Interoffice Correspondence

Massachusetts Institute of Technology
Department of Chemical Engineering

Memorandum to: Team 2 – Group Members

From: Gregory J. McRae

Subject: Assignment of ICE Design Topic Spring 2006

Date: 27th February 2006

Dear Team 2 – Group Members:

One of the challenges in reducing emissions from electricity generation is to remove the CO_2 from the flue gas. Most of the existing power plants in the US and for that matter around the world do not have any CO_2 capture technologies installed. One proposal is to use Integrated Gasification Combined Cycle (IGCC) as a way to reduce CO_2 emissions. IGCC also offers the potential to reduce other pollutants like NO_x, SO_x and Hg. Much of the current debate is focused on CO_2 your assignment is to see if IGCC is a good way to control the other pollutants as well. You task for this next week is to develop a suitable option and develop a plan of attack.

You are not to discuss with your class mates either the technology you have been asked to evaluate or your findings as you progress with your designs. A separate handout describes the structure of the final report.