TFS 27454 – Email Template for the Nightly Asset Appendix Generation Updated

The new email template was updated for the nightly generation Asset Appendix, and the correct SAT link was added to the Asset Appendix nightly generation email – wherein a table-formatted section listings for:

- Asset Appendix Serial Number
- Generated By Submission(s)
- Filing Entity Name
- Company Identifier (CID)
- Generated Date/Time

FERC Automatically Generated Asset Appendix

The following asset appendix has been automatically generated by FERC for the Filing Entity or Entities:

Submission(s) made by affiliated Filing Entity:

Asset Appendix Serial Number:	Generated By Submission(s)	Filing Entity Name	Company Identifier (CID)	Generated Date / Time
2129	429043	TC13	C013556	08/04/2025 15:46:16

If you have any questions or detect errors in your asset appendix, contact FERC:

E-Mail: mbrdatabase@ferc.gov, ferconlinesupport@ferc.gov

Toll Free: 866-208-3676

If you have any questions, or if you detect errors in your asset appendix, please contact FERC at: E-Mail: ferconlinesupport@ferc.gov Toll Free: 866-208-3676.

Release 1.58

TFS 17752 – Automatically Update EIA Data to Latest Provided; Prevent Duplicate/Older EIA Info

Upon receiving any submitted EIA data updates, MBR now automatically checks for any original and subsequent EIA data (Originator, Proposed #1, Proposed #2 or Proposed #X). To prevent duplicate EIA records for the same submission, the latest EIA submission data overwrites any original/previous EIA data that is found in the MBR database.

TFS 26026 – New features for the Latest Entity to Entity Report

Under the Additional Data section of the MBR Database, The link for the MBR Affiliations List now launches the Latest Entity to Entity report – which provides OEMR the functionalities listed below:

- 1. After criteria for a search, has been completed, users can choose to only display "Active Relationship" records
- 2. If/When zero records are found, present a message, "No Records Found"

TFS 23894 – Updating the Asset Appendix Generation Nightly Logic Report

So that submitters can comply with Order 860 regulations, MBR now provides a three-step process wherein users:

- 1. enter and submit a recording CID into the logs;
- 2. run an Asset Appendix nightly report;
- 3. send out appropriate emails.

Release 1.56

TFS 19005 – Entities to Entities Report - New export feature

Export functionality was added to the Entities-to-Entities Report. Users can now search for entities in the database via the link, <u>https://mbrweb.ferc.gov/</u>. Also, some column names in this report were updated for clarity. The renamed columns are also reflected in the export feature.

A. Search Boxes:

- 1. The Search boxes will perform a search that includes all entities in the database.
- 2. Search results may produce a list containing multiple entities; the user may choose the entity on which they want to report.

B. Possible Searches and Results:

- 1. Search for a company; the search provides details of the CID, GID, and LAI.
- 2. Search for a UUA.
- 3. Search for a Utility. (Only utilities with blankets are reported into the database.)

Release 1.55

TFS 17055 – New Entities to Entities Report

Enclosed in the "new Entities to Entities Report" is a link (<u>https://mbrweb.ferc.gov/</u>) where users can search for entities in the database. This report includes an updated export capability of the Entities to Entity tables, as some column names were updated for clarity.

A. Search Boxes:

- 1. The Search boxes will perform a search that includes all entities in the database.
- 2. Search results may produce a list containing multiple entities; the user may choose the entity that they want to report on

B. Possible Searches and Results:

- 1. Search for a company; the search provides details of the CID, GID, LAI
- 2. Search for a UUA
- 3. Search for a Utility (Only utilities with blankets are reported into the database)

Release 1.54

- Asset Appendix Repository in the Asset Appendix Repository, the Asset Appendix Date is generated and displayed below the Asset Appendix Serial Number.
- Bug Fix
 - When exporting an Excel file of the Asset Appendix Repository, the column **Filing Entity and its Energy Affiliates** now displays the company's name instead of the CID.

Release 1.53

• Submitted Data Tables → Entities to PPAs – For increased clarity, modifications have been made to a number of columns:

Original Field Name	Update Type	New Field Name
Company Name	Renamed	Reporting Entity Name
MBR Submission	Renamed	Submission ID
EIA_fk	Renamed	EIA ID
PPA Agreement Id	Renamed	PPA Agreement ID

Adjust Rating	Renamed	Adjusted Rating Option	
FERC Asset Gen Code	Renamed	FERC Gen Asset ID	
Eia Unit Code	Renamed	EIA Unit Code	
Eia Generator ID	Renamed	EIA Generator ID	
Eia Plant Code	Renamed	EIA Plant Code	
amount Adjusted	Renamed	Amount Adjusted	
Source Balancing Authority CD	Renamed	Source Balancing Authority	
Source Balancing Authority Hub CD	Renamed	Source Balancing Authority/Hub	
Sink Balancing Authority CD	Renamed	Sink Balancing Authority	
The first Entity ID Type CD	Renamed	Sink Balancing Authority/Hub	
Entity Name	New column	added after Entity ID Type CD column	
Counterparty Name	New column	added after Counterparty ID Type CD	
Updated Record	Renamed	Updated Record ID	

 Submitted Data Tables → Entities to Gen Assets – For increased clarity, modifications have been made to a number of columns:

Original Field Name	Update Type	New Field Name
Company Name	Renamed	Reporting Entity Name
MBR Submission	Renamed	Submission ID
EIA_fk	Renamed	EIA ID
Generation Assesst Type	Renamed	Generation Asset Type
Cap Rating Adjusted	Renamed	Capacity Rating Adjusted
Adjust Rating Options	Renamed	Adjusted Rating Option
FERC Asset Gen Code	Renamed	FERC Gen Asset ID
Eia Unit Code	Renamed	EIA Unit Code
Eia Generator ID	Renamed	EIA Generator ID
Eia Plant Code	Renamed	EIA Plant Code
Entity Name	New column	added between Entity ID and Entity ID Type CD
Update Record	Renamed	Updated Record ID

- Latest Asset Appendix Report:
 - o The Asset Appendix Report has been renamed "Latest Asset Appendix Report."
 - Presentation of data in the Generation Assets, Long-Term PPA, and Vertical Assets sheets display an Infragistics appearance with a single continuous scroll bar. Filtering capabilities have not been applied to the Latest Asset Appendix display
- Asset Appendix Repository:
 - The Asset Appendix Report landing page:
 - Now uses Infragistics with filtering capability and a vertical scroll bar.
 - Has a new column, Asset Appendix Date (i.e., the specified relationship end date), that appears just before the Generated Date column – so that these items may be viewed together.
 - Project data for the specified relationship end date automatically displays in the new column.
 - Presentation of data in the Generation Assets, Long-Term PPA, and Vertical Assets sheets display an Infragistics appearance with a single continuous scroll bar. Filtering capabilities have not been applied to the Asset Appendix Repository display
- MBR Database The Final 2022 EIA-860 data was uploaded to the MBR Database.

- MBR Reports → Market Share Screens The Study parameter "Non-Affiliate LT Firm Purchases Firm Sales" now reads as "Non-Affiliate LT Firm Sales".
- Documents and Links "MBR Order" now reads as "Order No. 860" which now links to the Commission Order on the ferc.gov website.

- Submitted Data→Entities to Entities Two new columns have been added so that users have a direct visual reference; i.e., there is no longer a need to repeatedly visit General Search for this information:
 - Reportable Entity Name is now shown in between the columns for Reportable Entity ID and Reportable Entity ID Type CD
 - Utility Name is now shown in between the columns for Utility ID and Utility Type CD
- Submit MBR XML/Validation rules Users can now input a value of "0" in the **Amount** field of the entities_to_genassets table of the MBR XML. This update allows sellers to report the addition of a generation asset that is associated with another reportable generator without adding attributable capacity to the reportable generator. For example, this approach is useful for reporting the addition of *battery energy storage systems* attached to generation facilities.
- Submit MBR XML/Validation rules Previously, if an XML file contained MS Word properties, this anomaly would have sent the submission into Auto Processing status. The validation rules have been updated to reject filings with MW Word properties, and the user is sent a notification.
- Reports→Asset Appendix Repository Presentation of the asset appendix records has been updated. For all asset appendix records for a specific CID where a *chosen relationship end date* has been specified by using the "Asset Appendix Date" field when using the "Generate AA Serial Number(s)" function on the Latest Asset Appendix Serial Numbers page, users will now see:
 - 1. the *serial number* for each asset appendix record that has a specified relationship end date
 - 2. the date that the serial number was created
 - o Also:
 - an email is sent to the user so that they can see both (a) the end date of the time period that is reflected in the asset appendix, and (b) the date the serial number was generated
 - the asset appendix will not contain any assets that were added to the company's affiliated generation capacity *after* the end date
- Reports -> Latest Asset Appendices/Asset Appendix Repository The "Base Views" in the Asset Appendix Report have undergone a complete assessment and subsequent performance optimization.
- All MBR tables now have the following updates:
 - Mouse-over/hover-display on the page titles display the description of the submitted data table
 - Table column headers have filters that allow selection of multiple values
 - Headings for table column headers word-wrap/display on two lines

- Table column widths autofit/resize per the column contents
- Radio button options for XML, CSV, and JSON are removed and are replaced by Export to Excel button
- Initial page launch loads the first 100 records. Any/all data search results exceeding 100 records display on a single, vertical-scrolling page.
- Reports→Global Information Sheet The Global Information Sheet has been removed from the MBR Reports area. A new/replacement reporting solution for market power studies is under consideration.
- API The API has been updated so that, when an update for the *Study Amended Reference* attribute for the Market Share and Pivotal Supplier Screens has been submitted, the update is reflected in the concurrent place(s) in the API.
- LEI table The LEI table has been updated; data is as of 8/30/2023.

- XML updates for the validation rules for MSS and PSS Indicative screens when study_area_balancing_authority_cd = EIM – and study parameters 22 and 27 in the PSS tables and study parameters 25 and 30 in MSS are only allowed input values of 0 or 1.
- Search and Submitted Data tables display only the first one hundred records in the initial view for improved record access.

Release 1.50

- Search→EIA→only the first one hundred records are displayed in the initial view to allow the screen to display the data quickly for filtering and exporting to Excel
- Search→MBR Authorizations→only the first one hundred records are displayed in the initial view to allow the screen to display the data quickly for filtering and exporting to Excel
- Search \rightarrow EIA and Gen Assets pages \rightarrow All MBR Tables have the following updates:
 - Mouse-over/hover-display the meta data associated to the page title
 - o Table column headers have filters that allow selection of multiple values
 - Headings for table column headers word-wrap/display on two lines
 - Table column widths autofit/resize per the column contents
 - Radio button options for XML, CSV, and JSON are removed and are replaced by Export to Excel button
 - All data results display on a single, vertical-scrolling page
- Updated text on the Update validation email language to remove non test verbiage on test filings.

- Create Gen Asset Appendix report now contains links to Assets by seller asset appendices. This allows Assets owned by one seller to appear on the other seller's asset appendices.
- Updated Validation rule for the Generation Asset Type ID field to only be populated as 1 or 2 so incorrect date is not accepted by the system.

- Look-up Tables → Submitted Data → New Revised Table views for the following tables: MBR Authorization, MBR Category Status, MBR Mitigations, MBR Self Limitations, MBR Operating Reserves, Entities to Entities, Entities to Vertical Assets, Entities to Gen Assets, Entities to PPAS, Market Share Screens and Pivotal Supplier Screen. The new views provide sorting capability, place the search fields directly in the header of each column, and supports future expansion of more detailed search functionality.
- Submitted Data \rightarrow Left-margin navigation name changes for the following menus:
 - Entities To Genassets to Entities to Gen Assets
 - Indicative PSS to Pivotal Supplier Screens
 - Indicative MSS to Market Share Screens
- Submitted Data Tables now all display an ID column.
- Tooltip descriptions providing definitions of the following tables are now viewable: MBR Authorization, MBR Category Status, MBR Mitigations, MBR Self Limitations, MBR Operating Reserves, Entities to Entities, Entities to Gen Assets, Entities to PPAs, and Entities to Vertical Assets.
- MBR Reports → MBR Affiliations list → Modifications to the view of this report to replicate the view of the Look-up Tables → Submitted Data Tables reports.
- Submitted Data \rightarrow MBR Category Status- \rightarrow Changes to the following column names:
 - Company Name to Reporting Entity Name
 - Submission to Submission ID
 - Cat status in Region to Category Status
 - Cat Status Effective Date to Effective Date
 - Updated Record to Updated Record ID
- Submitted Data \rightarrow MBR Authorization \rightarrow Changes to the following column names:
 - Company Name to Reporting Entity Name
 - Submission to Submission ID
 - Updated Record to Updated Record ID
- MBR System Administration has expanded functionality. Administrator can now view submissions that are stuck in a status and manually resubmit those submissions.

Release 1.47

• Release 1.47 addresses routine system maintenance with no material updates related to the validation or acceptance criteria. This release specifically addresses data/report anomalies raised by filers.

- Bug Fixes
 - The Asset Appendix Repository Report and Latest Asset Appendices now properly display the In Service Date and Explanatory notes.
 - Submissions containing data for hubs is now properly validated against the hub lookup table when the related BAA element is not 'Hub.'

Release 1.45

• Users now receive an error message when submitting duplicate records in the Entities to Entities table.

Release 1.44

- Introduced a select all checkbox when users are generating new asset appendices in the Asset Appendix Serial Numbers page
- Asset Appendix exports now correctly match all the information shown in both the Latest Asset Appendices and Asset Appendix Repository reports

- Bug Fixes
 - <u>Submitted data tables</u> now properly display Reference IDs and Updated Record IDs after updating records
 - The Asset Appendix Serial Number page now displays all the companies for which a user is registered
- The <u>Latest Asset Appendices report</u> now includes "Last Updated by and date" to indicate when the last update was made to the report.
 - Ex: Last Updated: Friday, May 6, 2022 by Submission ID: (MBR Test Company1)
- Reports→Asset Appendix Report→ Aligned the Export to CSV button with other export options
- Following a submission to the database, the system now displays links to the <u>Submission</u> <u>Summary</u> and <u>Asset Appendix Repository</u> reports
- Minor text updates

- Bug Fixes
 - Addressed an issue causing some users to experience an error in the Long-Term PPA tab in the Asset Appendix.
 - The Entities to Gen Assets Explanatory notes field now displays in the Asset Appendix when relationship_type_fk=2 (Control).
 - The Self Limitations table no longer produces an error when record_type_cd=Deactivate.
 - The Generator Assets tab in the Asset Appendix should no longer display duplicates in newly-created Asset Appendices.
 - MSS and PSS reports now correctly formats numbers as numeric values for .csv exports.
 - The Asset Appendix Reports now displays the name of the agent who generated the Asset Appendix, if it was *manually* generated.
- Validation Rules
 - The mbr_self_limitations table should *either* contain a **region_CD** or a
 Balancing_Authority_cd, but not both. If both are submitted, the submission will be rejected. The Data Dictionary was updated to reflect this.
 - The mbr_category_status table no longer requires a **cat_status_effective_date** when **cat_status_in_region_fk** is 1, or 2. The Data Dictionary was updated to reflect this.
 - Relaxed a rule erroneously preventing users from providing a source_balancing_ authority_cd in the entities_to_ppas table when ppa_type_fk = 1 (Purchase).

- Bug Fix:
 - Asset appendices will now generate when an MBR_Authorization table for an MBR Seller is not in the database
- Modified text in the Acceptance email changing "Asset Appendix ID" to "Asset Appendix Serial Number"
- Modified error message when study parameters in the PSS or MSS tables are not in the proper sequence. Message now reads: "Study Parameters provided are not in proper sequence",
- Look Up Tables \rightarrow Region table \rightarrow removed **Canada, Alaska, Ercot and Mexico** from the table.
- Submitted Data → MBR Self Limitations must contain either a region_cd or a Balancing_Authority_cd. If neither exists, the filing is rejected.
- Submitted Data → Explanatory Notes fields width in all tables increased to allow longer text entries.
- Removed LEI and CID search fields from Asset Appendix Reports

- Modifications to the landing page table and text to eliminate the third line pertaining to Sellers and to enclose the Text box above the table as well as add a URL to the portal.
- Added verbiage on the landing page detailing the Paperwork Reduction Act.
- New Asset Appendix Serial Numbers menu displays under the Documents and Link Menu. This
 provides a General AA Serial Numbers button visible for uses logged into the MBR System with
 the ability to generate new AA Serial Numbers and that are affiliated with the associated CID.
 The report information is added to the Asset Appendix Repository after the button is clicked and
 an email is sent to the user that the "request has been received and will be processed".
- Look Up Tables \rightarrow Region \rightarrow Removing Alaska and Canada from the Regions Table.
- MBR Administrators → Manage Lookup Tables → BAA, Administrators are able to select a region and County from the Add new BAA Screen.
- Modification to Reports →Asset Appendix→PPA Tab to add Entity Column between the Filing Entity and Counterparty columns.
- Reports→Asset Appendix Report →Generation Assets→Data Control Transfer field only display relationship start date.

Release 1.39

Contains updates to the XML Schema

- Submitted Data → Validation for PSS. Sellers can use a different parameter for Western EIM, for Study_Parameter ID=19 (Wholesale Load) and Study Parameter ID=20 (Uncommitted Supply). Parameter 20 is based on (ID=15)-(ID=19).
- MBR Reports → Asset Appendix → if the Docket cancellation_effective_date<=Today then those Dockets are excluded from populating in the asset appendix.
- Submitted Data → Updated text boxes to display as Entities to PPAs, Indicative PSS and Indicative MSS.
- Submitted Data→ Entities to PPA→ adj_rating_options_fk is not required when supply_type_fk is 2 ; amount_adjusted is not required when supply type= 2
- MBR Reports → Asset Appendix provides ability to search by GID and LEI as a reportable company.
- GID Creation screen allows Special characters to be used in the Legal Entity field for address names.
- MBR Reports \rightarrow Download General Search \rightarrow GID download list includes all individual names.
- MBR Administration → Region and Country is no longer required when adding a new record in the BAA Table.
- Lookup Tables→Region list does not include Alaska, Canada, Ercot or Mexico.

- Validation rules changes:
 - indicative_pss table: parameter 24 (Seller's Percent of SIL) now checks to see if it equals parameter 6 (Seller Uncommitted Capacity Imports) divided by parameter 23 (Total Imports)
 - entities_to_ppas table:
 - Now allows Amount equal to zero
 - Amount_Adjusted is required when Adj_Ratings_Options_FK not null or Adj_Ratings_Options_FK is required when Amount_Adjusted is not null (now matches the logic described in the data dictionary)
- <u>Asset Appendix Repository</u>:
 - Updated Search to allow search by LEI and GID
 - Updated to include records when Reportable Entity is also the Reporting Entity
 - No longer displays erroneous, duplicate records
- Added two columns to General Search: Other Legal Name and LEI Upload Date. Other Legal Name is often used as an English translation when an entity's primary legal name is not in English. The <u>primary source of LEI data</u> has further information on entities, if needed.
- Addressed data display performance issues in the PPA and Other Affiliation pages
- Updated XSD to change maxOccurs season value to 4

Release 1.37

*Contains updates to the XML Schema –submissions to the database **must use** the latest XML structure*

- XML Updates for the entities_to_entities and indicative_mss tables. The new fields in the entity_to_entities table are used in the auto-generation of the asset appendices. The <u>Data</u> <u>Dictionary</u> provides further details.
 - Three data fields were added to the entities_to_entities table:
 - Blanket_Auth_Docket_Number
 - Utility_ID_Type_CD
 - Utility_ID
 - Parameters 27 and 28, Seller and non-affiliate percentages of SIL, were commented out of the indicative_mss table. These fields should no longer be submitted in the XML. The MSS Reports in the system autocalculate the values based on the data submitted and no longer need to be reported. Parameters 29 and 30 remain numbered as such.
- The Latest Asset Appendices report now provides the ability to search by GID and LEI affiliations.
- When creating a GID
 - An error message now displays when attempting to input an Entity Name that exceeds the 50 character limit.
 - Users reported the address validations were too restrictive and prevented GID creations with legitimate addresses. The validations were loosened to no longer require an address. Adding an address is preferred, and will be validated if an address is provided, but the system will not generate an error if one is not provided.

- In the Entities_to_PPAs table, when the amount_adjusted field is blank, the adj_rating_option is now nullable.
- In the Entities_to_GenAssets table, when relationship_type_fk=1 (Ownership), the amount field can now be zero without generating an error.
- Users reported that LEI searches in the <u>General Search</u> page returned non-English characters in the Name field. The system is passing through these characters directly from the primary source of the <u>LEI Database Download</u>.
 - In the instances when the Legal Name in the <u>LEI Database</u> is non-English, it often includes an English translation. This data is now included in the General Search page under "Other Legal Name" and
 - To clarify when LEI data was added to the database, "LEI Upload Date" was also added to the search results.
 - If any ambiguity persists, users are encouraged to directly consult the <u>LEI Database</u> as a primary source of LEI information.
- Bug fixes when exporting asset appendices

- LEI data has been updated to reflect latest entity information
- Users can now download all CID, GID and LEI data in zipped format, under <u>Download General</u> <u>Search</u> in the MBR Reports page
- Asset Appendix report updated to accurately reflect assets submitted for non-MBR affiliates
- Welcome page updated to reflect latest or on the data collection changes relating to the Entity to Entity table structure

Release 1.35

• If Submitted Data → Entities to Gen Assets → Relationship Type FK column is set to 1, then the amount column can contain \$0.00.

- MBR Reports→Asset Appendix Repository has new columns for Plantcode Generator ID and Unit code in the Asset Appendix Repository.
- MBR Pre-Production Database/Data Cleanup. This includes the deletion of all user submitted MBR table data
 This does NOT include any MBR Identification (CID, LEI or GID) and Generation Asset information.
- Asset Appendices report:
 - Date control transferred is populating relationship_start_date.
 - Cap rating methodology is populating adj_rating_options_fk.

- New record is created for the Ikp_EIA Table when XML filing includes plant code value, eid_generator_id, and eia_unit_code are null the system will create a new record in Ikp_EIA table.
- If the plant code, eia_generator_id, and eia_unit_code contains data the system will validate per rules.
- The system now validates the submitted XML Zipped Files.
- Updated error messages for XML filings containing; entities_to_ppas, entities_to_genassets, entities_to_entities, and entities_to_vertical_assets when the filling contains an inactive GID.
- New validation for Submitted Data in the Entities_to_PPA Table for the PPA_Agreement_ID column which adds a unique key to PPA_Agreement_ID to help check for duplicate PPAs.

Release 1.32

• Updated security scan to allow MBR to load in Edge and Chrome browsers.

Release 1.31

Contains updates to XML

- MBR Landing page: fixed display issues of text that was cut off from the top right and the gap between Username and Logout buttons.
- FERC main website now opens in the same tab when clicking the FERC emblem.
- Updated missing Page Headers on the Lookup Tables page and the Submitted Data page.
- Updated the Export CSV file name and tab name.
- General search:
 - Removed extra column header in the Export file
 - Correctly matched the Export file column order with the UI (CSV/XML/ JSON)
 - Updated incorrect message; GID or GID. Full Name are Required
 - Updated Error message for an invalid search
- Gen Assets search:
 - o Added an Error message for No record found
 - Added "Inactive Date" column
- EIA:
- "Nameplate Capacity MW" column now displays correct data
- \circ ~ EIA search: Added Error message for No record found
- Operating Year: search results page- pagination is now working
- Operating Month: search results page- pagination is now working
- "Unit Code" column data is updated
- Lookup Table:
 - BBA: Export file- Removed incorrect column header and extra column
 - Region: Export file- Updated column header

- Submitted Data:
 - Updated Export file column headers, removed extra columns, matched order of columns to UI, and correctly linked data to appropriate columns for:
 - MBR Authorization
 - MBR Category status
 - MBR Mitigations
 - MBR Self Limitations
 - MBR Operating Reserves
 - Entities to Entities
 - E2Gen A
 - E2Ppas
 - E2VA
 - PSS
 - MSS
 - Added Error message for No record found to:
 - MBR Authorization
 - MBR Category Status
 - MBR Mitigations
 - MBR Self Limitations
 - MBR Operating Reserves
 - Entities to Entities
 - E2Gen A
 - E2Ppas
 - E2VA
 - PSS
 - MSS
- Create New GID: Correct error message now displays when you entering an Invalid state code (more than five digits)
- Reports:
 - AA Repository: Export- Removed extra columns
 - Company Dashboard: Added pop up window
 - o MBR Affiliation List: Created additional space on filtered items
 - MBR Reports: FERC Asset Single Submission Summary- Updated Submission status=> N/A
- MBR Administration: Updated pagination to function correctly for:
 - Look up files- BBA
 - E2E
 - 0 E 2 GA
 - o Error messages list
- Submission XML:
 - MBR Authorization- Updated XSD to reject when user enters more than 15 characters for <authorization_docket_number>

- MBR Authorization: "Cancellation effective date" is now system validated and must be greater than or equal to the authorization effective date.
- MBR Self Limitation: Updated effective_end_date to equal effective_date
- E2E: System no longer allows an Entities to Entities relationship with an inactive GID
- Entities to Gen Assets: Updated status upon validation to pass or reject; no longer displays auto processing for <cap_rating_adjusted> (Submission ID# 393406, 393408, 393411 and 393412)
- Entities to PPAs:
 - Updated status upon validation to pass or reject; issue caused by the
 <cap_rating_adjusted> validation above (Submission ID# 393417, 393418)
 - Updated "schedule end date" value to be ≥ "start_date" instead of only > date (Submission ID# 393426)
 - "Schedule_end_date" and "Actual_end_date" validation is no longer per Data Dictionary
 - Updated system validation for "Amount_adjusted" and now must be less than the nameplate capacity of the corresponding generator
- Updated system validation for PPAs "source_balancing_authority_hub_cd" when PPA type=2 and source balancing authority cd= hub
- Vertical Asset: Updated error message to be greater or equal to
- PSS: Updated system validation to ensure <pss_study_reference_fk> matches with an existing entry from the "IndicativePss" submitted data table
- MSS: Updated XSD to validate pass or reject status instead of Auto processing when inputing invalid <season Id> (Submission ID# 393459)
- MSS: Updated system validation to ensure <mss_study_reference_fk> matches with an existing entry from MSS submitted table

- BETA TESTING [in mbr_authorizations table only]: Introduced functionality to "Deactivate" previously-submitted, <u>active</u> records
 - Intended Purpose:
 - If a user accidentally submits a record for a table, the user will now be able to inactivate / remove / delete that specific record. For backward traceability, the record will remain in the database with an indication of the Submission which Deactivated it.
 - Theoretical Example:
 - A filer accidentally submits a second authorization into the database and realizes this was a mistake. Previously, Updating that record would necessitate submitting all the data in the table and would retain an active association to that record. With Deactivate, the filer submits an *mbr_authorizations* table with a record type of "Deactivate" and the Reference ID to that record to inactivate the association with that record.
 - Note: Neither Inactive, nor Active records with relationship end dates in the past, are used to populate asset appendices.

- This is not intended to be used as the primary mechanism for changing records Update should always be used when modifying details of previously-submitted records.
- Steps to Deactivate:
 - Only two fields should be submitted when Deactivating a record
 - 1) Record_type_cd = "Deactivate"
 - 2) Reference_id = [id of the record to-be Deactivated]
- Added API parameter values for the MSS and PSS.record_type_cd
- Updated various MBR Web API items:
 - Provided a sample SOAP response to find missing parameters
 - Updated API endpoints:
 - LT PPA Purchase & Sale
 - Vertical Assets
 - Pivotal Supplier Screen
 - Market Share Screen
 - Updated Data Dictionary indicative_mss to include row 5, study_amended_reference_fk
 - When MSS submissions occur, a second validation email will be sent that contains the validation. Previously, only a first email was sent and data was not successfully posting to MBR which could also not be retrieved when searched.
 - Updated missing EIA 2019 data on the MBR portal.
- Enhanced XSD for MSS and PSS:
 - Implemented validations to prevent the submission of either duplicate study parameters (or seasons within the same parameter). Validations also prevent the submission of either more or fewer parameters than expected

- Updated a rule for triggering the creation of a new Asset Appendix. Submissions containing *entities_to_vertical_assets* tables without any of the other "*entities_to_*" tables now result in a new AA.
- Implemented new rules for rounding calculations. The system now accommodates whole numbers, and rounded decimals to the tenths and hundredths place. For example a system calculation of 4.1 can be accepted as 4, 4.1, or 4.10; 4.11 as 4.1 or 4.11; or 4.111 as 4.11.
- Loosened restrictions in MSS/PSS calculations:
 - Values less than ten no longer require leading zeroes.
 - System Calculations and associated validations now prevent negative numbers in calculations, and instead will necessitate *zeroes*.
- Updated various MBR Web API Downloads:
 - MSS/PSS: the *Study_Parameter_ID* replaces the *study_param* attribute
 - MSS/PSS: data return is now structured as arrays by *Study_Parameter_ID* and *season_fk* (Season for MSS only)
 - entities_to_PPAs: added scheduled_end_date
 - *entities_to_vertical_assets*: added *relationship_start_date* and *relationship_end_date*

- Updated the Latest Asset Appendices landing page to contain an example row of data when clicking through the various tabs, with a blank search
- Fixed an Auto Processing bug when an *entity_ID_type_CD* didn't match the type of *entity_ID* submitted (ex: *entity_ID*: CXXXXXX *entity_ID_type_CD*: *LEI*). The system now returns an error.

- MBR Reports → Asset Appendix (AA) updated in the Draft Reports Table to "Asset Appendix Repository".
- MBR Reports → MBR users now have a unified interface for reporting and can download MSS reports by company name as well as click "Ultimate Upstream Affiliate" for an AA pop-up window.
- WCF/API correctly navigates to uploaded MBR XML file.

Release 1.27

Contains major update to Asset Appendix functionality

- The <u>Asset Appendix Repository</u> is a new functionality of the system that creates a history of generated Asset Appendices (Gen Assets, Vertical Assets, and PPAs)
 - The history of these Asset Appendices is tracked and referenceable by the "Asset Appendix Serial Number" on the Repository report (the furthest left column)
 - For background on the Asset Appendix Serial Number, please see paragraphs 16, 56, and 315 of <u>Order 860</u>
 - The "Get Report" link on the far right of the page links to that specific Asset Appendix, showing metadata of the report at the top of the page
 - Anytime a new Asset Appendix is generated by a successful submitting, a Serial Number is sent in the *Acceptance* email and link to the report of that
 - A new Asset Appendix is generated for an entity and its affiliates when any of the following tables are submitted:
 - entities_to_entities
 - entities_to_genassets
 - entities_to_vertical_assets
 - entities_to_ppas
- Updated XML Submission Page language, in addition to the <u>blank XML example</u>, an <u>XML example</u> was added with sample data. This new file includes examples of filing both New and Updated data for every table.
- <u>Redline</u> and <u>Excel</u> versions of the Data Dictionary were uploaded

** Both the Data Dictionary, and the XSD have been updated with this release **

- An <u>updated Data Dictionary</u> was published under <u>Documents and Links</u>.
 - [Redline and Excel versions will be published this week.]
- The XSD now requires each season when submitting MSS tables. Related Auto Processing issues were resolved by adding these attributes to the XML.
- The validation rules now limit MBR data updates to the filing CID for which the filer is an agent in FERC Online Registration.

Release 1.25

- MBR Reports → Updated Asset Appendix Vertical Asset table so that the "Filing Entity and its Energy Affiliates" column is visible and pulls data from the correct table.
- Renamed column to "Capacity Rating Methodology Used:(N)ameplate, (S)easonal, 5-yr(U)nit, 5-yr (E)IA, (A)lternative".
- Data now correctly displays in the "Capacity Rating Methodology Used: (N)ameplate, (S)easonal, 5yr(U)nit, 5-yr (E)IA, (A)Iternative" column.
- MBR Reports → Asset Appendix Capacity Rating Used in Filing (MW) column now pulls data from the correct table.
- Update to XML file PSS Only for validation rules and pre-validation that will prevent submission of duplicated tables within the same file.
- Added placeholder link for future Excel format of Data Dictionary.
- Users now able to input International zip codes.
- MBR UI data format update for MSS/GIS/PSS Commas are now included in all numeric fields.
- Reports/Views/UI→ AA Connection and Field Updates AA Gen/PPA/vertical assets all affected. Affiliation views corrected for CID/GID/LEI data.
- Search→ End to end queries are now able to be conducted in relationship end and inactive dates searches.
- MBR Reports → GIS Report for PSS Screens, where no screen data exists, now display as blank instead of auto-populating with zeros.
- MBR Reports \rightarrow GIS Report now displays PSS-Net Uncommitted Supply data.
- MBR Reports \rightarrow GIS Report now displays MSS-Market Share Results (%).
- Blank spaces, before and after all submitted data, will now be removed from the XML source prior to database entry.
- MBR Reports → Updated Asset Appendix Affiliations through GID/LEI now correctly populate assets/PPAs.

- MBR Reports \rightarrow MBR Affiliations list is viewable and provides Search and Export to CSV.
- Adding EIA business validation rules to add the <eia_generator_id> and <eia_unit_code> to the validation for tables entities_to_genassets and entities_to_ppas.

- Validation added that if a record does not exist in the MBR system, the same XML user is not allowed to submit the same MSS Submission within the XML.
- MBR Reports \rightarrow Asset Appendix Report now contain search fields for LEI and GID.

- MBR Reports → FERC Asset Single Submission Summary link opens to the Single Submission Summary Report and provides search and export capability.
- MBR Report → Submission Summary Report displays Submission Summary table in descending Order to ensure latest submission displays at the top of the list.
- MBR Reports → Submission Summary Report modified to remove 6 columns from the report located on the far right to improve data display.
- Log In screen now displays the MBR Order Schedule initially until Log In.
- Submit Data→ Indicative PSS and Indicative MSS reports now display the correct report under the Action column field for the selected company record.
- MBR Reports →MSS and PSS Reports→Report Link now displays the **SIL Limit Exceeded** Column and the **Result** column data as one digit, instead of decimal places, (0, vs. 0.00)
- MBR Reports \rightarrow GIS Report now displays Data for Fall as well as Winter, Spring and Summer data.
- Update to the validation rules to ensure that All MBR XML Submission data is only submitted or updated by the original CID or submitting entities who are authorized to file on behalf of the CID.
- Update to the validation rules to ensure that duplicated data is not submitted through the XML filing that already exists in the database. An error message will indicate that duplicate data has been submitted.

- MBR Reports→Global Information Report (GIS) is now available in the User Interface. This report provides a regional summary of Market Power Studies and allows the user to analyze the power studies for MSS/PSS for a selected region and study year.
- MBR Reports → Asset Appendices → Long-Term PPA include column name updates; seller name changed to Counterparty Name, Unit or system changed to Type of PPA. Also, the organization name under the "Counterparty Name" should always (Sale or Purchase) refer to the organization in the "counterparty_id" database column and the values under the "Filing Entity and its Energy Affiliates" should always(Sale or Purchase) refer to the organization in the "entity_cid_cd" database column (or affiliates related to this organization)

- MBR Reports \rightarrow Submission Summary Link opens to the Submission Summary Report
- Updates to the XML file that validates in the entities_to_PPAs table the field should be null when supply_type_fk is not 1, but when supply_type_fk=1, the entities_to_PPA table is not nullable.

Release 1.20

- Update to the MBR Reports →Asset Appendices: users can now export the 3 Asset Appendix tabs (Generation, PPAs, and Vertical) in CSV format to a ZIP file.
- The *lkp_supply_type* lookup table is now downloadable on the MBR Web API Help Page.
- Submissions to the entities_to_entities table no longer accepts a *reportable_entity_ID* that is the same as the CID of the *reporting_entity_cid* established in the FilingInformation table.
- Submissions to the entities_to_entities table now validates that the relationship_start_date value should not be null when the data is submitted in the *reportable_entity_ID_type_CD* and *reportable_entity_ID* fields.

Release 1.19

- Update to the XML file for validations that will prevent duplicated data based on table rules in the file.
- Search→ Submitted Data tables currently display all company names when an CSV Export is performed.

- **Critical Update:** Modification to the XML structure to match the order of the tables and attributes of the data dictionary. As such, subsequent submissions must conform to the latest XML.
- File submission errors now specify the attribute name associated with the error.
- Further refinements to the validation rules and associate notifications.

- XML code structure change to modify EIA *entities_to_genassets* and *entities_to_ppas*.
- Modification to the sample XML file to improve usability when opening the file as a new tab. This allows easier editing without modifying the original structure of the XML.
- Error messages for MSS and PSS can be managed through the Admin Module.
- Asset Appendix screen provides a search functionality for Organization and CID name.
- Admin Module → Manage GID Records → Name Search Parameter 2 field allows an additional name to be added to a company association.
- Admin Module → Manage GID Records → GID Relationship Group Search field for group numbers.
- Admin Module \rightarrow Manage GID Records modification of columns for better viewing.

Release 1.16

- Admin staff can now select any email template from the user interface to edit and save changes to the email.
- Look up Tables and MBR Submitted tables all list active and inactive dates for each item on every table.
- MBR Reports →Asset Appendix Report → displays Generation Assets Report on screen as a default display.
- MBR Reports → Asset Appendix Report → replaced **Transmission & Natural Gas** sub menu with **Vertical Assets** sub menu.

- MBR Administrative menu now available on the User Interface.
- MBR Administrative screen allows upload and download options for Release Notes and Data Dictionary.
- MBR Administrative screen provides ability to modify **Look-up tables** data and review audit history.
- MBR Administrator → Manage GID Records link, now provides the following features on the GID Administration screen:
 - Display ability to search GID records by GID name
 - Ability to initiate LINK function
 - Ability to select a record as lead
 - Ability to select from a list of records all records to be included in the relationship
 - Ability to indicate relationship/Group ID for all records who are a member of a relationship
 - Ability to indicate the relationship/Group Leader

- MBR Data Tables \rightarrow Expanded search function to include *Submission FK* data field.
- Lookup Tables → Addition of three tables: *lkp_mss_indicative_study_param*, *lkp_pss_indicative_study_param* and *lkp_supply_type*.
- Lookup Tables → Data cleanup Active Date fields default to 1/1/2020 and Inactive dates default set to null.
- MBR Authorization → Internal users only MBR Administration screen security authorization implemented per *MBR Admin* group membership.
- Documents and Links → Addition of WCF Service Link.
- MBR XML update to rename the PK column from *vertical_assets_id to entities_to_vertical_assets_id.*

Release 1.13

- Major revision to the Data Dictionary every table affected Redline and Standard versions are available in <u>Documents and Links</u>
- MBR Reports link from the User Interface screen links to the new MBR reports screen
- MBR Reports section of the website is the primary source for finding Reports and future Data Views
- Reports for MSS and PSS are available online and as CSV downloads
- Every Report contains a unique URL to the online report format
- Added the Action column in the MSS and PSS reports in the Submitted Data section of the website

- Filing period information is no longer included in the validation and acceptance emails sent to the filer.
- Search → Gen Assets will display a validation error if there is no End Date in the Active Date field when there is Start Date in the Active Date field
- Placeholders are no longer displayed in the General Search, Gen Asset and the EIA data fields.
- Search \rightarrow General now provides export options for XML, CSV, and JSON
- Search → General screen modifications for the Search, Clear and Print button to align with the XML, CSV, and JSON export buttons
- Search → Look Up Tables; BAA, Category Status in Region, Entity Type, PPA Type, Record Type, Region, Relationship Type, Scenario Type, Seasons, Study Type and Vertical Asset Type now have Active Dates as 1/1/2020
- Search \rightarrow EIA and Gen Asset now allow partial search in the name field (3 characters minimum)
- Implemented XML data submittal validation functionality for the MSS Indicative Screen table in accordance to the latest published Data Dictionary and Data Validation rules document

- Following the new ferc.gov update, XML/XSD Namespace was updated to reflect MBR server vs. FERC.GOV location. <u>Sample files for all XML and XSD files have been updated accordingly</u>.
- The *Latest Table Updates* table (pictured above) replaces the prior visual. The goal is to show the last release in which each specific table was updated. If you would like to, please submit feedback on this visual to MBRDatabase@ferc.gov
- The validation rules for MSS/PSS table submissions were relaxed to allow multiple MSS / PSS submissions by filer
- Search → Submitted Data tables now provide a search filter radio button for Active, Inactive, and All Records
- Search → Gen Assets screen now provides capabilities to search Gen Asset data "Search" the same as (CID/LEI/GID) screen with all functionalities (e.g. print and export)
- Search \rightarrow EIA Screen now provides capability to search an export EIA data
- All searches now display 50 records on the screen per page
- The BAA and HUB lookup tables were updated to properly show the *Codes* of the locations, for use in submitting data
- Remove the MBRSubmissionType and DateofReport element in the FilingInformation Table
- Documents and Links \rightarrow FERC.GOV URL updates.
- Enhanced the validation for entities_to_ppas: added/modify the rules for the columns(alt_methodology_used, source_balancing_authority_cd, source_balancing_authority_hub_cd, sink_balancing_authority_cd, sink_balancing_authority_hub_cd) to match the data dictionary

Release 1.10

- Search→ Look Up Tables and Submitted Data now provide export functions for CSV and JSON format in addition to XML.
- Search→ Gen Assets → now provide export functions for CSV and JSON format in addition to XML.
- Active and Inactive date columns are now visible on the right side of Search → Submitted Data tables.
- Search → Submitted Data → Searching will display validation message of "End range is missing" when there is no End Date in the End Range field.
- MBR Tables (e.g. 13 primary tables) now allow basic search and downloading functions as well as sorting, exporting and filter criteria by data type.
- Update of *pparef_ID* to entity_id and *pparef_ID_type_CD* to *ppared_id_type* for validation.
- Search→ Submitted Data→ MBR Tables now provide the ability to see data results, sort data and export XML data on the screen.
- New MBR reports available in the Reports portal for Filing Confirmation and Analytics.

Release 1.9

• Expansion of search and export capability of 5 of the 11 MBR Submitted Data tables (XML Format)

- Export function implemented for all MBR Lookup Tables (XML Format)
- Validation enhancement on study_parameter_value for recordtype=update, values to be in "1-9504" range.
- In the search \rightarrow Submitted Data \rightarrow MBR Lookup tables now all contain data and are exportable.

- The MBR Authorization Screen record type field now provides an option to select a Record type of **1**. New or **2**. Update, from the drop-down box and provides an export button to export the record to an XML schema format
- Combined the Document Links and Useful Links screens into one page
- Updated the search tree layout to simplify searches in the Lookup Tables and Submitted Data
- Acceptance email for a GID XML submission now contains the newly created GID number(s)
- Acceptance email for a FERC Asset XML submission, now contains newly created FERC Asset ID number(s)
- Introduced the Web API page, currently available for Lookup Table data.
- Improved indexing capabilities with web API on the Search interface Look-up Table screen for the Balancing Authority table
- New report in the reports portal to display generation asset submission information
- New report in the reports portal to display GID submission summary information
- Company Name column was added to the MBR Authorization Table
- In the Search → Submitted Data screen → entities_to_genassets and entities_to_ppa tables, added gen_asset_type_fk column and removed gen_asset_id column from entities_to_genassets table
- Updated the XML Submission file to validate all tables data when the **record_type_cd** is null to avoid errors in the filing

- Correction to XML/XSD validation to allow submission of multiple records for given MRB Submission table.
- Modification to MBR lookup tables and removal of redundant table/data such as the replacement of Asset Table with Vertical Asset table.
- Modification of LEI search in the **General Search** screen to require a minimum of 5 characters to help facilitate more responsive search results.
- Modification MBR menu modification Search menu now displays additional sub menus on the user interface:
 - **General** opens the general search
 - o General Assets-Lookup Table displays a list of look-up tables selectable from the menu
 - General Assets-Submission Data displays a list of submission data selectable from the menu
- Initial implementation of search and export functionality for MBR Submission's MBR Authorization table to allow users the ability to search and filter data by table data and export result set to XML format.

- Search menu → Submission Data → MBR Authorization screen now provides entry fields to enter the Start and End Range for dates, number fields and drop-down values for records types.
- **Reports** Menu in the interface has been removed and data now displays under the General Menu, and sub-menus.
- Expansion of Generation Asset submission recording to now log submitters of **Gen_Asset** identification to allow reporting of Gen Asset information by submitter.

- Updates to the following lookup tables for **BAA**, **BAA_Region**, **Cat_Status_in_Region**, **Region**, **Relationship_Type** in support of validation processes.
- Look-up Table drop down menu list in the Reports screen updated to reflect lookup table changes.
- Company Registration, users should be able to assign and remove delegated agents for the MBR form submissions. This feature is visible in the Company Registration application only.
- Minor updates to user interface (e.g. release number display format)

Release 1.5

- Added New entries in the Generation Assets and XML schema files for FERCASSET or EIA to the entities_to_genassets and entities_to_ppas_tables, for validation and database updates.
- Updated to general assets XML file for operating month validated as "1-12" and operating year validated as "1890-2050".
- Updated Generation Assets XML file with country information for United States, Canada or Mexico for validation.
- Expanded email notification for XML file submissions to include emails for receipt, validation, and acceptance/rejection. Validation emails contain a link to the XML file that confirm either an acceptance of the filing or a rejection (failed) message. The rejection notification now contains the error(s) that caused the rejection.

- Add new record types to the XML Schema and database for the following items: entities_to_genassets, mbr_operating_reserves, mbr_authorizations, entities_to_vertical assets, entities to entities, indicative_pss, indicative_mss.
- Update the following MBR Tables in support of MBR XML submission process; indicative_pss, and indicative_mss for validation and processing.

- Updated the following MBR tables in support of MBR XML submission process: entities_to_vertical_assets, mbr_operating_reserves, indicative_mss
- Update to MBR support documents to include matching version numbers (e.g. GID, Generation Assets, MBR XML and MBR XSD).
- Updated MBR XML submission tables in accordance with data dictionary updates. This includes Record Type for filers to identify records as New or Update.
- Updated FERC_GEN_ASSET country lookup table to include all states for USA and all province and territories linked to Mexico and Canada.
- Addressed security vulnerabilities remediation per security scan reports.

Release 1.2

- Added the following MBR tables in support of MBR XML submission process: entities_to_vertical_assets, mbr_operating_reserves, indicative_mss
- Update to MBR support documents to include matching version numbers (e.g. GID, Generation Assets, MBR XML and MBR XSD)
- Updated MBR XML submission tables in accordance with data dictionary updates. This includes Record Type for filers to identify records as New or Update.
- Addressed security vulnerabilities remediation per security scan reports.

- Added the following MBR tables in support of MBR XML submission process: entities_to_genassets, entities_to_ppas, mbr_self_limitations
- Clickable page number grids now display at the bottom of the search screen to advance to subsequent pages.
- Footer contact and release number information now displays at the bottom of every screen in the MBR system.
- Modifications have been made to validate the following tables: mbr_authorizations, mbr_category_status, mbr_mitigations and entities_to_entities.
- The search screen now allows individual selected and GID first and last name entered as a search option.
- The text for the radio box; "Are you requesting a GID for an individual" was modified and is located at the top of the create new GID screen.
- In the search page, there is now a clear button located next to the search button to clear the fields for another search.
- In the search option, the search input data is no longer case sensitive.
- In the search results the display of rows is increased to 50.
- Search results print button now prints all rows in the search results.
- All countries for companies throughout the world are now listed on the GID Screen.
- Search, reports and FERC on-line links are now available to the public without logging in or registering.

- In the Create New Generation assets screen, the year field will allow dates entered only between 1890 and 2050.
- IT-support <u>center@ferc.gov</u> has been replaced by <u>MBRDatabase@ferc.gov</u> in the banner for support contact.
- GID request email now displays, Entity name instead of Organization name.
- FERC asset email now displays, Assist ID instead of plant code.
- Registration email now displays, "Thank you for using the GID Service"