



Metering and Telemetry in Utility Virtual Power Plants

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KEY TAKEAWAYS

- Metering and telemetry requirements have been cited as a critical barrier to broader virtual power plant (VPP) deployment in VPPs that bid directly into wholesale markets (*market participant VPPs*). They are not typically referenced as a critical barrier for VPPs in which the utility is the offtaker of services provided by the VPP (*utility VPPs*).
- Utilities tend to take a different approach compared to markets when it comes to metering and telemetry from VPPs. Instead of requiring revenue-grade telemetry or AMI data,ⁱ which is often required by wholesale markets, utility VPPs rely on metering and telemetry provided through device-level internet-based communication.
- *Device-level internet-based communication* leverages the communications capabilities already built into distributed energy resources such as batteries, EVs, smart thermostats and other devices. Use of internet-based communication from devices can streamline customer enrollment, avoid the need for costly additional metering, and provide relatively real-time and granular data to support utility operations.
- While current systems for metering and telemetry in utility VPPs work well for managing system peaks, metering and telemetry may need to evolve to support future utility VPPs that provide location-targeted dispatch or services that require faster response (e.g., ancillary services).
- The following five actions can help broaden and advance leading practice for utility VPPs when it comes to metering and telemetry:
 1. Leverage device-level internet-based communications where appropriate.
 2. Establish clear data quality and performance standards, and measure device model performance against them.
 3. Link eligibility and compensation to data quality and performance.
 4. Align standards and requirements across jurisdictions at the regional and national levels.
 5. Integrate VPPs into utility operations and planning.

ⁱ See Appendix for definitions of technical terms mentioned in this report

INTRODUCTION

Metering and telemetry are two related data communications functions that support grid operations.

Metering is the measurement of the quantity of energy delivered. Metering data is used to ensure fair and accurate compensation of generators and load, including VPPs.

Telemetry is the capability to collect and automatically transmit ongoing data to a grid operator. Telemetry helps support real-time grid management.

Accurate and reliable data on virtual power plant (VPP) performance — both operational performance and the accuracy of projected performance — helps increase trust in VPPs and can lead to increased integration of VPPs into power system planning and operations. However, onerous requirements for metering and telemetry have been cited as a major issue for *market participant VPPs*, posing a key barrier for broader VPP deployment.¹

Although metering and telemetry have not been as frequently cited as a barrier to VPP deployment for *utility VPPs*, continued evolution and standardization of metering and telemetry can allow utility VPPs to provide additional grid services, further advancing reliability and affordability.

This report is a companion to [Virtual Power Plant Metering and Telemetry](#) (2025). Whereas *Virtual Power Plant Metering and Telemetry* provides an overview of critical issues and a high-level review of approaches used for metering and telemetry of VPPs, this paper focuses on metering and telemetry of utility VPPs. It is intended as a focused overview for regulators, utilities, and other stakeholders who are primarily interested in metering and telemetry approaches for VPPs that will not directly participate in wholesale markets.

While practices will vary considerably based on jurisdiction and context, this is intended to provide a sense of current practices, emerging issues, and possible actions for decision makers who want to get the most out of their VPPs.

ABOUT UTILITY VPP PROGRAMS

For the purposes of this paper, utility VPPs refer to VPPs in which the utility is the offtaker or purchaser of services provided by the VPP. In these models, VPP services are used to support utility objectives, such as peak reduction or distribution system needs.ⁱⁱ

By contrast, market participant VPPs are those in which the VPP bids directly into an ISO/RTO market and is compensated through wholesale market settlement mechanisms. These VPPs are subject to ISO/RTO metering and telemetry requirements. Technical requirements and considerations around market participant VPPs were the subject of RMI's companion report *Virtual Power Plant Metering and Telemetry*,² and as such are not covered in this paper.

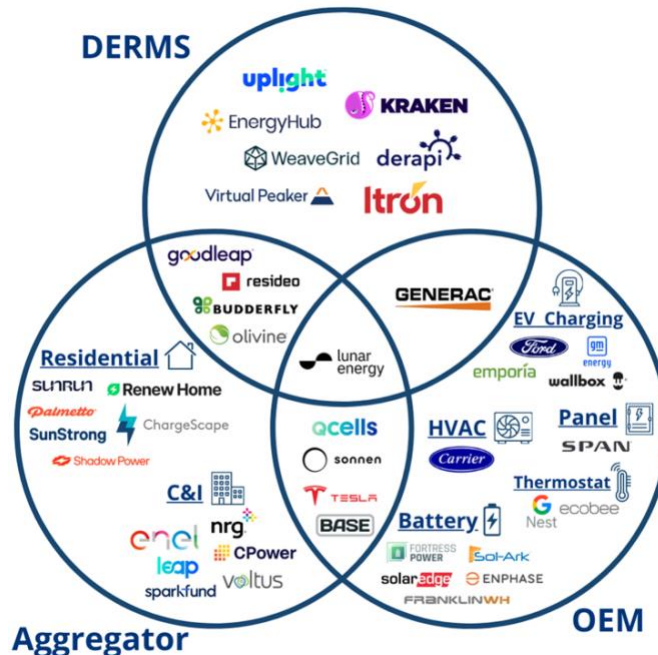
ⁱⁱ Many utility VPPs operate in regions with wholesale markets. In those instances, the utility VPP may be designed to avoid market obligations or purchases (e.g., resource adequacy or energy purchases). However, the VPP does not *directly* participate in the market.

Roles in Utility VPPs

Utility VPPs typically involve a collaboration between the utility and one or more third-party technology or service providers. These may include:

- **Distributed energy resource management system (DERMS) providers:** These provide software platforms that support enrollment, forecasting, coordination, and dispatch of the VPP. Utilities typically contract with third-party DERMS, though they may have their own in-house software platform. Two types of DERMS are Enterprise or Grid DERMS and Edge DERMS.ⁱⁱⁱ
- **Program administrators:** In some instances, a utility may contract with a third-party program administrator to manage customer engagement, enrollment, and implementation. Some DERMS providers also perform this role.
- **Aggregators:** In certain utility VPPs, aggregators enroll customers and interface with the DERMS or manage devices using a separate Edge DERMS to support dispatch.³
- **Third-party owners:** Third-party owners and financiers often play a role similar to aggregators in addition to financing devices. They may dispatch and manage a fleet of customer-sited assets that they own and operate.
- **Original equipment manufacturers (OEMs):** OEMs are the device manufacturers whose hardware is responsible for providing data to the aggregator or DERMS and for responding to dispatch signals from the DERMS. In certain programs, OEMs sometimes also play an active role in customer enrollment and may also act as an aggregator.
- **Measurement and verification (M&V) providers:** In some programs, the role of verifying VPP performance is conducted by independent evaluators who provide M&V services.

Exhibit 1: Some of the leading DERMS, aggregators, and OEMs⁴



Source: Ohm Analytics

ⁱⁱⁱ See Appendix for definitions. For an extended discussion on DERMS see Decoding DERMS (SEPA, 2025).

METERING AND TELEMETRY APPROACHES IN UTILITY VPP PROGRAMS

While specific architectures can vary across utilities, most utility VPPs draw on telemetry provided directly from OEM devices (device-level internet-based communications), supplemented in some cases by AMI data for measurement and verification. Given the disparate sources of data and potentially high integration burden, a critical step in utility VPP program metering and telemetry is the aggregation, processing, and normalization of data from multiple sources into a singular usable signal for the utility. The data processing responsibility can be handled either in-house by Data and IT teams within utilities, or as a service offered by DERMS providers or program administrators.

Device-level internet-based communications: features and considerations

Many consumer devices and equipment have onboard meters and sensors for energy/demand measurement,^{iv} and possess communication capabilities to transmit this measured usage data. These devices typically transmit their data using internet-based communication (via WiFi, cellular, or ethernet ports), typically through *API-based integrations*.^v Examples of OEM devices that have communications capabilities include smart thermostats, HVAC equipment, electric vehicles, EV chargers, batteries, home energy management panels,⁵ and other smart and grid-interactive appliances and devices.

There are a few important technical process and design aspects unique to device telemetry, which have significant influence over practical implementation in utility VPP programs, and affect how the reliability of device-level internet-based communications is viewed in supporting utility operations. These include:

- **API integration complexity:** OEM device APIs can have other integration challenges for utilities,⁶ such as fragmented protocol adoption, differences in vendor implementations, evolving firmware, and API fees.
- **Failure modes and redundancy:** OEM API-based telemetry is exposed to different kinds of failure modes (e.g., cloud outages, cellular or WiFi connectivity, etc.) so, as with any technology, there is need for proper risk management and redundancies.
- **Data sharing and integration burden:** OEMs all have their own robust data-sharing policies and customer agreements, which can vary widely among different OEMs and classes. This illustrates the significant integration burden involved in compiling data from a wide range of OEMs and device classes into a singular usable signal for the utility.

AMI: features and considerations

AMI refers to utility-owned and installed smart meters that measure premise-level demand and energy usage (i.e., whole home). AMI can use a range of communication networks — radio frequency (RF-mesh, or RF point-to-point), power line carrier (PLC), and in some cases, cellular networks. In addition to these modes of communication, newer AMI installations (AMI 2.0) typically have embedded multi-carrier cellular and/or private LTE at the meter to improve connectivity, enable real-time communications, and reduce latency.⁷

^{iv} In some cases, the data transmitted can be the device on/off state, runtime, and other data specific to a device type or OEM. Even in the absence of direct energy/demand data, the demand or usage can be reliably imputed and integrated in the final signal the utility receives.

^v See Appendix for definition.

In addition to device-level communications, AMI data is sometimes used for measurement and verification (e.g., to reconcile device-level and meter-level results) in certain regions. In a common structure, utility AMI data is used by third-party M&V evaluators to audit VPP program performance and compare it against data provided by device-level internet-based communications. The third-party evaluators then submit these M&V reports to the state utility commissions for their review.

A few considerations are important when considering leveraging AMI data in a VPP program:

- **AMI rollout:** AMI meter rollout across US utilities is at different stages of completion and AMI capabilities (including meter data resolution and frequency of transmission) vary by meter.⁸
- **Data latency:** While data latency has typically prevented AMI from being used for telemetry, emerging AMI 2.0 capabilities aim to enable low-latency real-time communication of customer meter data directly to the utility.

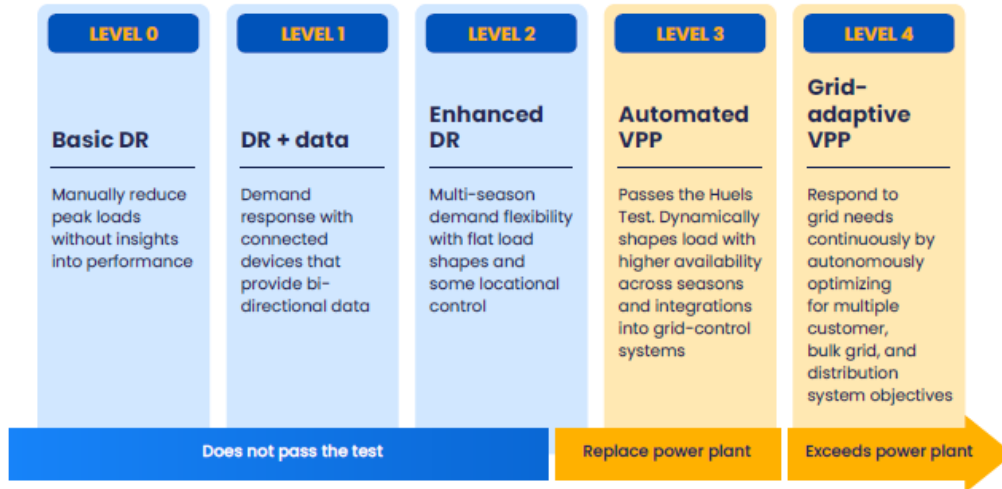
A key step in the functioning of a utility VPP is **data compilation, processing, and management**. This step involves the conversion of data from various sources into a combined singular signal that can be used by the utility. This can be a challenging and complex task given that OEMs do not universally provide standard and consistent data, nor does such a national standard for OEM data exist. While this function is typically provided by a third-party DERMS vendor or program administrator, in some instances it may be completed in house by the utility.

ISSUES AND THEMES FOR METERING AND TELEMETRY OF UTILITY VPPs

The number and scale of utility VPPs continues to grow as utility VPPs are increasingly becoming a trusted and reliable asset for utilities nationwide.⁹ However, for VPPs to grow their impact and provide a larger role in utility operations and planning, there is an opportunity to advance practice pertaining to VPP metering and telemetry.

In its *VPP Maturity Model*,¹⁰ EnergyHub proposes a multi-stage framework for the characteristics of more advanced practice for VPPs. The framework starts with basic demand response (level 0) and moves toward more sophisticated VPPs that are indistinguishable from an operator perspective compared to traditional power plants (see Exhibit 2 below). According to EnergyHub, today, most advanced VPPs operate at, or close to, level 2.

Exhibit 2: EnergyHub’s VPP Maturity Model



The VPP Maturity Model calls out several attributes of telemetry and related topics that may be necessary for VPPs to be trusted by grid operators to provide additional services to support the grid.

While there is not yet industry-wide agreement on standard values, the table below summarizes some of the ways technical requirements might need to advance to support more advanced VPP applications.

Exhibit 3: System requirements for VPP maturity¹⁰

Level	Telemetry	Dispatch Latency	Integrations
0	None	>6 hours	None
1	Hourly data with >1 hour latency	>1 hour	None
2	15-minute interval data with <15-minute delay	<15 minutes	Possible integration with utility operations and control platform
3	5-minute data with <5-minute delay	<5 minutes	Yes, integrated with utility operations and control platform (e.g., SCADA)
4	~2–6 seconds	<1 minute	Yes, integrated with SCADA/ADMS, Grid DERMS

A few key issues must be managed and addressed regarding metering and telemetry for utility VPPs to meet the technical requirements required in more mature VPPs.

Issue 1: Data quality and timeliness

Data quality is foundational for the credibility and effectiveness of utility VPPs. Irrespective of whether the data originates from AMI or device-level internet-based communications, the following features are important to improve trust for operations and planning:

- **Accuracy, reliability, and completeness:** While it is important for operator trust that the underlying measurements be **accurate**, it also matters that the data transmitted to the utility (or VPP administrator acting on behalf of the utility) is **complete** (i.e., all expected data points are present without missing intervals, gaps due to connectivity issues, or partial event data). Further, it is crucial that the data stream be **reliable**, with high uptime of cloud systems, minimal API integration failures rates, and sufficient redundancy mechanisms for data reporting.^{vi}
- **Latency and frequency of data transmission for reporting:** Latency refers to the lag time between data transmission of the device and receipt by the utility. Frequency is how often the measurement device transmits data to the utility (or the VPP administrator operating on behalf of the utility). Both utility AMI meters and OEM devices can vary in their data transmission frequency and latency.¹¹ Most AMI installations, for example, batch-upload data from once a day to a few times a day. For OEM devices, the frequency of data transmission varies across OEMs and device types.
- **Compliance with standards:** Given the diversity of data sources, formats, agreements, and communication pathways across OEMs, device types, and utility systems, standards help establish common expectations for data structure, accuracy, and transmission protocols. Examples of data communications standards include IEEE 2030.5, OpenADR, and CIM. Accurate and low-latency (regularly transmitted) data supports increased VPP maturity. Increased compliance with standards enables low-cost integration of maximum DER makes and models with reduced integration burden and error risk.

Issue 2: Dispatch latency and performance

Dispatch latency refers to the time between when a dispatch signal is issued (by the utility, DERMS, or aggregator) and when the distributed resource begins delivering the requested response. Reduced dispatch latency enables VPPs to be leveraged by utility operators to support system contingencies and more time-sensitive grid needs. Consistent performance (i.e., reliable response to dispatch signals) is also critical to building trust among utility operators and planners.

Although dispatch latency and performance are not strictly a telemetry issue (since telemetry relates to information flow to the grid operator), they are closely related in practice. Dispatch and control signals often rely on the same communications channels as telemetry. Low latency and highly reliable dispatch support increased VPP maturity and deeper integration into distribution grid operations.^{vii}

^{vi} While more granular (higher resolution) and real-time data is better, sufficient historical data and sophisticated forecasting tools can yield quite accurate predictions even without this level of detail.

^{vii} “Low latency” can be defined differently in various industries, and even within electric grid operations based on regional operating conditions and program designs. In utility VPPs, “low latency real-time operations” can mean the lag time between operator dispatch and VPP response/performance could be <2 seconds, <5 minutes, or even <15 minutes, depending on VPP maturity.

Issue 3: Utility integration and internal coordination

Utility integration refers to embedding VPPs within core utility systems and processes. This includes technical integration into utility software platforms such as SCADA, EMS, ADMS, grid DERMS etc., as well as incorporation into workflows for grid operations, outage management, and distribution planning.

While technology integrations are a critical aspect of utility programs, it is equally important for utilities to address internal structure and process changes to enable smooth functioning of these utility VPPs. Internal alignment and coordination across operations, planning, customer programs, IT, regulatory, and cybersecurity teams with clearly defined roles are necessary conditions for VPP program capabilities to translate into operational value.

Issue 4: Policy requirements

Policymakers, including regulators and legislators, help shape the technical and performance requirements governing utility VPPs. They are responsible for ensuring that utility VPPs (alongside other programs and investments) deliver measurable benefits to both participating and non-participating ratepayers, which may include establishing expectations for transparency, performance validation, and cost recovery.

In some instances, policymakers may specify technical approaches to validate VPP services, such as defined M&V methodologies, use of AMI data, or third-party verification. While these policies may be intended to ensure credibility and protect ratepayers, requirements that are overly prescriptive, unclear, or misaligned with current capabilities can increase costs or be counterproductive to program objectives.

Clear, outcome-focused policy frameworks that emphasize performance and accountability while allowing for flexibility in implementation, will enable VPP maturity without creating unnecessary barriers.

POTENTIAL ACTIONS TO SUPPORT AND ADVANCE METERING AND TELEMTRY IN UTILITY VPPS

As utilities, regulators, technology providers, and other stakeholders consider changes to utility metering and telemetry practice, two objectives should guide decision-making: 1) enable VPPs to deliver additional services that enhance grid reliability and affordability; and 2) avoid inhibiting VPP performance or expansion.

The following five actions support those objectives.

1: Leverage device level communications where appropriate.

While ANSI-certified telemetry is highly trusted and accurate, and some AMI systems (such as newer AMI 2.0 installations) promise to provide useful telemetry, both have limitations. ANSI-certified telemetry can be quite costly, and AMI may not be available or may lack the latest capabilities needed to provide sufficiently accurate and current information to support some grid services.

To maximize uptake and minimize costs, utilities can consider leveraging device-level communications. The principle of *Aggregated Accuracy* (see the *VPP Metering and Telemetry report* for more details¹²) shows that when aggregated into portfolios, device-level telemetry can become extremely accurate.

As with any grid edge solution, utilities should continue to evaluate and guard against any cybersecurity risk that this approach might present to ensure data, communications, and controls are adequately secure. Leading cybersecurity practices for DER and VPP ecosystems emphasize governance, risk management, access control, secure communications, incident detection and response, and alignment with harmonized standards. Integrating these practices into design and operations helps manage the expanded cyber-physical attack surface introduced by distributed grid edge resources. ¹³

2: Align standards and requirements across jurisdictions at the regional and national levels.

Increased standardization across a region or nationally can reduce the burden for individual compliance from individual OEMs and software/service providers. In addition, as VPPs are increasingly integrated into wholesale markets, it is helpful to align and coordinate standards and requirements. Utilities and their regulators are encouraged to increase coordination on these topics while focusing on solutions that preserve what's working with effective near-term VPPs and encouraging long-term VPP maturity and impact.

Any efforts to establish data quality and performance standards (see recommendation 3 below) would be most effective if they were national and provided the long-term clarity needed to inform long lead-time product development cycles. Some efforts are underway to create these kinds of national standards. These efforts should be advanced and, if possible, should include all technology types typically involved in VPPs.

3: Establish clear data quality and performance standards, and measure device model performance against them.

Utilities, potentially working with third-party researchers, should consider clearly setting transparent expectations regarding data quality and performance expectations, and then monitor and track telemetry performance by OEMs.

Data-related metrics for a standard to track could include:

- Latency
- Resolution (e.g., 15 min, 2 sec, etc.)
- Conformance to data protocols for OEM or aggregator communication to the grid operator (e.g., OpenADR, IEEE 2030.5)
- Responsiveness to grid signal (latency, magnitude, and reliability of response)

Missing data and invalid or out of range values are also an issue, so data to track might also be set around those metrics. In addition to tracking device models, utilities may consider setting clear standards for and tracking performance of aggregators or DERMS who have a role in collecting or packaging the data above.

4: Link eligibility and compensation to data quality and performance.

VPPs can provide the greatest utility value when multiple vendors and devices can participate.

However, if a device model is unable to provide telemetry data required to deliver a grid service, it may be appropriate to exclude that technology from the initial list of eligible devices, and work with vendors over time to support future qualification. However, utilities should try to not remove device models AFTER a program has been established as this would pose a significant risk to customers.

OEM eligibility isn't the only lever utilities have available to them. In some program structures it may also make sense to differentiate compensation based on data quality and performance. This would be appropriate if

differences in data quality impact the availability or usefulness of grid services provided by a VPP and if widely accepted data quality and performance expectations have been previously defined.

5: Integrate VPPs into utility operations and planning

To maximize value from VPPs, utilities can continue to invest in software systems and business processes to ensure that data provided from VPPs meaningfully impacts system planning and operations. This integration is important, because it ensures that VPPs are used to reduce spending that would have otherwise been directed to operations or capital expenditures.

Integration can be supported through technology systems and software such as Grid DERMS, ADMS, and GIS among others. Benefitting from these investments requires not only software implementation but also cross-department coordination and integration.

APPENDIX: DEFINITIONS

Advanced Distribution Management System (ADMS) — Integrated utility platform that combines SCADA and outage management functions to monitor and control distribution grid operations and support DER integration

Advanced metering infrastructure (AMI) — Smart meters and communications infrastructure that measure electricity usage at defined intervals and provide data back to utilities and customers

Ancillary Services — Essential grid services that support delivery of electric power while maintaining reliable grid operations (e.g., frequency and voltage regulation, spinning reserves)

API-based integration — Software integration using application programming interfaces (APIs) allowing data exchange and control between platforms

Device-level internet-based communications — performance measurement data transmitted from a distributed energy resource via internet-based communication pathways (WiFi, cellular, or ethernet)

DERMS (distributed energy resource management system) — A platform that enables monitoring, forecasting, optimization, and dispatch of distributed energy resources (DERs)

Dispatch latency — The lag time between when a dispatch signal is issued (by the utility, DERMS, or aggregator) and when the distributed resource begins delivering the requested response

Edge DERMS — DER management platform that orchestrates “grid-edge” devices (i.e., customer-owned DER assets), often integrate OEM device DERs and aggregator platforms, and interface with utility/enterprise DERMS

Enterprise (Grid) DERMS — Utility-level DERMS that is integrated into core utility systems such as an ADMS

Frequency (transmission interval) — How often a measurement device transmits data to the utility

Latency — Lag time between data transmission of the device and receipt by the utility

Location-targeted dispatch — Dispatch instructions aimed at DERs within a specific area of the distribution system (feeder- or substation-level) to address local grid needs and constraints

Market participant VPP — VPP that bids directly into a wholesale ISO/RTO as a market participant in energy, capacity, or ancillary service markets

Metering — Measurement of the quantity of energy delivered; metering data is used to ensure fair and accurate compensation of generators and load, including VPPs

OEM (original equipment manufacturer) — The manufacturer of DER hardware (such as inverters, batteries, EV chargers, EVs, smart thermostats, heat pumps etc.); often the source of device telemetry

Resolution — Intervals at which data measurements are recorded (5-min, hourly etc.)

Revenue-grade telemetry — Meters that meet specific accuracy standards such as ANSI C12.1, and communicate measurement data to the grid operator in real-time (sub-second or every few seconds)

SCADA (Supervisory Control and Data Acquisition) — System of remote control and telemetry used to monitor and control grid operations

Telemetry — capability to collect and automatically transmit ongoing data to a grid operator to support real-time grid management

Utility VPP — VPP in which the utility is the off-taker (or purchaser) of services provided by the VPP

Virtual power plant (VPP) — Dispatchable aggregation of distributed energy resources

ENDNOTES

¹ Gaps, Barriers, and Solutions to Demand Response Participation in Wholesale Markets, Energy Systems Integration Group, 2025, <https://www.esig.energy/demand-response-in-wholesale-markets>.

² *Virtual Power Plant Metering and Telemetry*, RMI, 2025, <https://rmi.org/insight/virtual-power-plant-metering-and-telemetry/>.

³ *Decoding DERMS: Options for the Future of DER Management*, Smart Electric Power Alliance, March 2025.

⁴ *2025 VPP Market Report*, Ohm Analytics, 2025.

⁵ Span Panels – Connectivity, Span, <https://support.span.io/hc/en-us/articles/4410667443607-SPAN-Panels-Connectivity>.

⁶ *Distributed Energy Resource Protocol Reference Guidebook*, Electric Power Research Institute, 2023, <https://www.epri.com/research/products/000000003002023419>; and *Integration of Microgrids, Distributed Energy Resource Aggregators, and Distributed Energy Resource Management Systems with Advanced Distribution Management Systems*, National Renewable Energy Laboratory, 2022, <https://www.nrel.gov/docs/fy22osti/82680.pdf>.

⁷ “Smart Meter,” GridTechPedia, <https://gridtechpedia.inl.gov/technology/smart-meter/>.

⁸ *2025 Assessment of Demand Response and Advanced Metering Pursuant to Section 1252(e)(3) of the Energy Policy Act of 2005*, Federal Energy Regulatory Commission, December 2025, https://www.ferc.gov/sites/default/files/2025-12/25_Assessment%20of%20Demand%20Response_1212.pdf.

⁹ *50 States of Virtual Power Plants and Supporting Distributed Energy Resources: 2025 State Policy Snapshot*, NC Clean Energy Technology Center and Smart Electric Power Alliance, 2026; and *Decoding DERMS: Options for the Future of DER Management*, Smart Electric Power Alliance, March 2025.

¹⁰ *Building Trustworthy Virtual Power Plants: The VPP Maturity Model — A Framework for Building VPPs That Perform Like — and Outperform — Conventional Resources*, EnergyHub, 2026.

¹¹ *Voices of Experience: Leveraging AMI Networks and Data*, Advanced Grid Research, May 2019, https://www.energy.gov/sites/default/files/2024-02/01-03-2019_doe-voe-leveraging-ami-networks-and-data-report_508_0.pdf

¹² *Virtual Power Plant Metering and Telemetry*, RMI.

¹³ *The Distributed Energy Resource Cybersecurity Framework*, National Renewable Energy Laboratory, 2022, <https://www.nrel.gov/docs/fy22osti/82577.pdf>; and MaGill, Charles, Jenna deCastro, Danish Saleem, and Jordan Waggoner, *DER Cybersecurity Standards: Assessment and Gap Analysis*, National Laboratory of the Rockies, 2026, <https://www.nrel.gov/docs/fy26osti/93100.pdf>.

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About VP3

The Virtual Power Plant Partnership, or VP3, is a coalition of industry voices that seeks to shift the necessary policies, regulations, and market rules to unlock the market for virtual power plants (VPPs). Our members span hardware and software technology solution providers, distributed energy resource (DER) aggregators, and others.

A robust VPP market expands the possibilities for all DERs — empowering households, businesses, and communities to play a role in the energy transition alongside technology solution providers. Learn more at vp3.io.



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