



Generator Interconnection Queue Process Workshop

August 25, 2025

Welcome

- This presentation is to provide an overview of MISO's Generation Interconnection Queue (GIQ) process and Generation Interconnection Application (GIA) portal
- This meeting is being recorded and will be posted to the [MISO Learning Center](#)



Disclaimer: The following materials have been developed for use as training materials only. These materials do not, and are not intended to support, govern or affect in any way market activities other than for training for which these materials were developed. Those seeking governance or business practice guidance are urged to consult relevant sections in the MISO Tariff and Business Practice Manuals available through the MISO website. Any data used in these materials or in training scenarios is test data developed solely for use in a test environment for training purposes. None of this data should be relied upon for any purpose other than the training for which it was developed.

Questions

- You had the opportunity to submit questions in advance of today's meeting, but you can also use the chat to submit a question.
- To allow adequate time to review details, any project or company-specific questions should be addressed offline through an [Ad Hoc meeting request](#)



Agenda

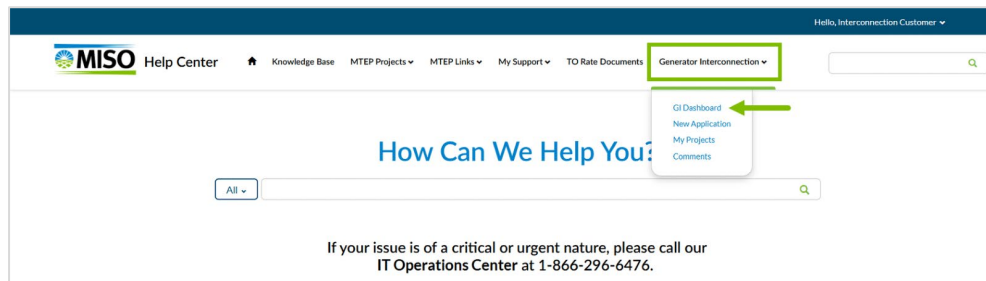


- Recent Updates
- Queue Process Overview
- Accessing the New Application Portal
- GI Finance
- Application Submittal, Review & Corrections
- Definitive Planning Phases
- Negotiation and Agreements
- Application Management
- Resources
- Q&A

Recent Updates

New GIA Portal

- The new Generator Interconnection Application Portal is located in the **MISO Help Center**.
- A data migration is currently underway to transfer historical applications from the old Grid Unity Portal to the new one. Until this process is complete, previously submitted applications will remain accessible and manageable through the old Portal. However, all new applications must be submitted via the new Portal.
- To submit and manage new applications, you must have:
 - A Help Center account **and**
 - A user type of Interconnection Customer or Transmission owner
- For step-by-step instructions, refer to the [How to Access the Generator Interconnection Application \(GIA\) Portal Knowledge Article](#).



New GIA Portal Enhancements

Section Details

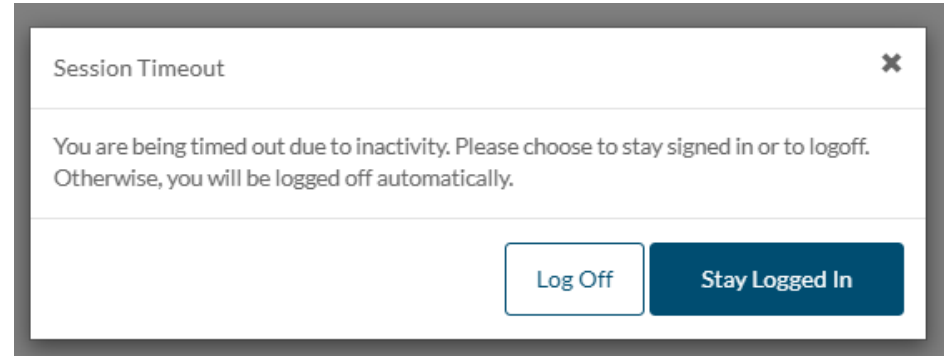
- Information has been added to provide additional details that will help you complete the section.
- It is highly recommended that you review this information before proceeding to enter data in the fields.

The screenshot displays the 'Application Contacts' section of the GIA Portal. A dark blue sidebar on the left contains a menu with the following items: 'GI Application', 'Contact and Company', 'Facility Location and POI', 'Generating Equipment', 'Interconnection Service', 'Facility Equipment', 'Payment', 'Summary Review', and 'Additional Information'. The main content area has a header 'Application Contacts' and a sub-header 'About This Section'. Below this, a paragraph states: 'We need to gather contact information for your application. You will need the names, email address, and title of application contact to create contacts for your application. Take a moment to prepare a list of who you will need to include in this process. You will need to determine who will be application contacts and the primary contact for this application. More information on these roles can be found in the cards below.' Two cards are shown: 'Application Contacts' (described as giving individuals access to the application) and 'Primary Contact' (described as receiving all communication from MISO). Below the cards, a section titled 'Contacts' includes the text 'Utilizing the table below to add as many application contacts to this application as you need.' At the bottom right, there are two buttons: 'New Contact' and 'Add Existing Contact'.

New GIA Portal Enhancements

Portal Logout/Resume

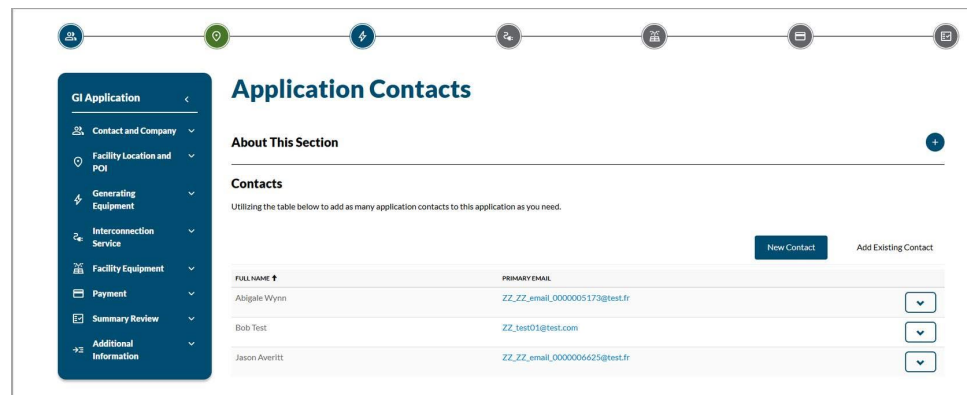
- After 18 minutes of inactivity, you will be prompted to stay logged in. If you do not select to stay logged in, you will be logged out after 20 minutes.
- When logging back in after being logged out, your session will resume where you left off.



New GIA Portal Enhancements

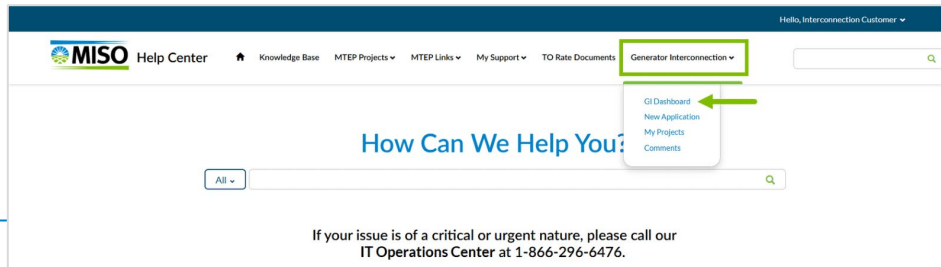
Collaboration

- Team members added as contacts on an application can collaborate, allowing multiple people within a company to access and contribute to an application.
- After the **Program Selection** and **W-9** upload are completed, users can navigate to different sections of the application by using the vertical menu bar on the left. This allows team members to navigate directly to the section(s) of the application they are responsible for completing.



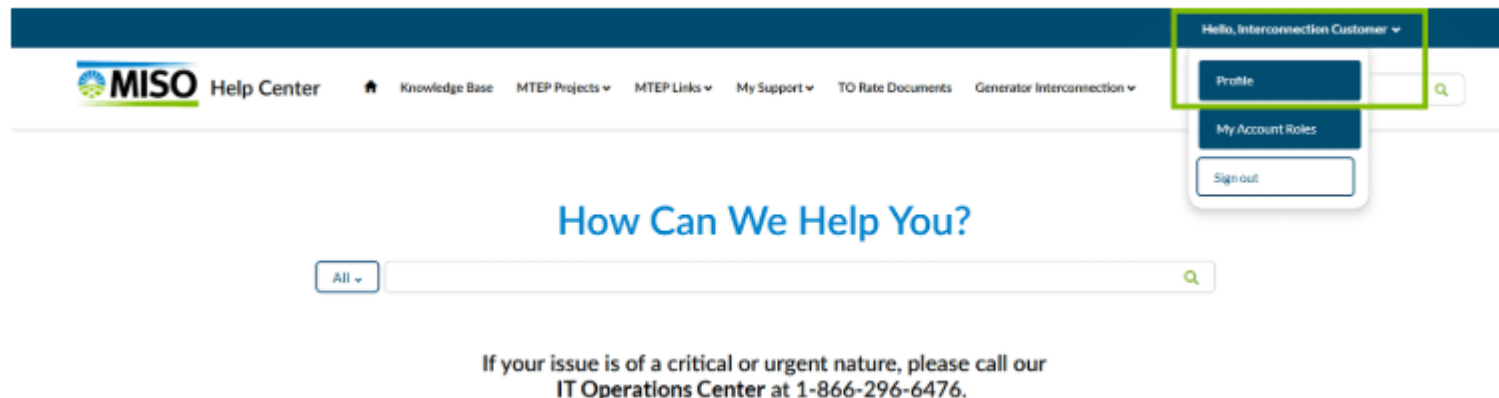
Accessing the New GIA Portal

- The new Generator Interconnection Application Portal is located in the **MISO Help Center**.
- A data migration is currently underway to transfer historical applications from the old Grid Unity Portal to the new one. Until this process is complete, previously submitted applications will remain accessible and manageable through the old Portal. However, all new applications must be submitted via the new Portal.
- To submit and manage new applications, you must have:
 - A Help Center account **and**
 - A user type of Interconnection Customer or Transmission owner
- For step-by-step instructions, refer to the [How to Access the Generator Interconnection Application \(GIA\) Portal Knowledge Article](#).



Selecting User Type

Once signed in to the MISO Help Center, select **Hello, Your Name** and select **Profile** from the drop down.



Selecting User Type

From the User Type drop down, select **Interconnection Customer** and click **Update**.

(If you need access to both Interconnection and Transmission, you will need to assign someone else from your company to the other User Type.)

Note: Once you make a User Type selection and click Update, the user type can't be changed unless you submit a request to MISO.

Profile

Interconnection Customer

Please provide some information about yourself.

User Type only applies to Generator Interconnection Customers. It will be locked once a selection is made.

Your Information

First Name *
Interconnection

Last Name *
Customer

E-mail *
ZZ.InterconnectionCustomer@miso.net

Primary Phone *
555-555-5555

Title

User Type
Interconnection Customer

Address 1: Street 1

Address 1: State/Province

Address 1: Street 2

Address 1: Country/Region

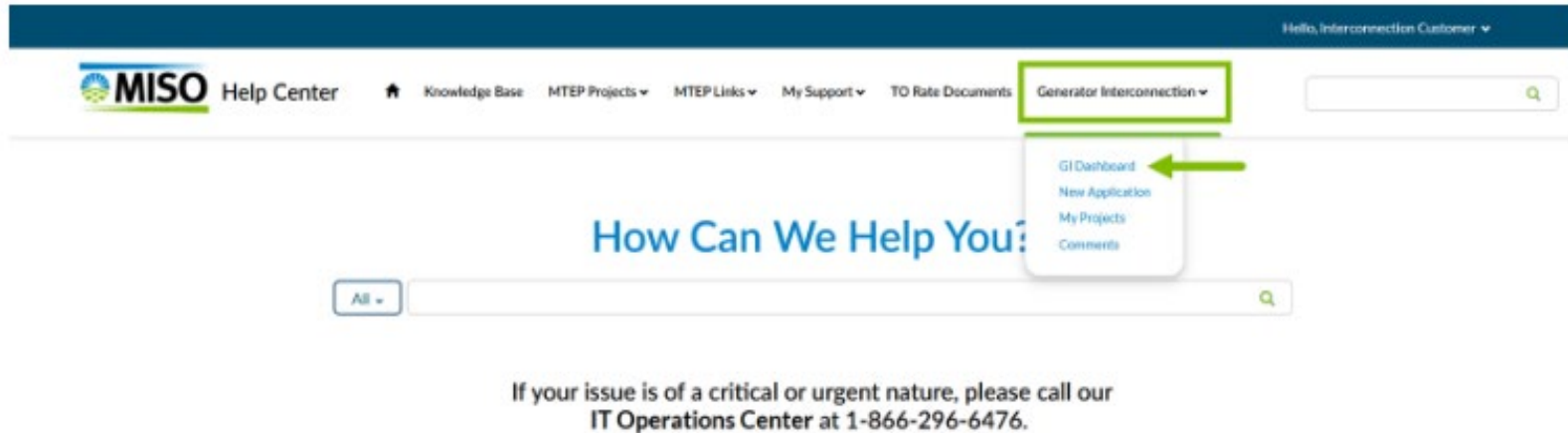
Address 1: City

Address 1: ZIP/Postal Code

Update


Selecting User Type

Refresh your browser, then click the **Generation Interconnection** tab and select **GI Dashboard**.




Portal Dashboard


Hello, Interconnection Customer ▾


 **Help Center**


[🏠 Knowledge Base](#) [MTEP Projects ▾](#) [MTEP Links ▾](#) [My Support ▾](#) [TO Rate Documents](#) [Generator Interconnection ▾](#)





What would you like to do today?



Start New Application



View My Projects



View GI Interactive Queue


View POI Tools


Learn About the GI Process

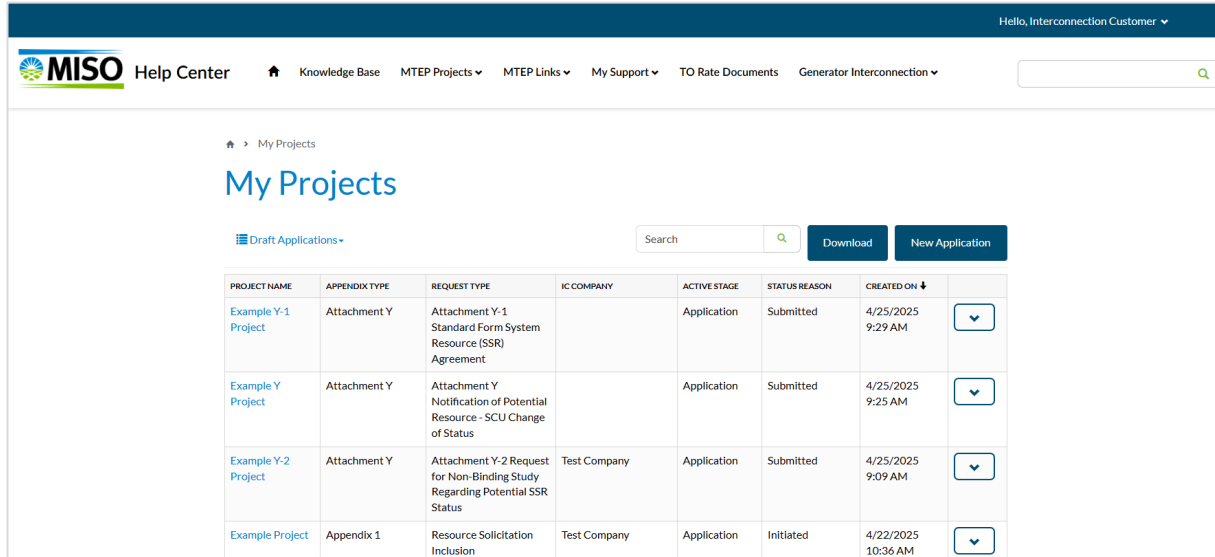

Notifications


GI Queue Process FAQ


Visit misoenergy.org

Accessing Your Applications

- The My Projects page allows you to view and access applications you are associated with



The screenshot displays the MISO Help Center interface. At the top, a dark blue header contains the MISO logo, 'Help Center', and navigation links: Knowledge Base, MTEP Projects, MTEP Links, My Support, TO Rate Documents, and Generator Interconnection. A user greeting 'Hello, Interconnection Customer' is visible in the top right. Below the header, the 'My Projects' page is shown, featuring a breadcrumb trail 'My Projects' and a title 'My Projects'. A search bar and two buttons, 'Download' and 'New Application', are located above a table of applications. The table has columns for Project Name, Appendix Type, Request Type, IC Company, Active Stage, Status Reason, Created On, and a dropdown menu. Four application entries are listed, each with a dropdown arrow in the final column.

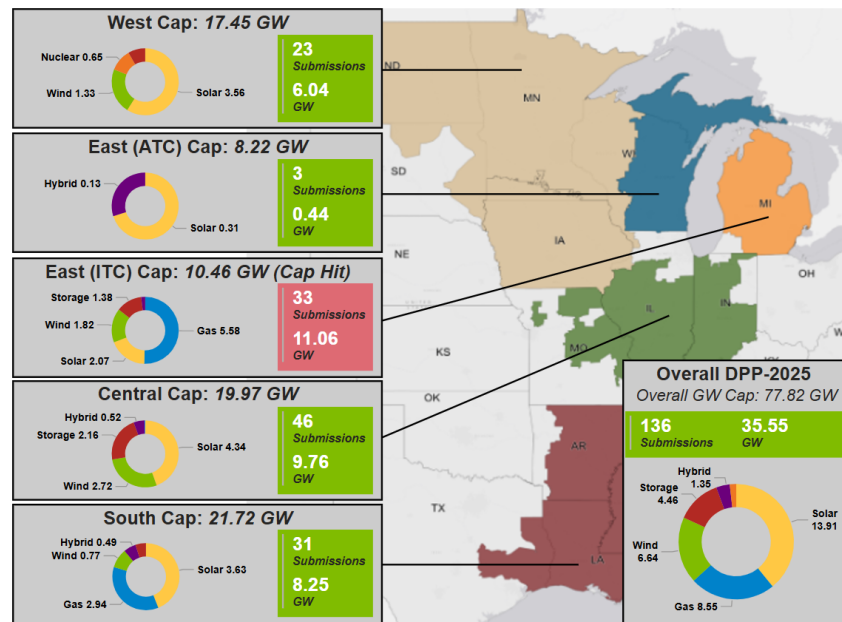
PROJECT NAME	APPENDIX TYPE	REQUEST TYPE	IC COMPANY	ACTIVE STAGE	STATUS REASON	CREATED ON	
Example Y-1 Project	Attachment Y	Attachment Y-1 Standard Form System Resource (SSR) Agreement		Application	Submitted	4/25/2025 9:29 AM	▼
Example Y Project	Attachment Y	Attachment Y Notification of Potential Resource - SCU Change of Status		Application	Submitted	4/25/2025 9:25 AM	▼
Example Y-2 Project	Attachment Y	Attachment Y-2 Request for Non-Binding Study Regarding Potential SSR Status	Test Company	Application	Submitted	4/25/2025 9:09 AM	▼
Example Project	Appendix 1	Resource Solicitation Inclusion	Test Company	Application	Initiated	4/22/2025 10:36 AM	▼

GI Application Training

- Remember, before you submit an application, please review the Generator Interconnection Online Application Guide in the [MISO Learning Center](#)
- The Generator Interconnection Online Application Guide contains step by step instructions for completing and submitting your application for MISO's review

GI Queue Cap

- Beginning with the 2025 Definitive Planning Phase study cycle, MISO is implementing a Generator Interconnection Queue Cap to manage the growing number of interconnection requests.
- The cap limits the total capacity of projects that can be studied in each queue cycle. The cap sets a limit equivalent to 50% of MISO's non-coincident peak load for each study region, based upon the power flow model used in its most recent available MTEP model series.
- View the latest information on the [Queue Cap Tracker](#), which tracks submitted applications and regional caps.
- Refer to [KA-01524](#) for Frequently Asked Questions.



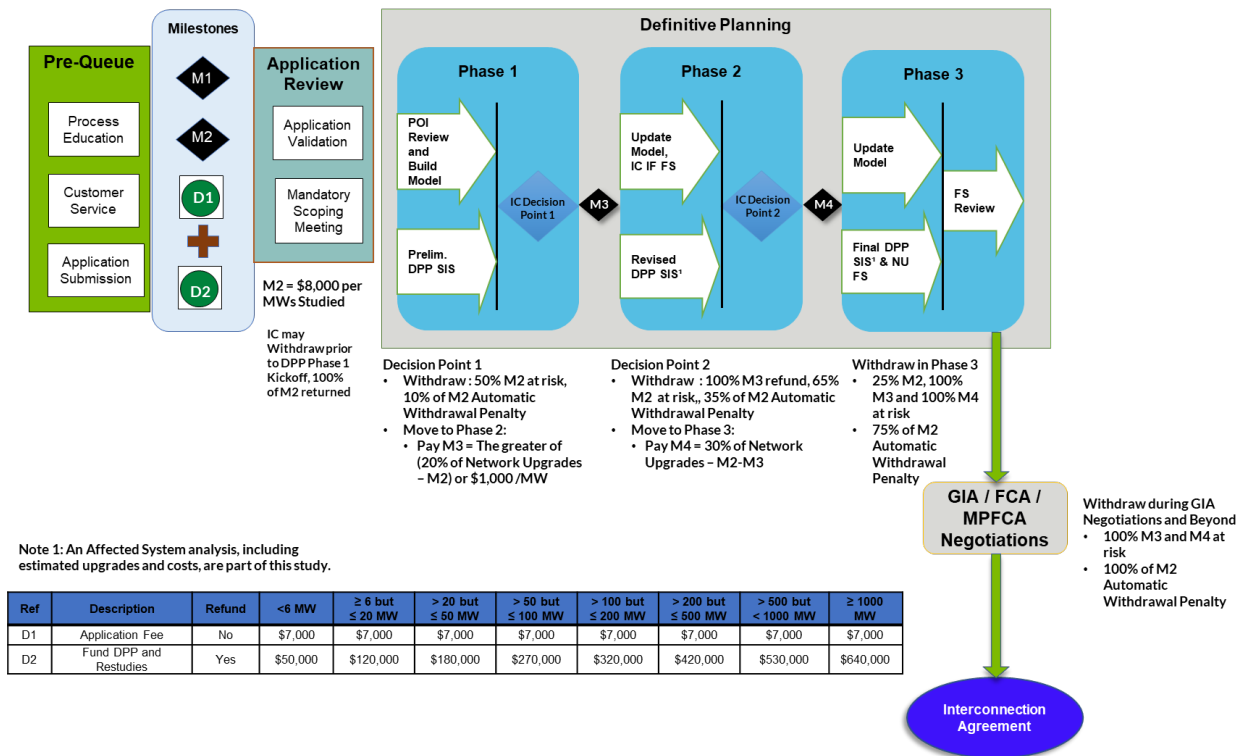
Key Dates

DPP-2025-Cycle Application Window

- Application Deadline October 7, 2025 @5:00 PM ET
 - All applications, payments, site control, etc. must be submitted by the deadline

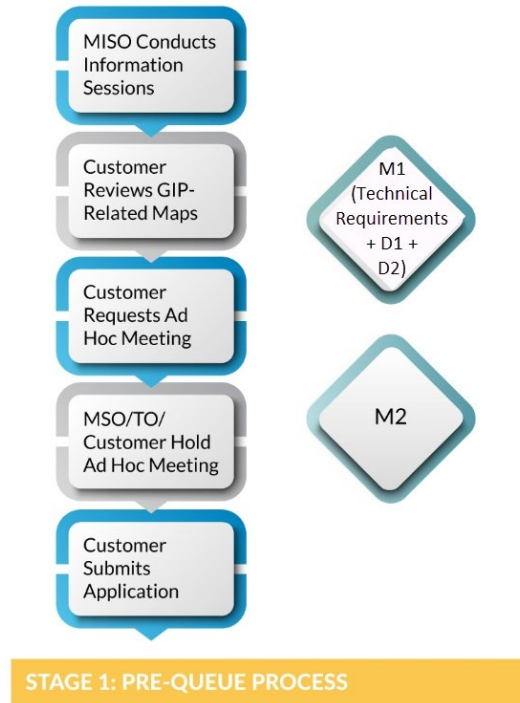
Generator Interconnection Process

Generator Interconnection Process



Pre-Queue Process Overview

- Before submitting an interconnection request, it is recommended to review the process, timeline and expectations
- After clarifying any questions and gathering important technical data, the application is submitted via the Generator Interconnection Portal



Request an Ad Hoc Meeting

- Interconnection Customers (ICs) preparing to submit a GIA have the option to request an ad hoc meeting with MISO to clarify any questions about the application or overall GI process
- To request an ad hoc meeting, complete and submit the [ad hoc meeting request form](#)
- MISO's Queue Admin Group will coordinate the meeting between the IC and the Transmission Owner

Review GI-Related Maps

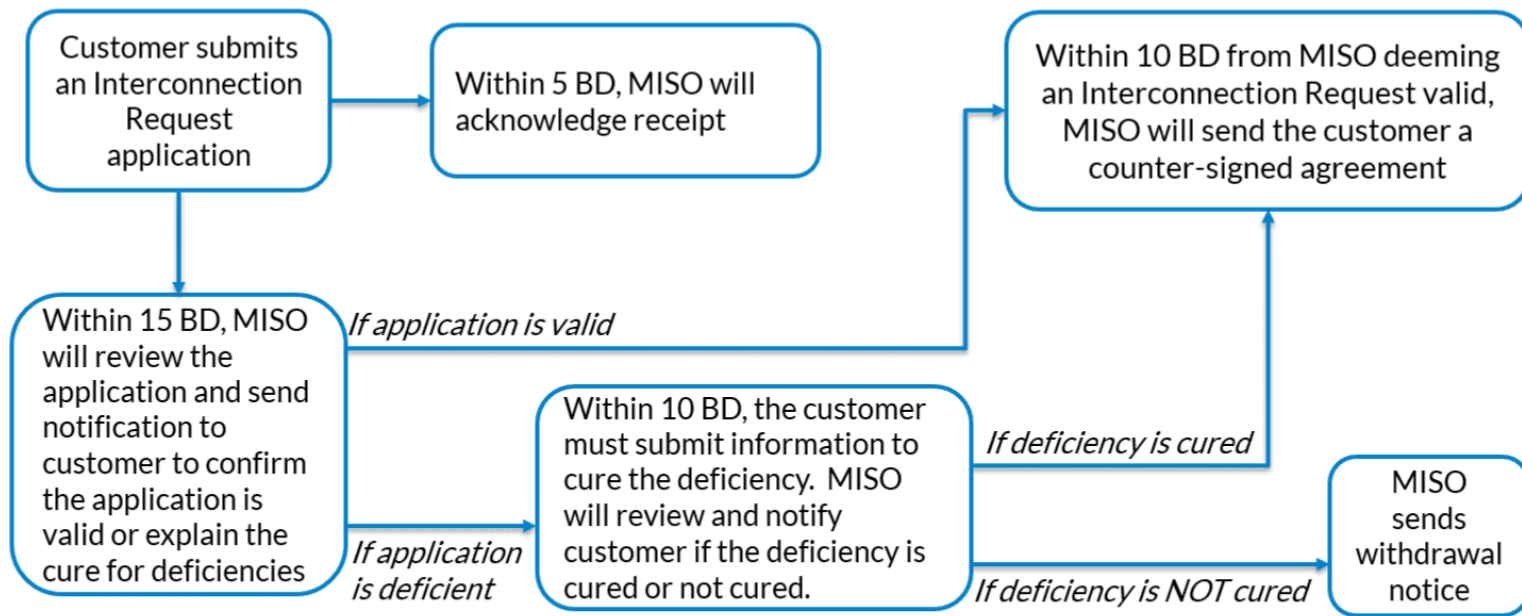
- We recommend you look over the maps and tools provided on the MISO website to prepare data for your application
 - [Interactive Queue](#)
 - [Interactive Queue Map](#)
 - [Point of Interconnection \(POI\) Self-Check Tool](#)

Gather Required Data and Documentation

- The Generator Interconnection Online Application Guide contains a table outlining required document uploads and the corresponding application section

Required Uploads/Attachments				
Refer to the Required Uploads/Attachments (below) for a list of required or "required if applicable" documentation.				
Document Name	Section	Sub-Section	Required/ If Applicable	Notes
W-9	Contact and Company	W-9	REQUIRED	An Internal Revenue Service Form W-9 or comparable state-issued document for the Interconnection Customer (IC) submitting the Interconnection Request. <i>Acceptable format(s): .PDF</i>
Operating Agreements	Contact and Company	Operating Agreement	If Applicable	Documentation proving the existence of a legally-binding relationship between the Interconnection Customer and any entity with a vested interest in this interconnection request. <i>Acceptable format(s): .PDF, .XLS, .XLSX, .DOC, .DOCX, .DYS, .ZIP</i>

Understand the Application Process



Site Control

Site Control Timing Requirements



Application

- ✓ 100% Site Control for Generating Facility
- ✓ 50% Site Control for Generating Facility's Interconnection Facilities Tie Line OR \$80K/mile deposit



Decision Point II

- ✓ 100% Site Control for Generating Facility
- ✓ 50% Site Control for Generating Facility's Interconnection Facilities Tie Line (deposit refunded upon approval)
- ✓ 50% Site Control for switchyard



GIA

- ✓ 100% Site Control for Generating Facility
- ✓ 100% Site Control for Generating Facility's Interconnection Facilities Tie Line
- ✓ 100% Site Control for switchyard
- ✓ 100% Site Control for TO Interconnection Facilities and Network Upgrades at the POI (as applicable)

Definitive Planning Phase

Site Control Documentation

Documents must be legally binding and give rights to develop specific fuel source(s)

1. Entity relationship documents

- Leases, deeds, and/or binding options for **100%** of acreage requirements
- **Ensure each agreement's term is effective (or can be extended) *at least* through your project's commercial operation date (COD)**
- If the lessee, optionee, or deed holder does not match the Applicant Company, then the IC must provide documentation of the relationship between entities

2. GIS-enabled Site Maps

- Google Earth KMZ map preferred
- PDF Site Plan Map
- Must show project boundary, IC IF, and POI

3. Executed Appendix 1 Attachment E

- Must be MISO's tariff version of this affidavit

Site Control Documentation

Accepted

- Lease Agreement
- Option to Lease
- Purchase Agreement
- Option to Purchase
- Title, Deed, or Tax Bill
- Memorandum of Lease*

Not Accepted

- Letter of Intent
- Memorandum of Understanding
- Officer Certification
- Other non-binding or non-exclusive agreements

Where to Submit Site Control Documents

Hello, Interconnection Customer ▾

👤

📍

⚡

⚙️

🏢

📁

📝

GI Application <

Contact and Company ▾

Facility Location and POI ^

Facility Location

Site Control

New or Existing Service

Point of Interconnection

⚡ Generating Equipment ▾

⚙️ Interconnection Service ▾

🏢 Facility Equipment ▾

📁 Payment ▾

📝 Summary Review ▾

➔ Additional Information ▾

Site Control

ICIF Site Control Submission Category *

Evidence Attached ▾

GF Site Control Submission Category *

Meets Resource-Specific-Acreage Requirements ▾

Total Acreage Submitted *

5.00

*** Larger files may take longer to upload

GIS-Enabled Site Map *

File formats accepted: pdf, zip

Example_GESM.pdf

Leases or Other Acceptable Site Control Evidence *


File formats accepted: pdf, zip

View/Download

Replace Existing File

Delete

30

 MISO

Site Control for Generating Facility's Interconnection Facilities Tie Line (POI)

- Confirm that 50% of the mileage is provided as indicated in the Tie Line - Line Length in Section A
- Confirm that 50% of the mileage is provided as indicated on the GIS-enabled site map
- Confirm that the GIS-enabled site map mileage and Tie Line - Line Length in Section A are the same

Insufficient Land Option

- If land does not meet the acreage requirement, the IC may provide additional evidence to demonstrate adequate site control (due at time of application)
- Additional Requirements: Detailed Site Plan & Justification Document
 - Include design considerations such as; complete site design, local spacing and setback requirements, location of feeder routes and Collector substation, and land utilization calculations
- See [Attachment X](#) Section 7.2.1.1 (ii) and [BPM-015](#) Section 5.1.2 “Insufficient land to meet the acreage requirements”

Acreage Requirements

Fuel Type	Land Required
Wind	Fifty (50) acres per MW
Solar	Five (5) acres per MW
Battery	One-tenth (0.1) acres per MW
Conventional	Ten (10) acres
Hybrid	Sum of individual Fuel Type requirements

Site Control Checklist

- A [Site Control Submission Checklist](#) is available on the MISO website
- It includes information for POI and Gen-Tie Site Control submissions
- This checklist covers all the requirements for Site Control, including:
 - Lease Agreements
 - KMZ Map Requirements
 - PDF Site Plan Map Requirements
 - Acreage Requirements
 - Reduced Footprint Requirements

The screenshot displays the MISO website's 'Generator Interconnection and Retirement' page. The header includes the MISO logo, navigation links (Meet MISO, Engage, Markets and Operations, Planning, Legal, Extranet), and a search bar. The breadcrumb trail shows 'Planning > Resource Utilization > Generator Interconnection'. The main heading is 'Generator Interconnection and Retirement'. Below this, a paragraph explains MISO's process for adding new energy sources. A sidebar on the right contains 'Quick Links' (Generator Interconnection Studies and Procedures, Generator Interconnection Queue, GI Queue Process Workshop) and 'Related Documents' (Appendix A to Attachment C UNDA Fillable PDF, Attachment D - Appendix 1 (Effective July 20, 2022).pdf, Attachment X - GIP (Effective January 31 2025)). A vertical list of steps is shown on the left: Application Process, Prepare to Apply, Apply, Application Deadline, Application Fee, and Prepare for Commercial Operations, each with a green plus icon.

Careers Library Help Center Login

MISO Meet MISO Engage Markets and Operations Planning Legal Extranet

Planning > Resource Utilization > Generator Interconnection

Generator Interconnection and Retirement

MISO's generator interconnection process vets and approves the addition of new energy sources into the MISO-controlled transmission network. It also manages generation retirement decisions to ensure that there's enough incoming energy to replace what is phased out. It's a non-discriminatory access system, open to generators within the MISO territory.

A successful application will result in an interconnection agreement that allows a connection to the MISO grid.

Quick Links

- [Generator Interconnection Studies and Procedures](#)
- [Generator Interconnection Queue](#)
- [GI Queue Process Workshop](#)

Related Documents

- [Appendix A to Attachment C UNDA Fillable PDF](#)
02/06/2024 [Follow](#)
- [Attachment D - Appendix 1 \(Effective July 20, 2022\).pdf](#)
07/12/2023 [Follow](#)
- [Attachment X - GIP \(Effective January 31 2025\)](#)
04/10/2025 [Follow](#)

Application Process +

Prepare to Apply +

Apply +

Application Deadline +


Application Fee +

Prepare for Commercial Operations +

GI Finance

Payment Submittal

All technical and non-technical milestones and study deposits must be received by MISO by the application submittal date. All payments must be submitted in full before a J number is assigned.



GI Application <

Contact and Company ▾

Facility Location and POI ▾

Generating Equipment ▾

Interconnection Service ▾

Facility Equipment ▾

Payment ▴

Payment Information

Summary Review ▾

Additional Information ▾

Payment Information

About This Section +

Application Fee and Study Deposits

D1 Amount Due *

D2 Amount Due

Milestone Payments (M2)

Select your milestone payment option: *

Select ▾

M2 Amount Due

Payment Submittal - Check

- If selecting check, payment should be sent to:

MISO

Attention: Resource Utilization

720 City Center Drive

Carmel, IN 46032

Milestone Payments (M2)

Select your milestone payment option: *

Check

M2 Amount Due

Please send your check to:

MISO

Attention: Resource Utilization

720 City Center Drive

Carmel, IN 46032

Payment Submittal - Deposit

- If selecting deposit, payment instructions are provided for domestic wire payments, ACH payments, and international wire payments
- When submitting payment, ensure the application ID is listed

Milestone Payments (M2)

Select your milestone payment option: *

Deposit

M2 Amount Due

\$8,000.00

You will need to wire/ACH the required amount to MISO Bank account with the application ID listed.

Domestic Wire Payments	ACH Payments	International Wire Payments
MISO Acct #1031566 ABA #021000021 JP Morgan Chase Chicago, IL	MISO Acct #1031566 ABA #071000013 JP Morgan Chase Chicago, IL	MISO ABA: 021000021 ACCT: 1031566 Swift Code: CHASUS33 JP Morgan Chase Chicago, IL

Payment Submittal – Surety Bond

- If selecting Letter of Credit, you are prompted to upload a copy of the Letter of Credit. The Letter of Credit needs to be in compliance with the **GI - Exhibit II - Irrevocable Letter of Credit**.
- You will also need to send the physical copy of the Letter of Credit via courier to MISO.

Milestone Payments (M2)

Select your milestone payment option: *

Deposit

M2 Amount Due

\$8,000.00

You will need to wire/ACH the required amount to MISO Bank account with the application ID listed.

Domestic Wire Payments	ACH Payments	International Wire Payments
MISO Acct #1031566 ABA #021000021 JP Morgan Chase Chicago, IL	MISO Acct #1031566 ABA #071000013 JP Morgan Chase Chicago, IL	MISO ABA: 021000021 ACCT: 1031566 Swift Code: CHASUS33 JP Morgan Chase Chicago, IL

Payment Submittal – Surety Bond

- If selecting Surety Bond, you are prompted to upload a copy of the Surety Bond. The Surety Bond needs to be in compliance with the [GI - Standard Surety Bond Template](#).
- You will also need to send the physical copy of the Surety Bond via courier to MISO.

Milestone Payments (M2)

Select your milestone payment option: *

Deposit

M2 Amount Due

\$8,000.00

You will need to wire/ACH the required amount to MISO Bank account with the application ID listed.

Domestic Wire Payments	ACH Payments	International Wire Payments
MISO Acct #1031566 ABA #021000021 JP Morgan Chase Chicago, IL	MISO Acct #1031566 ABA #071000013 JP Morgan Chase Chicago, IL	MISO ABA: 021000021 ACCT: 1031566 Swift Code: CHASUS33 JP Morgan Chase Chicago, IL

Banking Information

Payment in full is recommended at time of Application Submission.

All payments must be submitted in full before a J number is assigned.

Milestone Payment Requirements

- Each payment must be submitted separately; **DO NOT COMBINE PAYMENTS**
 - D1 – ACH/Wire Payment Only
 - D2 – ACH/Wire Payment Only
 - M2 – ACH/Wire Payment, Irrevocable Surety Bond, or Surety Bond (Only applicable for projects in DPP-2025 and after)
- **If the Interconnection Customer sends ACH/Wire payment without App ID or Project number, it will cause a delay in assigning the deposit to the correct project and putting a project at risk.**
 - Contact gifinance@misoenergy.org for wiring instructions
 - Please send remittance to accountsreceivable@misoenergy.org once the funds have been sent. Make sure to reference the project number/project name/Application ID so we know what project to apply it to.
- Use the MISO [GI - Exhibit II - Irrevocable Letter of Credit](#) and it must include the Application ID # or Project Number.
- Use the MISO [GI - Standard Surety Bond Template](#) and it must include the Application ID # or Project Number (Only applicable for projects in DPP-2025 and after).
 - Review the [GI Finance FAQ](#) for additional information
 - Upload Irrevocable Letter of credit or Surety Bond (if requirements are met) to the Application in the applicable area
 - Mail original Irrevocable Letter of credit /Surety Bond to MISO via Overnight/Standard or Certified Mail. The mailing address is listed on the FAQ.

Banking Information (Continued)

State or Federal Tax Form Requirements

- W-9 Form: An Internal Revenue Service Form W-9 or comparable state-issued document for the Interconnection Customer submitting the Interconnection Request is required.
- The W-9 Form/comparable document must match the name submitted on the application
- The address field must be completed; **DO NOT LEAVE IT BLANK**
- The address in the application must match the address on the W-9 Form.
- If applicable, ensure that the parent company name is added (Ex: XYZ Company on behalf of 123, LLC).

Refund Requirements

- Payments can be provided by the parent company, but received funds are assigned to the Interconnection Customer (IC) listed on the application
- If a parent entity wants to receive the refunds, the IC will have to provide the Operating Agreement at the time of the application
- Refunds are sent to the bank account listed on the application
- Entity receiving refunds (the Interconnection Customer or the Parent Company) needs to have supplier number - registered banking information with MISO
- To register the entity as a supplier with MISO – contact SupplierMaintenance@misoenergy.org and copy gifinance <gifinance@misoenergy.org>
- To initiate refund – submit the Refund Request form - [Milestone Refund Request Form \(Page 1 of 7\)](#)

Refunds of Milestones and Study Deposits

If the IC withdraws prior to entry into DPP Phase I

- The (M2) DPP Entry Milestone will be refunded one hundred percent (100%).
- The remaining (D2) Study Deposit will be refunded.

If the IC withdraws by the end of Decision Point I

- The (M2) DPP Entry Milestone will be refunded forty percent (40%). Automatic withdrawal penalty is 10% of (M2) and 50% of (M2) is at risk.
- The remaining (D2) DPP Study Deposit will be refunded.

If the IC withdraws by the end of Decision Point II

- The (M3) Milestone is refunded 100%. Automatic withdrawal penalty is 35% of (M2). 65% of M2 is at risk.
- The remaining (D2) DPP Study Deposit will be refunded.

If the IC withdraws at any time during DPP Phase III

- 100% of (M3) and 100% of (M4) is at risk. Automatic withdrawal penalty is 75% of (M2) and 25% of (M2) is at risk.
- The remaining (D2) will be refunded.

If the IC withdraws at any time during DPP Phase III and MISO determines that an Interconnection Study restudy is required

- The withdrawing IC will be responsible to fund all such restudies in DPP Phase III, up to amount of any remaining study deposit.

If the IC withdraws at GIA stage

- Automatic withdrawal penalty is 100% of (M2). (M3) and (M4) are at risk.
- The remaining (D2) will be refunded.

Automatic Withdrawal Penalty

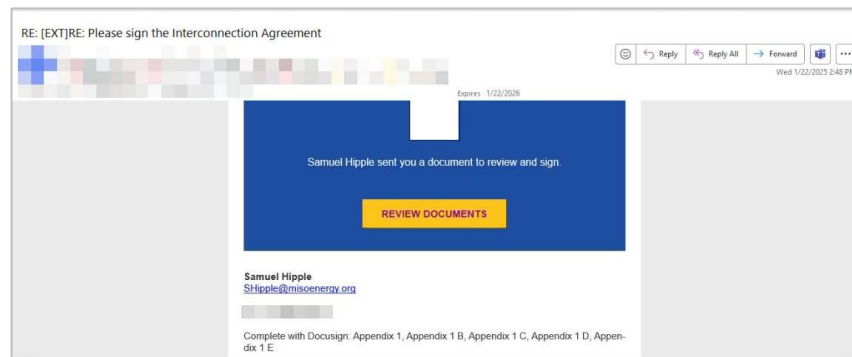
Example for 100 MW

M2 - \$800,000	Automatic Penalty	At Risk Milestone	Refund at time of Withdrawal
Withdrawn Pre-DPP	N/A	N/A	100% M2 \$800,000
Withdrawn DP1	10% M2 \$80,000	50% M2* \$400,000	40% M2 \$320,000
Withdrawn DP2	35% M2 \$280,000	65% M2* \$520,000	M2 N/A 100% M3
Withdrawn DP2 – PFW Eligible	35% M2 \$280,000	N/A	65% M2 - \$520,000 100% M3
Withdrawn Phase III	75% M2 \$600,000	25% M2 - \$200,000* 100% M3* 100% M4*	N/A
Withdrawn GIA	100% M2 \$800,000	100% M3* 100% M4*	N/A

DocuSign

DocuSign

- Once an application has successfully passed MISO's review and deficiencies have been corrected, MISO will give the application a 'Pass' status, and a J-number will be assigned
- At that point, the digital signer associated with the application will receive an email notification that documents must be signed through DocuSign
- For more details about the DocuSign process, refer to the Generator Interconnection Application User Guide



Expedited Resource Addition Study (ERAS)

What is ERAS?

- The Expedited Resource Addition Study (ERAS) is the temporary process for expediting the study and approval of interconnection projects needed for resource adequacy and/or reliability needs.

For more information about ERAS: [ERAS Informational Guide](#)

Definitive Planning Phases (DPP)

Definitive Planning Phase Overview

- This stage is where you enter Definitive Planning, where MISO will conduct studies on your Interconnection Request and provide decision point opportunities where you will have the option to continue with studies or withdraw from the Generator Interconnection Process (GIP) Queue
- During the DPP, MISO uses a “cluster study” approach in which every proposal in each year’s cycle is studied as a cohort to determine how they would impact the grid as a group and what transmission upgrades are needed for the cohort
- MISO also uses this approach for AFSs between SPP and PJM



Access Requests for Generation Interconnection Facility Studies (GIFS)

- Once your GI Application has been validated and you have received your project number (JXXXX), it is highly recommended to submit an access request for Extranet/GIFS so that you can receive access to the DPP base cases, perform model reviews and access your Study Reports
- Refer to knowledge article [KA-01377](#) for instructions on how to request new Extranet access
 - **Note:** Generation Interconnection customers are eligible for submitting *GI Facilities Studies* access requests **only**

Access Requests for Generation Interconnection Facility Studies (GIFS) (Cont.)

- GIFS Access Required Documentation:
 - Have your name listed on the [Appendix A of the Attachment C](#) of your GI Application
 - Have an [Attachment D CEII NDA](#) on file with MISO
 - Include your project number with your request.
- **Note:** Requests without proper documentation and valid project number will be denied. Refer to [KA-01427](#) for further instructions and details about documentation needed for access

DPP Kick-Off Call

- DPP Kick-off call is where the project transitions from Queue-Admin to DPP
- During the call, the parameters of the project will be confirmed, and MISO will provide the contact information of the following personnel:
 - DPP Engineer
 - DPP Project Manager
 - DPP Manager

MISO Screening Analysis

(Att. X 7.1.1, BPM-015 5.5.1)

- MISO will perform an indicative non-binding screening analysis to identify potential thermal and voltage constraints and publish the results of that analysis for Interconnection Customers and M HVDC Connection Customers entering the Definitive Planning Phase at least fifteen (15) Calendar Days prior to the kick-off of the DPP Phase I
- Screening analysis criteria
 - ERIS Criteria with P1 contingencies

DPP Phase 1 Study

Model Build and POI Review

- 20 calendar days timeline (10 BDs for Ad hoc group to review and remaining days for MISO to make model updates)

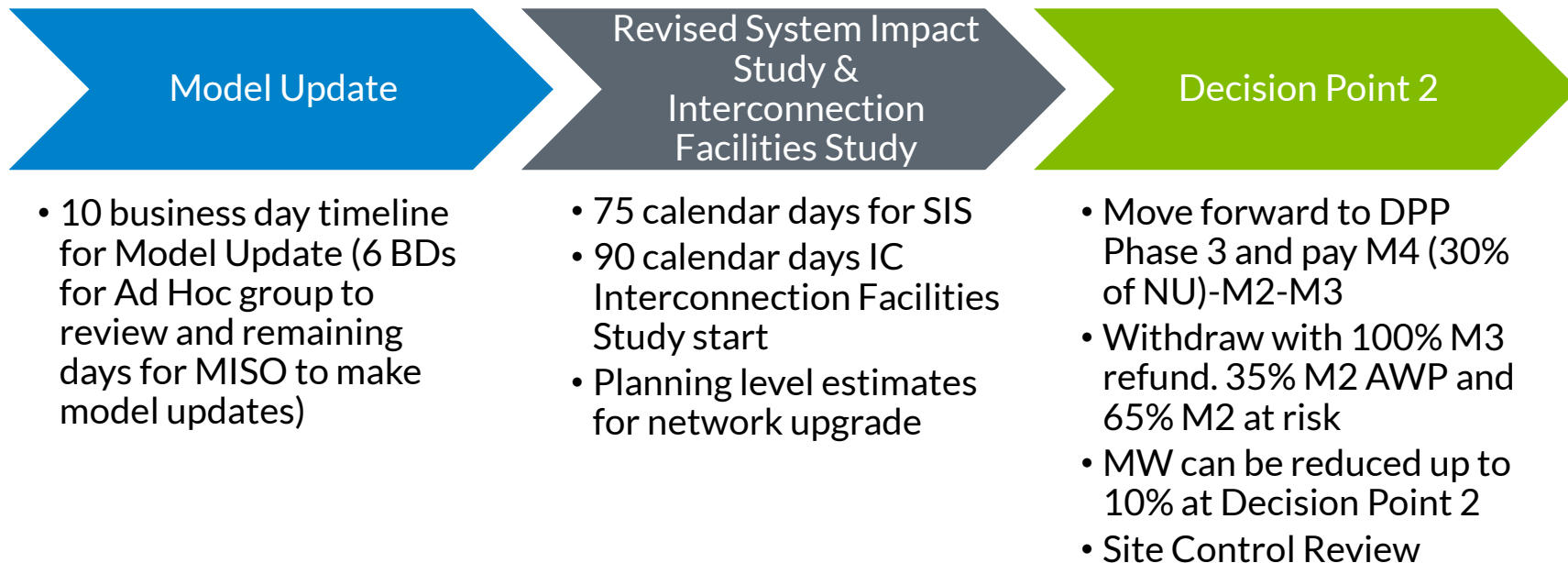
Preliminary System Impact Study

- 65 calendar day timeline
- Planning level estimate for network upgrades (includes TO NUs at POI)

Decision Point 1

- Move forward to DPP Phase 2 and pay M3 as the greater of (20% of Network Upgrades – M2) or \$1,000/MW
- Withdraw with 40% M2 refund (10% AWP, 50% at risk)
- MW can be reduced up to 100% at Decision Point 1

DPP Phase 2 Study



DPP Phase 3 Study

Model Update

- 10 business day timeline for Model Update (6 BD's for Ad Hoc group to review and remaining days for MISO to make model updates)

Final System Impact Study & Network Facilities Study

- 50 calendar days for SIS
- 90 calendar days for Network Upgrades Facility Study (NU FS)
- Withdraw and risk M2, M3, and M4

DPP Queue Decision Points

- Occurs at end of Phase 1 (Tariff Section 7.3.1.4) and Phase 2 (Tariff Section 7.3.2.4)
- Items 1-4 must be provided to MISO or the Interconnection Request will be withdrawn from the MISO Queue without a cure period.
- - 1) IC must provide M3/M4 deposit prior to Decision Point close or 3 business days after notification from MISO that deposit was not received.
 - 2) IC must provide election to proceed or withdraw project via the provided form link in the Decision Point notification email prior to Decision Point close.
 - 3) IC must provide ER/NR election amount via the provided form link in the Decision Point notification email prior to Decision Point close.
 - 4) IC must indicate if electing the option to build or defer that election via the provided form link in the Decision Point notification email prior to Decision Point close.
- For projects that will reduce the MW size, application sections Appendix 1 and Attachment A need to be updated to reflect those changes.
- If Interconnection Customer is in the process of transferring a project, items 1-4 still need to be provided to MISO. Transferring a project does not constitute a notice to proceed.

DPP PSCAD Modeling Requirements

- BPM-015, Section 5.2.3.1
- *MISO will identify projects that need to provide a PSCAD model for the active DPP study at DPP Kickoff. By the end of Decision Point 1, the IC for identified inverter-based projects will submit a PSCAD model of the entire project, including any STATCOM, D-VAR, SVC or other applicable equipment.*
- *The IC will also be required to update the PSCAD model as changes are made to the facilities over the life of the DPP process and the life of the project after Commercial Operation.*
- Regions where PSCAD models are required:
 - South-Entergy TO Region
 - Central-Ameren TO Region
 - East (ATC)
 - West-ITC Midwest and Missouri River Energy Services TO Regions

Inverter Based Resource projects not included in the regions mentioned above will need to provide a PSCAD model by GIA Execution

- *Inverter-based projects that are not going to be studied in the active DPP cycle are to submit, at a minimum, the following by GIA execution: manufacturer provided parameterized PSCAD models of the inverter and the plant controller.*
- BPM-015, Section 5.3.7 Battery Energy Storage System Grid-Forming Controls
- *By the start of Decision Point 2, the IC shall submit PSCAD simulation test results for the battery energy storage system (BESS) grid forming control (GFM) test procedures outlined in Appendix H*

Storage Charging Election

- Interconnection Request Appendix 1 to GIP Section K needs to be completed for Storage devices.
 - *If the proposed Generating Facility includes storage device(s), indicate whether the storage device(s) will be charged using energy from the Transmission System at any time: Yes____ or No____. If Yes, specify maximum MW that will be withdrawn from the Transmission System at any time: ____MW.*
- Storage charging election cannot be revised while in the DPP queue.
- Storage Charging requires Transmission Service Request (TSR) study.
- GIA/PGIA does not grant a TSR
- Storage Charging with on-site generation and no withdrawal from the transmission grid does not require a TSR
- DPP and TSR studies are not the same-DPP studies are regional, TSR studies are localized (specific source)

Storage Charging Election Cont.

- DC Coupled vs AC Coupled
 - This does not affect DPP Studies
 - If the IC requests a change from DC to AC or vice versa and that requires an inverter change, then a Material Modification analysis is required
- Options for an Interconnection Request to revise charging election
 - Withdraw project and go back through DPP Queue (0 MW project)
 - Request Long Term TSR
 - Go through MTEP process with TO
 - Withdraw project and request Surplus to existing project
- DPP Mitigation options for charging elections
 - Reduce charging rate
 - Reduce charging to 0
 - Pay for allocated costs
 - *MISO will not optimize the IC charging rate, IC will need to provide MISO the charging rate

Affected System Studies (AFS)

- In accordance with the procedures between MISO and neighboring systems
 - MISO provides Generator Interconnection Requests (GIRs) to and coordinates with the neighboring systems regarding any studies required to determine the impact of a GIR on non-MISO systems
 - Results of such coordinated studies will be included in MISO's System Impact Study report, if available
 - The Affected System's study and reinforcement criteria will apply to studies performed to determine impacts on their transmission system when evaluating the impact of MISO generation on non-MISO transmission facilities

Facilities Study Scope

- Interconnection Substation Facility Study (DPP Phase 2)
 - Determine facilities for POI substation
 - Final report
- Network Upgrade Facility Study (DPP Phase 3)
 - Incorporate Network Upgrades identified in Final SIS
 - Final Facilities Study report issued

Negotiations and Agreements

Negotiations and Agreement Process Overview

- This stage is where you begin negotiating and ultimately sign a Generator Interconnection Agreement (GIA), if all parties are agreeable



STAGE 4: NEGOTIATION AND AGREEMENT



~108 DAYS

Types of Agreements

- Generator Interconnection Agreement (GIA)
 - Agreement between the native Transmission Owner and Interconnection Customer
- Facility Construction Agreement (FCA)
 - Agreement between an Interconnection Customer and Affected Transmission Owner
- Multi-Party Facilities Construction Agreement (MPFCA)
 - Agreement between multiple Interconnection Customers who will share in the cost of a Network Upgrade and a Transmission Owner

IC/TO Milestones



Site Control Evidence



Initial Payment



In-Service Date (ISD)



Synchronization Date



Commercial Operation Date (COD)



IC and TO's have legible drawing and diagrams and specs for regulatory and operational use.

GIA Objective

- Ensure readiness and efficiency in the agreement negotiation process
 - Streamline the agreement negotiation steps with clear direction
 - Define IC and TO input areas and timelines
-
- Reference: Tariff Attachment X, Article 11 and BPM-015

Negotiation Kickoff:

- Appendix 1 Attachment C NDA updates should be made during DPP Phase 3 using the process that is provided by the Queue Administration Team
- Begin 8-week negotiation period after final study release Kickoff email and ShareFile link provided by MISO
- Week 1–2: Provide inputs via ShareFile Interconnection Customer edits agreement (Week 1) Transmission Owner provides payment details and schedule (Week 2)
- Weeks 3–4: Collaborate on agreement content Use ShareFile for updates and review
- Submit final agreement for approval and execution 15 Business Days for approval, 45 Calendar Days for execution Referenced in Attachment X, Identifying specific negotiation contacts is helpful, provide to your Project Manager Documentation of project name changes should be provided to MISO

Managing Applications

Application Revisions

- Revisions allow an Interconnection Customer to voluntarily change the contents of an application after it has been submitted
- Revisions:
 - Are requested and performed by the IC
 - Are approved or denied by MISO
 - Can occur when an application has been approved
- To initiate a revision, select **Revise** from the actions drop down
- For more details about the revision process, refer to the Generator Interconnection Application User Guide

My Projects

Approved Applications

Search [] [] Download New Application

PROJECT NAME	APPENDIX TYPE	REQUEST TYPE	IC COMPANY	ACTIVE STAGE	STATUS REASON	STATUS	CREATED ON	
Example Project	Attachment Y	Attachment Y Notification of Potential Resource - SCU Change of Status	Test Company	Application	Signed	Active	4/20/2025 6:58 PM	<div>▼ Edit View Details Withdraw Revise</div>
Example Project	Attachment Y	Attachment Y-1 Standard Form System Resource (SSR) Agreement	Test Company	Application	Confirmed	Active	4/18/2025 5:50 PM	

Material Modifications

- \$10,000 Material Modification Fee
 - If during the DPP Study process, MM \$10,000 deposit can be deducted from the D2 Deposit Balance. MISO to verify
- For any permitted modification proposed by IC, the IC must supply a detailed analysis demonstrating why they believe the change is not a Material Modification
- A material modification study can be initiated at any time after the start of DP Phase 1
- According to the BPM, *Inverter-based projects that are not going to be studied in the active DPP cycle, are to be submitted, at a minimum, the following by GIA execution: manufacturer provided parameterized PSCAD models of the inverter and the plant controller.* - Unless required by the perspective Transmission Owner.

Material Modifications

- General Requirements:
 - The report must comply with BPM 015, Section 6.7.1. It must show that results from the updated configuration are equal to or better than the original, confirming that no material modification has occurred.
 - The Material Modification Report must be submitted at least **30 days** before the hot sync

Material Modifications

The following studies will be required based on the DP Phase and MMA request :

- Steady State Thermal and Voltage
- Short Circuit Analysis between approved and new inverters
- Transient Stability Analysis
- FERC 827 Power Factor Analysis for non-synchronous machines
- LVRT Analysis
- Local Planning Criteria Study (Transmission Owner may require this)
- Provide idv. Files for all POI related modifications
- Provide dyr. Files for all inverter based modifications

Material Modifications

- POI Relocation

- Submit .kml or .kmz files
- If using the same transmission line: New location description, Distance (miles) from substation, Latitude/longitude to 4 decimal places.
- If using a different transmission line: Name of transmission line, Distance (miles) from substation, Latitude/longitude to 4 decimal places.

- Inverter/Machine Modifications

- Submit .DYR file
- Inverter model/manufacturer
- Total # of inverters
- Bus numbers-either consistent with the current DPP model used for this study or real bus numbers if the project has a signed GIA
- Files with incorrect or missing bus numbers will be returned
- If using Vestas wind machines a .dll file will be required

Material Modifications

- **Is a PSCAD model required for this MMA?**

Answer: If the project is inverter-based, then yes, a PSCAD model is required.

- **Is it possible to change the POI before the start of DPP Phase 1? Is there a specific format for this?**

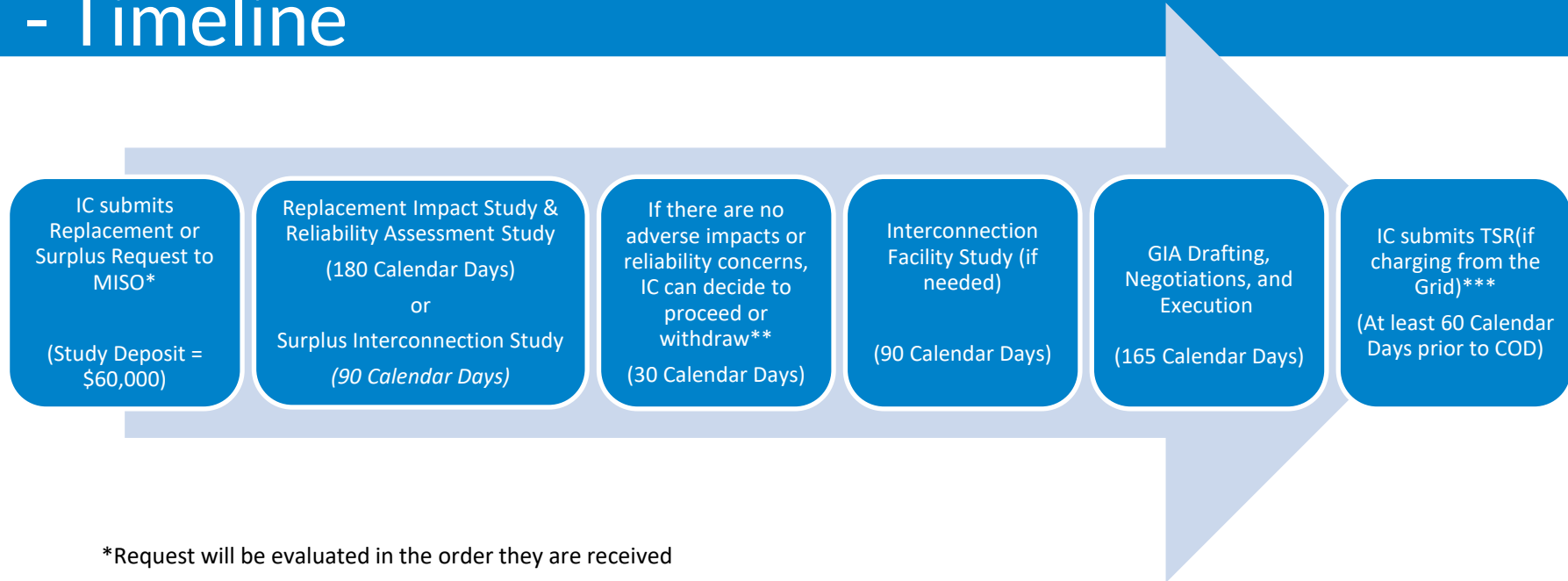
Answer: Yes, it is possible to change the POI or inverter before the DPP Phase 1 Kick-Off. In that case, an MM report is not required; updating the information in the portal is sufficient. The queue position will not be affected.

Generator Replacement and Surplus Requests

Generator Replacement and Surplus Request

- **Replacement request:** To replace one or more generating units and/or storage devices at an Existing Generating Facility with one or more new generating units or storage devices at the same electrical Point of Interconnection as those being decommissioned and electrically disconnected.
- **Surplus request:** To obtain Interconnection Service that is derived from the unneeded portion of Interconnection Service established in a GIA or in agreement with, or under the tariff of, a Transmission Owner prior to integration into MISO, such that if Surplus Interconnection Service is utilized the total amount of Interconnection Service at the Point of Interconnection would remain the same.

Generator Replacement and Surplus Request - Timeline



*Request will be evaluated in the order they are received

**If there are material adverse impacts or reliability concerns, then the IC will need to go through the 3-phase DPP process for the replacement unit and Attachment Y process for the existing unit, or the IC can withdraw the replacement request

***For more information, please refer to [TSR Flowchart for Surplus & Replacement.pdf](#)

Generator Replacement Request Timing Requirements

- Replacement Request must be submitted
 - one year prior to COD (allow replacement impact study completion before COD)
 - one year prior to cessation date unless the existing unit is approved for suspension or in forced outage (allow reliability assessment study completion before ceasing operation)
 - prior to 25th cumulative month (one year) of suspension within 5 years period when the existing unit is under suspension (allow replacement impact study completion before losing interconnection rights)
 - A unit can be suspended for a maximum of thirty-six (36) cumulative months during any five (5) year period under any combination of suspended and SSR-designated statuses

Generator Replacement and Surplus Process Changes

- Latest change: POI flexibility for Replacement Request (Attachment X section 3.7.1)
- Future changes (undergoing stakeholder process):
 - Update on Study deposit, study model requirement, modification of existing or study unit and COD requirement for both Replacement request and Surplus request
 - Update on Reliability Assessment Study scope for Replacement request and Clarification for surplus unit status after existing unit retirement
 - Please follow MISO stakeholder process(IPWG and PAC) for more details: latest update at [IPWG July meeting](#) (item 07 and 08)

Resources

Sharefile Usage information and Link

- How to use ShareFile links sent from MISO: <https://www.youtube.com/watch?v=BGzgLrBIPU8>
- Using collaborative editing of agreements online: <https://www.youtube.com/watch?v=ITSp1ozsiYc>
- MISO will work exclusively within Sharefile
- MISO request that IC and TO do not upload version variations within sharefile. The objective is to work collaboratively within sharefile.

Resources

Current Queue Info

- [Interactive Queue & Queue Map](#)
- [Definitive Planning Phase Schedule](#)

Getting Started

- [GI Portal \(MISO Help Center\)](#)
- [Queue Process Flow Diagram](#)
- [Ad Hoc Info Session Request Form](#)
- [POI Analysis Tool](#)
- [Site Control Submission Checklist](#)
- [Transferred Transmission Facilities](#)

MISO Website Pages

- [Generator Interconnection and Retirement Page](#)
- [Generator Interconnection Queue Page](#)
- [Generator Interconnection Studies and Procedures Page](#)

Stakeholder Entities

- [Interconnection Process Working Group \(IPWG\)](#)
- [Planning Advisory Committee \(PAC\)](#)
- [MISO-SPP Joint Targeted Interconnection Queue Study \(JTIQ\)](#)

Available Training

Training

- Courses Available in the [MISO Learning Center](#)
 - Generator Interconnection Process
 - Generator Interconnection Application User Guide
 - Generator Interconnection Application User Guide for TO Reviewers
 - Generator Interconnection Agreement Training
- Knowledge Articles Available in the [MISO Help Center](#)
 - GI Queue Reform
 - GI Queue Cap FAQ
 - GI Online Application Portal
 - Accessing the MISO Learning Center

Contacts

Resource Utilization

General Contact

GInterconnection@misoenergy.org

GI Finance

General Contact

GIFinance@misoenergy.org

MISO Client Services & Readiness

866-296-6476

<https://help.misoenergy.org/>

Resource Integration

General Contact

ResourceIntegration@misoenergy.org

GIA Negotiations

General Contact

GIANegotiation@misoenergy.org

Questions & Answers

Q & A



Submit your questions via the chat.

To allow adequate time to review details, any project or company-specific questions should be addressed offline through an Ad Hoc meeting request