Indirect Coal Liquefaction Plant
Western Kentucky

1.0 STATUS OF STUDIES

The current status of all planned studies is summarized by study number.

1.1 PROCESS DEVELOPMENT STUDY NO. 1 - HALF SIZE PLANT STUDY

This study was finished to the draft stage, at which time work was superseded by Process Development Study No. 26A. Refer to Section 2.1 for the draft copy of Study No. 1.

1.2 PROCESS DEVELOPMENT STUDY NO. 2 - METHANOL/SNG PRODUCTION

This study is complete and included in Section 2.2.

PROCESS DEVELOPMENT STUDY NO. 3 - ECONOMICS OF EXPORT POWER GENERATION

This study is complete and included in Section 2.3.

1.4 PROCESS DEVELOPMENT STUDY NO. 4 - OPTIMIZE OIL WORKUP

This study was deleted and included in the normal development of the Fischer-Tropsch design.

1.5 PROCESS DEVELOPMENT STUDY NO. 5 - AIR/WATER COOLING BREAKPOINT

This study is complete and included in Section 2.4.

1.6 ENGINEERING DEVELOPMENT STUDY NO. 6 - COMPARISON OF MECHANICAL AND NATURAL DRAFT COOLING TOWERS

This study is complete and included in Section 2.5. Additional work on cooling systems can be found in Process Development Study No. 27A (Volume 11C, Section 4.2.14).

1.7 PROCESS DEVELOPMENT STUDY NO. 7 - FLARE STACK STUDY

This study was cancelled. No work was performed.

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- 1.8 PROCESS DEVELOPMENT STUDY NO. 8 STORAGE REDUCTION
- This study was cancelled. No work was performed.
- 1.9 PROCESS DEVELOPMENT STUDY NO. 9 MATERIAL SELECTION PHILOSOPHY

This study was cancelled. No work was performed.

- 1.10 PROCESS DEVELOPMENT STUDY NO. 10 RIVER INTAKE VS RANNEY WELLS
- This study is complete and included in Section 2.6.
- 1.11 STRUCTURAL DEVELOPMENT STUDY NO. 11 CONCRETE VS FIREPROOFED STRUCTURAL STEEL
- This study is complete and included in Section 2.7.
- 1.12 ELECTRICAL DEVELOPMENT STUDY NO. 12 ABOVEGROUND VS UNDERGROUND ELECTRICAL
- This study was cancelled. No work was performed.
- 1.13 PROCESS DEVELOPMENT STUDY NO. 13 UPGRADE CREOSOTE TO DIESEL
- This study is complete and included in Section 2.8.
- 1.14 PROCESS DEVELOPMENT STUDY NO. 14 USE CREOSOTE AS FUEL
- This study was cancelled. No work was performed.
- 1.15 PROCESS DEVELOPMENT STUDY NO. 15 ETHANE/ETHYLENE TO SALES
- This study is complete and included in Section 2.9.
- 1.16 PROCESS DEVELOPMENT STUDY NO. 16 SELL PROPYLENE IN LIEU OF JET FUEL
- This study was cancelled. No work was performed.

1.17 PROCESS DEVELOPMENT STUDY NO. 17 - CO, COMPRESSION FOR ENHANCED OIL RECOVERY

This study is complete and included in Section 2.10.

1.18 PROCESS DEVELOPMENT STUDY NO. 18 - NITROGEN COMPRESSION FOR ENHANCED OIL RECOVERY

Work was suspended on this study after preliminary economic studies by TSSC were completed. A draft copy is included in Section 2.11.

1.19 PROCESS DEVELOPMENT STUDY NO. 19 - SEPARATE BENZENE FROM LURGI NAPETHA

This study is superseded by Case 7R9, Study 27A.

- 1.20 PROCESS DEVELOPMENT STUDY NO. 20 UPGRADE C, ALCOHOLS
 This study was cancelled. No work was performed.
- 1.21 PROCESS DEVELOPMENT STUDY NO. 21 ALCOHOL FOR DIRECT SALES/BLEND

This study is complete and included in Section 2.12.

1.22 PROCESS DEVELOPMENT STUDY NO. 22 - PRODUCE SYNCRUDE FOR BLENDING

This study was cancelled. No work was performed.

- 1.23 STRUCTURAL DEVELOPMENT STUDY NO. 23 BARGE DOCK STUDY
 This study was not started. Refer to Volume 4A,
 Section 1.4.4 Appendix IV for preliminary work.
- 1.24 PROCESS DEVELOPMENT STUDY NO. 24 ASSAY FOR SYNCRUDE This study was cancelled. No work was performed.
- 1.25 PROCESS DEVELOPMENT STUDY NO. 25 UPGRADE ALCOHOLS TO ASTM SPECIFICATIONS

This study was cancelled. No work was performed.

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- 1.26 PROCESS ALTERNATIVES STUDY NO. 26A CASE 1-12, 1R-8R
 This study is complete and included in Volume 11B.
- 1.27 PROCESS ALTERNATIVES STUDY NO. 27A CASES 7R1 7412
 This study is complete and included in Volume 11C.
- 1.28 STRUCTURAL DEVELOPMENT STUDY NO. 28 SOLID WASTE DISPOSAL STUDY

This study was not completed. A preliminary copy is included in Section 2.13