

October 11, 2023

Voltus Comments Regarding Cost Recovery, Cost Allocations and Distribution Wheeling Charges

I. Introduction:

The Indiana Utility Regulatory Commission (IURC or Commission) is conducting a stakeholder process to gather information regarding its implementation of Federal Energy Regulatory Commission (FERC) Order 2222. FERC Order 2222 was issued to remove the barriers preventing distributed energy resources (DERs) from competing on a level playing field in the organized capacity, energy and ancillary services markets run by regional grid operators. Despite many of the meetings taking place in person in Indianapolis, Voltus, Inc. ("Voltus") has been an active participant in the stakeholder process and appreciates this opportunity.

Voltus is one of the largest distributed energy resources platform service providers to residential, commercial, and industrial customers across the United States and Canada. Voltus acts as an Aggregator of Retail Customers ("ARC")¹ to enable consumers to profitably participate in various wholesale energy markets. Voltus operates in all of the North American regional electricity markets. Voltus enables consumers to provide benefits from behind-themeter assets (i.e., load flexibility, energy storage, distributed generation, and energy efficiency) by delivering energy, capacity, and ancillary services that the grid needs to operate efficiently. In return, Voltus sources and secures for its customers wholesale market revenues in payment for the use of their assets which participate in wholesale electric markets.

IURC's roundtable meeting scheduled for October 12, 2023, has no virtual option. Unfortunately, Voltus will not be able to attend in person, so respectfully provides these comments. The IURC has indicated that for the October 12, 2023, roundtable meeting, stakeholders will be discussing cost recovery, cost allocations, and distribution wheeling charges, and more specifically framed topics/questions thusly:

Cost recovery?

- for hardware/software/metering/facility upgrades/administration.

Cost allocation?

- To subsidize or not to subsidize?
- -What are the benefits for non-participants?
- -Are the benefits quantifiable? What would the benefit metrics be?

Distribution wheeling charges?

¹ An entity that is an ARC in MISO is a Curtailment Service Provider (CSP) in PJM.



-"An amount charged by one electrical system to transmit the energy of, and for, another system or systems."

II. Cost Recovery

During the roundtable meeting on September 14, 2023, where ARCs were asked to provide presentations regarding their operations and IURC's FERC Order 2222 implementation process, Voltus participated in person and provided a presentation that included some observations regarding cost recovery by distribution utilities for any infrastructure necessary to implement FERC Order 2222.² Voltus emphasized the following pertinent points:

- The level of DER penetration will determine configuration of any additional infrastructure.
- Incremental implementation will allow IURC to conduct its customary process(es) that
 require financial and engineering evidence to establish prudence/reasonableness for any
 particular infrastructure under standard rate of return regulation.

Voltus refers parties to its September 14 presentation for that discussion.

III. Cost Allocation

A. Subsidization

Voltus does not necessarily subscribe to the "subsidization" framing regarding cost allocation for infrastructure required to implement DERs in accordance with FERC Order 2222. DERs exist and have existed.³ From Voltus' perspective, the issue is more precisely whether DER aggregations that enable injection on the grid for participation in RTO/ISO markets impose incremental costs on the utility distribution system above the costs to serve the customer with distributed generation behind the meter that would not have occurred but for the DER injecting (as opposed to only serving the owner of the behind the meter generation). Those costs should then be identified and appropriately allocated.

The first level would be as established and approved through the interconnection agreement process which would establish any reasonable and necessary fees of interconnecting to the distribution grid. At the next level, if a particular upgrade or expense is necessary to facilitate two-way power flow at a particular location or area (such as upgrading a

² https://www.in.gov/iurc/home/implementation-re-ferc-order-2222/

³ See, e.g., https://smartgrid.ieee.org/bulletins/november-2017/two-way-power-flow-the-new-world-order-and-what-that-means-for-the-grid ("Bi-directional power flow is a relatively new topic of concern in the industry, although we have been dealing with it on the grid for years; particularly in states that have led the way in distributed generation.") and https://www.pjm.com/-/media/documents/ferc/filings/2022/20221018-ad21-10-000.ashx ("Distributed Energy Resources (DER) are not new to PJM, nor to regional grid planning.").







transformer) or generally (such as grid management technologies), the utility should be able to demonstrate that the purpose and magnitude of the upgrade or expense was for those specific reasons/customers. This should be able to be shown and addressed per the incremental rate of return process addressed in Part II above discussing cost recovery.

Voltus is not attempting to obtain any subsidy. Voltus' primary concern is that any allocation of those incremental costs is stakeholder-vetted, transparent and proportional to the cost burden that a DER aggregation participating in a specific wholesale program actually places on the system. For example, for DER participating in ancillary services programs, those costs should, all other things equal, be less than those participating in capacity programs because DERs participating in ancillary service programs should be injecting less frequently and at lower magnitudes than those participating in capacity programs. PJM and MISO require the utility and regulator to be provided with aggregator registrations for any utility customer participating in those programs. Accordingly, the type of program(s) will be identified, and the interconnection agreement provides additional location/magnitude/technology information that the utility can use to determine reasonable, necessary and prudent expenses or upgrades to its infrastructure.

B. Benefits

Notwithstanding the process for cost allocation discussed above, there are established benefits that the IURC may choose to take into account in the cost allocation process. DER aggregations provide another option for system operators that can lower wholesale costs by reducing energy costs, transmission losses and congestion which all are components of locational marginal pricing ("LMP") calculations that determine wholesale costs that load serving entities ("LSEs"), the local utilities, pay. Aggregators have experience bidding resources including DERs in response to price signals—typically when LMPs are high and DERs are replacing more costly generation with attendant congestion and line losses for energy traveling over more of the bulk electric system from more distant generators. ⁴

The IURC could calculate benefits by looking at historical LMPs for a particular time interval (month, year, etc.) for zones or regions where DERs were participating to compare pricing before and after DER aggregation. There are also more complex, sophisticated modeling to try to capture different assumptions or sensitivities and at particular pricing nodes at smaller time intervals, but the IURC could make the decision at what granularity and complexity it would like to assess benefits. Voltus' concern remains a stakeholder-vetted, consistent,

⁴ Voltus also notes that PJM, for example, has noted the reliability benefits as well, stating that "DERs provide an added suite of products that can help ensure reliability rather than sole reliance on central station generation or pure demand response." See https://www.pjm.com/-/media/documents/ferc/filings/2022/20221018-ad21-10-000.ashx. DERs can help utilities avoid certain distribution, generation and transmission investments, and there are often environmental benefits as well, but Voltus focuses on wholesale power prices for simplicity's sake.







transparent methodology that appropriately allocates costs based on established cost causation principles.

IV. Distribution Wheeling Charges

Voltus also does not subscribe to a "distribution wheeling charge" construct as the concept is simply inapplicable. The definition for "wheeling charges" provided appears to come from the Energy Information Agency glossary. However, we note that the next subsequent term "wheeling service" is defined as "[t]he movement of electricity from one system to another over transmission facilities of interconnecting systems. Wheeling service contracts can be established between two or more systems." This comports with our understanding of wheeling at retail being applicable in deregulated retail environments where customers have a choice of suppliers, and electricity from a source other than the utility needs to be "wheeled" to the customer. And at the wholesale level, wheeling concepts were subsumed in the open access transmission model at the wholesale level where the cost of transmission investment by transmission owners is recovered through whatever model the RTO/ISO establishes and is approved by FERC to allocate those costs to the transmission users on its system.

Here, customers are not choosing alternative suppliers. The RTO/ISO is determining, at the wholesale level, whether an aggregated DER resource provides a more economic or reliable choice to supply the grid or balance the system. The cost of transmission for those services is addressed at the wholesale level. At the retail level, as discussed above, the utility will determine whether facilitating two-way power flows imposes incremental cost to the system, and will identify, justify and allocate those incremental costs through the ratemaking process using cost causation principles.

V. Conclusion

Again, Voltus appreciates the opportunity to participate in this stakeholder process and looks forward to further participation.

⁵ See https://www.eia.gov/tools/glossary/index.php?id=w.