NEXPHASE™

THE FIRST INTELLIGENT EV SWITCHGEAR

The NexPhase™ Smart EV Switchgear is an all-in-one switchgear panel containing the entire infrastructure required between the utility service and Level 3 DC fast chargers. Unlike any switchgear of its kind, NexPhase™ features cutting-edge grid intelligence for utility power and EV charger remote monitoring, troubleshooting, and control — something chargers alone cannot provide.

SIMPLIFIED DESIGN
ACCELERATE PROJECT TIMELINES
By combining all switchgear equipment into one enclosure, NexPhase™ eliminates the lengthy design process of traditional post-and-frame systems, which require additional costs to design and source a mixed-manufacturer panel system.

INSTALLATION MADE EASY
MITIGATE UP-FRONT COSTS
NexPhase™ only requires the on-site connections for the incoming power and outgoing charger connections, drastically reducing on-site installation time and costs.

CONNECTION ENABLED
REMOTE MONITORING & CONTROL
An embedded monitoring system provides remote access to real-time health data with remote power cycling capabilities and automated alarms to facilitate condition-based maintenance planning.

CHARGER RESILIENCY
INCREASE EV CHARGER UPTIME
With early detection of EV charger deficiencies and system performance diagnostics provided by NexPhase™, fleet operators are provided with the tools to improve uptime, extend equipment service life, and enhance the reliability of their EV charger systems.

UPTIME ASSURANCE
PINPOINT OFF-LINE EV CHARGERS
It's approximated that up to 30% of public U.S. EV chargers are out of operation at any given time, with these outages going undetected until a technician is physically present. NexPhase™ provides ongoing state-of-charge data so operators can identify outages, remotely cycle power, and react with precision.

SAFETY FEATURES
PROTECT YOUR EV CHARGERS
NexPhase™ includes integrated emergency-stop capabilities for future NFPA compliance and added safety capabilities including EV charger crash detection, flammable vapor monitoring with automatic shutdown, and flood detection remote alerts.

TURNKEY SWITCHGEAR SOLUTION
Unlike traditional post-and-frame switchgear, NexPhase™ combines all of the electrical panels, equipment, and wiring that are tasked with receiving, distributing, and protecting the site's power into a single panel.

An embedded power monitoring systems provides continuous, precision performance data to the secure UNITE™ Web Interface. Through UNITE™ CPOs can remotely monitor, troubleshoot, and control the EV charging site.

TRADITIONAL SWITCHGEAR

HOW MUCH ARE EV CHARGER OUTAGES & TRUCK ROLLS COSTING YOU?

Outages are routinely due to a charger communication failure which leaves the Charge Point Operator (CPO) unable to detect and react remotely. 50-70% of the time a simple power cycle of the charger's power is all that is needed to get the charger up again. The charge point operator simply cannot perform a hard reboot on a charger remotely — NexPhase™ can.

TYPICAL CHARGER OUTAGES

CHARGER IS DOWN
The most common reason for charger outages is a communication failure within the charger itself.

CPO LOST SIGHT
With communication offline, the CPO has no remote visibility to know the cause of the charger outage.

TRUCK ROLL
The only course of action available to the CPO is to dispatch a service truck to investigate the downed charger.

POWER CYCLE
50-70% of the time a simple power cycle of the charger's power is all that is needed to get the charger up again.

THE COST
The CPO just spent $500-$700 in trip charges for a simple power cycle – plus the lost business in charger downtime.

THE NEXPHASE™ ALTERNATIVE TO OUTAGES

CHARGER IS DOWN
The most common reason for charger outages is a communication failure within the charger itself.

CPO STILL CONNECTED
Even though the charger is offline, NexPhase™ gives the CPO remote access to the station's vital power data and charger status.

REMOTE RESPONSE
The CPO can remotely confirm incoming utility power, verify all switchgear components are operational, trouble-shoot the charger, and initiate a power cycle to bring it back online.

NO TRIP CHARGE
Instead of sending a technician to the site, NexPhase™ empowers CPO personnel to remotely diagnose and rectify charging station outages.

THE SAVINGS
NexPhase™ can help CPOs maintain 97% charger uptimes while reducing maintenance and service calls – keeping chargers operational and reducing maintenance budgets.

CONNECTED EV CHARGING INFRASTRUCTURE

The UNITE™ Web Interface securely communicates with a NexPhase™ Smart EV Switchgear to provide user-friendly remote access to critical EV charger infrastructure monitoring information. With early detection of EV charger deficiencies and system performance diagnostics provided by UNITE™, Charge Point Operators (CPOs) are provided with the tools to improve uptime, extend equipment service life, and enhance the reliability of their EV charger systems.

EV CHARGING SITE DASHBOARD

View the operational status of the EV charging station's critical assets including the switchgear and EV chargers. Remote monitoring, troubleshooting, and control capabilities with automated alarms help facilitate condition-based maintenance and increase EV charger uptime.

REMOTE POWER CYCLE

When chargers fail, 50-70% of the time a simple hard reset of the charger's power is all that is needed to get the charger up again. Save the trip charge with remote power cycling capabilities.

POWER ANALYTICS

Get access to real-time and historical utility power usage and performance data that can be used to improve EV charging operational performance and better understand utility power usage.

POWER AVAILABILITY

97% Scroll through power availability metrics by trailing week, month, quarter, or year. Key in on chargers with power availability issues and dive deeper into the causes of those outages.

DAMAGE DETECTION

EV charger crash detection, flammable vapor monitoring, and flood detection with automatic shutdown help safeguard charging sites and identify outages.

STALE CHARGER DETECTION

Locate chargers that have not executed a charge in a user-defined time period. A stale charger can be a good indication of a software or communication outage, damage, or obstruction at the site.

OUTAGE DETECTION

Up to 30% of public U.S. EV chargers are offline at any given time, with these outages going undetected until a technician is physically present. UNITE™ pin-points offline chargers so CPOs can react quickly.

NETWORK VIEW
Visualize your entire charger network geographically in a single map view. Visually confirm the status of all chargers and quickly key in on those that may require attention or maintenance.

ASSET VIEW
Quickly view the operational status of each EV charging station's critical assets including the switchgear and EV chargers. Color-coded, icon-driven design facilitates fast and easy status-at-a-glance of these key assets.

CHARGER VIEW
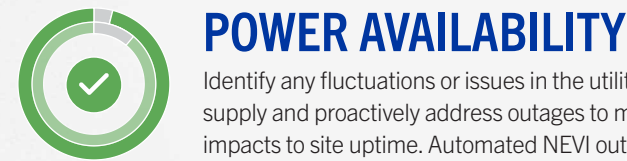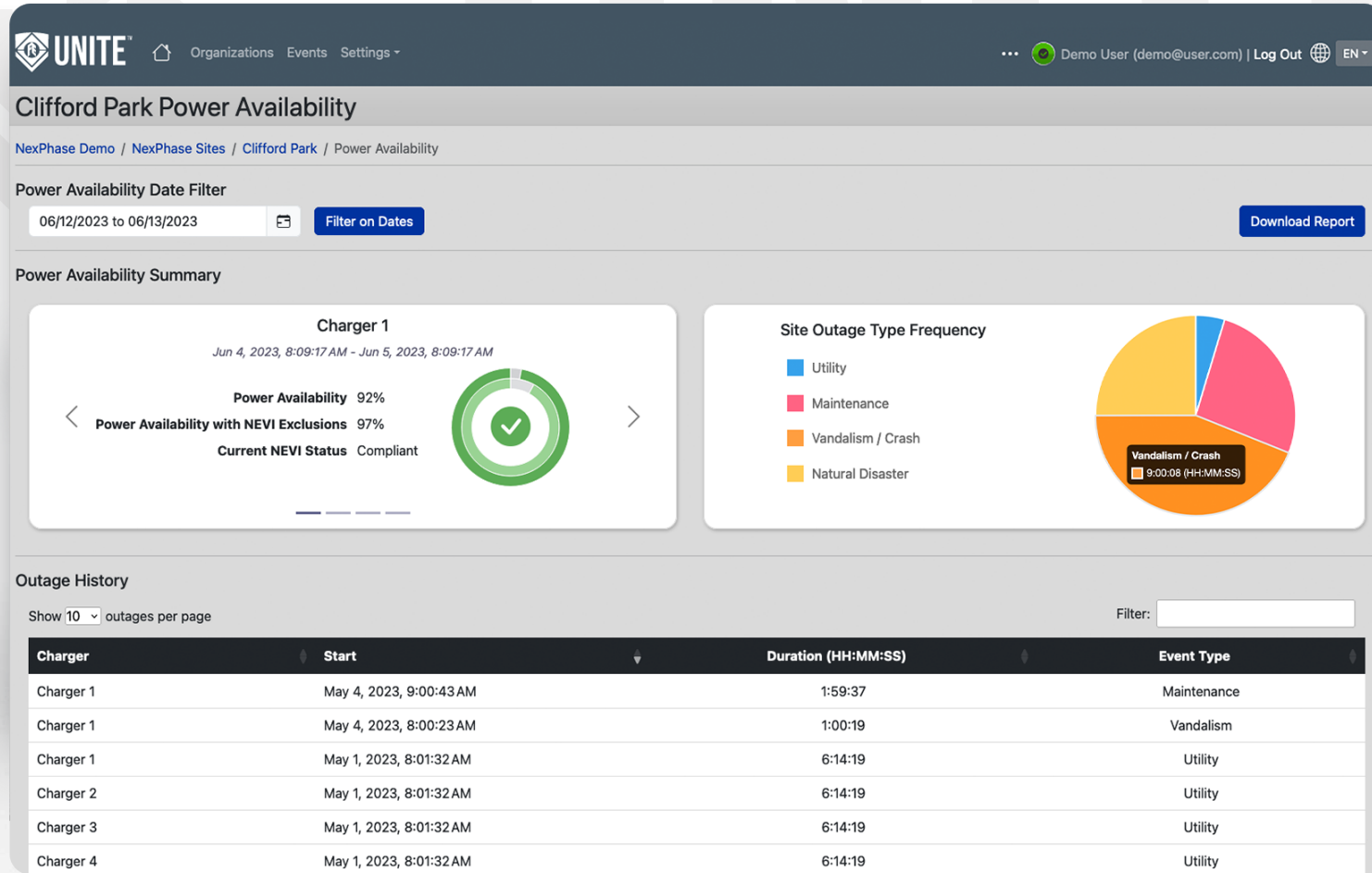Key in on individual chargers with access to data including usage, outage status, outage types, and outage duration. UNITE™ also tracks and monitors every charge event with access to charge times, duration, and advanced energy usage analytics.
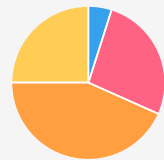
POWER AVAILABILITY DASHBOARD

Access key utility power availability metrics, track outages, and simplify reporting.

CHARGER TRANSACTIONS DASHBOARD

Access charger transaction metrics to track and trend charger activity, charge durations, output power, and energy consumed.

Clifford Park Power Availability

Power Availability Date Filter

06/12/2023 to 06/13/2023 | Filter on Dates | Download Report

Power Availability Summary

Charger 1
Jun 4, 2023, 8:09:17 AM - Jun 5, 2023, 8:09:17 AM

Power Availability	92%
Power Availability with NEVI Exclusions	97%
Current NEVI Status	Compliant

Site Outage Type Frequency
- Utility
- Maintenance
- Vandalism / Crash
- Natural Disaster

Vandalism / Crash
9:00:08 (HH:MM:SS)

Outage History

Show 10 outages per page   Filter:

Charger	Start	Duration (HH:MM:SS)	Event Type
Charger 1	May 4, 2023, 9:00:43 AM	1:59:37	Maintenance
Charger 1	May 4, 2023, 8:00:23 AM	1:00:19	Vandalism
Charger 1	May 1, 2023, 8:01:32 AM	6:14:19	Utility
Charger 2	May 1, 2023, 8:01:32 AM	6:14:19	Utility
Charger 3	May 1, 2023, 8:01:32 AM	6:14:19	Utility
Charger 4	May 1, 2023, 8:01:32 AM	6:14:19	Utility

Clifford Park Transactions

Transaction Date Filter

06/20/2022 to 06/20/2023 | Filter on Dates

Transaction Summary

Charger 1
Jun 20, 2022, 12:00:00 AM - Jun 20, 2023, 11:59:59 PM

Latest Transaction	Jun 6, 2023, 10:55:24 AM (0:17:07)
Total Transactions	222
Days with Transactions	9.02 %
Total Active Energy	6,264 kWh
Total Reactive Energy	-757 kVArh
Total Apparent Energy	7,717 kVAh

Active Energy Consumed per Transaction per Charger
Charger 1 | Charger 2 | Charger 3 | Charger 4

45-50 kWh
Charger 1: 25 transactions
Charger 2: 17 transactions
Charger 3: 29 transactions
Charger 4: 23 transactions

Transaction History

Show 10 transactions per page   Filter:

Charger	Start	Duration (HH:MM:SS)	Active Energy (kWh)	Reactive Energy (kVArh)	Apparent Energy (kVAh)
Charger 2	Jun 6, 2023, 11:00:08 AM	0:12:24	6.077	2.823	6.704
Charger 4	Jun 6, 2023, 10:57:18 AM	0:15:14	6.093	2.813	6.715
Charger 3	Jun 6, 2023, 10:55:34 AM	0:16:57	6.114	2.826	6.738
Charger 1	Jun 6, 2023, 10:55:24 AM	0:17:07	6.098	2.814	6.719
Charger 3	Jan 31, 2023, 6:25:52 PM	1:34:58	37.988	-4.372	48.041
Charger 1	Jan 31, 2023, 6:23:57 PM	0:37:33	15.113	-1.874	18.905

POWER AVAILABILITY

Identify any fluctuations or issues in the utility power supply and proactively address outages to minimize impacts to site uptime. Automated NEVI outage exclusion tracking simplifies uptime reporting.
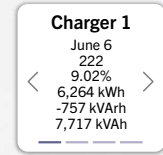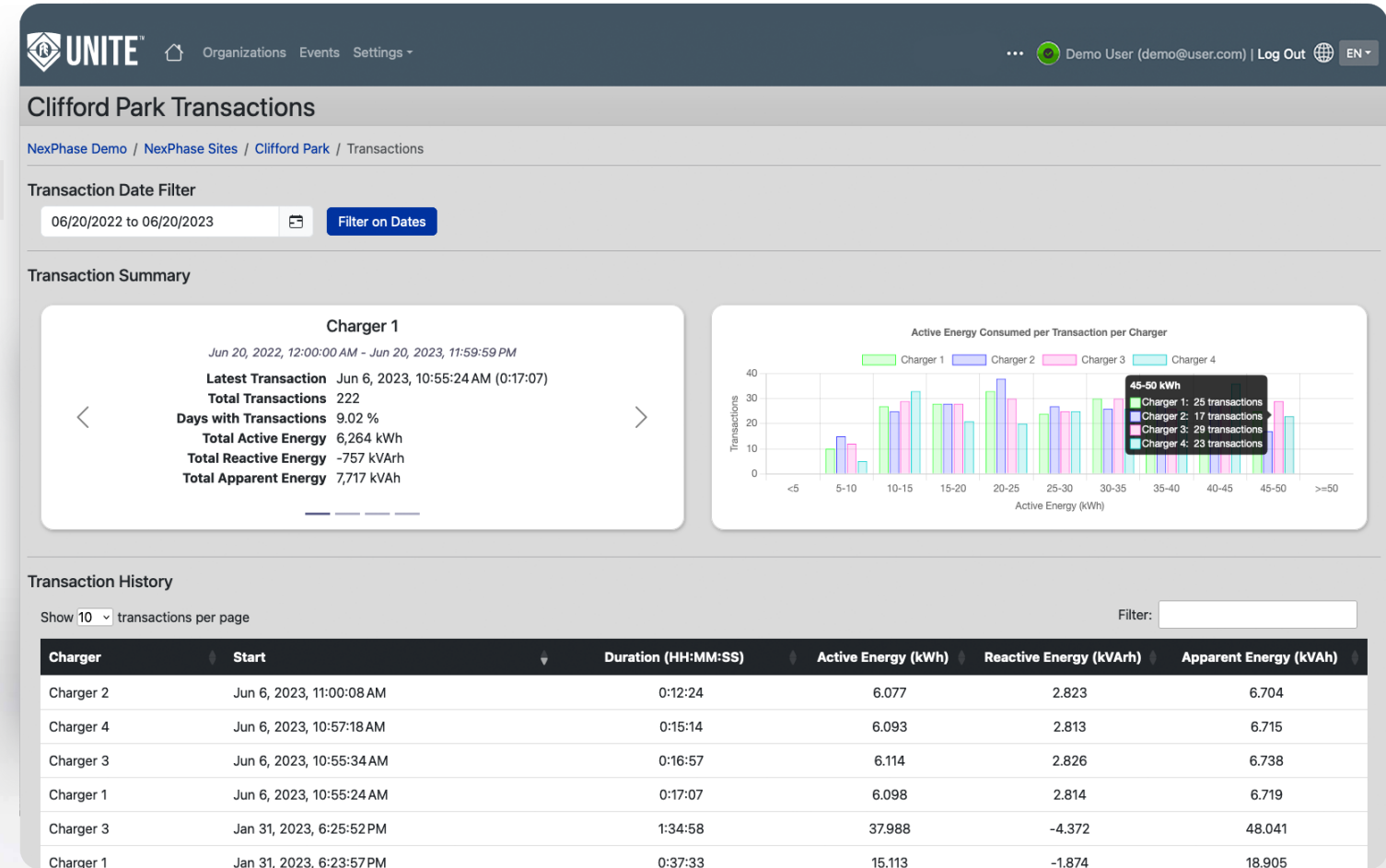
OUTAGE TRACKING

Understand the cause of outages and identify patterns or recurring issues that are impacting the reliability of the charging site. Address the sources of downtime with precision and increase overall uptime.

CHARGE TRACKING

Charger 1
June 6
222
9.02%
6,264 kWh
-757 kVArh
7,717 kVAh

Detailed charger energy tracking can help identify high-demand periods, optimize energy usage, plan maintenance, and implement load management strategies to minimize peak demand chargers.
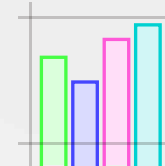
ACTIVE ENERGY

View charger performance both in terms of power consumption and number of transactions to verify chargers are performing as expected and quickly identify those that are not.
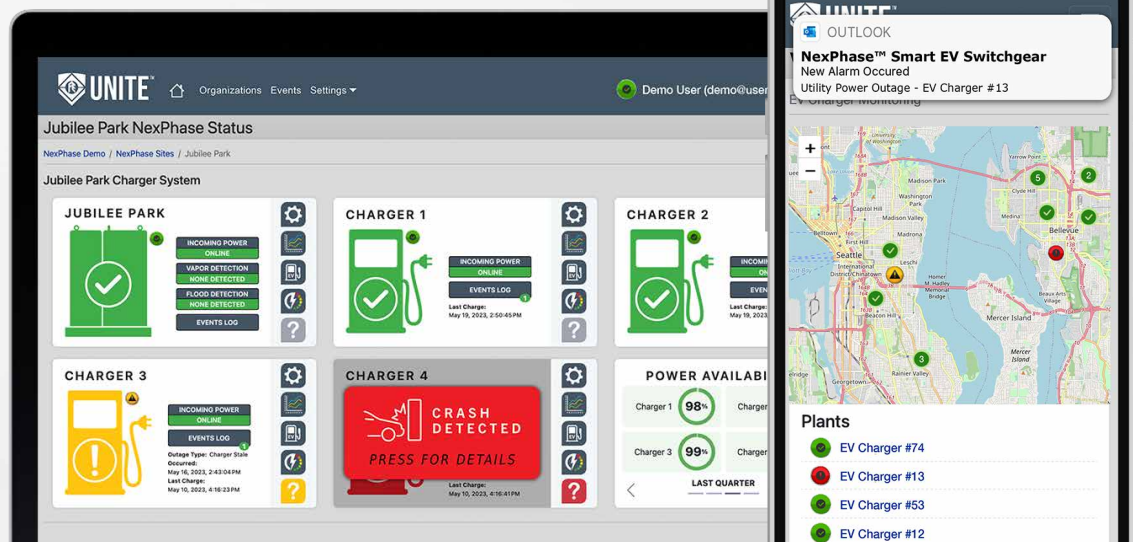
POWER ANALYTICS

UNITE™ features advanced data visualization tools for incoming utility power monitoring. Track and trend key power metrics including:

- Current by Phase
- Voltage by Phase
- Power Factor by Phase
- Apparent Power
- Active Power
- Reactive Power

Clifford Park Status

06/19/2023 to 06/20/2023 | Filter on Dates

TEST DRIVE UNITE™

Scan or click the QR code to demo UNITE™ on any device.

SCAN/CLICK FOR DEMO

View on tablet or PC for optimal user experience.

Jubilee Park NexPhase Status

Jubilee Park Charger System

JUBILEE PARK | CHARGER 1 | CHARGER 2
CHARGER 3 | CHARGER 4 | POWER AVAILA...

CRASH DETECTED
PRESS FOR DETAILS

NexPhase™ Smart EV Switchgear
New Alarm Occured
Utility Power Outage - EV Charger #13

Plants
- EV Charger #74
- EV Charger #13
- EV Charger #53
- EV Charger #12

NEXPHASE™

SMART EV SWITCHGEAR

POWERING THE **NEXT** MOBILITY TRANSFORMATION.

Franklin Electric
EV SYSTEMS