



# System Impact Study Reports

May 2026 IPS

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<https://www.pjm.com/planning/m/cycle-service-request-status>

SIS Report   Cluster Report   NUCRA

## Filters

Select the project type to view the list of available projects.

Project Types:    Cycle:    Status:    Transmission Own:

Select Project Type

PJM provides two types of SIS reports:

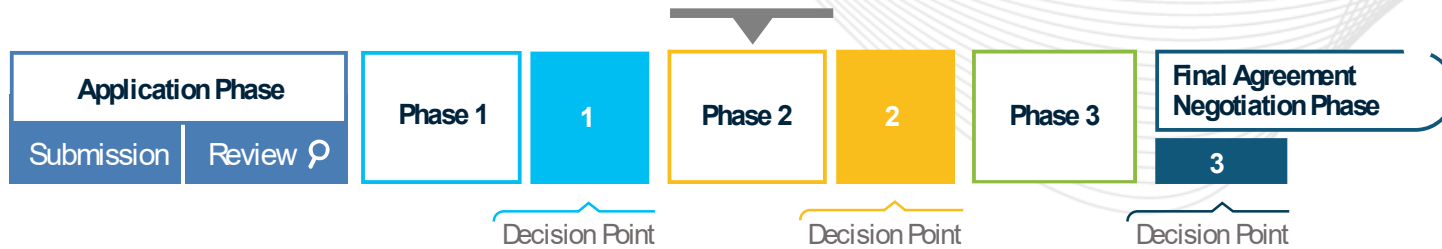
1. Cluster Report: covers an entire cohort
2. Individual SIS Report: specific details for an individual Interconnection Request.

Click on the “Phases and Agreements” tab to reveal links to the reports.

Full Export: [XLS](#) [XML](#)  
Filtered Export: [XLS](#) [XML](#)

Phases & Agreements

Project ID	Name	State	Status	TO	Phase I SIS Report	Phase II SIS Report	Phase III SIS Report	Final SIS Report	EPA/GIA/WMPA	CSA/UCSA
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ANALYSIS ACTIVITIES	TO ACTIVITIES
<ul style="list-style-type: none"> <li>• <b>Summer Peak, Light Load, Winter Peak</b> (with DP1 changes)</li> <li>• <b>Short Circuit</b></li> <li>• <b>Stability and Reactive Power Assessment</b></li> <li>• <b>Special studies</b> (Load Deliv, N-1-1 Analysis) (with DP1 changes)</li> <li>• <b>Voltage Analysis</b></li> <li>• <b>Affected System Operator Analysis</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>TO analysis</b> (with DP1 changes)</li> <li>• <b>Review PJM Analysis Results</b> and provide desk-side estimates for reinforcements.</li> <li>• <b>Provide Facility-Level Estimates</b> for Interconnection Facilities.</li> </ul>

## The TC2 Phase II Executive Summary Report includes:

- **List of all New Service Requests** including high level project details
- **Network Upgrades Cost Summary** for all new Interconnection Requests
- **System Reinforcements** identified from the study
- **CIR claims** from deactivated Generators



- Introduction
- Preface
- New Services Request List
- Stability Clusters
- Shared POIs
- CIR Claims From Deactivated Generators
- Cost Summary
- System Reinforcements
- Steady State Thermal & Voltage Reinforcements
- Short Circuit Reinforcements
- Stability Reinforcements

## Transition Cycle 2

v0.16 released 2026-05-20 09:23

### New Service Requests

### System Impact Study Executive Summary Report Transition Cycle 2 – Phase II

#### Introduction

This Phase II System Impact Study executive summary report has been prepared in accordance with the PJM Open Access Transmission Tariff Part VII, Subpart D, section 310. This report presents an executive summary of the Phase II System Impact Study results for New Service Requests (projects) in Transition Cycle 2.

Each Phase will have its own report that reflects the results of Activities that occurred during the phase.

## Individual SIS Reports include:

- **Detailed Information** for a single new Interconnection Request
- **Breakdown of Transmission Owner scope of work and costs**
- **Analysis Results:** load flow, short circuit and stability impacts
- **Required System Reinforcements** including scope of work and allocated costs.
- **Information about Readiness Deposit requirements**

- Introduction
- Preface
- Decision Point II Requirements
- Adverse Test Eligibility
- General
- Point of Interconnection
- Cost Summary
- Readiness Deposit
- Transmission Owner Scope of Work
- Transmission Owner Analysis
- Developer Requirements
- Revenue Metering and SCADA Requirements
- Summer Peak Analysis
- Winter Peak Analysis
- Light Load Analysis
- Short Circuit Analysis
- Stability Analysis
- Reactive Power Analysis
- Steady-State Voltage Analysis
- New Service Request Dependencies
- Affected System - PJM Identified Violations
- Affected System - Non-PJM Identified Violations
- System Reinforcements
- Attachments

## ZZ1-001 Phase II System Impact Study Report

v0.10 released 2026-05-19 14:20

Susquehanna Solar 230 kV  
25.0 MW Capacity / 20.0 MW Energy

### Introduction

This Phase II System Impact Study (SIS) Report has been prepared in accordance with the PJM Open Access Transmission Tariff, Part VII, Subpart D, section 310 for New Service Requests (projects) in Transition Cycle 2 (TC2). The Project Developer/Eligible Customer (developer) is Waterfront Storage Solutions LLC, and the Transmission Provider (TP) is PJM Interconnection, LLC (PJM). The interconnected Transmission Owner (TO) is Transmission Owner A.

### Preface

The Phase II System Impact Study is conducted on an aggregate basis within a New Services Request's Cycle, and results are provided in both (i) a single Cycle summary format and (ii) an individual project-level basis. The Phase II System Impact Study Results (for both the summary and individual reports) will be publicly available on PJM's website. Project Developers must obtain the results from the website.



# Example Readiness Deposit Calculation for DP2

## Readiness Deposit

Per Tariff Part VII, Subpart D, section 311 (Decision Point II) A.1.b and PJM Manual 14H, section 6.2, Readiness Deposit #3 (RD3) are funds committed by the Project Developer or Eligible Customer based upon the applicable contribution to Network Upgrades as defined below. Readiness Deposits are not used to fund studies nor to offset Security.

During Decision Point II (DP2), the Project Developer or Eligible Customer is required to submit Readiness Deposit #3, which is calculated as 20% of cost allocation for required Phase II Network Upgrades minus Readiness Deposit #1 & Readiness Deposit #2.

**Note 1:** “Network Upgrades” referred to in the calculation include both (i) the Physical Interconnection Network Upgrades and (ii) the System Reliability Network Upgrades as shown in the Cost Summary table.

**Note 2:** Readiness Deposit #1 (RD1) = (\$4,000 \* Project Size (MW))

**Note 3:** Readiness Deposit #2 (RD2) = 10% of cost allocation for required Network Upgrades minus RD1. Readiness Deposit #2 (RD2) can be zero, but may not be a negative number.

**Note 4:** Readiness Deposit #3 can be zero, but may not be a negative number.

### Readiness Deposit #3 Due for Project ZZ1-001

Readiness Deposit #3 has been calculated for the project based on the Phase II System Impact Study results and is shown in the table below. This Readiness Deposit #3 must be provided at Decision Point II through either a wire transfer or letter of credit per Manual 14H, Section 6.2.

### Readiness Deposit #3 Due for ZZ1-001

Project ID:	ZZ1-001
20% of cost allocation for Phase II Network Upgrades:	(A) \$300,000
Sum of Readiness Deposit #1 & Readiness Deposit #2 Received:	(B) \$200,000
Readiness Deposit #3 (RD3) due at DP2:	(A) - (B) = \$100,000

**Note:** Failure to provide an acceptable form of Readiness Deposit #3 by the end of Decision Point II will result in withdrawal and termination of the New Service Request.

For additional detail regarding Readiness Deposit Refunds, reference PJM Manual 14H, section 6.2.1. The Readiness Deposit Letter of Credit template can be found [here](#).



# Example Load Flow Analysis Section

## Summer Peak Analysis

The New Service Request XYZ-123 was evaluated as a 500 MW (250 MW Capacity) injection in the Transmission Owner area.

The request was part of a plant consisting of generators XYZ-123 and ABC-456. The total Energy output of the plant was evaluated at its maximum seasonal capability of 825 MW.

In compliance to applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners), the potential Summer Peak period network impacts were as follows:

**Note:** The capacity portion of Generation Interconnection Requests are evaluated for single or N-1 contingencies. The full energy output of Generation Interconnection Requests are evaluated for multiple facility contingencies (double circuit tower line, fault with a stuck breaker, and bus fault).

Click icon to see generators loading into this flowgate.

Summer Peak Analysis											
Type	Area	Facility Description	Contingency Name	Contingency Type	DC AC	Final Cycle Loading	Rating (MVA)	Rating Type	MVA to Mitigate	MW Contribution	Details
IPD	DVP	<a href="#">XYZ-123 TP-ALINE 115.0 kV Ckt 1 line</a>	<a href="#">XYZ_P4-2: 878_GEN-B</a>	Breaker	AC	1.15 %	249.0 MVA	C	287.1 MVA	19.98 MW	🔍
IPD	DVP	<a href="#">XYZ-123 TP-BLINE 115.0 kV Ckt 1 line</a>	<a href="#">XYZ_P4-2: 939_SRT-D</a>	Breaker	AC	1.15 %	249.0 MVA	C	287.1 MVA	19.98 MW	🔍
IPD	DVP	<a href="#">XYZ-123 TP-CLINE 115.0 kV Ckt 1 line</a>	<a href="#">XYZ_P1-2: LN 4561_SRT-A-4</a>	Single	AC	1.14 %	203.98 MVA	B	232.12 MVA	19.99 MW	🔍
GD	DVP/PEPCO	<a href="#">ASTATION-BSTATION 230.0 kV Ckt 1 line</a>	<a href="#">XYZ_P4-2: H2T351_SRT-A</a>	Breaker	AC	1.47 %	1417.0 MVA	B	2078.06 MVA	1.21 MW	🔍
GD	DVP/PEPCO	<a href="#">CSTATION-DSTATION 230.0 kV Ckt 1 line</a>	<a href="#">XYZ_P4-2: H1T845_SRT-A</a>	Breaker	AC	1.47 %	1417.0 MVA	B	2077.99 MVA	1.21 MW	🔍
GD	DVP/PEPCO	<a href="#">ESTATION - FSTATION 230.0 kV Ckt 1 line</a>	<a href="#">XYZ_P4-2: 560T654_SRT-S</a>	Breaker	AC	1.46 %	1417.0 MVA	B	2064.89 MVA	1.2 MW	🔍

Hover over Facility or Contingency to reveal bus numbers and contingency description

Hover to reveal bus numbers for this violation.

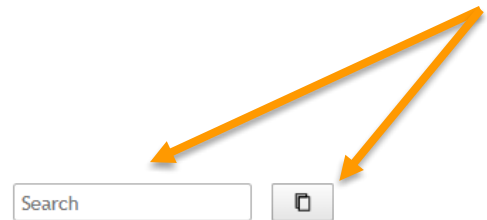
Summer Peak Analysis				
Facility Description	Contingency Name	Contingency Type	DC AC	Final C
YLINE5-YSTN5 500.0 kV Ckt 1 line	XYZ_P1: LN 878_GEN-B	Breaker	AC	
ZLINE7-ZSTN7 115.0 kV Ckt 2 line	XYZ_P9: LN 997_GEN-A	Breaker	AC	
TLINE5-TSTN5 230.0/500.0 kV Ckt 1 line	XYZ_P2: LN 213_GEN-A	Breaker	AC	

Copy and Search functions built into the table.

The search function will scan all text in the table including some conditionally visible text like contingency definitions and bus numbers

Hover to reveal the contingency description for this violation.

Summer Peak Analysis			
Contingency Name	Contingency Type	DC AC	Final Cyc
XYZ_P1: LN 878_GEN-B			
XYZ_P9: LN 997_GEN-A			
XYZ_P2: LN 213_GEN-A			
XYZ_P5: LN 312_GEN-C			
XYZ_P2: LN 381_GEN-A			
XYZ_P6: LN 820_GEN-A			
XYZ_P1: LN 486_GEN-C	Breaker	AC	



Summer Peak Analysis					
Area	Facility Description	Contingency Name	Contingency Type	DC AC	Final C
DVP	YLINE5-YSTN5 500.0 kV Ckt 1 line	XYZ_P1: LN 878_GEN-B	Breaker	AC	
DVP	ZLINE7-ZSTN7 115.0 kV Ckt 2 line	XYZ_P9: LN 997_GEN-A	Breaker	AC	
DVP	TLINE5-TSTN5 230.0/500.0 kV Ckt 1 line	XYZ_P2: LN 213_GEN-A	Breaker	AC	
DVP	ALINE8-ASTN8 230.0/500.0 kV Ckt 1 line	XYZ_P5: LN 312_GEN-C	Breaker	AC	

- This section contains a list of other New Service Requests which share in the loading of an overloaded facility in your report.
- Changes made to these projects could impact your load flow analysis results and / or cost allocation for a particular network upgrade reinforcement.

## New Service Request Dependencies

The New Service Requests below are listed in one or more dispatch for the overloads identified in this report. These projects contribute to the loading of the overloaded facilities identified in this report. The percent overload of a facility and cost allocation you may have towards a particular reinforcement could vary depending on the action of other projects. The status of each project at the time of the analysis is presented in the table. This list may change as other projects withdraw or modify their requests. This table is valid for load flow analyses only.

New Service Requests Dependencies		
Project ID	Project Name	Status
ZM28-762A	Substation Q 230kV	In Service
SF32-561	Substation L 500kV	In Service
NF33-434	Substation M 115kV	In Service

The System Reinforcements section contains a high-level cost breakdown of system reinforcements (shown here) as well as individual details for each system reinforcement.

XYZ-123 System Reinforcements:			
TO	RTEP ID	Title	Allocated Cost (\$USD)
Transmission Owner	n1234.1	Wreck and rebuild 12 miles of 230 kV Line #298 from Station A to Station B Substations with twin bundled (2) 768.2 ACSS/TW (20/7) "MAUMEE" conductor.	\$1,234,567
Transmission Owner	n1234.2	Wreck and rebuild 34 miles of 230 kV Line 298 from Station C to Station D Substations with twin bundled (2) 768 ACSS/TW (20/7) "MAUMEE" conductor.	\$234,567
Transmission Owner	n1234.3	Wreck and rebuild 56 miles of Line #511 between Station E and Station F Substations with three (3) 1351 ACSS/TW and associated substation work.	\$345,678
<b>Grand Total:</b>			<b>\$1,814,812</b>

## System Reinforcement: x0001

Type	Load Flow
TO	Utility A
RTEP ID / TO ID	x0001 / TOX-AAA-001
Title	Upgrade transformer equipment at Substation A
Description	Upgrade transformer equipment at Substation A
Total Cost (\$USD)	\$40,000,000
Allocated Cost (\$USD)	\$10,000,000
Time Estimate	40 to 42 Months

**Contributor**

Click to see applicable ratings

Hover for details

### Flowgates Addressed by this Reinforcement


Facility	Contingency
SUBSTATION A 230.0/500.0 kV Ckt 1 transformer	(Any)




### Cost Allocation

Project	MW Impact	Percent Allocation	Allocated Cost (\$USD)
XYZ-123	120 MW	25.0%	\$11,000,000
XYZ-124	100 MW	24.0%	\$10,000,000
XYZ-125	135 MW	26.0%	\$12,000,000

Expanding the rows on the flowgates table will reveal the new ratings if there are any

Flowgates Addressed by this Reinforcement		
Facility	Contingency	
▼ SUBSTATION A 230.0/500.0 kV Ckt 1 transformer	(Any)	
Rating Set	Rating Type	Rating Value
(All)	A	1440.0 MVA
(All)	B	1440.0 MVA
(All)	C	1440.0 MVA

Hovering over the  indicator in the cost allocation table will reveal projects that share the same POI and were thus considered in aggregate for MW impact.

Project	MW Impact	Percent Allocation	Allocated Cost (\$USD)
XYZ-123 			
XYZ-124 			
XYZ-125 			

SUBSTATION A 230 kV - Company 1: This project's cost allocation eligibility was based on the grouped impact of all New Service Requests which shared this POI within this cycle. The following project shared this POI:  
XYZ-123, XYZ-124, XYZ-125

## Cost Summary

The table below shows a summary of the total cost estimates for this New Service Request project. In Phase II SIS, the interconnected Transmission Owner has performed a facilities study for both the Transmission Owner Interconnection Facilities (TOIF) and Physical Interconnection Network Upgrades. The System Reliability Network Upgrade shown in the table are planning level cost estimates which are subject to change as a result of a facility study performed by the TO during Phase III System Impact Study.

Based on the Phase II SIS results, the Z01-0001 project has the following allocation of costs for interconnection. The cost contribution towards Readiness Deposit #3 are also shown below.

Cost Summary			
Description	Cost Allocated to Z01-0001	Cost Subject to Readiness*	Cost Subject to Adverse
Transmission Owner Interconnection Facilities (TOIF)	\$0	\$0	\$0
Other Scope	\$603,891	\$0	\$0
Option To Build Oversight	\$0	\$0	\$0
<b>Physical Interconnection Network Upgrades</b>			
Stand Alone Network Upgrades	\$0	\$0	\$0
Network Upgrades	\$1,780,859	\$1,780,859	\$1,780,859
<b>System Reliability Network Upgrades</b>			
Steady State Thermal & Voltage (SP & LL)	\$0	\$0	\$0
Transient Stability	\$0	\$0	\$0
Short Circuit	\$0	\$0	\$0
<b>Transmission Owner Analysis</b>			
SubRegional	\$0	\$0	\$0
Distribution	\$0	\$0	\$0
<b>Affected System Reinforcements</b>			
AFS - PJM Violations	\$0	\$0	\$0
AFS - Non-PJM Violations	\$0	\$0	\$0
<b>Total</b>	<b>\$2,384,750</b>	<b>\$1,780,859</b>	<b>\$1,780,859</b>

\* Contributes to calculation for Readiness Deposit #3 (RD3). See Readiness Deposit section of report for additional detail.

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