NATIONAL PETROLEUM COUNCIL

DRAFT

Future Transportation Fuels Study

Integrated Model Set User's Guide

June 20, 2012

This is a working document solely for the review and use of the participants in the National Petroleum Council's Future Transportation Fuels Study. Data, conclusions, and recommendations contained herein are preliminary and subject to substantive change. This draft material has not been considered by the National Petroleum Council and is not a report nor advice of the Council.

DO NOT QUOTE OR CITE

The Integrated Model Set refers to seven Excel workbooks used for the highest-level of analytical modeling work in the Future Transportation Fuels Study (FTF Study) of the National Petroleum Council. The FTF Study included many more sub-models at the detailed working level, but results from those sub-models have been hard-coded into these seven workbooks such that all information needed to perform an analysis "run" is self-contained.

The seven files comprising the Integrated Model Set are

- 1. matrixCollection.xls
- 2. Inputs.xls
- 3. VCM.xls
- 4. VISIONbase.xls
- 5. VISIONhigh.xls
- 6. VISIONlow.xls
- 7. CaseResult.xls

Figure 1 provides a description of each file and shows the data flows that take place between files through macro execution (read / write) or links (read).



Figure 1 – Integrated Model Set Files and Data Flow

Steps required to execute a run of the integrated model are

- 1. Save all seven files to a common folder location
- 2. Open all seven files
- 3. Run the <u>GenerateOutputs</u> macro (Developer ... Macros ... [select] ... Run)

Points to keep in mind when using the Integrated Model Set

- 1. Cases listed in the matrix worksheet of matrixCollection.xls will be included in the run and results will be written into the Collection and CollectMktSh worksheets of the same file.
- 2. If the case list is shortened, then existing data in the Collection and CollectMktSh worksheets should be deleted prior to running. This will avoid any confusion between the new data from the current run and old data from previous runs that might not be overwritten.
- 3. The entire set of cases used in the FTF Study requires up to 4 hours of run time
- 4. The macro in matrixCollection will produce an error if the files are launched in different instances of Excel (Visual Basic cannot see across different instances to read / write data). To ensure all seven files are in a single instance, launch Excel first and then open the files from within Excel (File ... Open ...)