To: Members of the Technical Advisory Group

From: John Etherington, TAG Chair

Technical Advisory Group Teleconference 12:00-1:30 pm GMT Thursday 12 March 2015 MINUTES

Attendees: John Etherington (Chair), Roger Dixon, Alistair Jones, Per Blystad, Harikrishnan

Tulsidas.

Observers: Charlotte Griffiths

Apologies: Santosh Adhikari, John Barry, Leesa Carson, Maksim Saakian, Michael Lynch-

Bell, David Macdonald, and Danny Trotman.

Approval of Draft Agenda

1. The draft agenda was approved.

Draft Minutes of TAG meeting of 21 January 2015

2. The draft minutes of the 21 January 2015 meeting were approved and are ready to be posted on the website.

Status Update: Revisions to the CRIRSCO-UNFC-2009 Bridging Document

- 3. Recent analysis indicates a need to recommend a further revision to the 9 February 2015 TAG submittal to the Bureau on UNFC-2009 Series No. 42 Annex III to align with the 2013 changes to the CRIRSCO Template. It was pointed out that reporting Exploration Target estimates is not confined to national inventories. Further, the CRIRSCO Template does not prevent companies from reporting such estimates as long as it is made clear that these are not Mineral Resources.
- 4. Secondly "The G4 estimates refer to in situ (In-place) quantities.", runs against UNFC-2009 definition of G4. It is only category F4 that defines in-situ quantities. It can be assumed that all quantities estimated are "potentially recoverable".
- 5. Sub-classes for Exploration Target are not defined in the CRIRSCO Template. It is suggested that if included, they should be in conformity with Generic Specifications R (Classification of quantities associated with Exploration Projects).
- 6. Roger Dixon and Harikrishnan Tulsidas will jointly develop a revised version of UNECE Energy Series 42 Annex III to be reviewed by the full TAG. Pending TAG approval, a new recommendation will be forwarded to the Bureau.

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

7. The GKZ previously advised that they are working on this project and expect to have a first draft available by 15 April 2015 but no further update has been received to date. The GKZ agreed to meet with a sub-group of the TAG in Geneva on Tuesday 28 April 2015 to review its progress towards development of a Bridging Document.

8. The meeting is set for Room A662, Palais des Nations, from 9:30 to 11:30 am. The GKZ will be sending a delegation of six staff to the April EGRC meeting. The TAG will be represented in this meeting by John Etherington and Per Blystad. John Etherington will contact other petroleum experts who will be attending the EGRC 6th session to solicit their participation.

Status Update: Renewables Generic Specifications - Alistair Jones

- 9. The final draft Generic Renewables Specifications have been reviewed by the Bureau. No further comments were given. The TAG recommendation was approved.
- 10. Working groups have been set up for Geothermal and for Bioenergy in order to develop commodity-specific specifications. These groups are making progress but draft documents are not imminent. The issues of Energy Product and Reference Point are being actively discussed in the Bioenergy Group. There are some challenges in deciding what can be reported as energy products.
- 11. The Task Force will present at the EGRC 6th Session on the generic specifications and responses to public comments, project status, the 2016/17 work programme, and the status of work relating to geothermal and bioenergy. There will be a lunch meeting of the Task Force on Wednesday 29 April.
- 12. Although Hydro, Solar and Wind projects are the more commercially mature among Renewables, work on those commodity-specific specification documents is currently on hold due to lack of "volunteer manpower" and will proceed once subject experts have been identified and task forces assembled.
- 13. The Geothermal Working Group organized a workshop in Washington on 5 March with the support of the IGA (International Geothermal Association)/ESMAP (Energy Sector Management Assistance Program) and the World Bank, who hosted the event, to progress development of the geothermal specifications. During the Workshop, it was apparent the geothermal community finds the G axis definition confusing and a number of experts have wrongly interpreted the F axis definition as being "technology driven".

Status Update: Specifications for the Application of UNFC-2009 to Injection Projects for the Purpose of Geological Storage - Per Blystad

- 14. A final draft from the Task Force, including the comments from the TAG, was sent on 18 February 2015 to the Bureau. The TAG recommended the same day that, when finalized, this document should be approved by the EGRC as a supplement to UNFC-2009. The Bureau approved this recommendation.
- 15. For Injection projects for the purpose of Geological Storage, the resource is the *storage potential* in a given reservoir available for geological storage. However, the Task Force did not reach consensus on the use of the term 'Storage Potential' as an expression of the resource. The proposal to use 'storage capacity' for the resource was not accepted by the Task Force.
- 16. The draft will be presented and discussed at the EGRC sixth session. Following the EGRC discussions and a public review, the TAG will receive the amended draft for final

comments. It is not clear if this process will be complete by the September deadline to submit document to the Committee on Sustainable Energy.

Review of TAG 2015 Annual Report – John Etherington

- 17. Version 7 of the TAG 2015 Annual Report as circulated on 11 March 2015 was approved by the full TAG. Amendments may be made if additional projects and or status updates are identified before early April.
- 18. There was a subsequent discussion regarding the potential to recommend changes to the original Terms of Reference (TOR) (attached). Portions of sections C, D and I that may be of concern are highlighted in blue. Section K outlines a process to annually review, and if required, recommend changes to the TOR.
- 19. The current Annual TAG Report states that: "Regards the original TOR, the production of case studies and designation as primary UNFC presenters at conferences and work sessions may be a problem given the workload and the additional travel costs. It is recommended that TAG members, along with Bureau and other EGRC members should share these assignments on an "as available basis".
- 20. The TAG chair believes that that the phrase "as needed" in the TOR is interpreted as relieving the TAG members from being "primary presenters" and the above section in the annual report just reinforces that intent. Thus, subject to further feedback from the members, no changes to the TOR are recommended at this time.
- 21. Section G in the TOR addresses funding issues. The Secretariat advised that no ECE funding is currently available to subsidize travel expenses associated with carrying out TAG responsibilities.
- 22. There was extensive discussion around the draft TAG presentation slides (version 9 March 2015) to be used at the April EGRC sixth session. Of specific interest are slides 13-21 that graphically illustrate the relationship of current and future bridging and specification documents and the TAG process in reviewing and approving these projects.
- 23. It was suggested to look at the slide sets created by the Communications Sub-Committee to ensure a common message. Further, it is premature to present detailed process to address consistency issues to the EGRC before reaching consensus on the message within the TAG.
- 24. TAG members were asked to critically review the presentation slides to confirm alignment with the annual report text and exchange ideas on alternative graphics by email. While the slides need not be finalized until our 28 April meeting, we should provide the Bureau with a preview by early April.

Other Business

25. The Secretariat has been contacted by Mr. Zwang Dawei (Director, Mineral Resources and Reserves Evaluation Center, Ministry of Land and Resources, PR China) regarding the potential to develop a Bridging Document between the Chinese Minerals Reserves and Resources Classification System (CMRRCS) and UNFC-2009 and the CRIRSCO Template.

This potential project will be discussed with representatives of the TAG during the April EGRC meeting.

26. The TAG has replied to requests by representatives of the Indian Oil and Natural Gas Corporation (ONGC) to advise on classifying and categorizing petroleum reserves and resources SPE-PRMS 2007 to UNFC-2009. The TAG Chair drafted a reply to the 5 March 2015 request; it was approved by the TAG and sent on 9 March 2015.

Next Meeting

27: The next meeting is scheduled for 28 April 2015 in Geneva prior to the EGRC sixth session. It will be held in Room A662 from 2:00 to 4:00 pm. Audioconference facilities will be made available.