaning of “economically viable” in defining E1. While foot notes attempt to expand the definition to cover all contingencies including social/environmental issues, it is often applied considering economic in the narrow sense.

### **Competent Person Study: David MacDonald (Bureau Working Group)**

19. On 26 January 2017, the TAG completed its review of two documents scheduled for translation and presentation at the 8<sup>th</sup> EGRC session (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.

20. Both documents provide background and summarize the current industry practices around establishing qualifications of resource evaluators. The report does not establish UNFC mandatory processes but offers options that can be considered for regulatory and national inventory reporting and/or defers to commodity specific guidelines for more detailed guidance.

While the document does not propose UNFC specific guidelines regards qualifications, it does raise the possibility of doing so in the future where a reporting agency specifically requires reporting under UNFC-2009.

21. The documents do not address who would be responsible for ensuring that UNFC-2009 is correctly applied. In the current systems, Competent Persons in petroleum and solid minerals are obligated to register with self-regulating organizations (SRO) that set standards and have the power to review performance and address complaints. These SRO's have not yet taken on responsibility in the area of renewables nor are they conversant with UNFC-2009 and the Bridging Documents.

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

22. The working group intends to submit the draft G-axis EGRC report by 13 March to the Bureau/TAG for review. Again this will need to be considered as part of the 2018 UNFC update project.

#### **Oil and Gas Case Studies: Jan Bygdevoll**

23. Work is progressing, and a status report will be issued in March. An update will be presented at the 8<sup>th</sup> session of the EGRC.

#### **SPE-SRMS Review: John Etherington**

24. On February 15, 2017, the TAG submitted its review of a draft report from the SPE on CO<sub>2</sub> Storage Management System (SRMS) modeled on the 2007 Petroleum Resources Management System (PRMS). The review was in response to a request for EGRC comments submitted by Karin Ask on 16 January.

25. TAG encouraged the group to align their terminology with the UNFC document on "Specifications for the Application of UNFC-2009 to Injection Projects for the Purpose of Geological Storage". It was noted that that the emphasis is on available pore volume, but this may not cover all the processes. The UNFC document defines the following: "The Total Geological Storage of a reservoir is the total amounts of a given fluid that could be injected and stored in this reservoir, including amounts that could be dissolved in aquifer water, be trapped by chemical reaction or adsorbed onto the carbon in coal bed methane recovery". We certainly would encourage the SPE to accommodate this range of CO<sub>2</sub> sequestration processes.

26. Under capacity, to qualify we think there should be a requirement to demonstrate technical characteristics to contain the injected CO<sub>2</sub> (no leaks). This issue should also be addressed under abandonment, decommissioning and restoration where there must be a plan to monitor containment in the future.

#### **Nordic UNFC Project: John Etherington**

27. 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 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's minerals reporting requirements. The working group will have their third progress meeting February 16 & 17 and plan to have a draft

for TAG review in the first or second week of March. While this is not an “official” bridging document”, the TAG will provide feedback on the proposed mapping.

28. There is some concern that despite the “label” there is no mandate to include petroleum reporting under this project and the primary Nordic petroleum producer, Norway, is not actively involved. While the NPD has previously provided a mapping of their petroleum classification to UNFC, and currently reports aggregated volumes in UNFC, Norway has no plans to adopt UNFC as the default classification and reporting system.

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

29. 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. A draft terms of reference for the project was distributed to the TAG on 26 January.

30. John Etherington will collate issues identified by the TAG and a report is in progress.

### **EFG-UNECE Conference**

31. A joint session of the European Federation of Geologists (EFG) and the UNECE was held 9-10 February in Brussels; several representatives of the EGRC attended/presented. Hari Tulsidas will forward [a link to the presentation files](#).

### **TAG 2017 Review Timetable**

32. First, thanks to the TAG for their prompt attention to clear all those projects scheduled for translation by early February. Regards remaining projects and expected timing:

- Solar Position papers – expected for TAG review March 15
- Draft Anthropogenic Resources Specifications /status Update - TAG review March 10
- Nordic UNFC Study – TAG review in mid-March
- White Paper on application of G-axis and recommendations – late March
- Draft Chinese Petroleum Bridging Document – Draft under review by TAG
- Draft Chinese Solid Minerals Bridging Document – Draft under review by TAG

### **EGRC April 2018 Meeting Schedule**

33. The following meetings are tentatively scheduled in advance of the 8<sup>th</sup> EGRC session:

|                   |  |
|-------------------|--|
| April 24 pm       | Meet with Russian delegation to review RF-2013 Bridging Document project and future plans (lessons learned, case studies, solid minerals bridging) |
| April 24 or 25 pm | Meet with E-axis Working Group (to be scheduled)   |
| April 25 am       | Chinese Petroleum Bridging Document working session  |
| April 25 pm       | Annual TAG meeting (over lunch)  |
| April 25 pm       | Chinese Solid Minerals Bridging Document working session   |

## **Next Meeting**

34. It was proposed to schedule the next TAG meeting the week of 20-24 March 2017. Hari Tulsidas will issue a Doodle poll to define an exact date.

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