

Petroleum & Electric GIS Data Dictionary Expanded Delivery Format

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North American Expanded Format Pipeline/Facilities Spatial and Relational Data Dictionary

For the basic license level, all data layer names and associated table names will be suffixed with a *letter(s)* indicating the commodity(s).

- **P = Petroleum Bundle** (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous))
- **N = Natural Gas Bundle** (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous))
- **E = Electric Bundle** (Transmission Lines, Substations, Power Plants, various service territories)
- A = All commodity bundles

XPIPELINES Table - Field Definitions

This table provides information regarding petroleum pipeline segments. Field names are indicated by **BOLD** or square brackets [].

MSID - This fourteen character alphanumeric field contains the Endeavor MAPSearch unique identifier assigned to each pipeline segment.

OWNER - This seventy-five character text field identifies the company that owns the pipeline.

OWNERID - This eight character text field contains the abbreviation of the company that owns the pipeline [OWNER]. Use this field to acquire statistical and ownership information from the COMPANY and OWNER tables.

NUMOWNERS - This fifteen character text field identifies whether the pipeline segment is part of a pipeline system that is owned either individually or jointly. This field is valued with "Single Owner" or "Multiple Owners". All owners and their percentage of ownership may be determined using the SYS_OWN table. Use the xpipelines's [SYSTEMID] to relate to the SYS_OWN table's [SYSTEM]. The full company names can be found in the COMPANY table.

LEASED - This twenty-two character text field is marked "Pipeline is leased" when the operator of the pipeline is leasing the line from the owner of the pipeline.

OPERATOR - This seventy-five character text field identifies the company that operates the pipeline.

OPERATORID - This eight character text field contains the abbreviation of the company that operates the pipeline [OPERATOR]. Use this field to acquire statistical and ownership information from the COMPANY and OWNER tables.

COMMODITY - This is a twenty-five character text field that identifies the primary commodity that flows through the pipeline.

COMMODITY2 - This one-hundred character text field contains a more detailed description of the commodity that is transported by this pipeline segment. For example, an LPG (general commodity) pipeline that specifically transports propane and various butanes.

PRIMBATCH1 - This is a twenty-five character text field. This field identifies the first batched commodity associated with the primary commodity, thus allowing for cases of additional general products running through a single line. For example, a crude oil line that also occasionally transports (batches) LPGs and refined products. This field uses the same values as the commodity field [COMMODITY].

SECBATCH1 - This one-hundred character text field contains a more detailed description of the first batched commodity [PRIMBATCH1] transported by this pipeline segment.

PRIMBATCH2 - This is a twenty-five character alphanumeric field. This field identifies the second batched commodity associated with the primary commodity, thus allowing for cases of additional general products running through a single line. This field uses the same values as the commodity field [COMMODITY].

SECBATCH2 - This one-hundred character text field contains a more detailed description of the second batched commodity [PRIMBATCH2] transported by this pipeline segment.

LINETYPE - This fifty character text field identifies the classification of the pipe.

SYSTEM - The MAPSearch definition of a system is a group of pipes in which each segment of pipe has the same owner and operator and has been assigned a "common" name by the company or has more than one owner. A system cannot be comprised of other systems. This seventy character text field contains the full name of that system.

SYSTEMID - This eight character text field contains the abbreviation of the full system name [SYSTEM] to which this pipe segment belongs.

SYSTYPE - This twenty-five character text field identifies whether the pipeline segment belongs to a pipeline system that exists within a state or a pipeline system which crosses state lines.

OFFSHORE – This field indicates whether a line is located on land (onshore) or offshore.

INSERVICE – This numeric field represents the Year the original system commenced initial commercial operations. This field does not represent the year any upgrade, expansion or transfer of assets occurred.

FLOWDIR - This one-hundred character text field identifies the direction of flow of product through the pipeline.

DIAMETER - This numeric field is the diameter of the pipe in inches.

MDIAMETER - This numeric field is the diameter of the pipe in millimeters.

STATUS - This is a twenty-five character text field, which identifies the status of the pipeline as provided by the pipeline operator.

CORRIDOR – This field should be used for symbology only and indicates when MAPSearch has decided to stack lines due to limited detailed information about the exact location of each line within the corridor. MAPSearch stacks the lines close in proximity in the middle of the scar or visible corridor and all stacked lines have the same vertices. This is NOT a legal designation of corridors or right-ofways.

SEGMENTNUM - This nineteen character alphanumeric field is an identifier assigned by "Minerals Management Service" (MMS) for offshore pipelines. *This field is only populated for offshore pipelines.*

TX_T4 - This five character alphanumeric field indentifies the RRC assigned five-digit pipeline permit number.

TX_P5 - This six character alphanumeric field indentifies the six-digit number generated and used by the RRC to identify a pipeline operator.

UPDATED - This date field contains the date when the pipeline segment information was last modified. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

UPDATED_SP - This date field indicates when the placement of the line was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY). This is a new field and is not yet fully populated.

METACODE - This one hundred character alphanumeric field describes the degree of data integrity and quality.

IMG_SOURCE - This fifty character text field names the source of the imagery used for the pipeline's spatial placement. This field will not be populated if the spatial placement was geo-coded or digitized from a map. This is a new field and is not yet fully populated.

RESOLUTION - This fifty character text field contains the pixel resolution *in meters* of the imagery that was used for spatial placement of the line. This field will not be populated if the spatial placement was geo-coded or digitized from a map. This is a new field and is not yet fully populated.

MAP_ID - This twenty-five character alphanumeric field contains the Endeavor MAPSearch unique identifier of the source map used to either reference the location and/or attributes of the feature.

MAPSCALE - This fifty character text field contains the absolute scale of the map from which the line was digitized. This field will not be populated if the spatial location was geo-coded or determined from imagery. This is a new field and is not yet fully populated.

LASTOWNER - This seventy-five character text field identifies the previous owner of the pipeline segment.

LASTOWNID - This eight character text field contains the abbreviation of the company that previously owned the pipeline segment [LASTOWNER].

LASTOPER - This seventy-five character text field identifies the previous operator of the pipeline segment.

LASTOPERID - This eight character text field contains the abbreviation of the company that previously operated the feature [LASTOPER].

MILEAGE - This numeric field contains the pipeline segment length in miles.

RELEASE_DT - This date field indicates MAPSearch's data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

XFACILITIES Table – Field Definitions

This table provides information regarding petroleum pipeline facilities. Field names are indicated by **BOLD** or square brackets [].

MSID - This fourteen character alphanumeric field contains the Endeavor MAPSearch unique identifier assigned to each facility/platform.

FACNAME - This is the owner-assigned facility name. If this facility/platform does not have an assigned name, it will remain blank. This text field is one-hundred characters in length.

FACTYPE - This field identifies the type of facility represented by this point. This is a one-hundred character text field.

OWNER - This seventy-five character text field identifies the company that owns the facility/platform. We are aware that there are facilities with multiple owners. This will be addressed in a future release.

OWNERID - This eight character text field contains the abbreviation of the company that owns the facility/platform [OWNER]. Use this field to acquire statistical and ownership information from the COMPANY and OWNER tables.

OPERATOR - This seventy-five character text field identifies the company that operates the facility/platform.

OPERATORID - This eight character text field contains the abbreviation of the company that operates the facility/platform [OPERATOR]. Use this field to acquire statistical and ownership information from the COMPANY and OWNER tables.

LEASED - This twenty-two character text field is marked "Facility is leased" when the operator of the facility is leasing from the owner of the facility.

COMMODITY - This is a ninety-five character text field that identifies the primary commodity processed or produced at the facility/platform.

STATUS - This is a twenty-five character text field, which identifies the status of a facility/platform.

CAPACITY - This eight digit numeric field indicates the capacity of the facility. The capacity of all refineries, Import/Export Docks, Distribution/Receiving Terminals, Truck Loading/Unloading facilities and LPG Fractionators are reported in barrels per day (b/d). The capacity of terminals, excluding LNG terminals, is reported in barrels (bbls). The capacity of LNG Terminals is reported in billion cubic feet per day (bcf/d). The capacity of Underground Natural Gas Storage facilities is the Total Capacity, reported in million cubic feet (MMcf). The capacity of Bio Gas Production facilities, CO2 Processing plants, Dehydration plants, Delivery points to Power Plants, Gas Processing plants, Natural Gas Marketing Hubs, and Miscible Flood Projects are all reported in million cubic feet per day (MMcf/d). The capacity of Ethanol plants is reported in million gallons per year (MGY). The capacity of chemical plants and Propane/Propylene Splitters is reported in Metric Ton per year (MTPA). Capacity for compressor and pump stations indicates the installed horsepower for the facility.

GATHERING - This fifty character text field indicates whether or not the facility/platform is associated with a gathering system.

- **SYSTEMID** This eight character text field contains the abbreviation of the full system name [SYSTEM] to with which the facility/platform is associated.
- **SYSTEM** The MAPSearch definition of a system is a group of pipes in which each segment of pipe has the same owner and operator and has been assigned a "common" name by the company or has more than one owner. A system cannot be comprised of other systems. This seventy character text field contains the full name of the pipeline system with which the facility/platform is associated.
- **COMPLEX_ID** This four digit numeric field is a "Mineral Management Services" (MMS)-assigned unique identifier for offshore platforms. It is assigned to a single man-made structure or group of structures connected by a walkway. *This field is only populated for offshore platforms.*
- **UPDATED** This date field contains the date when the facility/platform information was last modified. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).
- **UPDATED_SP** This date field indicates when the placement of the facility was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY). This is a new field and is not yet fully populated.
- **METACODE** This one hundred character alphanumeric field describes the degree of data integrity and quality.
- **IMG_SOURCE** This fifty character text field names the source of the imagery used for the facility's spatial placement. This field will not be populated if the spatial placement was geo-coded or digitized from a map. This is a new field and is not yet fully populated.
- **RESOLUTION** This fifty character text field contains the pixel resolution *in meters* of the imagery that was used for spatial placement of the facility. This field will not be populated if the spatial placement was geo-coded or digitized from a map. This is a new field and is not yet fully populated.
- **MAP_ID** This twenty-five character alphanumeric field contains the Endeavor MAPSearch unique identifier of the source map used to either reference the location and/or attributes of the feature.
- **MAPSCALE** This fifty character text field contains the absolute scale of the map from which the facility was digitized. This field will not be populated if the spatial location was geo-coded or determined from imagery. This is a new field and is not yet fully populated.

LASTOWNER - This seventy-five character text field identifies the previous owner of the facility/platform.

LASTOWNID - This eight character text field contains the abbreviation of the company that previously owned the facility/platform [LASTOWNER].

LASTOPER - This seventy-five character text field identifies the previous operator of the facility/platform.

LASTOPERID - This eight character text field contains the abbreviation of the company that previously operated the facility/platform [LASTOPER].

RELEASE_DT - This date field indicates MAPSearch's data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

XINTERCONNECTS Table – Field Definitions

We only identify interconnect points between different pipeline operators. **We do not assign or track internal pipeline operators' interconnect points**. Field names are indicated by **BOLD** or square brackets [].

MSID - This fourteen character alphanumeric field contains the Endeavor MAPSearch unique identifier assigned to each interconnect.

NAME - This forty character text field contains the name or a description of the interconnect feature.

FACTYPE - This field identifies the type of the facility represented by this point. This is a twelve character text field.

COMMODITY - This is a twenty-five character text field that identifies the primary commodity that is exchanged at this point.

INTRNAME1 - This seventy-five character text field identifies the first of at least two operators that interconnect at this point. If [INTRNAME1] and [INTRNAME2] are the same, one of the pipelines that interconnects at this point is leased and operated by the same operator as the second pipeline, but owned by another company.

INAME1 - This fifteen character text field contains the abbreviation of the first operator [INTRNAME1] that interconnects at this point. Use this field to join to the COMPANY table for more information.

INTRNAME2 - This seventy-five character text field identifies the second of at least two operators that interconnect at this point.

INAME2 - This fifteen character text field contains the abbreviation of the second of at least two operators [INTRNAME2] that interconnect at this point. Use this field to join to the COMPANY table for more information.

INTRNAME3 - This seventy-five character text field identifies a third operator that interconnects at this point.

INAME3 - This fifteen character text field contains the abbreviation of a third operator [INTRNAME3] that interconnects at this point. Use this field to join to the COMPANY table for more information.

INTRNAME4 - This seventy-five character text field identifies a fourth operator that interconnects at this point.

INAME4 - This fifteen character text field contains the abbreviation of a fourth operator [INTRNAME4] that interconnects at this point. Use this field to join to the COMPANY table for more information.

INTRNAME5 - This seventy-five character text field identifies a fifth operator that interconnects at this point.

INAME5 - This fifteen character text field contains the abbreviation of a fifth operator [INTRNAME5] that interconnects at this point. Use this field to join to the COMPANY table for more information.

INTRNAME6 - This seventy-five character text field identifies a sixth operator that interconnects at this point.

INAME6 - This fifteen character text field contains the abbreviation of a sixth operator [INTRNAME6] that interconnects at this point. Use this field to join to the COMPANY table for more information.

INTRNAME7 - This seventy-five character text field identifies a seventh operator that interconnects at this point.

INAME7 - This fifteen character text field contains the abbreviation of a seventh operator [INTRNAME7] that interconnects at this point. Use this field to join to the COMPANY table for more information.

INTRNAME8 - This seventy-five character text field identifies an eighth operator that interconnects at this point.

- **INAME8** This fifteen character text field contains the abbreviation of an eighth operator [INTRNAME8] that interconnects at this point. Use this field to join to the COMPANY table for more information.
- **COMMODITY2** This one-hundred character text field provides a more detailed description, if available, of the commodity [COMMODITY] being exchanged at this point.
- **GATHERING** This fifty character text field indicates whether or not this interconnect is associated with a gathering system.
- **UPDATED** This date field contains the date when the interconnect information was last modified. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).
- **UPDATED_SP** This date field indicates when the placement of the interconnect feature was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY). This is a new field and is not yet fully populated.
- **METACODE** This one hundred character alphanumeric field describes the degree of data integrity and quality.
- **IMG_SOURCE** This fifty character text field names the source of the imagery used for the interconnect feature's spatial placement. This field will not be populated if the spatial placement was geo-coded or digitized from a map. This is a new field and is not yet fully populated.
- **RESOLUTION** This fifty character text field contains the pixel resolution *in meters* of the imagery used for spatial placement of the feature. This field will not be populated if the spatial placement was geo-coded or digitized from a map. This is a new field and is not yet fully populated.
- **MAP_ID** This twenty-five character alphanumeric field contains MAPSearch's unique identifier of the source map used to either reference the location and/or attributes of the feature.
- **MAPSCALE** This fifty character text field contains the absolute scale of the map from which the feature was digitized. This field will not be populated if the spatial location was geo-coded or determined from imagery. This is a new field and is not yet fully populated.
- **RELEASE_DT -** This date field indicates MAPSearch's data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

XINTLEASES Table - Field Definitions

This table provides information regarding leases for the Nova Scotia offshore area. Field names are indicated by **BOLD** or square brackets [].

OWNER - This seventy-five character text field identifies the company that owns the petroleum rights for this lease.

OWNERID - This eight character text field contains the abbreviation of the company that owns the petroleum rights [OWNER]. Use this field to acquire statistical and ownership information from the XINTLEASE_CO and COMPANY tables.

EXPL_LIC_NUM - This ten digit field contains the exploration license number.

DISC_LIC_NUM - This ten digit field contains the significant discovery license number.

COMMODITY - This eleven character text field that identifies the primary commodity that is available in this lease.

STATUS - This twenty-five character alphanumeric field identifies the status of the lease.

NOTES - This fifty character alphanumeric field contains additional information about the lease.

UPDATED - This date field contains the date when the lease information was last modified. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

METACODE - This one hundred character alphanumeric field describes the degree of data integrity and quality.

LASTOWNER - This seventy-five character text field identifies the previous owner of the petroleum rights for this lease.

LASTOWNID - This eight character text field contains the abbreviation of the previous owner of the petroleum rights [LASTOWNER].

RELEASE_DT - This date field indicates MAPSearch's data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

XMXFIELDS Table - Field Definitions

This table provides information regarding oil and gas fields in Mexico. Field names are indicated by **BOLD** or square brackets [].

MSID - This fourteen character alphanumeric field contains the Endeavor MAPSearch unique identifier assigned to each field.

NAME - This fifty character text field contains the name of the field.

COMMODITY - This twenty-five character text field indicates the primary commodity that is obtained from this field.

UPDATED - This date field contains the date when the lease information was last modified. . It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

METACODE - This one hundred character alphanumeric field describes the degree of data integrity and quality.

RELEASE_DT - This date field indicates MAPSearch's data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

ACTLEASE Table - Field Definitions

This table provides information regarding all active leases for the Outer Continental Shelf (OCS) including whole block leases.

LEASE_NUMBER - This seven character alphanumeric field identifies the lease number assigned to a lease by the regulatory agency having jurisdiction over mineral activity in the territory where the lease is located.

SALE_NUMBER - This seven character alphanumeric field identifies the sale number or the numeric designation assigned by the Minerals Management Service to specifically identify an Outer Continental Shelf lease sale.

BLOCKS Table – Field Definitions

This table provides information regarding OCS (Outer Continental Shelf) blocks. The MMS is responsible for the development and management of mineral resources in those areas of the OCS within Federal jurisdiction. An offshore cadastre has been overlain and the individual blocks represent approved subdivisions of the OCS, called OCS blocks. The cadastre is generally constrained by the State Seaward Boundary, Exclusive Economic Zone (EEZ) limit, and international maritime boundaries. Block data accurately and legally define areas on the OCS in support of the Federal offshore leasing program.

MMS_REGION_CODE - This one character alphanumeric field is a unique identifier for the MMS OCS. Value for the Gulf of Mexico = G.

MMS_PLAN_AREA_CD - This three character alphanumeric field contains acronyms (CGM, EGM, LND, NUS, WGM). There is no MMS documentation for this field at this time.

PROT_NUMBER - This seven character alphanumeric field identifies an official MMS protraction number. The two types of protraction utilized by the MMS are an Official Protraction Diagram (OPD) or a Leasing Map.

PROT_APRV_DATE - This nine character alphanumeric field identifies the date that the Official Protraction Diagram (OPD) or Leasing Map is signed by the Federal Government and approved for distribution.

BLOCK_NUMBER - This six character alphanumeric field identifies a subdivision of an Official Protraction Diagram (OPD).

BLK_FED_APRV_DT - This nine character alphanumeric field identifies the date that the Outer Continental Shelf (OCS) block was established.

BLOCK_LAB - This six character alphanumeric field contains the left-justified BLOCK NUMBER.

AC_LAB - This eight character alphanumeric field is a concatenated field. The first two characters contain the area code and the remaining characters contain the block number.

PROT_NAME - This sixty character alphanumeric field contains the protraction name. There is no MMS documentation for this field at this time.

DEPTH Table – Field Definitions

This table provides information regarding ocean depth contours.

DEPTH - This four digit integer field provides ocean depth in feet.

DIST Table – Field Definitions

This table provides information regarding the district or sub-office of an Outer Continental Shelf (OCS) regional office that has delegated authority for field operations activities including permitting wells, inspections, drilling, and production operations.

DISTRICT_CODE - This three digit integer field contains an indicator assigned to a sub-office of an Outer Continental Shelf (OCS) regional office that has delegated authority for field operations activities. Domain values are: 1 = New Orleans District, 2 = Houma District, 3 = Lafayette District, 4 = Lake Jackson District, 5 = Lake Charles Subdistrict, 6 = Corpus Christi Subdistrict.

STAT - This one digit integer field contains values of 0 and 1. There is no MMS documentation for this field at this time.

SHADE - This three digit integer field contains a color code used to shade each district polygon. Domain values refer to the TIMS shadeset and are as follows:

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126 = District 1 (light brown)128 = District 4 (brown)141 = District 2 (red)199 = District 5 (yellow)173 = District 3 (blue)139 = District 6 (purple)
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TEXT_LABEL - This is a fifty character alphanumeric field containing the District labels.

FAIR Table - Field Definitions

This table provides information that defines the major shipping fairways for the Gulf of Mexico Region. Outlines of the fairways were generated by the MMS from points published in 33CFR 166 and 167.

FEDSTATE Table - Field Definitions

This table provides information that delineates the State Seaward Boundary.

MMS_REGION_CODE - This one character alphanumeric field contains the region code. There is no MMS documentation for this field at this time.

BDRY_TYPE_CODE - This two character alphanumeric field contains the Boundary type code. There is no MMS documentation for this field at this time.

BDRY_PT_PROT_NUM - This seven character alphanumeric field contains the protraction number. There is no MMS documentation for this field at this time.

BDRY_APRV_DATE - This eleven character alphanumeric field contains the boundary approval date. There is no MMS documentation for this field at this time.

BLOCK_NUMBER - This six character alphanumeric field contains block numbers. There is no MMS documentation for this field at this time.

BDRY_NM_CD - This four-digit field contains the boundary codes. There is no MMS documentation for this field at this time.

BDRY_NM_TXT - This eighty character alphanumeric field contains the boundary labels. There is no MMS documentation for this field at this time.

BDRY_COV_SEQ_NUM - This six-digit field contains the value 200111. There is no MMS documentation for this field at this time.

LINE8G Table - Field Definitions

This table provides information regarding the delineation of the Limit of 8(g) Zone for the MMS Federal Offshore Gulf of Mexico Region. The '8(g) Zone' lies between the Submerged Lands Act (SLA) boundary line and a line projected 3 nautical miles seaward of the SLA boundary line. Within this zone revenues are shared with the coastal state(s). The digital Limit of '8(g) Zone' line is shown only in areas where an official baseline has been established.

MMS_REGION_CODE - This one character alphanumeric field is a unique identifier for the MMS OCS. Value for the Gulf of Mexico = G.

BDRY_TYPE_CODE - This two character alphanumeric field identifies the type of offshore boundary line.

BDRY_PT_PROT_NUM - This seven character alphanumeric field contains the protraction number. There is no MMS documentation for this field at this time.

BDRY_APRV_DATE - This eleven character alphanumeric field contains the boundary approval date. There is no MMS documentation for this field at this time.

BLOCK_NUMBER - This six character alphanumeric field contains block numbers. There is no MMS documentation for this field at this time.

BDRY_NM_CD - This four-digit field contains the boundary codes. There is no MMS documentation for this field at this time.

BDRY_NM_TXT - This eighty character alphanumeric field contains the boundary labels. There is no MMS documentation for this field at this time.

BDRY_COV_SEQ_NUM - This six-digit field contains the value 200112. There is no MMS documentation for this field at this time.

LS510 Table – Field Definitions

This table provides information regarding 5, 8, and 10-year lease outlines for the OCS (Outer Continental Shelf). It is comprised of all leases in effect and does not contain any relinquished, terminated or expired leases.

LEASETERM - This 3 character alphanumeric field contains the lease period that indicates the 5, 8, and 10 year lease term areas.

PROT Table - Field Definitions

This table provides information that defines a composite polygon of the areas for the Gulf of Mexico Region. This file is based on the Outer Continental Shelf (OCS) Marine Survey Group Official Protraction Diagram (OPD). Each offshore area is defined by an API Number corresponding to those in API Bulletin Number D12A.

MMS_REGION_CODE - This one character alphanumeric field is a unique identifier for the MMS OCS. Value for the Gulf of Mexico = G.

PROT_NUMBER - This seven character alphanumeric field identifies an official MMS protraction number. The two types of protraction utilized by the MMS are an Official Protraction Diagram (OPD) or a Leasing Map.

PROT_APRV_DATE - This nine character alphanumeric field identifies the date that the Official Protraction Diagram (OPD) or Leasing Map is signed by the Federal Government and approved for distribution.

PROT_NAME - This sixty character alphanumeric field contains the protraction name. There is no MMS documentation for this field at this time.

PROJ_ZONE_CODE - This two character alphanumeric field contains a numeric zone code. There is no MMS documentation for this field at this time.

Petroleum Database Tables

There are four principal tables: the COMPANY table, the SYSTEM table, the EMERGENC table and the CONTACT table. These tables contain the basic information for the various companies, pipeline systems, emergency telephone numbers, and business contacts. Seven additional tables interconnect the four main tables and contain information on the relationships between the main tables. The OWNER table indicates ownership between various companies within the COMPANY table. The SYS_OWN and SYS_OPR tables indicate which companies own and operate various systems and which systems are owned and operated by each company. The CO_EMERG table links companies and systems to emergency telephone numbers. Finally, the CO_CONT table connects contacts with the companies they represent and each company with all of its contacts.

Table Name: CO_CONT

This table associates business contacts with the companies they represent and visa versa. Data in this table includes the contact ID, the company ID, and information relating to each contact and how it relates to each company.

CONTACT_ID - This numeric field uniquely identifies a business contact. Use this key to reference the contact information in the CONTACT table.

CO_ID - This eight character text field identifies a company with which the contact is associated. The CO_ID field is used to obtain the company information in the company table.

Example of multiple representatives (597 and 7947) for a company (ANGI) and a single contact (7947) associated with multiple companies:

CONTACT_ID	CO_ID
597	ANGI
7947	ANGI
7947	ARCO

- **CRUDE_FLG** This numeric field is a flag indicating whether or not this contact supports crude oil for this company.
- **LPG_FLG** This numeric field is a flag indicating whether or not this contact supports LPG/NGL for this company.
- **NATG_FLG** This numeric field is a flag indicating whether or not this contact supports natural gas for this company.
- **REFINE_FLG** This numeric field is a flag indicating whether or not this contact supports refined products for this company.
- **PETRO_FLG** This numeric field is a flag indicating whether or not this contact supports petrochemical products for this company.
- **MISC_FLG** This numeric field is a flag indicating whether or not this contact supports miscellaneous petroleum products, other than those mentioned above, for this company. This includes such products as "specialty gases" (hydrogen, oxygen, nitrogen, etc.) and anhydrous Ammonia.
- **LRC_OFFSH** This numeric field is a flag indicating whether or not this person is an offshore contact for this company.
- **LRC_ENG** This numeric field is a flag indicating whether or not this person is an engineering contact for this company.
- **LAST_UPDT** This date field is in American Standard date format (MM/DD/YYYY) and is maintained automatically. This is the date the company contact information was last changed.
- **LRC_SYS** This numeric field is a flag indicating whether or not this person is a system contact for this company.
- **LRC_OPR** This numeric field is a flag indicating whether or not this person is an operations contact for this company.

Each pipeline segment has operator ID [OPERATORID] and owner ID [OWNERID fields which are used to access the company (COMPANY) and company contact (CO_CONT) tables. The company contact table allows for a business contact to be associated with more than one company. If a contact is responsible for multiple companies contact ID will appear multiple times in the CO_CONT table. To identify all the companies for a business contact, match the [CONTACT_ID] in the contact table to the [CONTACT_ID] on the CO_CONT table.

21

Table Name: CO_EMERG

This table connects companies with emergency telephone numbers for various areas and commodities served by the companies.

CO_ID - This eight character text field is used to obtain information from the company table.

EMERG_NO - This ten character text field contains an emergency telephone number for the company and links to the EMERGENC table.

LAST_UPDT - This date field is in American Standard date format (MM/DD/YYYY) and is maintained automatically. This is the date the emergency telephone number information was last changed.

Companies can have multiple emergency telephone numbers and multiple companies can share a single telephone number. Use the company ID to locate all telephone numbers for a company in the CO_EMERG table then look up these numbers in the EMERGENC table to determine which commodities, areas, and times are served by the individual numbers.

Table Name: COMPANY

This table contains basic company information including the company name, address, telephone number and general nature of business.

CO_ID - This eight character text field is an abbreviation of the company name. It is also used as a unique identifier within the database.

CO_NAME - This seventy-five character text field is the name of the currently selected company.

CRUDE_FLG - This numeric field is a flag indicating that this company supports crude oil.

LPG_FLG - This numeric field is a flag indicating that this company supports LPG/NGL.

NATG_FLG - This numeric field is a flag indicating that this company supports natural gas.

REFINE_FLG - This numeric field is a flag indicating that this company supports refined products.

PETRO_FLG - This numeric field is a flag indicating that this company supports Petrochemicals/Olefin products.

MISC_FLG - This numeric field is a flag indicating that this company supports miscellaneous petroleum products such as "specialty gases" (hydrogen, oxygen, nitrogen, etc.) and anhydrous ammonia.

MAIL_ADDR - This seventy character alphanumeric field contains the mailing address for the corporate headquarters.

MAIL_ADDR2 - This seventy character alphanumeric field contains additional mailing address information such as suite or floor number.

CITY - This fifty character text field contains the name of the city where the corporate headquarters is located.

STATE_PROV - This fifty character text field contains the name of the state or province where the corporate headquarters is located.

ZIPCODE - This twenty character alphanumeric field contains the postal code for the corporate headquarters.

GEN_PHONE - This numeric field indicates the phone number for the corporate headquarters.

FAX_NUMBER - This numeric field indicates the fax number for the corporate headquarters.

E_MAIL - This fifty character alphanumeric field contains the Primary email address for the corporate.

WEBPAGE - This fifty character alphanumeric field indicates the web address for the corporate headquarters.

COUNTRY - This fifty character text field contains the name of the country where the corporate headquarters is located.

CO_TYPE - This one character alphanumeric field describes the type of company or entity being referenced.

Correct values:

- A = Administrative Corporate Operation
- C = System
- D = Drilling
- E = Exploration Company
- F = Federal Government

- H = Holding Company
- I = Investor-Owned Utility
- L = Industrial Plant
- M = Municipal
- O = Production Company
- P = Public Utility
- R = Rural Electric Cooperative
- S = State Government
- U = Unknown Company
- Z = Exploration and Production

PROD_FLG - This numeric field is a flag indicating that this is a production company.

SHIP_FLG - This numeric field is a flag indicating that this company transports products, using means other than pipelines and power transmission lines, for example, transportation by ship, truck or rail.

MKTG_FLG - This numeric field is a flag indicating that it markets products produced by the company.

PL_OWN_FLG - This numeric field is a flag indicating if the company owns any pipelines.

PL_OPR_FLG - This numeric field is a flag indicating if the company operates any pipelines.

COMMERCE - This five character text field indicates if the company owns or operates intrastate or interstate pipelines.

INTRA - Intrastate refers to a pipeline located within one state.

INTER - Interstate refers to a pipeline that crosses state lines.

OFFSHORE - This numeric field is a flag indicating that this company has offshore assets.

LAST_RVWD - This date field is in American Standard date format (MM/DD/YYYY) format and is the date the company information was last reviewed by a representative of the company.

PHYS_ADDR1 - This seventy character alphanumericfield contains the physical address for the corporate headquarters.

PHYS_ADDR2 - This seventy character alphanumeric field contains additional mailing information such as Apt./Ste.

PHYS_CITY - This fifty character text field identifies the name of the city.

PHYS_STATE - This fifty character text field contains the name of the state or province where the corporate headquarters is located.

PHYS_ZIPCO - This twenty character alphanumeric field contains the postal code for the corporate headquarters.

PHYS_COUNT - This fifty character text field contains the name of the country where the corporate headquarters is located.

Each pipeline segment has an operator ID [OPERATORID] and an owner ID [OWNERID] that is used to access the company table (COMPANY). To obtain the company information for a pipeline, link the [OPERATORID] and/or [OWNERID] fields from the pipeline attribute table to the [CO_ID] field in the COMPANY table.

Table Name: CONTACT

This table provides a list of the business contacts for companies, pipeline systems and facilities. Information included in this table is the contact's name, address, telephone number, department, and miscellaneous contact data.

CONTACT_ID - This numeric field is a unique field that identifies a business contact as referenced by the SYS_CONT and CO_CONT tables.

MR_MS - This three character text field indicates the honorific of the contact. Values are "MR.", "MS.", "MRS".

FIRST - This fifteen character text field contains the contact's first name.

MIDDLE - This fifteen character text field contains the contact's middle name.

LAST - This twenty-five character text field contains the contacts last name.

TITLE - This forty-five character text field represents the contacts job title.

DEPARTMENT - This fifty character text field identifies the department the contact works in.

ADDRESS - This seventy character alphanumeric field contains the address for the contact.

ADDRESS2 - This seventy character alphanumeric field contains additional mailing address information such as suite or floor number.

CITY - This fifty character text field identifies the name of the city where the contact is located in.

STATE_PROV - This fifty character text field indicates what state the contact is located in.

ZIPCODE - This twenty character alphanumeric field contains the zip code for the contact.

COUNTRY - This fifty character text field identifies the name of the country where the contact is located.

PHYS_ADDR - This seventy character alphanumeric field contains the physical address for the contact.

PHYS_ADDR2 - This seventy character alphanumeric field contains additional physical address information such as Apt./Ste.

PHYS_CITY - This fifty character text field identifies the name of the city.

PHYS_STATE - This fifty character text field indicates the name of the state the contact is located in.

PHYS_ZIP - This twenty character alphanumeric field contains the postal code.

PHYS_COUNT - This fifty character text field contains the name of the country.

PHONE - This thirty character alphanumeric field contains the contacts phone number.

FAX_NUMBER - This thirty character alphanumeric field contains the fax number for the contact.

E_MAIL - This fifty character alphanumeric field contains the email address for the contact.

LAST_UPDT - This date field is in American Standard Date format (MM/DD/YYYY) and is maintained automatically. This field identifies when the contact information was last changed.

Use the company IDs [CO_ID] to locate all [CONTACT_ID]s in the CO_CONT table for the company or system of interest. Use the located [CONTACT_ID]s to access detailed information about each contact in the CONTACT table.

Table Name: EMERGENC

This table is used to maintain all emergency numbers for companies, systems and facilities.

EMERG_NO - This then character alphanumeric field contains the emergency telephone number for the selected commodity, area and time.

SERV_CO - This numeric field is a flag indicating whether the telephone number is that of an emergency service company or is a private number for the company or system.

AREACOVG - This forty character text field lists the areas covered by the emergency number. The standard state abbreviations are used for locations in the United States and Canada. Additional text indicates when the number serves only parts of states or provinces. "ALL" is used when only one emergency number exists for entire country or region served by the company or pipeline system.

TIME - This two character alphanumeric field indicates the hours of availability for the emergency number.

Correct values: AM = Business hours PM= After business hours 24 = All day

CRUDE_FLG - This numeric field is a flag indicating whether or not this emergency number handles crude oil.

LPG_FLG - This numeric field is a flag indicating whether or not this emergency number handles LPG/NGL.

NATG_FLG - This numeric field is a flag indicating whether or not this emergency number handles natural gas.

REFINE_FLG - This numeric field is a flag indicating whether or not this emergency number handles refined products.

PETRO_FLG - This numeric field is a flag indicating whether or not this emergency number handles other petrochemical commodities.

MISC_FLG - This numeric field is a flag indicating whether or not this emergency number handles miscellaneous petroleum products, other than those mentioned above. This includes such products as "specialty gases" (hydrogen, oxygen, nitrogen, etc.) and anhydrous ammonia.

LAST_RVWD - This date field is in American Standard date format (MM/DD/YYYY) and is the date the contact information was last reviewed by a representative of the company.

The [OPERATORID] and [OWNERID] from the pipeline attribute table are used to match the [CO_ID] in the COMPANY and CO_EMERG tables. After locating the [CO_ID] in the CO_EMERG table, use the corresponding emergency numbers to access the EMERGENC table to determine the commodities and areas served by each emergency telephone number.

Table Name: OWNER

This table provides company ownership and subsidiary information, including the percentage of the subsidiary owned.

CO_ID - This eight character text field is used to obtain the subsidiary information from the company table.

OWNR_ID - This eight character text field is used to obtain the owner information from the company table.

OWNER_PCT - This numeric field is the percentage of the subsidiary company (CO_ID) owned by the OWNR_ID company. Example where the BUTTE subsidiary is jointly owned by three other companies:

BUTTE - .2 MURPHY - .5 SPLHI - .2

LAST_UPDT - This date field is in American Standard date format (MM/DD/YYYY) and is maintained automatically. This is the date the ownership information was last changed.

Subsidiaries are operated as independent companies and treated as such in both the feature attribute and relational tables. To view subsidiary information, search the OWNER table by the [OWNERID]. Each record located will identify a subsidiary of the company and will indicate the percentage of the subsidiary owned by the company. To view ownership information, examine the OWNER table by [CO_ID] to identify all the owners of a company.

Table Name: SYS_OPR

This table provides pipeline systems operator information including the pipeline system identifier(s) and operator(s).

SYSTEM - This eight character text field is the identifier for the pipeline system. This field resides in the pipe attribute segment. Use this field to access system information in the system table (SYSTEM).

OPR_ID - Each pipeline system has at least one operating company. The eight character OPR_ID text field is used to obtain operator information from the COMPANY table. The following are examples of a pipeline system (ROCKYMTN) with multiple operators and an operator (CONOCO) operating more than one system (ROCKYMTN and CHEROKEE). SYSTEM OPR_ID ROCKYMTN CONOCO ROCKYMTN MAPCO CHEROKEE CONOCO.

LAST_UPDT - This date field is in American Standard date format (MM/DD/YYYY) and is maintained automatically. This is the date the pipeline system operator information was last updated.

Each pipeline segment has system identifier [SYSTEMID] and operator ID [OPERATORID] fields that are used to access the system operator table (SYS_OPR). This table identifies each operator of the pipeline system. The [SYSTEMID] field from the pipeline attribute table is used to match the SYSTEM field in the system operator table (SYS_OPR). Company information can be obtained by matching [OPERATORID] to [CO_ID] in the company table (COMPANY).

Table Name: SYS_OWN

This table provides pipeline systems ownership information including the pipeline system, owner and the percentage of the pipeline system owned.

SYSTEM - This eight character text field identifies the pipeline system. This field resides in the pipe attribute segment. Use this field to access system information in the system table (SYSTEM).

OWNR_ID - Each pipeline system has at least one owner. The eight character OWNR_ID text field is used to obtain owner information from the COMPANY table.

OWNER_PCT - This numeric field identifies the percentage of the pipeline system (SYSTEM) owned by the OWNR_ID company. Example where pipeline system LM has joint ownership: SYSTEM OWNR_ID OWNER_PCT LM MOHI .25 LM SHELL2 .60 LM CONOCO .15

LAST_UPDT - This date field is in American Standard date format MM/DD/YYYY and is maintained automatically. This is the date the pipeline system ownership information was last updated.

Each pipeline segment has system identifier [SYSTEMID] and owner ID [OWNERID] fields that are used to access the system ownership table (SYS_OWN). This table identifies each owner of the pipeline system along with the percentage of the system owned. The SYSTEM field from the pipeline attribute table is used to match the SYSTEM field in the system ownership table (SYS_OWN). Company information can be obtained by matching [OWNERID] to [CO_ID] in the company table (COMPANY). The system ownership table allows identification of ownership information by pipeline system.

Table Name: SYSTEM

Systems are pipeline segments that have been labeled by an operator for ease of identification. Information included in this table is the name of the system, commodity, commerce, pipeline operator and a brief description of the pipeline system.

SYSTEM - This eight character text field indicates the unique system id created by Endeavor MAPSearch.

SYS_NAME - This fifty character text field contains the name of the system.

CRUDE_FLG - This numeric field is a flag indicating that this system transports crude oil.

LPG_FLG - This numeric field is a flag indicating that the pipeline system transports LPG/NGL.

NATG_FLG - This numeric field is a flag indicates that this system supports Natural Gas.

REFINE_FLG - This numeric field is a flag indicating that this system transports refined products.

PETRO_FLG - This numeric field is a flag indicating that this system supports petrochemicals.

MISC_FLG - This numeric field is a flag indicating that this system supports miscellaneous petroleum products, other than those mentioned above. This includes such products as "specialty gases" (hydrogen, oxygen, nitrogen, etc.) and anhydrous ammonia.

COMMERCE - This five character text field identifies if the system is an interstate or an intrastate system.

INTRA - Intrastate refers to a pipeline system located within one state.

INTER - Interstate refers to a pipeline system that crosses state lines.

OFFSHORE - This numeric field is a flag indicating that this is an offshore pipeline system.

CARRIER - This one-character text field indicates how commodities are transported.

Correct values:

C = Common Carrier

P = Private Carrier

LAST_RVWD - This date field is in American Standard date format (MM/DD/YYYY) and is maintained automatically. This is the date the research department last reviewed this record.

INSERVICE – This numeric field represents the Year the original system commenced initial commercial operations. This field does not represent the year any upgrade, expansion or transfer of assets occurred.

Each pipeline system has a system ID [SYSTEMID] that is used to access the SYSTEM table. The SYSTEM field from the ARC/INFO pipeline attribute table is used to match the [SYSTEM] field in the SYSTEM table. The system ID is also used to access the system ownership table (SYS_OWN) to identify the pipeline system's owners and the operator table (SYS_OPR) to identify the pipeline system's operators. Detailed information about owners and operators is stored in the COMPANY table. To find the business contacts for a pipeline system, use the [SYSTEMID] to access the system contact table (SYS_CONT) and obtain the contact ID [CONTACT_ID] to directly access the CONTACT table.

Table Name: XINTLEASE_CO

This table contains basic International Lease company information including the company name, address, telephone number and general nature of business.

- **OWNR_ID** This is an eleven character text field and is an abbreviation of the company name. It is also used as a unique identifier within the database.
- **CO_NAME** This is a twenty-nine character alphanumeric field which identifies the name of the currently selected company.
- **LPG_FLG** This numeric field is a flag indicating that this company supports LPG/NGL.
- **NATG_FLG** This numeric field is a flag indicating that this company supports natural gas.
- **REFINE_FLG** This numeric field is a flag indicating that this company supports refined products.
- **PETRO_FLG** This numeric field is a flag indicating that this company supports Petrochemicals/Olefin products.
- **MISC_FLG** This numeric field is a flag indicating that this company supports miscellaneous petroleum products such as "specialty gases" (hydrogen, oxygen, nitrogen, etc.) and anhydrous ammonia.
- **MAIL_ADDR** This twenty-four character alphanumeric field contains the mailing address for the corporate headquarters.
- **MAIL_ADDR2** This thirteen character alphanumeric field contains additional mailing address information such as suite or floor number.
- **CITY** This thirteen character alphanumeric field contains the name of the city where the corporate headquarters is located.
- **STATE_PROV** This fourteen character text field contains the name of the state or province where the corporate headquarters is located.
- **ZIPCODE** This nine character alphanumeric field contains the postal code for the corporate headquarters.
- **GEN_PHONE** This thirteen character alphanumeric field indicates the phone number for the corporate headquarters.
- **FAX_NUMBER** This numeric field indicates the fax number for the corporate headquarters.
- **E_MAIL** This nineteen character alphanumeric field contains the Primary email address for the corporate headquarters.

WEBPAGE - This nineteen character alphanumeric field indicates the web address for the corporate headquarters.

COUNTRY - This ten character text field contains the name of the country where the corporate headquarters is located.

CO_TYPE - This ten character text field describes the type of company or entity being referenced.

Correct values:

- A = Administrative Corporate Operation
- C = System
- D = Drilling
- E = Exploration Company
- F = Federal Government
- H = Holding Company
- I = Investor-Owned Utility
- L = Industrial Plant
- M = Municipal
- O = Production Company
- P = Public Utility
- R = Rural Electric Cooperative
- S = State Government
- U = Unknown Company
- Z = Exploration and Production

PROD_FLG - This numeric field is a flag indicating that this is a production company.

SHIP_FLG - This numeric field is a flag indicating that this company transports products, using means other than pipelines and power transmission lines. Examples are ship, truck or railcar.

MKTG_FLG - This numeric field is a flag indicating that it markets products produced by the company.

PL_OWN_FLG - This numeric field is a flag indicating if the company owns any pipelines.

PL_OPR_FLG - This numeric field is a flag indicating if the company operates any pipelines.

COMMERCE - This twelve character text field indicates if the company owns or operates intrastate or interstate pipelines.

INTRA - Intrastate refers to a pipeline located within one state.

INTER - Interstate refers to a pipeline that crosses state lines.

OFFSHORE - This numeric field is a flag indicating that this company has offshore assets.

LAST_RVWD - This date field is in American Standard date format (MM/DD/YYYY) and is the date the company information was last reviewed by a representative of the company.

PHYS_ADDR_ - This twenty-eight character alphanumeric field contains the physical address for the corporate headquarters.

PHYS_ADDR1 - This thirty-one character alphanumeric field contains additional mailing information such as Apt./Ste.

PHYS_CITY - This eleven character text field identifies the name of the city.

PHYS_STATE - This twenty character text field contains the name of the state or province where the corporate headquarters is located.

PHYS_ZIPCO - This fifteen character alphanumeric field contains the postal code for the corporate headquarters.

PHYS_COUNT - This seventeen character text field contains the name of the country where the corporate headquarters is located.

Each lease polygon has an owner ID [OWNERID] that is used to access the company information table (XINTLEASE_CO). To obtain the company information for a lease, link the [OWNERID] from the lease attribute table to the [CO ID] field in the XINTLEASE CO table.

Table Name: UGS

This table provides information regarding underground Natural Gas Storage Facilities (UGS) and contains information included in the International Gas Union 2006 database.

FAC_MSID - This fourteen character alphanumeric field contains the Endeavor MAPSearch unique identifier arbitrarily assigned to each UGS.

FAC_NAME - This seventy character alphanumeric field is the owner-assigned UGS facility name. If this facility does not have an assigned name, it will remain blank.

TYPSTORG - This twenty-five character text field identifies the type of UGS: Aquifer, Oil/Gas Field, Abandoned Mine or Salt Cavern.

YRCOMMS - This numeric field identifies the year the UGS was commissioned/placed into service.

CAPACITY - This numeric field identifies the total capacity of the UGS. The Total Capacity is the sum of the UGS facility's Working Gas Volume and the Cushion Gas Volume, measured in million cubic feet (MMcf).

WVC - This numeric field identifies the Working Volume Capacity: The volume of natural gas in the storage reservoir that can be extracted during normal operation, measured in million cubic feet (MMcf).

CGV - This numeric field identifies the Cushion Gas Volume; the volume of gas that must remain in the storage facility to provide the required pressurization to extract the remaining gas, measured in million cubic feet (MMcf).

PWR - This numeric field identifies the Peak Withdrawal Rate; the amount of gas that can be withdrawn from a storage facility on a daily basis. It is measured in Thousand Cubic Feet per Day. (Mcf/d)

NOCAVERN - This numeric field identifies the total Number of Storage Wells/Caverns.

FIELD_NM - This fifty character text field is the name of the oil or gas field in which the Underground Storage Facility resides.

STATE - This fifty character text field describes the state in which the underground storage facility resides.

COUNTY - This fifty character text field describes the county in which the underground storage facility resides.

Each underground natural gas storage facility in the facilities GIS layer has a unique [MSID] that can be used to access the capacity and cavern information in the Underground Storage table (UGS).

Table Name: FACILITY

This table provides address and contact information for facilities. To access this information from within the GIS, join with the xfacilities layer using the xfacilities.MSID and FACILITY.MSID fields. **Please Note:** This table does not contain information about meter stations.

MSID - This fourteen character alphanumeric field contains the Endeavor MAPSearch unique identifier assigned to each feature.

FAC_NAME - This seventy character text field indicates the facility name.

MAIL_ADDR - This seventy character alphanumeric field contains the mailing address for facility.

MAIL_ADDR2 - This seventy character alphanumeric field contains any additional mailing address information for the facility.

MAIL_CITY - This fifty character text field contains the city for the mailing address.

MAIL_STATE - This fifty character text field contains the state for the mailing address.

MAIL_ZIP - This twenty character alphanumeric field contains the zipcode for the mailing address.

PHYS_ADDR - This seventy character alphanumeric field contains the physical address for the facility.

PHYS_ADDR2 - This seventy character alphanumeric field contains any additional physical address information for the facility.

PHYS_CITY - This fifty character text field contains the city for the physical address.

PHYS_STATE - This fifty character text field contains the state for the physical address.

PHYS_ZIP - This twenty character alphanumeric field contains the zip code for the physical address.

PHONE_NUM - This thirty character alphanumeric field contains the phone number of the facility.

FAX_NUMBER - This thirty character alphanumeric field contains the fax number of the facility.

Table Name: FAC_SIC_NAICS_Codes

This table provides information regarding the Standard Industrial Classification (SIC) and North American Classification System (NAICS) related to the xfacilities data layer. To access the information in this table from within the GIS, create a join with the xfacilities layer based on the FAC_SIC_NAICS_Codes.TYPE and xfacilities.FACTYPE fields.

FTYPE - This twenty character text field contains the abbreviation for the type of facility represented by this point.

TYPE - This one-hundred character text field identifies the type of facility represented by this point. This is a one-hundred character alphanumeric field.

SIC_CODE - This short integer field contains the SIC code.

SIC_DESCRIPTION - This two-hundred fifty character alphanumeric field gives the detailed description of the associated SIC_CODE.

NAICS_CODE - This long integer field contains the NAICS code.

NAICS_DESCRIPTION - This two-hundred fifty character alphanumeric field gives the detailed description of the associated NAICS CODE.

Table Name: PIP_SIC_NAICS_Codes

This table provides information regarding the Standard Industrial Classification (SIC) and North American Classification System (NAICS) related to the xpipelines data layer. To access the information in this table from within the GIS, create a join with the xpipelines layer based on the PIP_SIC_NAICS_Codes.COMMODITY and xpipelines.COMMODITY fields.

CMDTY - This ten character text field contains the abbreviation for the commodity transported by the pipeline.

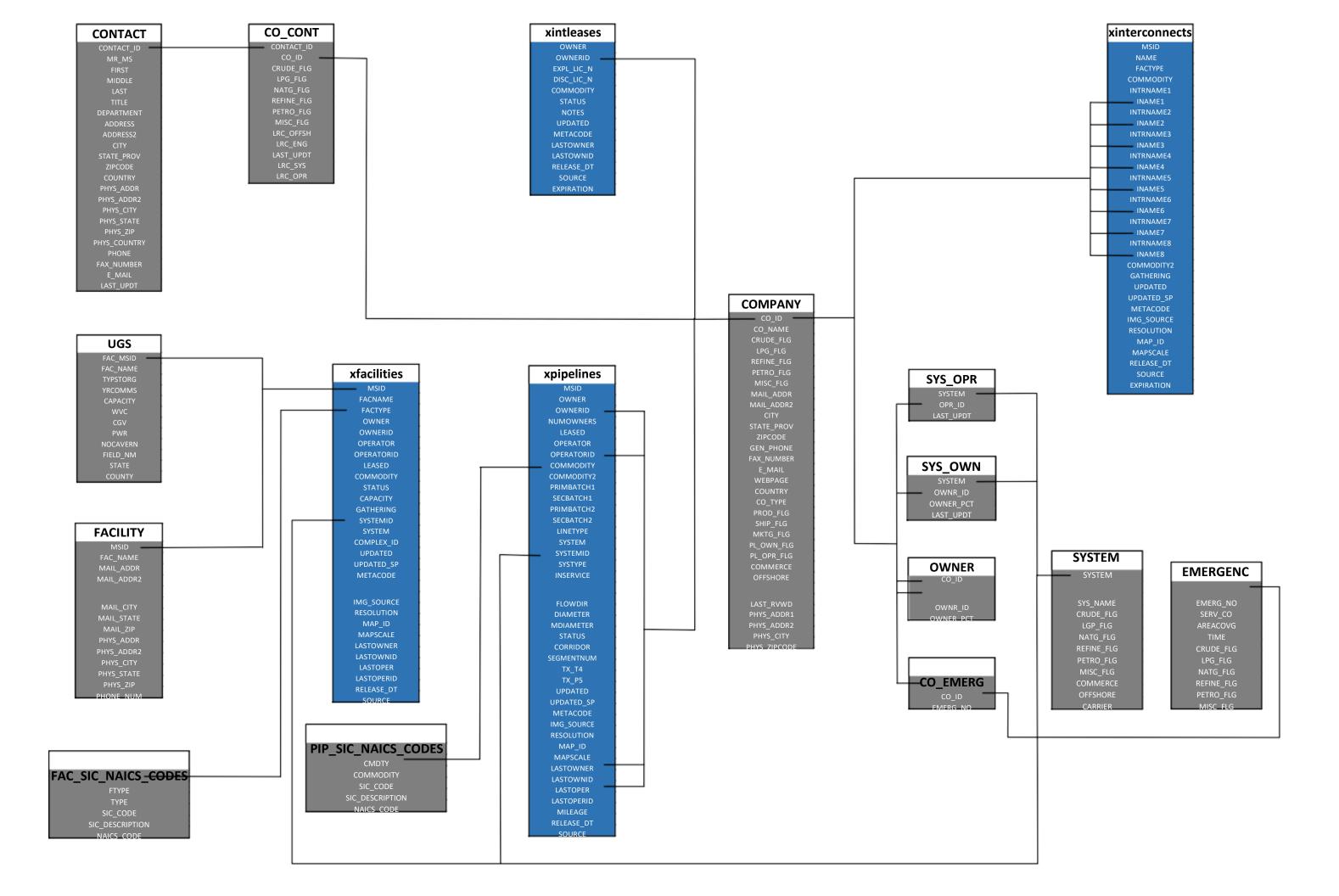
COMMODITY - This twenty-five character text field contains the full commodity name of the commodity carried by the pipeline.

SIC_CODE - This short integer field contains the SIC code.

SIC_DESCRIPTION - This two-hundred fifty character alphanumeric field gives the detailed description of the associated SIC_CODE.

NAICS_CODE - This long integer field contains the NAICS code.

NAICS_DESCRIPTION - This two-hundred fifty character alphanumeric field gives the detailed description of the associated NAICS_CODE.



North American Expanded Format Electric Spatial and Relational Data Dictionary

For the basic license level, all data layer names and associated table names will be suffixed with a *letter(s)* indicating the commodity(s).

P = Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous))

N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous))

E = Electric Bundle (Transmission Lines, Substations, Power Plants, various service territories)

A = All commodity bundles

XPOWERPLANTS Table – Field Definitions

Field names are indicated by **BOLD** or square brackets [].

MSID - This fourteen character alphanumeric field contains the Endeavor MAPSearch unique identifier assigned to each facility. The [MSID] is used to acquire facility statistical and owning/holding company information from the EPLANTS, EPLANTOP and EPLANTOW look-up tables.

FACNAME - This seventy character text field contains the name of the generation facility.

OWNER - This seventy-five character text field identifies the owning/holding company of the generation facility.

OWNERID - This eight character text field contains the Endeavor MAPSearch abbreviation of the owning/holding company of the facility [OWNER]. Use this as the linking field to acquire statistical and ownership information from the ECOMPANY, EPLANTOW and ESUBSIDI look-up tables.

NUMOWNERS - This fifteen character text field is associated with the [OWNER]. It identifies jointly owned facilities. If [NUMOWNERS] = "Multiple Owners," use [MSID] to join to the EPLANTOW table to identify all the owners for that facility. The EPLANTOW table includes [OWNERID]s and percent ownership, where available. The full company names can be found in the ECOMPANY table. A value of "0" in the percent ownership column indicates that the information is unknown.

OPERATOR - This seventy-five character text field identifies the company that operates the facility.

OPERATORID - This eight character text field contains the Endeavor MAPSearch abbreviation of the company [OPERATOR] who operates the generation facility. Use this as the linking field to acquire company statistical and operating information from the ECOMPANY, EPLANTOP and ESUBSIDI look-up tables.

NUMOPERS - This eighteen character text field is associated with the [OPERATOR]. This identifies jointly operated facilities. If the [NUMOPERS] = "Multiple Operators," use [MSID] to join to the EPLANTOP table to identify all the operators for that particular facility. The EPLANTOP table includes [OPERATORID]s and percent of operation, where available. A value of "0" in the percent operation column indicates that the information is unknown.

LEASED - This twenty-two character text field is marked "Facility is leased" when the operator of the facility is leasing the facility from the owner of the facility.

YRINSTALL - This numeric field contains the year that the facility was completed.

NAME_CAP - This numeric field identifies the installed name plate generation capacity in Megawatts.

NUMUNITS - This numeric field contains the number of generation units located at the facility.

PROP_CAP – This numeric field identifies the proposed name plate generation capacity in Megawatts for a proposed / under construction facility or the additional capacity to be added to an existing facility.

PROPUNIT - This numeric field contains the number of generation units that are proposed at the facility and corresponds with the PROP_CAP field.

STATUS - This twenty-five character text field contains operational status information for the facility.

NON UTIL - This twenty character text field indicates non-utility status.

NUCLEAR - This fourteen character text field is populated with "Nuclear" when the facility uses nuclear fuel to generate power.

FOSSILFUEL - This forty-six character text field contains the fossil fuel type(s) used to generate power at this facility. Fuels categorized as fossil fuels include coal, fuel oil, and natural gas. If the fuel type is unknown, the value is "Other."

RENEWABLE - This forty-four character text field contains the renewable fuel type(s) used to generate power at this facility. Fuels categorized as renewable include biomass, geothermal, hydro, solar, waste, and wind.

PRIMEFUEL – This thirty-five character text field contains the predominant fuel used to continuously power the generator for electricity production.

PRIMEMOVER - This eighty-nine character text field contains the prime mover(s) utilized by the generation facility. Values include combined cycle, steam, internal combustion, geothermal, compressed air energy storage (CAES), wind and solar. If the prime mover has not yet been identified, a value of "Unknown" will be given.

RESERVOIR - This fifty character text field contains the name of the reservoir with which this hydroelectric facility is associated.

RIVER - This fifty character text field contains the name of the river on which the dam is built.

EIA_CD - This fifteen character text field indicates the universal numerical code generated by the Energy Information Administration and assigned to each power generation facility in the United States.

UPDATED - This date field indicates when any of the attributes of the facility were last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

UPDT_SP - This date field indicates when the placement of the facility was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY). This is a new field and is not yet fully populated.

IMG_SOURCE - This fifty character text field names the source of the imagery used for the facility's spatial placement. This field will not be populated if the spatial placement was geo-coded or digitized from a map. This is a new field and is not yet fully populated.

RESOLUTION - This fifty character text field contains the pixel resolution *in meters* of the imagery that was used for spatial placement of the facility. This field will not be populated if the spatial placement was geo-coded or digitized from a map. This is a new field and is not yet fully populated.

METACODE - This one hundred character alphanumeric field describes the degree of spatial data integrity and quality.

MAP_ID - This twenty-five character alphanumeric field contains the Endeavor MAPSearch unique identifier of the source map used to either reference the location and/or attributes of the feature.

MAPSCALE - This fifty character text field contains the absolute scale of the map from which the facility was digitized. This field will not be populated if the spatial location was geo-coded or determined from imagery. This is a new field and is not yet fully populated.

LASTOWNER - This seventy-five character text field identifies the previous owning/holding company of the facility.

LASTOWNID - This eight character text field contains the Endeavor MAPSearch abbreviation of the previous owning/holding company of the facility [LASTOWNER]. Use this as the linking field to acquire statistical and ownership information for the previous owner from the ECOMPANY, EPLANTOW and ESUBSIDI look-up tables.

LASTOPER - This seventy-five character text field identifies the previous operator of the facility.

LASTOPERID - This eight character text field contains the Endeavor MAPSearch abbreviation of the company that previously operated the facility [LASTOPER]. Use this as the linking field to acquire company statistical and operating information for the previous operator from the ECOMPANY, EPLANTOP and ESUBSIDI look-up tables.

RELEASE_DT - This date field indicates MAPSearch's data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

XPOWERLINES Table - Field Definitions

Field names are indicated by **BOLD** or square brackets [].

MSID - This fourteen character alphanumeric field contains the Endeavor MAPSearch unique identifier assigned to each line segment.

VOLTAGE - This numeric field contains a value that represent either the transmission line's exact kilovolt voltage or the lowest kilovolt value within a voltage range.

Example: Exact Voltage – 115 KV [VOLTAGE] = '115'

Voltage Range – 100-161 KV [VOLTAGE] = '100'

RANGE - This three character text field indicates whether the transmission line is characterized as a voltage range or an exact voltage. If the transmission line is represented as a voltage range, for example 100-161 KV, the text field will be valued 'Yes'. If the transmission line is represented as an exact voltage, the text field will not be valued.

HIVOLTAGE - This thirty character text field indicates the highest kilovolt value for the voltage range of the transmission line. If the transmission line is characterized as an exact voltage, this field will default to '0'.

Example: Exact Voltage – 115 KV [HIVOLTAGE] = '0'

Voltage Range – 100-161 KV [HIVOLTAGE] = '161'

VOLT_CAT - This ten character alphanumeric field contains the preset voltage range for the transmission line for symbology and mapping purposes.

TYPE - This twenty-five character text field contains the transmission line current type or line type. The default for this field is "Alternating Current."

STATUS - This twenty-five character text field contains operational status information for the transmission line. The default value for this field is "Active."

CORRIDOR – This field should be used for symbology only and indicates when MAPSearch has decided to stack lines due to limited detailed information about the exact location of each line within the corridor. MAPSearch stacks the lines close in proximity in the middle of the scar or visible corridor and all stacked lines have the same vertices. This is NOT a legal designation of corridors or right-of-ways.

OWNER - This seventy-five character text field identifies the owning/holding company of the transmission line.

OWNERID - This eight character text field contains the Endeavor MAPSearch abbreviation of the owning/holding company of the transmission line [OWNER]. Use this as the linking field to acquire statistical and ownership information from the ECOMPANY and ESUBSIDI look-up tables.

NUMOWNERS - This fifteen character text field is associated with the [OWNER]. It identifies jointly owned lines. If [NUMOWNERS] = "Multiple Owners," use [MSID] to join to the XMIS_OWN table to identify all the owners for that facility. The XMIS_OWN table includes [OWNERID]s and percent ownership, where available. The full company names can be found in the ECOMPANY table. A value of "0" in the percent ownership column indicates that the information is unknown.

OPERATOR - This seventy-five character text field identifies the company that operates the transmission line.

OPERATORID - This eight character text field contains the Endeavor MAPSearch abbreviation of the company [OPERATOR] who operates the line. Use this as the linking field to acquire company statistical and operating information from the ECOMPANY, and ESUBSIDI look-up tables.

PROJECTID – This fifty character alphanumeric field contains the project identifier relating to the transmission project associated with Transmission Hub.

PROJECTNAME – This two hundred and fifty five character alphanumeric field contains the name of the transmission project associated with Transmission Hub.

INSTALL_DT – This eight character alphanumeric field contains the in service date, or anticipated in service date of the transmission project.

ROUTETYPE – This twenty character numeric field is used to indicate the route preference of this proposed line segment.

LINENAME – This two hundred and fifty five character alphanumeric field contains the name of the line segment. This name is derived from the "to and from" substation names.

UPDATED - This date field indicates when any of the attributes of the transmission line were last updated or audited It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY). The default value is "06/01/2001."

UPDT_SP - This date field indicates when the placement of the transmission line was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY). This is a new field and is not yet fully populated.

IMG_SOURCE - This fifty character text field names the source of the imagery used for the line's spatial placement. This field will not be populated if the spatial placement was geo-coded or digitized from a map. This is a new field and is not yet fully populated.

RESOLUTION - This fifty character text field contains the pixel resolution *in meters* of the imagery that was used for spatial placement of the line. This field will not be populated if the spatial placement was geo-coded or digitized from a map. This is a new field and is not yet fully populated.

METACODE - This one hundred character alphanumeric field describes the degree of spatial data integrity and quality.

MAP_ID - This twenty-five character alphanumeric field contains the Endeavor MAPSearch unique identifier of the source map used to either reference the location and/or attributes of the feature.

MAPSCALE - This fifty character text field contains the absolute scale of the map from which the line was digitized. This field will not be populated if the spatial location was geo-coded or determined from imagery. This is a new field and is not yet fully populated.

LASTOWNER - This seventy-five character text field identifies the previous owning/holding company of the line.

LASTOWNID - This eight character text field contains the Endeavor MAPSearch abbreviation of the previous owning/holding company of the line [LASTOWNER]. Use this as the linking field to acquire statistical and ownership information for the previous owner from the ECOMPANY and ESUBSIDI lookup tables.

LASTOPER - This seventy-five character text field identifies the previous operator of the line.

LASTOPERID - This eight character text field contains the Endeavor MAPSearch abbreviation of the company that previously operated the line [LASTOPER]. Use this as the linking field to acquire company statistical and operating information for the previous operator from the ECOMPANY and ESUBSIDI look-up tables.

MILEAGE - This numeric field contains the 2-D calculated segment length of the power line in miles.

RELEASE_DT - This date field indicates the MAPSearch data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

XSUBSTATIONS Table - Field Definitions

Field names are indicated by **BOLD** or square brackets [].

MSID - This fourteen character alphanumeric field contains the Endeavor MAPSearch unique identifier assigned to each facility. The [MSID] is used to acquire transmission substation statistical and ownership (holding company) information from the ESUBSTAT, ESUBOPER and ESUBOWNE look-up tables.

SUBNAME - This sixty character text field contains the name of the substation.

SUBTYPE - This thirty-five character text field contains a description of the specific type of station present.

PRIMVOLT – This numeric field contains the highest voltage associated with a connecting transmission line for the substation.

SECVOLT – This numeric field contains the second highest voltage associated with a connecting transmission line for the substation.

TERTVOLT – This numeric field contains the third highest voltage associated with a connecting transmission line for the substation.

STATUS - This twenty-five character text field contains operational status information for the substation.

OWNER - This seventy-five character text field identifies the owning/holding company of the substation.

OWNERID - This eight character text field contains the Endeavor MAPSearch abbreviation of the owning/holding company of the substation [OWNER]. Use this as the linking field to acquire statistical and ownership information from the ECOMPANY, SUBOWNE and ESUBSIDI look-up tables.

NUMOWNERS - This fifteen character text field is associated with the [OWNER]. It identifies jointly owned facilities. If [NUMOWNERS] = "Multiple Owners," use [MSID] to join to the ESUBOWNE table to identify all the owners for that facility. The ESUBOWNE table includes [OWNERID]s and percent ownership, where available. The full company names can be found in the ECOMPANY table. A value of "0" in the percent ownership column indicates that the information is unknown.

OPERATOR - This seventy-five character text field identifies the company that operates the facility.

OPERATORID - This eight character text field contains the Endeavor MAPSearch abbreviation of the company [OPERATOR] who operates the facility. Use this as the linking field to acquire company statistical and operating information from the ECOMPANY, ESUBOPER and ESUBSIDI look-up tables.

NUMOPERS - This eighteen character text field is associated with the [OPERATOR]. This identifies jointly operated facilities. If the [NUMOPERS] = "Multiple Operators," use [MSID] to join to the ESUBOPER table to identify all the operators for that particular facility. The ESUBOPER table includes [OPERATORID]'s and percent of operation, where available. A value of "0" in the percent operation column indicates that the information is unknown.

LEASED - This twenty-two character text field is marked "Facility is leased" when the operator of the facility is leasing the facility from the owner of the facility.

PROJECTID – This fifty character alphanumeric field contains the project identifier relating to the substation associated with Transmission Hub.

PROJECTNAME – This two hundred and fifty five character alphanumeric field contains the name of the transmission project associated with Transmission Hub.

INSTALL_DT – This eight character alphanumeric field contains the in service date of the substation.

ROUTETYPE – This twenty character numeric field is used to indicate the route preference of this proposed line segment.

UPDATED - This date field indicates when any of the attributes of the substation were last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

UPDT_SP - This date field indicates when the placement of the substation was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY). This is a new field and is not yet fully populated.

IMG_SOURCE - This fifty character text field names the source of the imagery used for the facility's spatial placement. This field will not be populated if the spatial placement was geo-coded or digitized from a map. This is a new field and is not yet fully populated.

RESOLUTION - This fifty character text field contains the pixel resolution *in meters* of the imagery that was used for spatial placement of the facility. This field will not be populated if the spatial placement was geo-coded or digitized from a map. This is a new field and is not yet fully populated.

METACODE - This one hundred character alphanumeric field describes the degree of spatial data integrity and quality.

MAP_ID - This twenty-five character alphanumeric field contains Endeavor MAPSearch unique identifier of the source map used to reference the location and/or attributes of the feature.

MAPSCALE - This fifty character text field contains the absolute scale of the map from which the facility was digitized. This field will not be populated if the spatial location was geo-coded or determined from imagery. This is a new field and is not yet fully populated.

LASTOWNER - This seventy-five character text field identifies the previous owning/holding company of the facility.

LASTOWNID - This eight character text field contains the Endeavor MAPSearch abbreviation of the previous owning/holding company of the facility [LASTOWNER]. Use this as the linking field to acquire statistical and ownership information for the previous owner from the ECOMPANY, ESUBOWNE and ESUBSIDI look-up tables.

LASTOPER - This seventy-five character text field identifies the previous operator of the facility.

LASTOPERID - This eight character text field contains the Endeavor MAPSearch abbreviation of the company that previously operated the facility [LASTOPER]. Use this as the linking field to acquire company statistical and operating information for the previous operator from the ECOMPANY, ESUBOPER and ESUBSIDI look-up tables.

RELEASE_DT - This date field indicates the MAPSearch data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

XINVESTOROWNEDUTILS Table – Field Definitions

Field names are indicated by **BOLD** or square brackets [].

OWNER - This seventy-five character text field identifies the investor-owned utility (IOU) holding company.

OWNERID - This eight character text field contains Endeavor MAPSearch abbreviation of the IOU holding company [OWNER]. Use this as the linking field to acquire statistical and ownership information from the ECOMPANY and ESUBSIDI look-up tables.

OPERATOR - This seventy-five character text field identifies the investor-owned utility (IOU) subsidiary company.

OPERATORID - This eight character text field contains Endeavor MAPSearch abbreviation of the IOU subsidiary company [OPERATOR]. Use this as the linking field to acquire company statistical and operating information from the ECOMPANY and ESUBSIDI look-up tables.

EIA_UTIL - This numeric field indicates the universal numerical code generated by the Energy Information Administration and assigned to each investor owned utility in the United States.

LASTOWNER - This seventy-five character text field identifies the previous owning/holding company of the IOU.

LASTOWNID - This eight character text field contains Endeavor MAPSearch abbreviation of the previous holding company of the IOU [LASTOWNER]. Use this as the linking field to acquire statistical and ownership information for the previous owner from the ECOMPANY and ESUBSIDI look-up tables.

LASTOPER - This seventy-five character text field identifies the previous operator of the IOU.

LASTOPERID - This eight character text field contains Endeavor MAPSearch abbreviation of the previous IOU subsidiary company that [LASTOPER]. Use this as the linking field to acquire company statistical and operating information for the previous operator from the ECOMPANY and ESUBSIDI look-up tables.

UPDATED - This date field identifies when the investor owned utility was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

UPDT_SP - This date field indicates when the placement of the investor owned utility was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY). This is a new field and is not yet fully populated.

METACODE -This one hundred character alphanumeric field describes the degree of spatial data integrity and quality.

MAP_ID - This twenty-five character alphanumeric field contains Endeavor MAPSearch unique identifier of the source map used to reference the location and/or attributes of the feature.

MAPSCALE - This fifty character text field contains the absolute scale of the map from which the facility was digitized. This field will not be populated if the spatial location was geo-coded or determined from imagery. This is a new field and is not yet fully populated.

RELEASE_DT - This date field indicates Endeavor MAPSearch data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format

(MM/DD/YYYY)

XNGLDCSERVTERR Table – Field Definitions

Field names are indicated by **BOLD** or square brackets [].

OWNER - This seventy-five character text field identifies the holding company of the Natural Gas Local Distribution Company (NGLDC).

OWNERID - This eight character text field contains Endeavor MAPSearch abbreviation of the NGLDC holding company [OWNER]. Use this as the linking field to acquire statistical and ownership information from the ECOMPANY and ESUBSIDI look-up tables.

OPERATOR - This seventy-five character text field identifies the NGLDC subsidiary company.

OPERATORID - This eight character text field contains Endeavor MAPSearch abbreviation of the NGLDC subsidiary company [OPERATOR]. Use this as the linking field to acquire company statistical and operating information from the ECOMPANY and ESUBSIDI look-up tables.

EIA_UTIL - This numeric field indicates the universal numerical code generated by the Energy Information Administration and assigned to each investor owned utility in the United States.

LASTOWNER - This seventy-five character text field identifies the previous owning/holding company of the NGLDC.

LASTOWNID - This eight character text field contains Endeavor MAPSearch abbreviation of the previous holding company of the NGLDC [LASTOWNER]. Use this as the linking field to acquire statistical and ownership information for the previous owner from the ECOMPANY and ESUBSIDI look-up tables.

LASTOPER - This seventy-five character text field identifies the previous operator of the NGLDC.

LASTOPERID - This eight character text field contains Endeavor MAPSearch abbreviation of the previous NGLDC subsidiary company that [LASTOPER]. Use this as the linking field to acquire company statistical and operating information for the previous operator from the ECOMPANY and ESUBSIDI look-up tables.

UPDATED - This date field identifies when the investor owned utility was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

UPDT_SP - This date field indicates when the placement of the investor owned utility was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY). This is a new field and is not yet fully populated.

METACODE -This one hundred character alphanumeric field describes the degree of spatial data integrity and quality.

MAP_ID - This twenty-five character alphanumeric field contains Endeavor MAPSearch unique identifier of the source map used to reference the location and/or attributes of the feature.

MAPSCALE - This fifty character text field contains the absolute scale of the map from which the facility was digitized. This field will not be populated if the spatial location was geo-coded or determined from imagery. This is a new field and is not yet fully populated.

RELEASE_DT - This date field indicates Endeavor MAPSearch data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

XPUBLICPOWER Table – Field Definitions

Field names are indicated by **BOLD** or square brackets [].

COMPANYTYPE – This fifty character alphanumeric field contains the type of utility this company is.

OWNER - This seventy-five character text field identifies the public power electric service area holding company.

OWNERID - This eight character text field contains Endeavor MAPSearch abbreviation of the public power holding company [OWNER]. Use this as the linking field to acquire statistical and ownership information from the ECOMPANY and ESUBSIDI look-up tables.

OPERATOR - This seventy-five character text field identifies the utility's subsidiary company.

OPERATORID - This eight character text field contains Endeavor MAPSearch abbreviation of the utility's subsidiary company [OPERATOR]. Use this as the linking field to acquire company statistical and operating information from the ECOMPANY and ESUBSIDI look-up tables.

EIA_UTILITY - This numeric field indicates the universal numerical code generated by the Energy Information Administration and assigned to each utility in the United States.

LASTOWNER - This seventy-five character text field identifies the previous owning/holding company of the utility.

LASTOWNID - This eight character text field contains Endeavor MAPSearch abbreviation of the previous holding company of the utility [LASTOWNER]. Use this as the linking field to acquire statistical and ownership information for the previous owner from the ECOMPANY and ESUBSIDI look-up tables.

LASTOPER - This seventy-five character text field identifies the previous operator of the utility.

LASTOPERID - This eight character text field contains Endeavor MAPSearch abbreviation of the previous utility's subsidiary company that [LASTOPER]. Use this as the linking field to acquire company statistical and operating information for the previous operator from the ECOMPANY and ESUBSIDI look-up tables.

GTENTITY – This seventy five character field provides the Generation and Transmission Entity that the utility is a member.

GTENTID – This eight character field provides Endeavor MAPSearch abbreviation of the Generation and Transmission Entity that the utility is a member.

GTENTFED – This seventy five character text field provides the Generation and Transmission Federation to which the electric utility is a member.

GTENTFEDID – This eight character text field provides Endeavor MAPSearch abbreviation of the Generation and Transmission Federation to which the electric utility is a member.

CAO – This seventy five character text field provides the Control Area Operator to which the electric utility is a member.

CAO_ID – This eight character text field identifies Endeavor MAPSearch abbreviation for the Control Area Operator the electric utility is a part of.

OPERATORSTATE – This fifty character alphanumeric field contains the state or states in which the utility resides.

NERCREGION – This fifty character alphanumeric field contains the North American Electric Reliability Corporation to which the utility is a member.

UPDATED - This date field identifies when the utility was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

UPDT_SP - This date field indicates when the placement of the utility was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY). This is a new field and is not yet fully populated.

METACODE -This one hundred character alphanumeric field describes the degree of spatial data integrity and quality.

MAP_ID - This twenty-five character alphanumeric field contains Endeavor MAPSearch unique identifier of the source map used to reference the location and/or attributes of the feature.

MAPSCALE - This fifty character text field contains the absolute scale of the map from which the facility was digitized. This field will not be populated if the spatial location was geo-coded or determined from imagery. This is a new field and is not yet fully populated.

RELEASE_DT - This date field indicates Endeavor MAPSearch data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

XISORTOREGIONS Table - Field Definitions

Field names are indicated by **BOLD** or square brackets [].

NAME – This 255 character text field contains the full names of the Independent System Operators and Regional Transmission Organizations. (Note: for shapefiles, the field length is 254)

POP_NAME - This fifty character text field contains the standard abbreviations for the ISO or RTO regions.

MAP_ID - This twenty-five character alphanumeric field contains the Endeavor MAPSearch unique identifier of the source map used to reference the location and/or attributes of the feature.

METACODE -This one hundred character alphanumeric field describes the degree of spatial data integrity and quality.

MAPSCALE - This fifty character text field contains the absolute scale of the map from which the facility was digitized. This field will not be populated if the spatial location was geo-coded or determined from imagery. This is a new field and is not yet fully populated.

UPDATED - This date field identifies when the investor owned utility was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

UPDT_SP - This date field indicates when the placement of the investor owned utility was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY). This is a new field and is not yet fully populated.

RELEASE_DT - This date field indicates the MAPSearch data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

XNERCREGIONS Table – Field Definitions

Field names are indicated by **BOLD** or square brackets [].

REGION - This sixty character text field contains the full names of the NERC regions.

POP_NAME - This six character text field contains the standard abbreviations for the NERC regions. This region identifier is used to acquire contact information from the ECOMPANY look-up table.

COREGION - This sixty character text field indicates an overlap of two NERC regions. This field gives the alternative NERC region that represents that area.

COPOP_NAME - This six character text field displays the standard abbreviation for the alternative NERC region indicated in the [COREGION] field. This region identifier is used to acquire contact information from the ECOMPANY look-up table.

UPDATED - This date field indicates when any of the attributes of the NERC region were last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

UPDT_SP - This date field indicates when the placement or shape of the NERC region was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY). This is a new field and is not yet fully populated.

METACODE - This one hundred character alphanumeric field describes the degree of spatial data integrity and quality.

MAP_ID - This twenty-five character alphanumeric field contains the Endeavor MAPSearch unique identifier of the source map used to reference the location and/or attributes of the feature.

RELEASE_DT - This date field indicates the MAPSearch data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

XEVSTATIONS Table – Field Definitions

MSID - Unique alphanumeric identifier autogenerated by Endeavor MAPSearch.

NAME - Name of the electrical vehicle charging station.

ADDRESS - Address of the electrical vehicle charging station.

CITY - City of the electrical vehicle charging station.

STATE - State of the electrical vehicle charging station.

ZIP - Zip code of the electrical vehicle charging station.

COUNTRY - Country of the electrical vehicle charging station.

STATUS - Status of the electrical vehicle charging station. Options include Available, Proposed, Idle/Inactive.

PRIVATE - Type of availability for users. Options include Public or Private.

ACCESSTIME - Hours of operation at the station.

INSTALL YR - Electrical vehicle charging station operational year.

CONNECTTYPE - EV charging connector type. Options include:

J1772 Connector: Level 1 or 2 Charging connection

CCS Connector: DC Fast Charging connection type and J1772 combo connector

CHAdeMO Connector: DC Fast Charging connection type

Tesla connector: DC Fast Charging connection type

NEMA1450: J1772 Connector cord end with either Level 1 or 2 connection (Amp= 15 amps and

Voltage= 125 V)

NEMA 515: J1772 Connector cord end with either Level 1 or 2 connection (Amp= 20 amps and Voltage= 125 V)

NEMA520: J1772 Connector cord end with either Level 1 or 2 connection (Amp= 50 amps and Voltage= 240 V)

LVL1 COUNT - Number of EVSE charging ports for level 1 connectors (Voltage= 120 V).

LVL2 COUNT - Number of EVSE charging ports for level 2 connectors (Voltage= 208 or 240 V).

DC COUNT - Number of EVSE charging ports for DC Fast connectors (Voltage= 480 V).

OTHER - Description of EVSE charging ports other than level 1, 2 or DC. Other connector types include, Small Paddle Inductive, Large Paddle Inductive and Avcon Conductive.

NETWORK - Either non-networked or networked station ownership. EV network companies, such as: Powerflex, Volta, ChargePoint, Tesla, Greenlots, FLO, etc.

UPDATED - Date of recent attribute updates made towards station.

UPDT_SP - This date field indicates when the placement or shape of the NERC region was last updated or audited. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY). This is a new field and is not yet fully populated.

METACODE - This one hundred character alphanumeric field describes the degree of spatial data integrity and quality.

RELEASE_DT - This date field indicates the MAPSearch data publication date. It is displayed as a two-digit month, two-digit day and four-digit year in American Standard date format (MM/DD/YYYY).

Electric Company Profile Tables

There are three principal tables: ECompany, EPlants, and ESubstat. These tables contain the basic information for the various companies and facilities. Five additional tables interconnect the three main tables and contain information on the relationships between the main tables. The EPlantOw table indicates ownership of the facilities. The EPlantOp table indicates which companies operate various facilities. The ESubsidi table connects subsidiaries with holding companies and vice versa. The ESubOwne table indicates ownership of the substations. The ESubOper table indicates which companies operate various substations.

Table Name: ECompany

This table contains basic company information including the company name, address, telephone number and general nature of business.

CoID - This is a unique, eight character, alphanumeric field containing the identifier used in the ownership [OWNERID] and operator [OPERATORID] fields for the various features.

CoName - This seventy-five character, alphanumeric field is the company's full name. A portion of the company's name may be abbreviated (Limited = Ltd., Corporation = Corp., Company = Co., Incorporated = Inc., Limited Partnership = LP).

PhysAddres - This seventy character alphanumeric field is the physical address of the company.

PhysCity - This is a fifty character, alphanumeric field containing the city in which the company is located.

PhysState - This is a fifty character, alphanumeric field containing the state or province in which the company is located.

PhysIPosta - This is a twenty character, alphanumeric field containing the postal code for the company's physical address.

MailAddres - This is a fifty character, alphanumeric field containing the mailing address of the company.

MailCity - This is a fifty character, alphanumeric field containing the city in which the company receives mail.

MailState - This is a fifty character, alphanumeric field containing the state or province in which the company receives mail.

MailPostal - This is a twenty character, alphanumeric field containing the company's mailing postal code.

Phone - This is a thirty character, alphanumeric field containing the company's main phone number.

Fax - This is a thirty character, alphanumeric field containing the main fax number for the company.

Email - This is a fifty character, alphanumeric field containing the primary E-mail address for the company.

Webpage - This fifty character field identifies the location of the company's web site.

Country - This is a fifty character, alphanumeric field containing the country in which the company is located.

<u>Company Type</u> - is indicated by the alphanumeric fields listed below. These fields describe the type of company or entity being referenced. (Please note there can be more than one to describe a company.) These fields will populate as 1 for true/ 0 for false.

CountyGovernment Districts

JointAgencies Defunct

FederalGovernment StateGovernment Subsidiary HoldingCompany

Investor Owned Utility Municipal

Public Utility District Rural Electric Association

Unknown NUT (Non-utility)

Generation flag indicates if the company generates electricity and will populate as a 1 for true/0 for false.

Distributi flag indicates if the company distributes electricity and will populate as a 1 for true/0 for false.

Transmissi flag indicates if the company transmits electricity and will populate as a 1 for true/0 for false.

TotalReven - This numeric field indicates the total revenue for the company for the past year.

ElectricOp - This numeric field indicates the total electric operating revenue for the company for the past year.

NetIncome - This is a numeric field and indicates the total net income for the company for the past year.

TotalElect - This is a numeric field and indicates the total electric operating expenses for the past year for each company.

Operatingl - This is a numeric field that indicates the operating income for each company for the past year.

Consumers - This is a numeric field that indicates the number of consumers the company served for the past year.

Mwh Sales - This is a numeric field that indicates the mega watt-hours sold for the past year for each company.

Table Name: ESubsidi

This table provides company ownership and subsidiary information. This table should be viewed with the ECOMPANY table. In order to determine if a company is a holding company or a subsidiary you must view the ECOMPANY table.

CoID1 - This is an eight character, alphanumeric field used to obtain the holding company information from the company table. (See above description.)

CoID2 - This is an eight character, alphanumeric field used to obtain the subsidiary company information from the company table. (See above description.)

CoID1	CoID2		
ALBPOW	SO		
ALLEGEN	ALLEGH		
ALLEGH	ALLEGEN		

Table Name: EPlants

This table provides information on each facility.

FacID - This fourteen character alphanumeric field is the identifier for the facility.

FacilityNa - This seventy character alphanumeric field is the facility's full name.

FPhysAddre - This seventy character alphanumeric field is the physical address for the facility.

FPhysCity - This fifty character alphanumeric field is the city in which the facility is physically located.

FPhysState - This fifty character alphanumeric field is the physical state in which the facility is located.

FPhysPosta - This twenty character alphanumeric field is the physical address postal code for the facility.

FMailAddre - This fifty character alphanumeric field is the mailing address for the facility.

FMailCity - This fifty character alphanumeric field is the city for the mailing address of the facility.

FMailState - This fifty character alphanumeric field is the state for the mailing address of the facility.

CountryNam - This fifty character alphanumeric field is the country in which the facility is located.

FCounty - This fifty character alphanumeric field is the county in which the facility is located.

FMailPosta - This twenty character alphanumeric field is the postal code for the mailing address of the facility.

FPhone - This thirty character alphanumeric field is the main phone number for the facility.

FFax - This thirty character alphanumeric field is the main fax number for the facility.

NonUtility flag indicates if the facility is a non-utility and will populate as a 1 for true/0 for false.

<u>Fuel Type</u> - is indicated by the alphanumeric fields listed below. These fields describe the type of fuel the facility uses to make electricity. (Please note there can be more than one fuel type used.) These fields will populate as 1 for true/0 for false.

Coal Gas Hydro Nuclear Oil Geothermal

Waste Wind

Diesel Culm

Biomass Renewable Resources

Other Solar

FossilFuel (Default value. Specific petroleum fuel type was not available.)

FuelTypeEx - This is a notes field that may include more detail about the specific fuel type utilized by the facility.

H_ResName - This fifty character alphanumeric field identifies the name of the reservoir as specified by the U.S. Army Corps of Engineers 1990 revision of the 1982 dams inventory.

H_PopName - This fifty character alphanumeric field identifies the popular name of each dam as specified in the U.S. Army Corp of Engineers 1990 revision of the 1982 dams inventory.

H_River - This fifty character field identifies the name of the river on which the dam is built as specified by the U.S. Army Corp of Engineers 1990 revision of the 1982 dams inventory.

H_StLine - This is a numeric field and identifies whether a dam is located on a state line. A value of "1" indicates that the dam is located on a state line and a value of "0" indicates that the dam is located within a state.

Table Name: EPlantOw

This table provides facility ownership information including the facility, owner and the percentage of the facility owned.

FacID - This fourteen character alphanumeric field is the identifier for the facility.

CO_ID - This is an eight character, alphanumeric field. This field is used to obtain owner information from the ECompany table.

PctOwned - This is a numeric field and is the percentage of the facility owned bythe company. 0 indicates an unknown percentage.

Example of facility owner table:

FacID	CO_ID	PctOwned
MSE1001781- 1	PUBENT	95
MSE1001770- 1	PPLRES	90
MSE1000297- 1	TERA	89

Table Name: EPlantOp

This table provides facility operator information.

FacID - This fourteen character alphanumeric field is the identifier for the facilities.

CO_ID - This is an eight-character, alphanumeric field. Each facility has at least one operating company. This field is used to obtain operator information from the ECompany table.

The following are examples of the facility operator table:

FacID	CO_ID
MSE1000004- 1	CONLP
MSE1000010- 1	DEC
MSE1000012- 1	TEC

Table Name: ESubstat

This table provides information on each substation.

SubsMSID - This fourteen character alphanumeric field is the identifier for the substation.

SubsName - This seventy character alphanumeric field is the substation name.

SubsState - This fifty character alphanumeric field is the state for the physical address of the substation.

SubsType - is indicated as AC, DC or AC/DC. This field describes the direction of current going through the substation.

SubsStatus - is indicated as Proposed or Active.

SubsDesc - This three character alphanumeric field contains a description of the substation.

SUB = SubstationSWS = Switching StationTER = Terminal TowerMTR = Metering StationREC = Receiving StationCAP = Capacitor StationCVR = Converter StationTAP = Line Taps

DSP = Distribution Point SWY = Switching Yard

BLK = Bulk Station

SubsOwnrFI - This one character alphanumeric flag is associated with the OWNR_ID field. A single owner is identified with an "S" and multiple owners with an "M". This identifies jointly owned substations.

SubsOprFlg - This one character alphanumeric flag is associated with the OPR_ID field. A single operator is identified with an "S" and multiple operators with an "M". This identifies jointly operated substations.

SubsLeaseF - This one character alphanumeric flag is marked "Y" when the operator of the substation is leasing the facility from the owner.

Table Name: ESubOwne

This table provides substation ownership information including the substation, owner and the percentage of the substation owned.

MSID - This fourteen character alphanumeric field is the identifier for the substation.

OWNR_ID - This is an eight character, alphanumeric field. This field is used to obtain owner information from the ECompany table.

Percent - This is a numeric field and is the percentage of the substation owned by the company. 0 indicates an unknown percentage.

Example of facility owner table:

MSID	OWNR_ID	PERCENT
MSS1000000-	ATCOGRP	0
MSS1000005-	HYDROPQ	0
MSS1000006-	CMPGROU	0

Table Name: ESubOper

This table provides substation operator information.

MSID - This fourteen character alphanumeric field is the identifier for the substation.

OPR_ID - This is an eight-character, alphanumeric field. Each substation has at least one operating company. This field is used to obtain operator information from the ECompany table.

MSID	OPR_ID	
MSS100000	ATCOEL	
MSS100000	HYDROPQ	
MSS100000	CENMAINE	

Table Name: EXMIS OWN

This table provides transmission line multiple ownership information.

- **MSID** This fourteen character alphanumeric field is the identifier for the transmission line.
- **VOLTAGE** This numeric field contains a value that represent either the transmission line's exact kilovolt voltage or the lowest kilovolt value within a voltage range.
- **MAP_ID** This ten character alphanumeric field contains the Endeavor MAPSearch unique identifier of the source map used to reference the location and/or attributes of the feature.
- **OWNR_ID** This is an eleven character, alphanumeric field. This field is used to obtain owner information from the ECompany table.
- **PERCENT_1** This is an eleven character, alphanumeric field. It is the percentage of the transmission line owned by the company OWNR_ID.
- **OWNR_ID2** This is an eleven character, alphanumeric field. This field is used to obtain owner information from the ECompany table.
- **PERCENT_2** This is an eleven character, alphanumeric field. It is the percentage of the transmission line owned by the company OWNR_ID2.
- **OWNR_ID3** This is an eleven character, alphanumeric field. This field is used to obtain owner information from the ECompany table.
- **PERCENT_3** This is an eleven character, alphanumeric field. It is the percentage of the transmission line owned by the company OWNR_ID3.
- **OWNR_ID4** This is an eleven character, alphanumeric field. This field is used to obtain owner information from the ECompany table.
- **PERCENT_4** This is an eleven character, alphanumeric field. It is the percentage of the transmission line owned by the company OWNR_ID4.
- **OWNR_ID5** This is an eleven character, alphanumeric field. This field is used to obtain owner information from the ECompany table.
- **PERCENT_5** This is an eleven character, alphanumeric field. It is the percentage of the transmission line owned by the company OWNR_ID5.
- **OWNR_ID6** This is an eleven character, alphanumeric field. This field is used to obtain owner information from the ECompany table.
- **PERCENT_6** This is an eleven character, alphanumeric field. It is the percentage of the

transmission line owned by the company OWNR_ID6.

Example of EXMIS_OWN table:

MSID	VOLTAGE	MAP_ID	OWNR_ID	PERCENT_1	OWNR_ID2	PERCENT_2
MSID406577	345		DPLINC	50	DUKE	25
MSID406608	230	MBPP1	DOI	50	BASINE	10
MSID1475703	230	WECC4	PINNACLE	40	SALTR	20
MSID1475913	500	WECC4	PINNACLE	40	SALTR	20

