Disclaimer:

DOE is waiting for McKinsey to provide documents and information that can be publicly shared. This memo discloses information discussed during the meeting, pursuant to the Department's transparency commitment for the DOE-QTR, and will be supplemented by McKinsey provided documents when they are received.

Document received by DOE from McKinsey: A "discussion document" titled "Decarbonization pathways for the United States" (confidential and proprietary). DOE continues to wait a non-proprietary document from McKinsey for public dissemination.

Subject: McKinsey provided briefing on recent work and indicated potential connection with QER

Date: Feb 16, 2011

List of External Attendees:

Jon Wilkins (McKinsey) Stefan Heck (McKinsey) Rob McNish (McKinsey)

List of DOE Attendees:

Dr. Steven Koonin Dr. Asa Hopkins Cynthia Lin

Description

McKinsey requested a meeting with Dr. Koonin as a result of the PCAST recommendations for the QTR to begin immediately at the Department level. McKinsey is interested for two reasons:

- 1) McKinsey has had experience helping DOD on its QDR efforts. McKinsey has also had experience dealing with energy strategy issues for the US military coming out of the QDR.
- 2) McKinsey feels it has relevant expertise in areas useful to the QTR: ongoing research and work on the global economics of carbon abatement and renewable, financing, engagement, document-pulling.

Dr. Koonin's intent is for the QTR to be framed using facts and principles. The QTR effort currently does not have means to hire external consultants, but DOE is mindful of McKinsey's expertise and welcome external critique.

McKinsey discussed portions of their presentation. The first portion focused on a recent project on how the EU could meet an 80% GHG reduction goal by 2050. This project used a McKinsey model to determine the clean power requirements in each EU country to meet that goal. The second portion centered on McKinsey's Low Carbon Economics Toolkit, developed in

partnership with a number of sponsors (the technical specifications of the tool were published in March 2010).

McKinsey proposed a potential project in which its LCE Toolkit could be used to support and guide DOE's first Quadrennial Energy Review:

- o Roadmaps for key energy technologies
- o Portfolio assessments laying out optimal deployment of resources
- o Funding needs for critical technologies
- o Prioritization of demonstration projects
- o Identification of policy gaps
- o Plan for involvement of natural laboratories

The LCE Toolkit would provide facts that can be used to prioritize technology goals. It is able to:

- Identify key cost/performance levels required for widespread rollout of new energy technologies
- o Quantify benefits of breakthroughs in costs or performance criteria
 - GDP, jobs, energy security, power prices, balance of trade, GHG, emissions
 - Results available at state and industry levels
- o Allow consistent comparison across technologies
- o Highlight barriers preventing wider adoption of critical technologies