Disclaimer: The information contained in this document is intended to be used for general informational purposes only and is subject to change. PJM is not responsible for the user's reliance on information contained in this document, which does not supersede or modify any terms or conditions that are set forth in a PJM service agreement (e.g., Wholesale Market Participation Agreement (WMPA), Interconnection Service Agreement (ISA), Generation Interconnection Agreement (GIA)), the PJM Open Access Transmission Tariff, other PJM Governing Documents, or PJM Manuals. In the event of a conflict, the PJM service agreement, the PJM Open Access Transmission Tariff, other PJM Governing Documents, or PJM Manuals shall control. This guidance is consistent with PJM's review of ~~the~~ PJM's current Tariff and Governing Documents and Manuals, and without any prejudice to any regulatory action which might impact the Tariff or any other Governing Document or Manual provisions.

There has been a significant interest in the use of co-located load configurations in PJM. A co-located load configuration refers to end-use customer load that is physically connected to the facilities of an existing or planned Customer Facility[1] on the Interconnection Customer's[2] side of the Point of Interconnection ("POI") to the PJM Transmission System ("co-located Customer Facility"). Co-located load is distinct from and does not include Station Power load. Examples of co-located load include a data center, crypto currency mining operation, hydrogen hub, etc. Although co-located load is located behind the POI, it still is electrically connected and synchronized to the PJM Transmission System when consuming power and therefore benefits from the use of the Transmission System and Ancillary Services. This document provides guidance on the use of co-located load configurations.[3]

PJM Guidance on Co-located Load Configurations

1. PJM continues to recommends that all co-located load be served from the PJM Transmission System as PJM Network Load with applicable firm transmission service (e.g., Regional Network Integration Transmission Service (NITS) under PJM Tariff, Part III). Under this arrangement the following applies:

    a. The MW consumption of the co-located load and the MW output of the co-located ~~generation~~ Customer Facility (net of Station Power load) must be separately metered. The co-located load must be reported via InSchedules and the MW output of the co-located ~~generation~~ Customer Facility (net of Station Power load) must be reported to Power Meter for PJM settlement purposes. For operational security, real-time metering (MW & MVAR) and telemetry for the co-located load is also required, as well as adequate modeling of the load and breaker configuration in accordance with Manual 1 and Manual 3A.

    b. If the co-located ~~generation~~ Customer Facility elects to be designated as Behind the Meter Generation (BTMG), it will be allowed to net the co-located load directly against the output of

[1] For purposes of this guidance document, "Customer Facility" is used synonymously with "Generating Facility" as used in the GIA and WMPA in Part IX of the PJM Tariff and "Participant Facility" as used in the pre-Transition Date WMPA.
[2] For purposes of ~~the~~ this guidance document, "Interconnection Customer" is used synonymously with "Project Developer" as used in the GIA and WMPA found in Part IX of the PJM Tariff and "Wholesale Market Participant" as used in the pre-Transition Date WMPA.
[3] This guidance document does not apply to co-located load configurations involving Generation Capacity Resources located outside the PJM Region.

the ~~generation~~ co-located Customer Ffacility, but any portion of the co-located Customer Facility designated as BTMG must forfeit its designation as a Generation Capacity Resource. In this case, the MW consumption of the co-located load and the MW output of the BTMG co-located ~~BTMG~~ Customer Facility (net of Station Power load) may be netted. If the net result is consumption from the grid, Station Power consumption should be reported via Power Meter and net load consumption should be reported via InSchedules for PJM settlement purposes and will be priced at the Locational Marginal Price (LMP) of the pricing node specified on the InSchedules load contract. Under a scenario of net load consumption, any Aancillary Sservices provided by PJM will be based on the volume of such net load consumption. If the net result is an injection to the grid, that single value should be reported via Power Meter for PJM settlement purposes and will be priced at the generation bus LMP. For operational security, real-time metering (MW & MVAR) and telemetry for the co-located load is also required, as well as adequate modeling of the load and breaker configuration in accordance with Manual 1 and Manual 3A.

c. Co-located load that is part of the PJM Transmission System as PJM Network Load with applicable firm transmission service does not need to decrease the Capacity Interconnection Rights (CIRs) of the co-located Customer Facility unless the co-located ~~generation~~ Customer Facility elects to be designated as BTMG. This BTMG scenario reflects an arrangement where the co-located Customer Facility is installed behind the co-located load's meter, with the co-located load being PJM Network Load.

d. Co-located load that is part of the PJM Transmission System as PJM Network Load with applicable firm transmission service could qualify for any curtailment capability it may have as demand response (up to the peak load contribution (~~"~~PLC~~"~~) level of the load).

e. The foregoing co-located load configuration does not reduce the co-located Customer Facility's Maximum Facility Output (MFO).

2. PJM recognizes that certain parties may wish to pursue a co-located load configuration that involves a co-located Customer Facility and without procuring applicable firm transmission service. If the co-located load is **not** PJM Network Load (load without applicable firm transmission service under PJM Tariff, Part III), then the following applies:

   a. The MW consumption of the co-located load and the MW output of the co-located ~~generation~~ Customer Facility (net of Station Power load) are netted and reported as a single value to Power Meter to be used for PJM settlement purposes. As no load is being served from the Transmission ~~s~~System, no load is reported via InSchedules for PJM settlement purposes. For operational security, real-time metering (MW & MVAR) and telemetry for the co-located load is also required, as well as adequate modeling of the load and breaker configuration in accordance with Manual 1 and Manual 3A.

   b. The co-located Customer Facility's CIRs must be reduced to reflect the amount of capacity dedicated to the co-located load where this MW amount is based on the highest expected hourly demand of the co-located load. The CIRs/capacity value may be retained for additional MWs above the capacity dedicated to the co-located load but these additional

MWs must first be dedicated to the PJM system load. If first rights to the capacity cannot be dedicated to PJM system load then the CIR/capacity value of the co-located Customer Facility that is a Generation Capacity Resource must be reduced to reflect the amount of capacity to which PJM will not have the first rights.

c. The MFO specified in the existing PJM service agreement may remain unchanged if the Interconnection Customer anticipates providing the co-located Customer Facility's full output capability to the PJM Transmission System whenever the co-located load is shutdown or otherwise not being served by the co-located Customer Facility.

d. The capacity value of the co-located Customer Facility that is a Generation Capacity Resource cannot exceed the CIR MWs specified in the PJM service agreement for the resource.

e. ~~PJM does not support co-located configurations for which there exists the possibility of an unexpected injection or withdrawal of power on the PJM Transmission System. Therefore, all c~~Co-located load that is not PJM Network Load (load without applicable firm transmission service) must have System Protection Facilities in place to prevent the unexpected ~~injection or~~ withdrawal of power at the POI from the PJM Transmission System for the co-located Customer Facility. If the protection schemes were to fail (which they should not), PJM will assess the settlements and compliance implications for any such unexpected ~~injections or~~ withdrawal in coordination with the Transmission Owner and local Electric Distribution Company. Notifications of a failure of the protection scheme must be made immediately to PJM Operations, Legal and Settlements.

f. If the co-located load configuration allows for a back-up Generation Capacity Resource(s) to serve the co-located load, then that back-up Generation Capacity Resource(s) must fulfill its obligations as a ~~meet all the existing requirements of a~~ PJM Generation Capacity Resource, for which CIRs/capacity value exist, including providing energy to the PJM system when needed and meeting the capacity and energy must-offer requirement. To the extent this obligation cannot be met, ~~If~~ the back-up Generation Capacity Resource may be subject to Capacity Resource Deficiency Charges and/or Non-Performance Charges based on its obligation. Therefore, PJM recommends that the obligation be replaced or the ~~is unable to meet the existing requirements then the~~ CIR/capacity value ~~of the co-located Customer Facility that is a Generation Capacity Resource must~~ be reduced to reflect the amount of capacity to which the facility can meet the requirements.

   i. Unplanned outages of the co-located ~~generation~~Customer Facility will require the ~~C~~co-located load ~~must~~ to first be reduced to zero before the back-up Generation Capacity Resource or Energy Resource can serve the co-located load.

   ii. Coordination with PJM Operations and the local Transmission Owner for both unplanned and planned outages of the co-located Customer Facility is required before the back-up Generation Capacity Resource or Energy Resource can serve the co-located load. To request the utilization of a back-up Generation Capacity Resource or Energy Resource to serve the co-located load, the owner of the Generation

Capacity Resource or Energy Resource must submit an outage in eDART ~~If authorized by PJM Operations an outage must be submitted in eDART~~ with proper cause code of "co-located load" for the period of service ~~of~~ to the co-located Customer Facility. If ~~not~~ the request is authorized by PJM, the outage of the co-located Customer Facility will be approved. If the request is not authorized[4], the outage will be denied and it is not acceptable to claim an outage or divert the MWs from the back-up Generation Capacity Resource or Energy Resource to the co-located load.

1. Energy Resources that are not already committed to run for PJM will always have their associated eDART outage approved to supply the co-located load, but an outage is still required for proper coordination of any impacts to the Bulk Electric System (BES) and associated NERC Standards.

iii. Back-up Generation Capacity Resources and Energy -Resources that serve co-located load that is not PJM Network Load will be required to use eDART cause code "co-located load" with a Forced Outage (FO) recognition. All outages using cause code "co-located load" should be entered in eDART and eGADS as a forced outage.[5]

g. Co-located load that is not PJM Network Load (load without applicable firm transmission service) is not eligible to participate as a demand response resource.

3. Co-located must either be PJM Network Load (with applicable firm transmission service) or **not** PJM Network Load (load without applicable firm transmission service). There is no option to change between configurations unless it is a permanent change. For example, co-located load that elects to operate not as PJM Network Load cannot switch to a PJM Network Load configuration if the co-located Customer Facility is unavailable. The co-located load configuration that is studied and memorialized in a PJM service agreement may not be changed unless the Interconnection Customer undergoes a subsequent necessary studies process and the results of such process are memorialized in an amended service agreement.

4. Co-located load is not equivalent to Station Power load. Station Power load includes heating, lighting, air-conditioning and office equipment needs of buildings on the site of a generation facility that is used in the operation, maintenance, or repair of such generation facility. Station Power load does not include power required to operate synchronous condensers.

5. The Interconnection Customer, Wholesale Market Participant, or Project Developer identified in co-located Customer Facility's ISA, WMPA, or GIA is responsible for ensuring that the proposed co-

[4] PJM Operations may deny for reasons including ~~but not limited to~~ capacity related emergencies and/or load shed.
[5] Per Tariff Attachment K-Appendix, section 1.9.4, "a Generation Capacity Resource committed to PJM loads through an RPM Auction, FRR Capacity Plan, or by designation as a replacement resource under Attachment DD of the PJM Tariff, that does not deliver all or part of its scheduled energy shall be deemed to have experienced a Generator Forced Outage with respect to such undelivered energy, in accordance with standards and procedures for full and partial Generator Forced Outages specified in the Reliability Assurance Agreement, and the PJM Manuals."

located load configuration is in accordance with the applicable PJM service agreement (e.g., ISA, WMPA, or GIA), PJM Tariff, Operating Agreement, other PJM governing documents, PJM Manuals, and all applicable federal, State and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any governmental authority having jurisdiction over the relevant parties, their generating facilities and any other respective facilities, and/or the respective services they provide.

   a. To the extent there are any differences between ownership of the Customer Facility and the co-located load, such differences must be discussed and disclosed in advance ~~to~~ with PJM and the ~~Interconnected~~ Transmission Owner. The Interconnection Customer will be required to represent to PJM and the ~~Interconnected~~ Transmission Owner that any third-party ownership of the co-located load will not interfere with the Interconnection Customer's obligations under all applicable requirements.

6. In accordance with PJM Tariff, Part VI, Attachment O, Appendix 2, section 3, PJM Tariff, Part IX, Subpart B, Appendix 2, section 3, and section 4.5 of PJM Manual 14G, the Interconnection Customer, Wholesale Market Participant, or Project Developer identified in co-located Customer Facility's PJM service agreement shall provide PJM and the ~~Interconnected~~ Transmission Owner with notice of any planned modifications to the co-located Customer Facility and shall provide the relevant drawings, plans, specifications, and models to PJM and the ~~Interconnected~~ Transmission Owner in advance of beginning the work. Such advance notification is required so that PJM and the ~~Interconnected~~ Transmission Owner can evaluate potential reliability impacts of the proposed co-located load configuration, including verification that adequate protection is in place to prevent the unexpected ~~injection or~~ withdrawal of power at the POI for the co-located Customer Facility as part of a necessary studies process. A failure to provide advance notification is a breach of the applicable PJM service agreement, and subject to the breach, cure, and default provisions of such agreement. A failure to provide proper notice may also be considered a violation of PJM Governing Documents that may warrant a referral of the violation to the FERC's Office of Enforcement. For the PJM notification, the Interconnection Customer should contact the specific Client Manager assigned to the Interconnection Customer, or the general Client Manager mailing list (ClientManagers@pjm.com). The modification request will then be forwarded by Client Management to the Transmission Coordination & Analysis department to initiate the necessary study process.

7. The necessary studies process provides PJM an opportunity to perform studies to evaluate the potential reliability impact of a proposed addition or reduction of a co-located load configuration on the PJM Transmission System, and determine what, if any, system reinforcements are required prior to the addition or reduction of the planned co-located load configuration. PJM reserves the right to take other actions consistent with its existing legal authority to protect system reliability caused by removing capacity MWs from the PJM markets, including seeking, via a filing submitted with the relevant federal, state or local regulatory authority, emergency authority to prevent or delay the addition of co-located load. Prior to beginning the necessary studies process, a necessary studies agreement must be drafted and executed by PJM and the Interconnection Customer, a necessary study deposit provided, and all required technical data submitted. In some instances, the ~~Interconnected~~ Transmission Owner may require additional studies based on the planned co-located load configuration, and such studies may result in additional study costs. The execution of a Construction Service Agreement (CSA) may be required if the results of the necessary studies

process identifies the need to construct system reinforcements and the related PJM service agreement (e.g., ISA, GIA, WMPA) would be amended to reflect these necessary system upgrades, related costs, and posting of the requisite security.

Any applicable PJM service agreement (e.g., ISA, GIA, WMPA, CSA) must be executed and/or amended to reflect all changes resulting from the incorporation of a co-located load configuration. Service to the co-located load pursuant to the co-located load configuration may not commence until the necessary PJM service agreement(s) has been fully executed by the parties, filed with and accepted by the ~~Commission~~FERC, and all required system reinforcements, system protection facilities, and metering are in place.

8. The proposed addition of a co-located load configurations is not the same as a Deactivation request. Unlike a Deactivation request, the MFO of the co-located Customer Facility is not changed because the co-located Customer Facility physically has not changed its operating characteristic, it remains capable of injecting all of its output onto the PJM Transmission ~~s~~System, it still is electrically connected and synchronized to the PJM Transmission System and is sharing the same POI with the co-located load. Deactivation requests involve~~s~~ the physical removal of the generation resource from the PJM Transmission System and the reduction of the MFO to zero.

9. PJM reserves the right to modify and update this Guidance Document as necessary based on, for example, experience gained with co-located load configurations and regulatory developments.