CCOP - DMF Project on Petroleum Resources / Reserves Classification and Reporting System

3rd Workshop: Maximizing the value of oil and gas resources (coded S5)

Grand Mercure Bangkok Hotel, 8-10 Sep 2015

Introduction

The 3rd Workshop of the CCOP-DMF Project was successfully conducted at the Grand Mercure Hotel in Bangkok on 8-10 Sep 2015. The CCOP - DMF Project is conducting a series of capacity building workshops related to petroleum resources and reserves classification system and reporting. The workshops are participated by representatives from the Government oil and gas upstream regulators, national oil/gas companies, research organizations, academia, and serves as a forum for CCOP member countries to share their experiences and best practices in the overall oil and gas resource management system - the workflow, data analysis, capacities developed, planning and reporting system used. The activities also leveraged on the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources (UNFC 2009) and availability of the Expert Group on Resource Classification (EGRC) where the CCOP Technical Secretariat, Thailand, China, Vietnam and some of the member countries are actively participating. Topics on the use of UNFC 2009 for Injection Projects such as CO2 geological storage were also presented and discussed in the workshops.



Participants

A total of 51 participants from the Cambodia, China, Indonesia, Korea, Lao-PDR, Malaysia, Philippines, Vietnam and Thailand. The number also includes the participation of ASCOPE members, from various petroleum-related organisations in Bangkok and CCOP Technical Secretariat staff.

The Opening address of Dr Adichat Surinkum, Director of CCOP TS (delivered by Mr Sim Caluyong of CCOP TS), emphasized the importance of sharing of knowledge and best practices in oil and gas resource management. He also reminded the participants to take advantage of the presence of experts in the workshop and find new ways for further collaboration. The opening remarks by Dr Phumee Srisuwon, Head of Petroleum

Management Bureau, DMF, highlighted the importance of sharing the experiences and best practices in maximising the value of oil and gas resources by the member countries with presentation of case studies. It is also an effective way to learn and develop further the capacities of the participants in reporting of petroleum reserves.

Sharing of Best Practices

As in any CCOP Workshops, S5 provided a forum of sharing best practices and this time on maximizing the value of oil and gas resources from the experiences of the member countries and invited organisations from cooperating countries. Resource persons were invited from Malaysia, Indonesia, China, Norway and Australia) to share their best practices. The other CCOP member countries (Vietnam, Thailand and Philippines) also shared their experiences and updates related to the subject matter.

Mr Mat Arifin Ismail, senior manager of Malaysia Petroleum Management Unit, PETRONAS, delivered another presentation on the Malaysian reporting system focusing mainly on how they prepare their data and timelines, how data is obtained and expertise required to do the job. In addition, he elaborated the Field Development Plan (FDP) process, the technical assurance and approval procedure involved. The maturation of resources to reserves was also highlighted with some field examples for better understanding - here, the sharing of best practices on the strategy of the Malaysian government for maximizing project economics and reserves was well appreciated by the participants. Mr Mar Arifin, was also invited by DMF management for a special half-day session with their staff at the DMF headquarters.

Mr Oki Hedriana of LEMIGAS, Indonesia shared their practices on how they obtain data from operating companies, what they would do with the data, the approval process of Plan for development and Production (PDP), the roles and responsibilities of various government agencies, the classification and reporting system in Indonesia. Indonesia also uses the PRMS system in reporting their reserves/resources , with some modifications. The presentation also included the fiscal regime and the various actions from the government to obtain additional reserves.

Dr Li Guangchao of SINOPEC, shared their company's strategies to maximise the value of resources and recovery of oil and gas resources. Research on technology application is an important task for SINOPEC, as one of the large national oil and gas

company of China. Currently, the research is focused primarily on efficiency of water flooding and infill drilling. There also on-going research on use of chemical and CO2 gas for IOR/EOR as well as on improving current practices. All the research works leverages on SINOPEC's large data base, expertise, and many networks not only within China but also overseas.

Ms Allison Hortle of the Commonwealth Scientific and Industrial Research Organisation (CSIRO)- Australia, presented how the collaborative works between the government, science organisations and industry are delivering the goals of sustainable development of oil, gas and fuel resources in Australia. We also learned of the many overlaps by many agencies/organizations particularly on technology research, but these are also complimentary with the view of delivering the resource value and emission reductions for Australia. Also presented and discussed are some case studies on maximising value from historical pressure data using PressurePlot and PressureQC to understand in-situ pressure. Understanding in-situ pressure is a key aspect of exploration and production of petroleum resources. The database (with quality control) and PressurePlot link was provided as free download - for further testing and use of the participants.

Mr Arvind Osthus of the Norwegian Petroleum Directorate, reiterated the importance of team work and collaborative efforts between the Government, Science and Industry in order to maximise the value of oil and gas resources. The Norwegian reporting and classification system has been presented a number of times in CCOP workshops and we learned that it has gone through several process of review and revisions with important inputs from industry and other scientific organizations. The presentation highlighted the four important factors that resulted in increased oil production in Norway, as follows:

- Managed to maintain the reservoir pressure due to water/gas injection from the start up of most fields
- Drilled more production wells than originally planned in the plan for development and operation (PDO)
- Systematically and continuously collected new information to improve the understanding of the reservoir, and adapt plans to new information
- Focus on R & D and Technology development.

Summary and Conclusions:

1. Petroleum classification system and reporting in CCOP countries is aligned to the PRMS systems, with some modifications according to the country setting/needs. The PRMS is aligned to UNFC 2009, and therefore, UNFC can be use by the countries for reporting energy and injection projects.
2. Collaboration of Government, Science and Industry is a key factor in maximising the value of oil and gas resources.
3. Government shall continue to collect new information and develop its capacities to improve the understanding of the reservoir, and make actions based on new information.

A 1 day field trip was organized by the CCOP TS and DMF to visit some cultural places of interest in Bangkok.