Projects Interaction and Review Team Meeting: Carbon Sequestration Leadership Forum: London, UK 14th November 2006

Minutes of PIRT Meeting: 09:00-11:45

Location: Holiday Inn Kensington Forum 97 Cromwell Road, London

Present: J Bradshaw (AUS – Co-Chair), D O'Brien (EC– Co-Chair), N Otter (UK– Co-Chair), S Bachu (CAN), J Giove (USA), M Goel (IND), J Hake (GER), H Herzog (USA), J Karlsen (NOR), R Lynch (USA/Sec), A Patchett (AUS), B Reynen (CAN), P Sharman (UK)

Apologies: T Sundset (NOR) arrived late, N Otter (UK) left early.

1. Adoption of Chair of Meeting

- 1.1. Australia (John Bradshaw) chaired the meeting.
- 1.2. Annette Patchett (AUS) took the minutes for the meeting.

2. Membership of Core Group

2.1. No other countries have formally requested to join PIRT. Formally invited other CSLF members, especially developing countries, to join the PIRT, which was subsequently expressed verbally during the Technical Group meeting.

3. Last Meeting, San Francisco, 23rd August 2006

3.1. Notes from the informal PIRT meeting in San Francisco were accepted.

4. Additions to Agenda

4.1. JB (AUS) added discussion of the CSLF Action Plan as it relates to PIRT activities to the agenda (Item 10).

5. Gap Analysis

- 5.1. The Gaps Analysis has been constructed at a generic level for Capture, Storage and MMV.
- 5.2. NO (UK) advised that the spreadsheets were sent to the Floating Group several weeks ago with a 40% response rate from 17 CSLF responses
- 5.3. The responses need to be collated and there is a need to follow up nonresponses. This activity needs to be done by the technical groups (not the Secretariat) and divided into Capture, Storage and MMV. Action Item 12.1.1
- 5.4. (Note : unsure of FRIO contact and there has been no response from this project.) Action Item 12.1.2
- 5.5. To collate the respective responses to the Gaps Analysis; Australia offered to take lead with Storage, EC for Capture and Canada for MMV. Action Item 12.1.1
- 5.6. Goal is to receive all responses by the end of November and NO (UK) will distribute responses to the Core Group and also will need to send to Floating

Group with a high level commentary before the end of the year. Action Item 12.1.1

- 5.7. Need to identify individuals who will address the Gaps Analysis outcomes at the Workshop meeting in Paris. Action Item 12.1.3
- 5.8. There was discussion around how to use the Gaps Analysis data to impact on the Paris Workshop planning and the mix of technical versus policy issues and the relevance of the Workshop to the recognised projects.

6. Future Project Meeting At Next CSLF PG/TG Meeting in Paris in April 2007

- 6.1. (Note: The following is almost a transcript of ideas as there was a lot of varying views expressed as the ideas evolved and so the notes reflect those differing opinions on this topic to help its ongoing development.)
- 6.2. Number of ideas put forward as to what Workshop should be about. Eg. Deliverables from projects, possible themes relating to gaps analysis, want to hear about problems and lessons learnt and gaps addressed, strong technical basis of interesting talks.
- 6.3. Other ideas were that we are dealing with mixed group of people who want to be educated and should have a policy perspective to the talks.
- 6.4. Suggestion that should divide meetings into sessions with members of PIRT chairing sessions, and have those chairs work one on one to guide both the session and the individual presentations.
- 6.5. Issues were raised that not all projects could present talks and it should be open for discussion with technical group to develop agenda for Paris.
- 6.6. Suggestion that could start with PIRT introduction talk regarding the Gaps Analysis and what projects are addressing, and then break into successive sessions on Capture, Storage and MMV with several projects to present in each session, then discussion about projects and gaps, then sum up with way forward.
- 6.7. Policy talks could be put at the end to make policy people stay for technical discussions.
- 6.8. Agenda should be flexible with 5 to 10 talks focussing on quality not quantity, thus perhaps only half of the projects might be invited to participate formally.
- 6.9. Suggested that there should be a Developing country representation, to showcase work or provide encouragement for the activity that is happening in those countries, such as Source / Sink matching in Brazil which is a key storage gap.
- 6.10. Suggestion made that should focus on economic gain from storage.
- 6.11. One option may be to cluster projects to give a group presentation on their common topic so as to force collaboration between the projects i.e. one project representing 2 or three others on e.g. pre-combustion gaps and technology advances.
- 6.12. Comments made that need to think about how to structure Workshop so as to allow for quality not quantity, direct messages and content to the policy group as well, and make policy group aware of what the policy issues are but from a technical view.
- 6.13. Several suggestions made as to the need to keep a focus on "value adding" for the CSLF recognised projects. One perspective that was suggested for this was to allow the projects to identify their key obstacles with the policy group present, but also to ensure that the Policy Group see that projects are trying to

solve problems, have them talk about their methodology for solving problems, and that this would be a good message for policy makers.

- 6.14. A suggestion was to call it a "Deployment workshop", or "Main Barriers to Deployment", and if Policy People attend and give feedback to projects then that would be important value adding for the projects.
- 6.15. Suggestion that session chair give talk at beginning of each session. 'Why is this session policy relevant?' 'Why/how is this gap relevant to policy?' Expressed that we can't dumb it down, as policy people need to be able to listen to a certain amount of technical information.
- 6.16. Suggested that need more interaction and interface with policy issues, and that these should be core part of the meeting. But in response; If that is so, the Technical Group/PIRT shouldn't be involved in organisation of the Workshop. Some technical messages are important to convey to policy makers. Draw on importance/relevance of technical issues.
- 6.17. It was suggested that we should pair two co-chairs for each session 1 technical and 1 policy so as to get them both involved from the beginning. All agreed this was an excellent idea, and thus need at least 4-5 policy people involved, and need to get the right policy person involved. There will be challenges involved with this, and there will be the need to get them together to make a single presentation.
- 6.18. Suggested we need to be careful about how technical content is presented so as to include 'policy hooks', and to ensure the presenters are briefed by cochairs as to how to incorporate policy hooks, and to rename themes from technical to something more policy orientated eg. MMV – public health and safety / economics.
- 6.19. Final suggestion is to have a later phone hook up to get working party together for this. Action Item 12.2.1 and 12.2.2

7. CSLF Project Issues & Project Recognition Guidelines

- 7.1. The reason for addressing the issue of the project recognition guidelines were reviewed by JB (AUS), and the desire in TG and PIRT Meetings in New Delhi to revisit them with a view to improvement of the process and the documentation.
- 7.2. A variety of issues were then reviewed, of the options that have been put forward to deal with them in the new submission form designed by the CSLF Secretariat based on the recommendations from JB (AUS), and described in the meeting document CSLF-T-2006-11.
- 7.3. Question was asked if a project at end of outputs ceased to be a CSLF project, or does it continue to be recognised? Responses were that some projects are already finished, and that finished projects should still be recognised projects but be under a category of "completed projects" versus the others that are "active projects".
- 7.4. Issue arose as to whether and how we consider new phases of projects, and that they need to reapply for recognition and thus will need to resubmit applications (eg Frio 2).
- 7.5. Suggested that PIRT approach Frio 2 to apply for recognition before Paris, and that PIRT should be proactive in seeking recognition if they consider them worthwhile projects. Action Item 12.3.1
- 7.6. Issue was raised as to how to deal with projects that diverge and are not meeting agreed outcomes/outputs. Point was raised that whilst we could

consider whether to do this, at a practical level the documentation as to what the agreed outputs are supposed to be is so poor and variable, it would be difficult to mount a case. This is why the new project recognition submission form has been designed so that information is well documented and then options exist for the PIRT to review project progress.

- 7.7. Suggestion was made that if a project evolves in a new direction after CSLF recognition, then the project should be reconsidered in terms of being "delisted". But the contrary view was expressed that they should be encouraged to approach the CSLF with a view to having that alteration recognised rather than imposing strict "delisting" rules.
- 7.8. Questions were raised about whether projects should report to the PIRT (perhaps annually) but at this stage the burden of identifying project activity and reporting is on the PIRT not the projects themselves i.e. there are no specific reporting requirements to the CSLF at all for a recognised project. But the PIRT must report regularly (including annually) on its activities which presumably include the status of recognised projects. See 13.1
- 7.9. It was generally agreed that it would be desirable that there be some form of reporting process but that it could not be automatic under current arrangements as that was never the intention for recognised projects, nor included in any direct manner in the recognition criteria.
- 7.10. Question arose as to whether there should be a limit to CSLF recognised projects which are accepted, and if already recognised CSLF projects are addressing gaps, how do we manage duplication? In response the point was made that not all of a project will necessarily be recognised; only components of projects which are addressing gaps may/are come forward, and that if they are not addressing gaps then they won't meet recognition criteria.
- 7.11. Suggested that duplication not necessarily a bad thing, some advantage in this, provided they have slightly different approaches to validate/invalidate various methods.
- 7.12. Issue was raised that original project recognition guidelines don't make mention of addressing gaps so this is a retrospective aspect? The response was that the CSLF Charter is entirely consistent and compatible with the approach in the project recognition submission form. See 7.14 and 7.15 and 13.2
- 7.13. The point was raised that the CSLF recognition process must maintain integrity, and projects must help us to better understand CCS, and that the Policy Group will want a discrete number of manageable projects. However response was that the Gaps Analysis is already showing there are lots of gaps not being addressed, so technically we could accommodate many projects.
- 7.14. Concern was raised as to how we deal with a project that is submitted for recognition that is not addressing a gap. It was suggested that it will sort itself out as the way the submission form is written now, many projects won't apply because they will realise they are not addressing unique aspects of the technology, but that we should accept a project as long as the gap still exists and has not been resolved. See 13.2
- 7.15. Questions were raised as to whether the Policy Group needed to approve the recognition form. A response was that the submission form is consistent with both the CSLF charter and the original recognition criteria, and the information that is required to fill in the submission form is there to help document the project objectives, keep the Gaps Analysis evergreen, and

streamline the submission process. The metrics implied within the submission form will assist the selection process, allowing for the fact that the onus is on the Project proponent to provide information to assist the PIRT decide upon recognition. Thus the form is not creating any new recognition criteria, and as such Policy Group approval has not been sought.

8. Recommendations for Technical Group

- 8.1. A series of recommendations were agreed upon to present to the TG meeting later in the day, being;
 - 8.1.1. Issue invitation for other CSLF members to join PIRT
 - 8.1.2. Accept Strategic Implementation Report : PIRT
 - 8.1.3. Accept Gaps Analysis
 - 8.1.4. Accept and implement guidelines attached to project recognition for all new projects
 - 8.1.5. Accept new project submission form to alleviate shortcomings of previous process
 - 8.1.6. Statement with regard to Action Plan and its implementation

9. Other PIRT Issues

- 9.1. Rotation Of PIRT Chair
 - 9.1.1. Discussed that under the PIRT guidelines there is the opportunity to rotate 1 of the 3 co-chairs on an annual basis and that having officially formed the PIRT in April 2006 in New Delhi, then if a Member country would like to nominate for a co-chair role, they should express that interest prior to the PIRT meeting in Paris in April 2007.

10. CSLF Action Plan - PIRT Activities List

- 10.1. JB distributed a chart of the action plan timetable (attached) as it relates to the PIRT and a discussion followed that indicated that there was a significant workload identified for the PIRT, and that the timeframe to complete the tasks was unrealistic.
- 10.2. Between 7 and 9 items are required to be delivered by the PIRT in the next 12 months, additional to the tasks already assigned to the PIRT by the Technical Group, and additional to contributing to organisation of the Paris Workshop.
- 10.3. Despite the merits of the individual tasks and the need to have them done, there was discussion as to whether; some items were already happening by various means, some could be done by other means not directly by the PIRT, some would have to be delayed.
- 10.4. Several items were also discussed in terms of the ambiguity of the task (e.g. 1.1 Key Definitions for CCS) and that clarification should be sought from the Technical and/or Policy Group.

11. Venue for next meeting

11.1. TBC – most likely by phone hook-up

Meeting declared closed at 11:45.

The following Action Items were identified from the minutes.

12. Action Items

12.1. Gap Analysis: Items 5.3 to 5.7

- 12.1.1. Collate responses and follow up non-responses and distribute to Core Group and to Floating Group (UK, EC, AUS, CAN)
- 12.1.2. Follow up on Frio Project contact (USA/Sec)

12.1.2.1. Frio Project: Susan Havorka - University of Texas <u>susan.havorka@beg.utexas.edu</u> http://www.cslforum.org/documents/FrioProject.pdf

12.1.3. Identify Speaker to address compiled Gaps Analysis at Paris Workshop.

12.2. <u>Future Project Meeting At Next CSLF PG/TG Meeting in Paris in</u> <u>April 2007: Item 6</u>

- 12.2.1. Synthesise ideas from the PIRT discussion as detailed herein and present back to TG Chair and Vice-Chairs (UK, AUS, EC)
- 12.2.2. To follow up with a phone hook-up to discuss this item further, using the working group (suggested within the later TG meeting) of chairs, vice-chairs and co-chairs of TG and PIRT (NOR, CAN, IND, AUS, UK, EC).
- **12.3.** CSLF Project Issues & Project Recognition Guidelines: Items 7.5 12.3.1. Frio 2 project be approached to apply for recognition before Paris. (USA/Sec)

13. Post Meeting clarifications and comments on some issues raised at meeting.

- 13.1. Item 7.8 (JB post script addition): The "annual" PIRT Project Workshop is clearly a mechanism that is a formal process and that projects can participate in if they wish. Another obvious and simplified manner of reporting may revolve around the gaps analysis and we could "annually" ask for the Projects to update their status against the gaps they say they are addressing. This would be consistent with the CSLF charter of fostering technology development and would be clearly within the PIRT's domain of maintaining the Gaps Analysis in an evergreen status.
- 13.2. Item 7.14 (Post Script edit JB): If comments in 7.14 are true, then if there are projects that are enthusiastic about being recognised with the CSLF and want to improve their likelihood of success, they will endeavour to structure at least part of their program to address unique technology gaps – which would be a good outcome. Also, under Section 2.3 of the CSLF Charter, if the CSLF members deem that recognition of a specific project is consistent with the meeting of their priorities, then the CSLF will move to have it recognised. Currently the implied suggestion under the submission guidelines is that "member priorities" will often relate to technology development aspects such as the Gaps Analysis, but clearly it could be nontechnical policy priorities as well, such as the importance of capacity building. Also the impact of considering Gaps Analysis as a metric in project selection could be considered to be slightly stronger than the wording in the

Charter, which repeatedly refers to "improvements" in technology, not "new" technology. So it would come down to considering, is an "improvement" in technology filling a gap or not, and the answer to that depends on what the gap is.

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John Bradshaw

30th November 2006