

NATIONAL PETROLEUM COUNCIL
CONFERENCE CALL MINUTES
OF THE
COORDINATING SUBCOMMITTEE (CSC)
OF THE
NPC COMMITTEE ON CARBON CAPTURE, UTILIZATION, AND STORAGE (CCUS)

Via WebEx
July 24, 2018
1:00 p.m. (CDT)

The following individuals were in attendance:

CSC MEMBERS

Cindy A. Yeilding, Chair	– BP America Inc.
Jarad Daniels, Assistant Government Cochair	– U.S. Department of Energy
John H. Guy, IV, Secretary	– NPC Staff
Scott Anderson	– Environmental Defense Fund (EDF)
Jeffery Bobeck	– Center for Climate and Energy Solutions (C2ES)
(for Robert W. Perciasepe)	
William Elliott	– Bechtel
Jason W. Fraser	– Valero Energy Corporation
Fiji George	– Cheniere Energy, Inc.
Pierre Germain	– Total
Jan W. Mares	– Resources for the Future Inc. (RFF)
Jean-François Poupeau	– Schlumberger Limited
Guy A. Powell	– Exxon Mobil Corporation
Leslie Savage	– Railroad Commission of Texas
Desikan Sundararajan	– Equinor ASA
(for Steinar Eikass)	
William Swetra & Al Collins	– Occidental Oil and Gas Corporation
(for Joseph C. Elliott)	

TASK GROUP CHAIRS

Giovanni Dubon & Akos Losz	– Columbia University
(for Jason Bordoff)	
Roxann Walsh	– Southern Company

OTHERS

Kristin Drew	– Williams Companies
Nancy L. Johnson	– U.S. Department of Energy
Hyder Kazimi	– McKinsey & Company
Sally Kolenda	– BP America Inc.
Marshall W. Nichols	– NPC Staff

Greg Santoni
James A Slutz
Jane Stricker
D. Brian Williams

– McKinsey & Company
– NPC Staff
– BP America Inc
– BP America Inc.

Item 1: Roll-Call and Antitrust Reminder. Mr. Guy conducted a roll-call of participants and provided an antitrust reminder noting the previous distribution of NPC Antitrust Guidelines.

Item 2: Introductions and Meeting Agenda. Ms. Yeilding, Chair of the Coordinating Subcommittee (CSC), opened the meeting by welcoming those present and noting that Mr. Powell had been formally designated as a member of the CSC. She reminded the group that this was a bi-weekly CSC conference call and that such would be held every two weeks between in-person CSC meetings. She then reviewed the agenda for the meeting (Attachment 1).

Item 3: Study Committee Status and Next Steps – Ms. Yeilding reported that the Committee's membership had been proposed and reviewed by Mr. Minge', Chair of the study. She stated that the Committee served multiple functions for the study:

- Approve the Study Plan
- Provide staffing resources for the study's working groups
- Receive updates and provide guidance during the course of the study
- Review and comment on the study's proposed final draft report
- Assist in post-report-approval presentations

Mr. Nichols, Executive Director of the NPC, then reviewed the next steps for the Committee:

- Similar committee proposal is being developed for the concurrent NPC study on U.S. oil and gas transportation infrastructure
- Proposals for both study committees would be submitted to the NPC Appointment Committee for approval to ensure that the proposal is balanced.
- Proposals for both study committees would then be forwarded to the DOE for its concurrence.
- Then, the NPC Chair will formally appoint the study committees.

Item 4: Overview of McKinsey Initial Engagement. Mr. Williams reported on the plans for McKinsey & Company to provide support to the study (Attachment 2, updated post-meeting version) and introduced the McKinsey team on the call:

- First Phase of support: Seven-week period starting in early August involving interviews with companies on the NPC study. Purpose is to kick-start the study work, not to preempt the work of the study teams, and to identify gaps for the task groups to examine.
- McKinsey team:
 - Greg Santoni, Project Manager
 - Hyder Kazimi, Houston Partner

Mr. Santoni, reviewed the two slides that provided an overview of the planned McKinsey & Company support of the study (Attachment 2, updated post-meeting version):

- First Phase, August 6 – September 21: Seven-week period involving interviews with companies on the NPC study and potentially others. Deliverable will be a 30-page slide pack, which can serve as a roadmap for the next 12 months of the study work.
- Second Phase: Support task group/ integration workshops
- Third Phase: Assistance with development of the study's Roadmap to CCUS Deployment.

In response to CSC questions, Mr. Williams added:

- First Phase will involve a larger number of interviews that originally discussed.
- Those to be interviewed in the first phase work included CSC Members, Task Group Leads, DOE and others from outside of the study. Mr. George noted that the National Academies of Science were working on various aspects of CCUS. CSC participants were encouraged to send suggestions to Mr. Williams.
- Modeling structure of physical and economic flows will involve the development of descriptions of:
 - Physical flows: Size of point sources, midstream infrastructure, and ultimate uses
 - Economic flows: Economic costs

Item 5: Task Group Government Cochairs. Mr. Daniels reported that DOE was designating the following individuals from the Department to serve as the Government Cochairs and alternates for the study's task groups:

- Energy and Emissions Landscape: Ann Satsangi, with Chuck Zelek as the alternate
- CCUS Technology: John Litynski, with Darin Damiani as the alternate
- Enabling Factors: Sarah Forbes, with Anhar Karimjee as the alternate
- Roadmap to Deployment: Mark Ackiewicz, with Anhar Karimjee as the alternate

Item 6: Task Group/Subgroup Engagement Update. Ms. Yeilding then called on the task group leaders to report on the status of their task group/ subgroup activities:

- **Energy & Emissions Landscape Task Group.** Mr. Dubon report for Mr. Bordoff:
 - Invitations to participate on the Task group had been issued to about 12 individuals and were still waiting for about 2 responses
 - Task Group assignments were in the process of being made.
- **CCUS Technologies Task Group.** Ms. Walsh reported:
 - Recruitment of Subgroup leads:
 - **Capture:** Mr. Herzog, MIT, declined to lead the Subgroup, discussing other options
 - **Transport:** Mr. Cole, Denberry, will lead the Subgroup
 - **Use:** Discussing options
 - **Storage:** Ms. Benson, Stanford, and Mr. Esposito, Southern Company, will lead the Subgroup
 - **Enhanced Oil Recovery (EOR):** Ms. Russell & Mr. Barrett, Occidental Petroleum, will lead the Subgroup
 - The Technologies Task Group is scheduling a technology workshop on September 18 in Birmingham, Alabama (further discussion below under Calendar of Meetings).
- **Enabling Factors for Deployment Task Group.** Mr. Powell reported:

- Mr. Gunn, ExxonMobil, will chair this Task group.
- Recruitment of Subgroup leads:
 - **Policy, Regulatory & Legal:** Ms. Savage, TRRC, will lead the Subgroup
 - **Stakeholder Engagement:** Ms. Greenberg, Illinois Geological Survey, will lead the Subgroup
 - **Value Chain/ X-Industry:** Mr. Arya, IHS Markit, will lead the Subgroup
- Ms. Johnson suggested that Michael Paque, Ground Water Protection Council, would be a good participant in the Task Group's work.

Item 7: Study Logistics.

- **Calendar of Meetings.**
 - August-September – CSC bi-weekly teleconferences will continue for the near future
 - September 18-20 – CSC will participate in the following in-person sessions in Birmingham, Alabama:
 - September 18, morning: CSC meeting to receive feedback on phase one of McKinsey's work – interview findings
 - September 18, afternoon: NPC CCUS Technology Task Group's technology workshop
 - September 19-20: Southern Company and the Global CCS Institute's Forum entitled "Bridging the Gap: Carbon Capture Technology and Development" (Attachment 3, Forum invitation).
- **Collaboration/Share-Point Site for CCUS Study.**
 - Ms. Stricker reported that the current NPC Infrastructure study's OneNote collaboration/ share-point site and the similar sites used by prior NPC studies are being investigated to determine the most appropriate platform for the CCUS Study's site.
- **Guidelines and Templates for CCUS Study.**
 - Ms. Stricker stated that NPC editorial/ graphics guidelines and report templates will be distributed to the Task Group leaders and will be posted on the collaboration site when it is operable.

Item 8: Adjournment. The discussions were completed at 2:12 p.m.

Respectfully submitted,

John H. Guy, IV
Secretary

Attachments

NOTE: All attachments referenced in these minutes will be posted on the CCUS study collaboration/ share-point site when it is operational.