

## **Pacific Ethanol Magic Valley, ID CA-GREET Model**

The applicant has conducted its analysis of direct effects on carbon intensity for this pathway using CA-GREET, v.1.8b (Dec. 2009) (See [http://www.arb.ca.gov/fuels/lcfs/ca\\_greet1.8b\\_dec09.xls](http://www.arb.ca.gov/fuels/lcfs/ca_greet1.8b_dec09.xls)). The standard inputs and parameters specified in CA-GREET remain unchanged except as noted in the input table below. The input table below specifies the spreadsheet location of the CA-GREET inputs and other parameters that were claimed as confidential business information or trade secret by the applicant, but it does not disclose the actual value of such inputs and parameters because they are claimed to be confidential business information or trade secret.

Magic Valley Input data table (Locations of cells containing Confidential Business Information are shown, but the actual values of such confidential information are not disclosed):

**Table 4. Summary of GREET Model Modifications Implemented in the LCA**

| <b>Worksheet</b> | <b>Cell Address</b> | <b>Value Used</b> | <b>Parameter</b>  |
|------------------|---------------------|-------------------|---|
| Fuel_Prod_TS     | D277                | █                 | Ethanol yield (gal/bu)  |
| Fuel_Prod_TS     | L277                | █                 | Total process energy (BTU/gal, LHV)                             |
| Inputs           | C247                | █                 | Electricity share of process energy (%)                         |
| T&D_Flowcharts   | M1308               | 100               | Share of corn feedstock transported by rail (%)                 |
| T&D_Flowcharts   | M1309               | 800               | Corn transport distance by rail (miles)                         |
| T&D_Flowcharts   | F1441               | 100               | Share of ethanol produced traveling by rail (%)                 |
| T&D_Flowcharts   | F1442               | 1000              | Ethanol transport distance by rail (miles)                      |
| Regional LT      | A658                | █                 | Title of electricity generation region (for ethanol production) |
| Regional LT      | C2                  | █                 | Title of electricity generation region (for ethanol production) |
| Regional LT      | J6                  | █                 | Title of electricity generation region (for ethanol production) |
| Regional LT      | J83                 | █                 | BPA electricity mix, Residual oil share (%)                     |
| Regional LT      | J84                 | █                 | BPA electricity mix, Natural gas share (%)                      |
| Regional LT      | J85                 | █                 | BPA electricity mix, Coal share (%)                             |
| Regional LT      | J86                 | █                 | BPA electricity mix, Nuclear share (%)                          |
| Regional LT      | J87                 | █                 | BPA electricity mix, Biomass share (%)                          |
| Regional LT      | J88                 | █                 | BPA electricity mix, Other (renewables) share (%)               |