To: Members of the Technical Advisory Group

From: John Etherington, TAG Chair

Technical Advisory Group Meeting 14 September 2015 – 2:00 pm BST MINUTES

Attendees: John Etherington, Roger Dixon, Alistair Jones, Jan Bygdevoll, Andrew Barrett

and Danny Trotman

Observer: Charlotte Griffiths

Apologies: Santosh Adhikari, John Barry, Michael Lynch-Bell, Harikrishnan Tulsidas,

Dominique Salacz, Maksim Saakian, and David Macdonald (Observer)

Approval of Draft Agenda

1. The draft agenda was approved with an expansion under "other business" to discuss the status of Bureau working groups and other issues.

Draft Minutes of TAG meeting of 26 June 2015

2. The draft minutes of the 26 June 2015 meeting were approved and can be posted on the UNECE website.

Status Update: New GKZ Petroleum Classification Bridging Document – John Etherington

- 3. At the request of the GKZ, a working session with the TAG has been scheduled for 12–13 October in London to review progress on the new RF-2013 classification for oil and gas to UNFC-2009 bridging document. The Russian delegation will consist of seven representatives of the GKZ and associated organizations; the TAG will be represented by a subgroup of five members and the Bureau observer, David Macdonald.
- 4. As promised in the April meeting in Geneva, the GKZ has now provided an English translation of supplementary guidelines to RF-2013 to be reviewed by the TAG prior to this meeting.
- 5. It is the GKZ's intent to finalize a bridging document prior to the April 2016 EGRC meeting.

Status Update: Bridging Document to Chinese Petroleum Classification – John Etherington/ Dominique Salacz

6. The TAG is awaiting an official English translation of the current Chinese classification system for petroleum. Dominique Salacz, as the new TAG contact person, is communicating with Yang Hua regarding a potential work session in early 2016. It is their intent to complete a bridging document prior to the 2017 EGRC meeting.

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

7. The TAG is awaiting further communication from the Chinese who first had to take the proposal back to the relevant ministry for approval and then they were to supply an English version of the Chinese classification system as presented in Geneva. Roger will contact Mr. Li to get a progress report. It is intent of the Chinese to complete a bridging document prior to the 2017 EGRC meeting.

Status Update: Renewables – Geothermal and Bioenergy Projects – Alistair Jones

- 8. Alistair Jones will coordinate the TAG's interface with all Renewables projects and remain the primary contact for Bioenergy. Andrew Barrett has volunteered to be the primary TAG contact for the Geothermal Working Group in coordination with Alistair. The G-axis Working Group is also being administered by the Renewables Task Force; Domonique Salacz will be the primary contact and coordinate with Alistair. (See also item 18,)
- 9. The TAG completed a review of a Simplified Classification Example for Petroleum document submitted on behalf of the Renewables Task Force. Comments and suggested modifications of the final document were submitted on 16 July 2015. This document will be used by the Renewables working groups to maintain alignment within current UNFC-bridged systems.
- 10. The Bioenergy Working Group (WG) has developed several case studies which are helping in the development of specifications. These are continuing to be refined and further case studies are being considered. One focus of the specification development is on definitions of Energy Product, Reference Point and Bioenergy Source. Alistair attended the July discussion on Energy Product and shared and discussed the TAG comments on a draft document. The WG is finalising its proposals on Energy Product and Reference Point and expect to submit these to the TAG in the next few weeks.
- 11. The other current focus of the Bioenergy WG is on Access and Entitlement. The specifications on this aspect are mostly being drawn from SPE PRMS. The one additional aspect is the treatment of biomass feed-stocks sourced under purchase agreements. The Access and Entitlement proposal will be submitted to the TAG in due course.

Status Update: Specifications for the Application of UNFC-2009 to Injection Projects for the Purpose of Geological Storage – Jan Bygdevoll

- 12. The public comment period on the draft specification document ends on 15 September. An amended draft will be submitted later in 2015 for TAG review. Subject to Bureau approval, the finalized document will be presented at the 7th EGRC session.
- 13. An outstanding issue in this document is the appropriate terminology regarding storage capacity versus storage potential. The Bureau has previously recommended to keep the terminology simple and use footnotes to clarify exactly what is meant by the term used.

Status Update: Uranium/Thorium Guidelines and Case Studies – Harikishnan Tulsidas

- 14. The public comment period on draft Guidelines for the Application of UNFC-2009 to Uranium and Thorium Resources ended 20 August 2015.
- 15. Mr. Jean-Rene Blaise, an expert in uranium projects, volunteered to assist the TAG in its review of the Uranium Guidelines and case studies. Additional TAG comments were

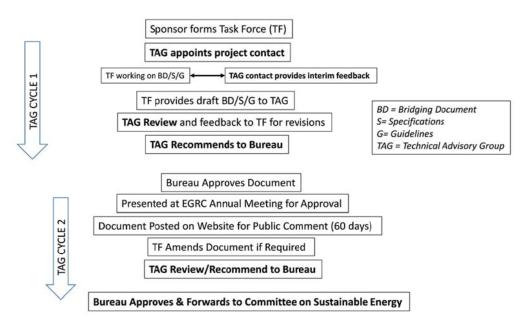
submitted by Roger Dixon. A final amended document is in preparation and will be submitted to the TAG later in September.

- 16. It was noted that the case studies included mapping of classification systems in China, Ukraine and Australia to UNFC 2009. The development of such mapping provides an interpretation, by the classification system "owners", of the possible relationship between the mapped system and UNFC-2009. Such mapping is a useful precursor to developing a definitive linkage via a Bridging Document, but does not reflect an official TAG or EGRC position.
- 17. The Task Force is now working on a Best Practices document focused on Quality Assurance/Control in assessment and reporting.

Other Business

TAG Review Flow Diagram – John Etherington

18. The attached flow diagram (updated 14 September) was developed to clarify TAG's interface with the EGRC working groups regards both the development of the bridging or specification documents and the subsequent public review process now being implemented on all major projects.



19. The following is an updated list of TAG internal point contacts for all current projects.

Uranium - H. Tulsidas Injection - J. Byfdevoll Renewables Task Force - A. Jones

Geothermal WG
Bioenergy WG
G-axis WG
Chinese Petroleum
Chinese Solid Minerals

- A. Barrett
- A. Jones
- D. Salacz
- J. Etherington
- D. Salacz
- R. Dixon

E-Axis Working Group - J. Etherington

E-axis Working Group – John Etherington

- 20. The E-axis Sub-group chaired by David Elliott has circulated an early draft discussion document for Bureau comments due back 14 September. A formal report will be submitted for TAG review later in 2015. The draft discusses the lack of guidance around non-economic contingencies such as environmental issues and their impact on project viability.
- 21. Key suggestions within this draft include:
 - Modify current E-axis text to replace "economic" with "commercial" with the understanding that this will include social-environmental issues in addition to economics in the restricted sense.
 - Add sub-categories E2.1 and E2.2 regards the relative chance of resolving key commercial contingencies.
 - Those responsible for commodity specific guidelines should assess updates where required to better reflect the impact of social-environmental issues in their classifications.

G-axis Working Group – Alistair Jones/Dominique Salacz

- 22. Following this year's EGRC meeting, a new working group was established reporting into the Renewables Task Force. Its remit is to consider the extension of the definition and revision of the name of the G-axis to be more applicable to renewables whilst maintaining robustness for minerals and petroleum. The WG includes representatives from the minerals sector (Paul Banks) and the petroleum sector (Jim Ross). Proposals will be shared with the TAG for comments and recommendation before submitting to the Bureau.
- 23. Charlotte will distribute a copy of the G-axis terms of Reference to TAG members.
- 24. Dominique Salacz has volunteered to assist Alistair on this project.

Support Activities

25. The TAG received a request for assistance from Siddarartha Kulkarni of Soiltech (India) on 2 September regarding application of UNFC-2009 to a minerals project. Roger Dixon will coordinate this response.

TAG Membership

26. The TAG welcomed two new members: Jan Bygdevoll replaced Per Blystad as the Norwegian Petroleum Directorate representative and Andrew Barrett represents Geoscience Australia.

Next Meeting

27. The next meeting will be scheduled during the period 9–13 November 2015. Charlotte will provide alternative dates in a "doodle poll". To better accommodate Andrew Barrett's participation the meeting time will be adjusted to 1:00 pm BST.
