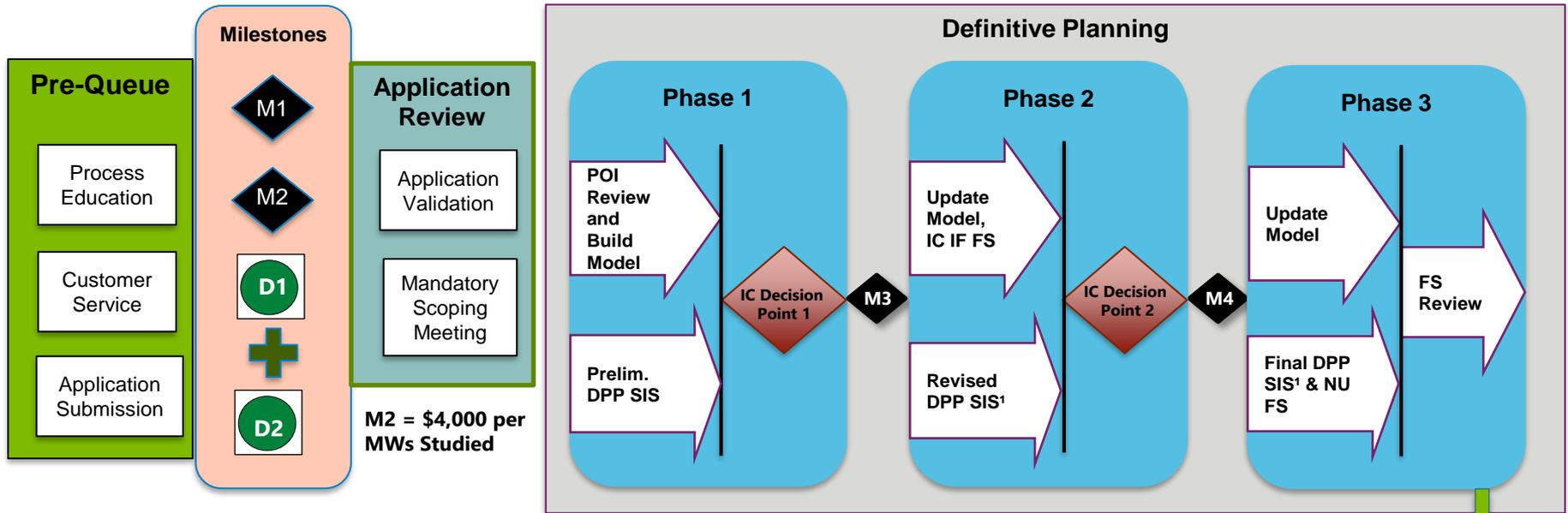




MISO Generation Interconnection

MO PURPA
Informational/Educational Workshop
April 6th, 2021

MISO Generation Interconnection Process



M2 = \$4,000 per MWs Studied

Decision Point 1

- **Withdraw** : 50% M2 refund
- **Move to Phase 2:**
 - Pay M3 = (10% of NU) – M2
 - M2 100% at risk

Decision Point 2

- **Withdraw** : 100% M3 refund
- **Move to Phase 3:**
 - Pay M4 = (20% of NU) – M2 – M3
 - M2, M3 and M4 at risk

Withdraw in Phase 3

- M2, M3 and M4 at risk

Note 1: An Affected System analysis, including estimated upgrades and costs, are part of this study.

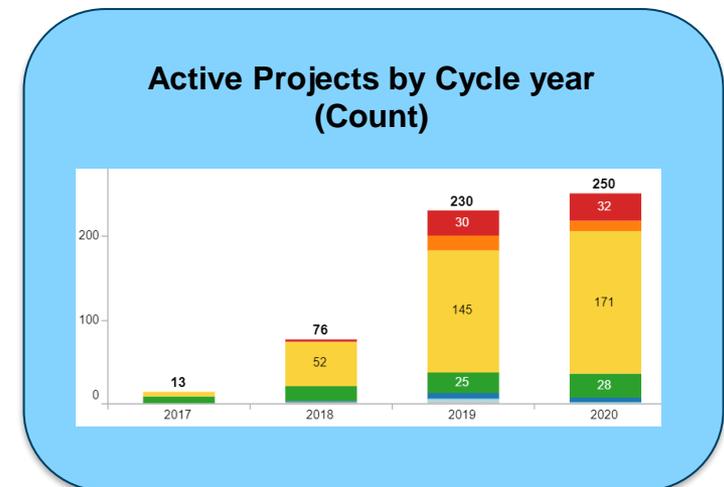
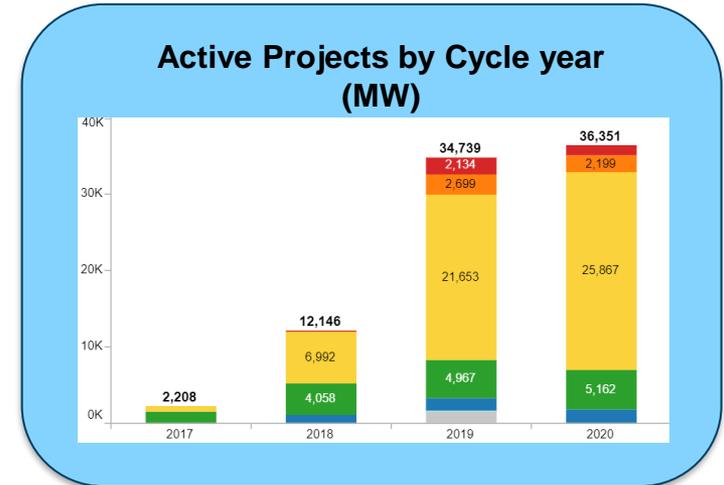
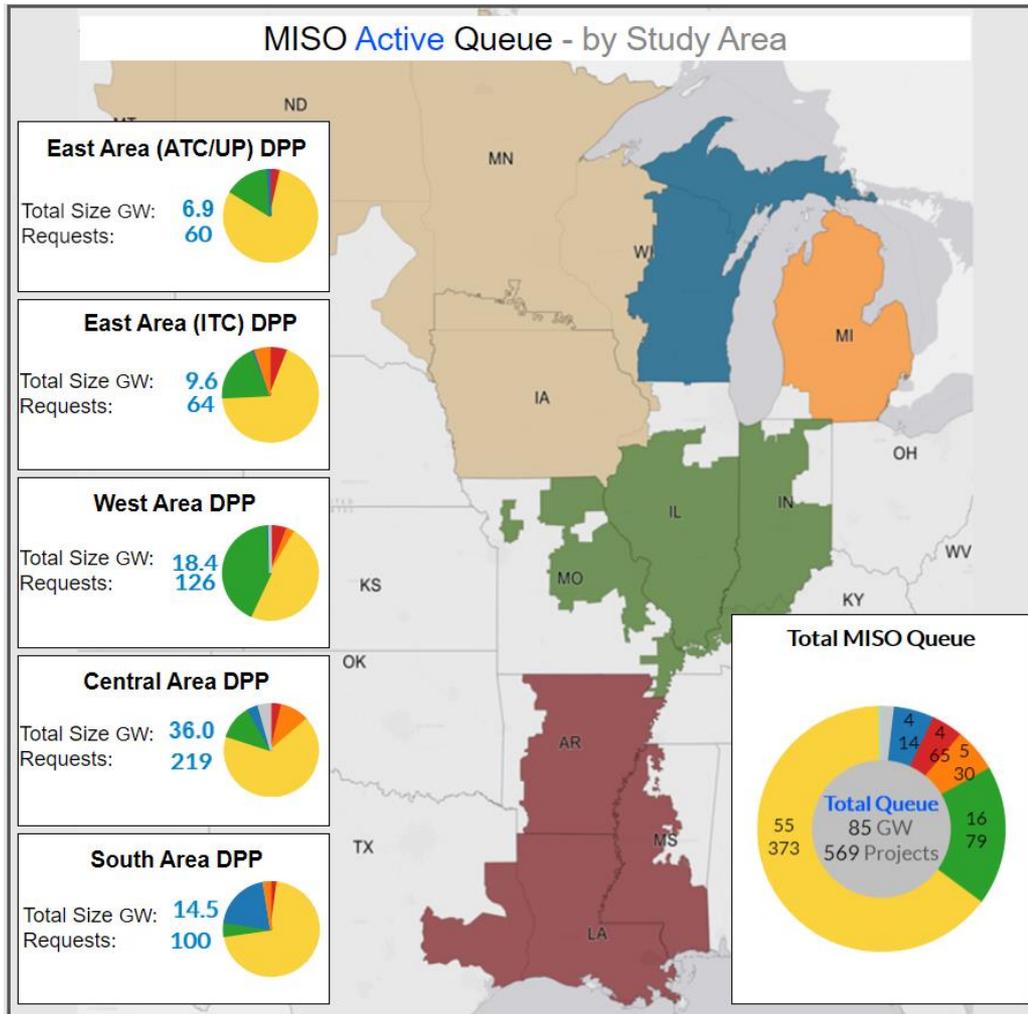
GIA / FCA / MPFCA Negotiations

Interconnection Agreement

Ref	Description	Refund	<6 MW	≥ 6 but ≤ 20 MW	> 20 but ≤ 50 MW	> 50 but ≤ 100 MW	> 100 but ≤ 200 MW	> 200 but ≤ 500 MW	> 500 but < 1000 MW	≥ 1000 MW
D1	Application Fee	No	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
D2	Fund DPP and Restudies	Yes	\$50,000	\$120,000	\$180,000	\$270,000	\$320,000	\$420,000	\$530,000	\$640,000

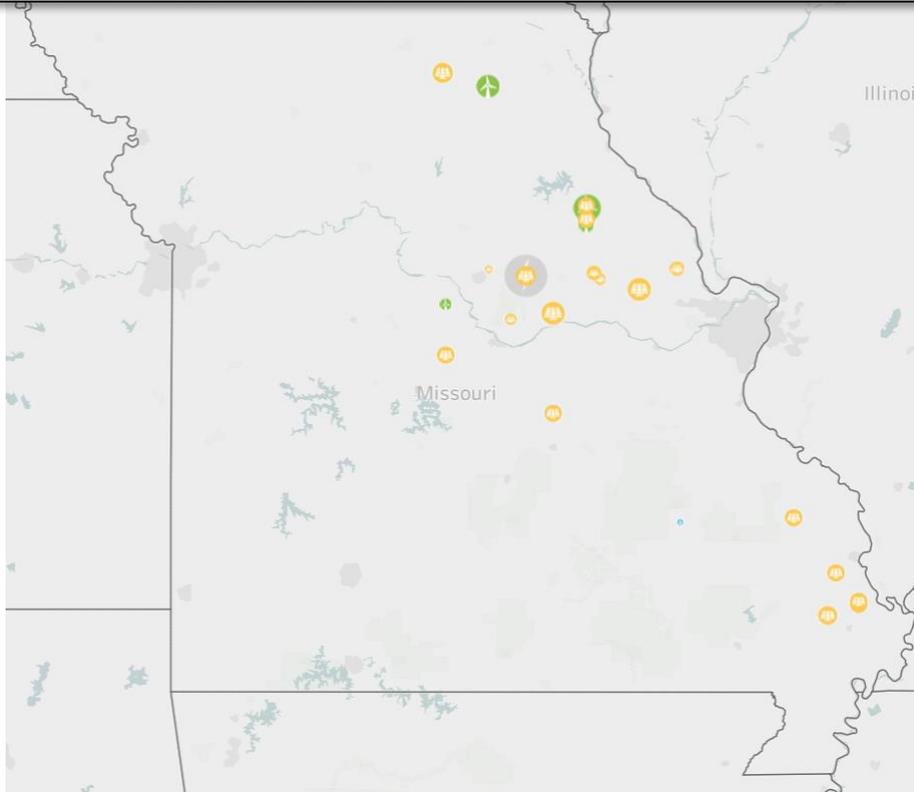
Generator Interconnection: Overview

The current generator interconnection active queue consists of **569** projects totaling **85 GW**

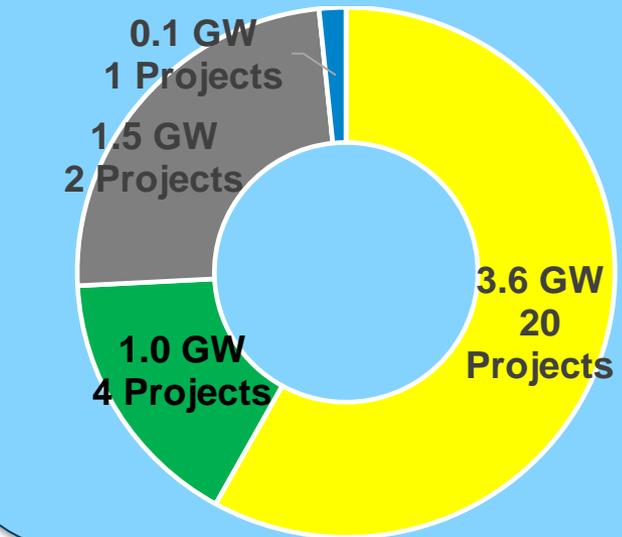


Interconnection Requests in Missouri

Active queue projects in Missouri



Active Projects by Fuel Type (GW)



12.0 GW of projects have entered the MISO queue in Missouri since 2016, of that...

- 4.7 GW have withdrawn,
- 1.1 GW have completed the study process to obtain in interconnection agreement
- 6.2 GW in later groups (2018 to 2020) are currently under study or awaiting study

MISO Interconnection - energy and capacity

- One requirement for participation in the MISO Planning Resource Auction (PRA) is proving deliverability
- Two acceptable ways are:
 - Directly obtaining Network Resource Interconnection Service (NRIS) in the MISO Interconnection Queue or;
 - Obtaining Energy Resource Interconnection Service (ERIS) in combination with Firm Transmission Service

QF Interconnection Under PURPA

- FERC Order Nos. 2003 & 2006
 - States exercise authority over QF interconnections when the owner of the QF sells the output of the QF only to the interconnected utility or to on-site customers
 - “When an electric utility is required to interconnect under section 292.303 of the Commission's regulations, that is, when it purchases the QF's total output, the state has authority over the interconnection and the allocation of interconnection costs.”
 - FERC exercises jurisdiction over a QF's interconnection if the QF's owner sells any of the QF's output to an entity other than the electric utility directly interconnected with the QF
 - “When an electric utility interconnecting with a QF does not purchase all of the QF's output and instead transmits the QF's power in interstate commerce, the Commission exercises jurisdiction over the rates, terms, and conditions affecting or related to such service, such as interconnections.”
 - A QF already interconnected that intends to sell electric energy at wholesale in interstate commerce need not submit a new interconnection request if the output of the facility will be substantially the same

FERC Order Nos. 2222 & 2222-A

- Order No. 2222
 - FERC determined that interconnection of Distributed Energy Resources (DERs) in a DER Aggregation are subject to state jurisdiction
 - The rule did not revise FERC's jurisdictional approach to the interconnections of QFs participating in a DER aggregations
- Order No. 2222-A
 - Clarified that FERC will decline to exercise jurisdiction over the interconnections of DERs, *including the interconnections of QFs*, to distribution facilities for the purpose of participating in RTO/ISO markets exclusively as part of a DER aggregation
 - But, if a QF participates in RTO/ISO markets directly, rather than exclusively through a DER aggregation, FERC's long-standing QF interconnection policies continue to apply.

APPENDIX

QF Interconnection Under PURPA

- PURPA Rules –
 - 18 CFR Section 292.303(c) -- Obligation to interconnect
 - (1) Subject to paragraph (c)(2) of this section, any electric utility shall make such interconnection with any qualifying facility as may be necessary to accomplish purchases or sales under this subpart. The obligation to pay for any interconnection costs shall be determined in accordance with § 292.306.
 - (2) No electric utility is required to interconnect with any qualifying facility if, solely by reason of purchases or sales over the interconnection, the electric utility would become subject to regulation as a public utility under part II of the Federal Power Act.
 - 18 CFR Section 292.303(d) – Transmission to other electric utilities
 - If a qualifying facility agrees, an electric utility which would otherwise be obligated to purchase energy or capacity from such qualifying facility may transmit the energy or capacity to any other electric utility. Any electric utility to which such energy or capacity is transmitted shall purchase such energy or capacity under this subpart as if the qualifying facility were supplying energy or capacity directly to such electric utility. The rate for purchase by the electric utility to which such energy is transmitted shall be adjusted up or down to reflect line losses pursuant to § 292.304(e)(4) and shall not include any charges for transmission.
 - 18 CFR Section 292.306 -- Interconnection costs.
 - (a) Obligation to pay. Each qualifying facility shall be obligated to pay any interconnection costs which the State regulatory authority (with respect to any electric utility over which it has ratemaking authority) or nonregulated electric utility may assess against the qualifying facility on a nondiscriminatory basis with respect to other customers with similar load characteristics.
 - (b) Reimbursement of interconnection costs. Each State regulatory authority (with respect to any electric utility over which it has ratemaking authority) and nonregulated utility shall determine the manner for payments of interconnection costs, which may include reimbursement over a reasonable period of time.