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E-FILE

April 20, 2023

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor North
Harrisburg, PA 17120

**RE: Petition of PPL Electric Utilities Corporation for Approval of Tariff
Modifications and Waivers of Regulations Necessary to Implement
its Distributed Energy Resources Management Plan
Docket No. P-2019-3010128**

Dear Secretary Chiavetta:

Enclosed for filing on behalf of PPL Electric Utilities Corporation is the 2023 DER Management Report, which is being filed pursuant to the Recommended Decision issued November 17, 2020 in the above-captioned proceeding.

Excel files of the data sets referenced within the 2023 DER Management Report have been filed via the Secretary's SharePoint site today.

Pursuant to 52 Pa. Code § 1.11, the enclosed document is to be deemed filed on April 20, 2023, which is the date it was filed electronically using the Commission's E-filing system.

If you have questions, please do not hesitate to contact me.

Respectfully submitted,

A handwritten signature in blue ink that reads "Kimberly A. Klock". The signature is fluid and cursive, with the first name "Kimberly" and last name "Klock" clearly legible.

Kimberly A. Klock

Enclosure

cc via email: Certificate of Service
Joe Sherrick, Bureau of Technical Utility Services

CERTIFICATE OF SERVICE

(Docket No. P-2019-3010128)

I hereby certify that true and correct copies of the foregoing have been served upon the following persons, in the manner indicated, in accordance with the requirements of § 1.54 (relating to service by a participant).

VIA ELECTRONIC MAIL

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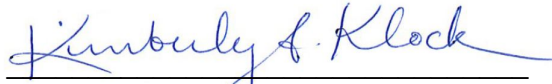
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Date: April 20, 2023



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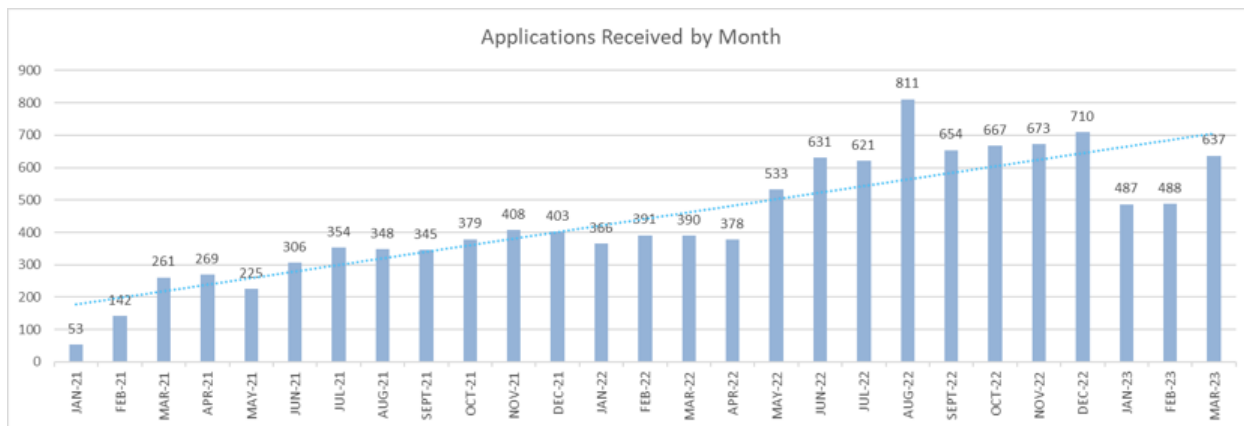


PPL Electric Utilities Corporation
2023 DER Management Report
to the
Pennsylvania Public Utility Commission

April 20, 2023

Executive Summary

PPL Electric is proud to present the first annual report for the DER Management Pilot program. This pilot is the first of its kind in North America, communicating with and managing DERs down to the individual residential installation level for the purposes of improving power quality, safety, and hosting capacity, expanding operational awareness, and avoiding otherwise necessary capital or maintenance expenses. The goal of this pilot program is to understand, demonstrate, and quantify these benefits of active management, their associated costs, and the overall impact on distribution system and customers' DER system performance. The Commission's authorization of this program has already yielded significant benefits and will continue to enable the growth of clean energy in Pennsylvania while maintaining system reliability, power quality, and affordability. In fact, the number of DERs has significantly grown in PPL Electric's service territory since the pilot program began in 2021. To date in 2023, PPL Electric has seen increases of approximately 350% in DER applications as compared to the same period in 2021. The following chart demonstrates the monthly growth of DER applications within PPL Electric's service territory since the start of the pilot program:



Additionally, PPL Electric has tested and approved numerous inverter types, with a current total of 147 approved inverters with different manufacturers, models, and types that can be used by customers and installers. Thus, the Company believes that customers and installers have more than a sufficient supply and variety of approved inverters for their DER installations.

The results presented within this report reflect PPL Electric's commitment to data-driven analysis and conclusions. In order to identify the operational elements and benefits of active management, PPL Electric has leveraged its data analytics process to automate the integration of data across numerous sources including SCADA, AMI, Inverter data, and ADMS/DERMS operations logs. This integration enables at-scale reporting of the expected and actual changes to important system characteristics as a result of DER management on a per-event basis. The automation of these reporting capabilities will enable future reports to be developed without adding significant incremental costs. The same capabilities are also being used by PPL Electric's engineering and operations teams to identify use cases and improve system performance.

The contents of this report capture Program Year Zero (January 1, 2021 to March 21, 2022) and Program Year 1 (March 22, 2022 to March 21, 2023) as defined within the Pilot Implementation Plan. Results through the first year show significant promise in a number of key impact areas. The frequency of voltage violations for Active Management customers has decreased relative to their Control Group and Grandfathered peers, with additional gains expected as the volume of active management DERs continues to increase in Program Year 2 and beyond. Targeted power factor active management has resulted in significantly less disruption to customers' real power generation than autonomous volt/var curves and have enabled significant increases in hosting capacity and significant reductions in DERs' interconnection study costs.

PPL Electric expects these positive findings to continue and expand in Program Year 2 and beyond as more DERs are interconnected to the system with DER Management capabilities. PPL Electric's deployment of its 2030.5 communications solution in Program Year 2 will be a significant milestone that will further drive Actively Managed DER penetration. The increase in the number of available DERs to manage, along with the increase in the total number of commands sent over time, will continue to demonstrate the value that DER Management provides.

1) The number of DERs Installed and the Number of DER Management Devices Installed

Between January 1, 2021 and March 21, 2023, (6,595) Distributed Energy Resources (“DERs”) were installed on PPL Electric’s distribution system and (4,005) DER Management devices were installed.

Of the 4,005 DER Management devices installed:

- 1,219 were the ConnectDER Generation 1 DER Management Device
- 2,786 were the ConnectDER Bridge

The difference between the number of DERs installed and the number of DER management devices installed is the result of PPL Electric’s grandfathering of certain installations where the installation of DER management devices could not be completed. The primary driver for this category was the exclusion of applications that use inverters which exclusively use the IEEE 2030.5 communication protocol. PPL Electric notes that it has developed a DER Management device compatible with IEEE 2030.5 with the plan to deploy later this year.

2) A list of participating DERs that includes for each DER: (a) a unique customer identifier; (b) the nameplate capacity; (c) the initial settings established for that DER’s smart inverter; and (d) the type of DER (e.g., solar, solar plus storage)

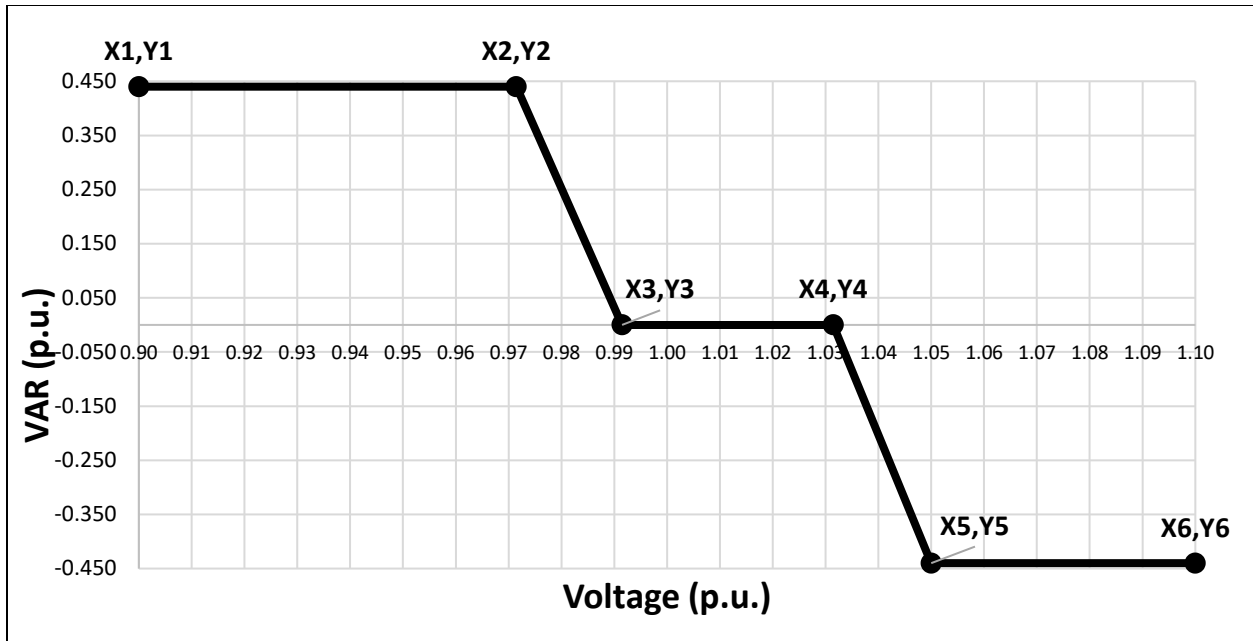
A full list of participating DERs, along with the applicable DER attributes and the assign volt/var curves, has been provided in Appendix A.

For the Pilot Group field, the following group assignments have been applied:

- Group 1: Control Group 1
- Group 12: Control Group 1 and Control Group 2
- Group 2: Control Group 2
- Group AM: Active Management Group

For the volt/var curve parameters listed in this table, specific attributes will adhere to the following conventions:

- Points X1 - X6 correspond to specific voltage values, progressing from low voltage (X1) to high voltage (X6) that define the transition points of the volt/var curve from one slope to a different slope.
- Points Y1 - Y6 correspond to the specific reactive power output values at which the inverter is required to perform for the corresponding voltage measurement transition points.
- An example curve has been provided below for reference.



In addition, all participating DERs are programmed with standardized voltage and frequency ride-through values identified within the tables below.

Table 1: PPL EU Required Low Voltage Shall Ride-Through and Shall Trip Settings

<u>Under Voltage Requirements</u>		
<i>Shall Ride Through and Shall Trip curves are identical (overlapping) and defined in this table.</i>		
Shall Trip Function	Voltage (p.u. of nominal voltage)	Time (sec)
UV1	0.88	2.1
UV2	0.5	0.6

Table 2: PPL EU Required High Voltage Shall Ride-Through and Shall Trip Settings

<u>Over Voltage Requirements</u>		
<i>Shall Ride Through and Shall Trip curves are identical (overlapping) and defined in this table.</i>		
Shall Trip Function	Voltage (p.u. of nominal voltage)	Time (sec)
OV1	1.1	2.1
OV2	1.2	0.2

Table 3: PPL EU Required Under Frequency Ride-Through Settings

Shall Trip – Under Frequency Requirements		
Shall Trip Function	Frequency (Hz)	Clearing Time (sec)
UF1	58.5	301
UF2	56.5	0.2

Table 4: PPL EU Required Over Frequency Ride-Through Settings

Shall Trip – Over Frequency Requirements		
Shall Trip Function	Frequency (Hz)	Clearing Time (sec)
OF1	61.2	301
OF2	62	0.2

3) Capital costs and expenses associated with the purchase, installation, ownership, and maintenance of DER management devices

Between January 1, 2021 and March 21, 2023, the following capital costs, shown in Table 5, represent the cost for the purchase, installation, ownership, and maintenance of DER management devices within the DER management program. At this time, PPL Electric has not identified any expenses directly associated with the purchase, installation, ownership, and maintenance of DER management devices to date.

Table 5 – Total Annual Capital Costs

	2021	2022	2023
Purchase Costs			
<i>ConnectDER Generation 1 DER Management Device</i>	\$ 610,435.00	\$ 383,050.00	
<i>ConnectDER Bridge Device</i>		\$ 1,143,471.91	\$ 513,334.43
<i>Sub Total (Purchase)</i>	<i>\$ 610,435.00</i>	<i>\$ 1,526,521.91</i>	<i>\$ 513,334.43</i>
Installation Costs			
<i>ConnectDER Generation 1 DER Management Device</i>	\$ 232,190.00	\$ 145,700.00	
<i>ConnectDER Bridge Device</i>		\$ 448,615.00	\$ 201,395.00
<i>Sub Total (Installation)</i>	<i>\$ 232,190.00</i>	<i>\$ 594,315.00</i>	<i>\$ 201,395.00</i>
Total Capital Costs	\$ 842,625.00	\$ 2,120,836.91	\$ 714,729.43

4) Number of times, locations, and duration for active management

An aggregated summary of the number of times PPL Electric actively managed each grid support function between March 22, 2022, and March 21, 2023, is shown in Table 6.

Table 6 – Grid Support Function Total Events

Grid Support Function	Total Number of Events
Volt/VAR Curve Overrides	0
Power Factor Setting Changes	768
Ride-through Setting Changes	0
Remote On/Off	0
Volt/Watt Curve Overrides (where applicable)	0

A detailed table capturing the number of times, locations, and average durations of active management events aggregated to the distribution feeder level is provided in Appendix B.

5) Grid benefits achieved for each instance of active management

PPL Electric has developed the definition and parameters of grid benefits to capture real-time grid constraint mitigation for each instance of active management. Initial results through the end of Program Year 1 show consistent improvements in system voltage, but do not necessarily fully resolve voltage issues. As the penetration of Actively Managed DERs continues to increase in future years, it is expected that voltage violations experienced by customers will decline in number and severity as more resources will be available in a wider variety of locations to respond to power quality challenges.

PPL Electric defines “grid benefits achieved” for real-time constraint mitigation as the change in the number or severity of voltage violations present on the system in the time intervals before and after the active management of one or more DERs. The intent is to capture changes which result directly from active management on a per-event basis.

The change in voltage violations for each instance of active management is calculated by evaluating the measured Advanced Metering Infrastructure (“AMI”) meter voltages for the reporting interval immediately preceding and immediately following the active management for all DERs served by the same substation bus as the active management DERs. Grid benefits are considered by quantifying the reduction in the number of voltage violations or the reduction in the magnitude of the severity of those violations (e.g., reducing the voltage when a customer was experiencing a high voltage condition).

These measures were selected because they have the highest potential to capture the voltage improvement outcomes expected to result from active management capabilities on a per-instance basis. Using the measured AMI voltages before and after each instance of active management provides a quantitative means of measuring the impact of the active management event to improving customer voltage. Modeling the specific effects of Active Management is impractical on a per-instance basis due to the volume and scale of analysis that would be required. Specific modeling performed for this purpose can be found within the Use Cases for some specific scenarios.

One challenge with this approach is that many other factors can influence customer voltage within the same time window of the calculations. Things like circuit load changes, local service transformer load

changes, capacitor status changes, transmission voltage changes, and other factors can hide or overwhelm the impact of Active Management of DERs, especially on substations with relatively few DERs that can be managed.

PPL Electric has identified any switched capacitor banks which were operated within the same time interval and the overall change in feeder reactive power measurements in order to isolate DER-specific benefits to the extent possible at this scale and to provide context for the calculated results.

The complete table of grid benefits achieved for each instance of active management has been compiled as Appendix C.

6) *Net generation gain or loss due to active management*

PPL Electric has developed a report capturing the net generation loss or gain due to PPL Electric's active management of grid support functions in each instance. The total generation loss identified as a result of active management events represents a very small portion of overall system generation capabilities. This is primarily because the management actions are targeted to specific locations and time intervals where system benefits can be achieved.

On average, active management customers saw approximately 0.01 kWh of net generation loss as a result of active management per management event, totaling 9.5 kWh across 768 events. A table containing net generation changes for each instance of active management can be found within Appendix D.

7) *Distribution system upgrades avoided due to increased hosting capacity attributed to monitoring*

PPL Electric is required to develop a report which compares the computed circuit hosting capacity when all DERs are evaluated at nameplate kW only ("Nameplate") versus the hosting capacity of each circuit with actual kW output, gained via monitoring ("Monitored"), while keeping Grandfathered DERs at nameplate kW. Initial results indicate that the availability and use of actual DER system production data results in a noticeable increase in a circuit's calculated hosting capacity in most cases. Cost-effective increases in hosting capacity are critical to enabling the renewable energy transition by reducing and avoiding costs for future interconnections of renewable resources.

Hosting capacity calculations have been performed for each of PPL Electric's radially fed non-dedicated distribution feeders.¹ The results for the "Nameplate" and "Monitored" calculations for each feeder can be found in the second and third columns in the table provided in Appendix E ("Nameplate – Avg Nodal Hosting Capacity (kW)" and "Monitored – Avg Nodal Hosting Capacity (kW)", respectively). Feeders which have zero calculated hosting capacity have pre-existing criteria violations within the model. Additional details regarding the methodology of the Hosting Capacity calculations can also be found in Appendix E.

8) *Distribution system upgrades avoided due to increased hosting capacity attributed to autonomous grid support functions*

¹ Feeders fed by PPL Electric's Underground Secondary Network, also referred to as the "Low Tension Network," have been excluded, as have those dedicated to serving a single customer.

PPL Electric has developed a report which compares the computed circuit hosting capacity with actual kW gained via monitoring only (“Monitored”) versus the scenario where those DERs are equipped with autonomous grid support functions (“Autonomous”), while keeping grandfathered DERs at nameplate kW). Autonomous functions provide additional benefits in the form of improved hosting capacity by allowing DERs to respond to local voltages to help mitigate high or low voltage constraints.

Hosting capacity calculation results on each applicable feeder can be found in the third and fourth columns in the table provided in Appendix E (“Monitored – Avg Nodal Hosting Capacity (kW)” and “Autonomous- Avg Nodal Hosting Capacity (kW)”, respectively). Feeders which have zero calculated hosting capacity have pre-existing criteria violations within the model. Additional details regarding the methodology of the Hosting Capacity calculations can also be found in Appendix E.

9) Distribution system upgrades avoided due to increased hosting capacity attributed to active management

PPL Electric has developed a report which compares the computed circuit hosting capacity when all DERs are evaluated at the nameplate kW only (“Nameplate”), without any monitoring or active management, versus the hosting capacity of each circuit with actual kW output gained via active management (“Active Management”), while keeping grandfathered DERs at nameplate kW. Active management shows additional improvements in feeder hosting capacity when compared to autonomous only scenarios. This results from the ability of active management to utilize DER to respond to voltage violations holistically, rather than relying on DERs to control themselves based on local measurements.

Hosting capacity calculation results on each applicable feeder can be found in the second and fifth columns in the table provided in Appendix E (“Nameplate – Avg Nodal Hosting Capacity (kW)” and “Active Management – Avg Nodal Hosting Capacity (kW)”, respectively). Feeders which have zero calculated hosting capacity have pre-existing criteria violations within the model. Additional details regarding the methodology of the Hosting Capacity calculations can also be found in Appendix E.

10) System operation comparisons of circuits under autonomous inverter grid support functions versus active management

PPL Electric has developed voltage metrics depicting performance characteristics between the grandfathered group (“GF”), the control groups (“Autonomous”), and active management group (“AM”). These metrics capture the variation in the percentage of days during which an average customer within each group experiences voltages above or below the allowable limits as determined by the AMI voltage readings at each customer location. The averaging is used to account for the variances in the number of customers within each group and provide as fair and equivalent comparisons as possible. While the active management group begins to be populated after March 22, 2022, the first active management command occurs on 10/12/2022, with further ramp-up in the incidence of active management events and subsequent voltage violation reduction opportunities into 2023.

When examining the voltage violation data, it is important to consider both the data and the underlying factors which can influence the comparative analysis. At a glance, the data shows consistently lower

numbers of voltage violations at control group locations. Prior to the start of active management events, autonomous group locations experience less voltage violations despite having the same functionality (e.g., volt/var curve). This indicates that the initial control group installations are likely located in locations less prone to voltage violations than the initial active management locations. This must be considered when making any outcome comparisons. This trend is demonstrated within the data in Figures 1-3 below.

In Figure 1 below, “Violation Free Days” is defined as the percentage of days for which the average customer in each pilot group experiences no voltage violations. “Violation Free Reads” reflects the total percentage of measurements taken that do not contain a voltage violation.

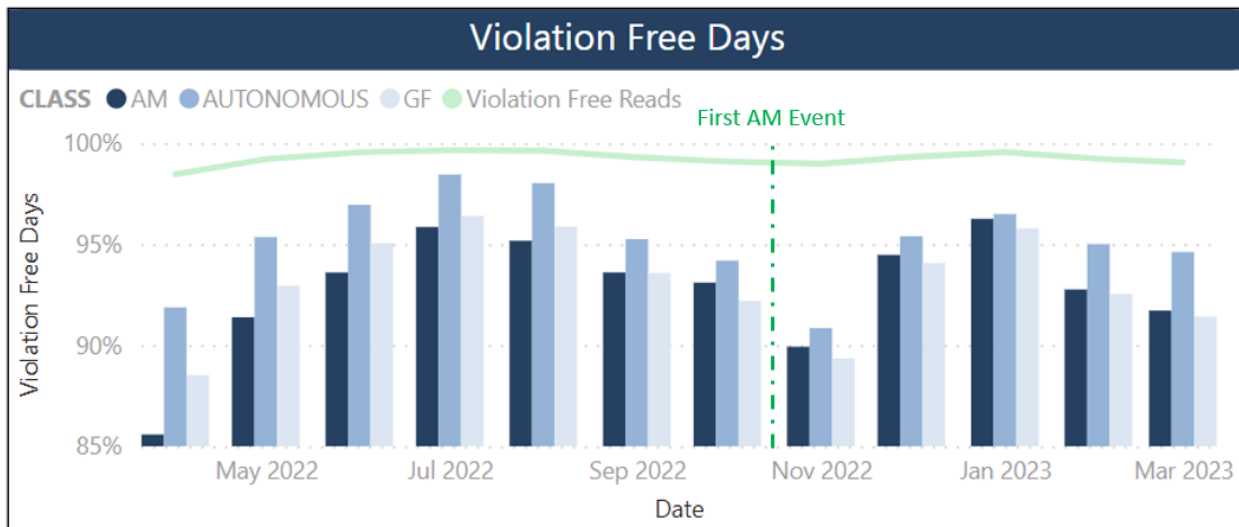


Figure 1 - Violation Free Days Percentage by Group

Figure 2 below shows the comparison of High Violation Days by month across the various pilot groups. “High Violation Days” captures the percentage of days that the average customer within each pilot group experiences at least one voltage measurement above the 1.05 per unit voltage threshold.

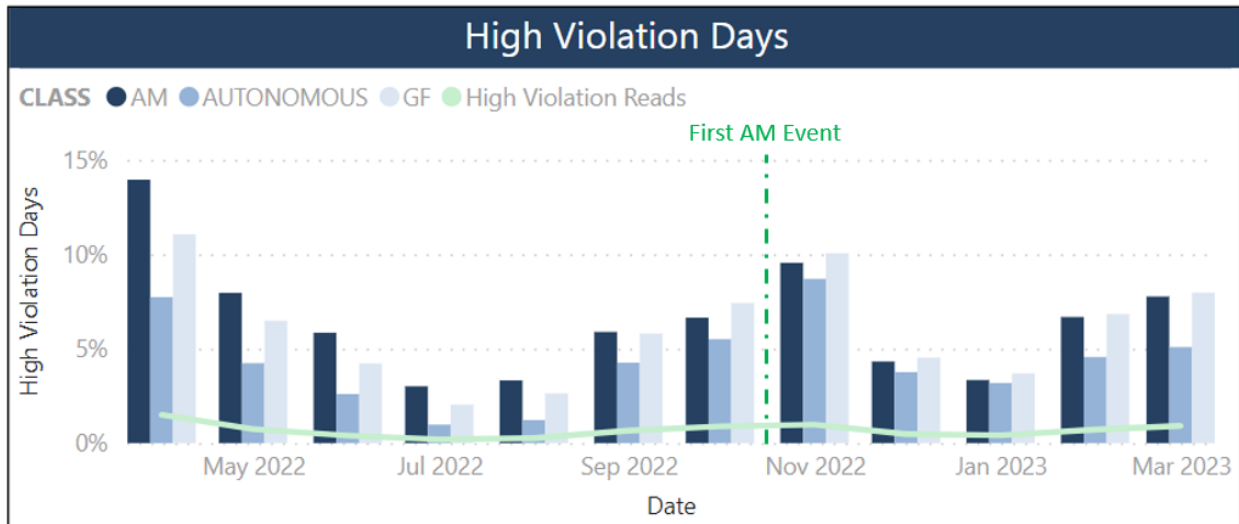


Figure 2 - High Violations Days Percentage by Group

Conversely, Figure 3 below shows the comparison of Low Violation Days by month across the various pilot groups. “Low Violation Days” captures the percentage of days that the average customer within each pilot group experiences at least one voltage measurement below the 0.95 per unit voltage threshold.

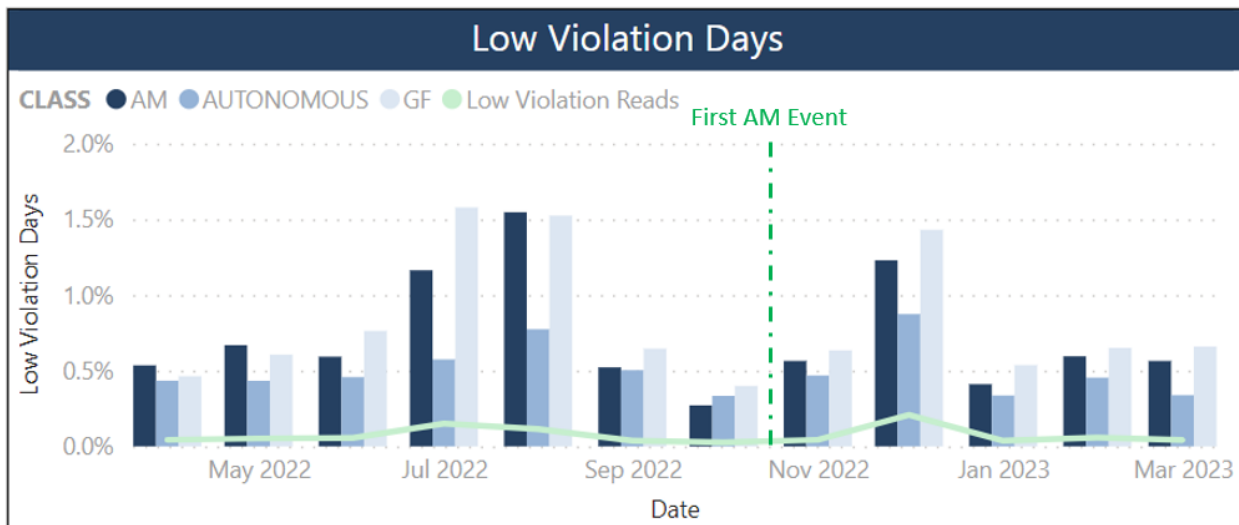


Figure 3 - Low Violation Days Percentage by Group

11) Operational descriptions of how active management was executed and implemented

PPL Electric has developed a report based on data captured from the ADMS/DERMS system which identifies the operational issues faced, the active management action taken, and the expected resulting impact of the action for each instance of active management. The resulting data has been compiled within Appendix F. Similar to the “Grid Benefits Achieved” section of the report, the event logs within Appendix F identify the number and severity of voltage violations present before and after ADMS/DERMS executes the management plan. These management plans can include both DER and

capacitor management actions. Capacitor management actions events, as well as the overall change in the power factor, have been included in order to isolate DER-specific benefits to the extent possible at this scale and to provide context for the calculated results.

12) Performance measures related to active management

PPL Electric has developed performance tracking metrics for monitoring and active management installations which capture communication reliability and overall data quality. PPL Electric’s communication systems have continued to perform at a high level as the number of communicating DERs has increased through the end of Program Year 1. PPL Electric continues to maintain focus on maintaining and improving the reliability of its AMI network.

For communications reliability, PPL Electric tracks communications between the customer’s inverter and the AMI head-end system. This captures the overall reliability and performance of the AMI network layer. Within the AMI communications layer, commands are sent from the AMI head-end system to the endpoint devices, which respond back to the head-end system. One execution of this cycle is a “round trip”. Communication reliability and performance for the AMI layer of communications are measured by evaluating the percentage of successful round trips. PPL Electric aims to maintain an overall communications success rate of 95% between the AMI headend system and DER Management devices.

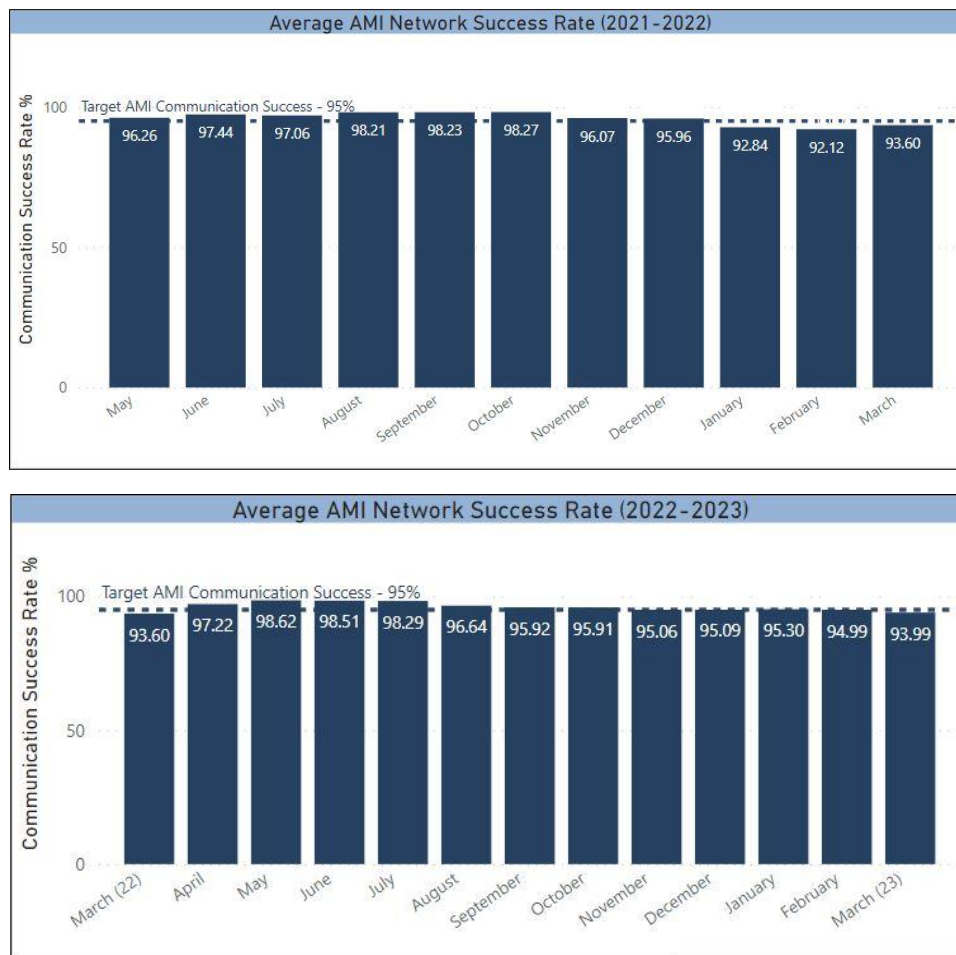


Figure 4 - Average AMI Communication Success Rate by Month, 2021-2023

For the AMI communication success data above, locations where AMI communication could not be established have been removed from the averages depicted, as their performance is not indicative of overall network performance. As of March 2023, this accounts for 3.85% of DER installations enrolled in the pilot program. These locations are being investigated by PPL Electric.

Average Round Trip Time, another important element of AMI performance, measures the amount of time it takes for a command to be sent from the head-end system and for the response to be returned by the radio. For the average round trip time, PPL Electric aims to maintain a maximum time of 60 seconds.

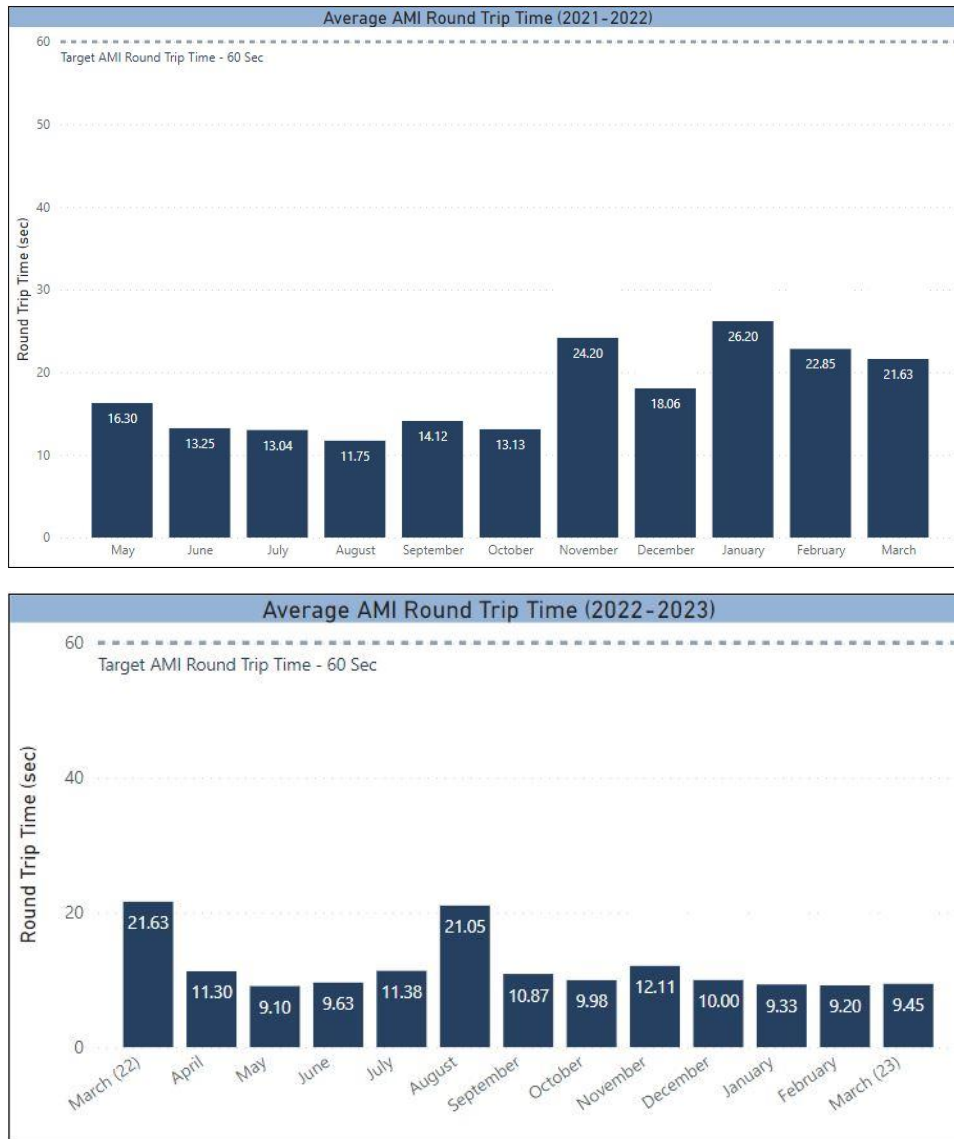


Figure 5 - 2022 Average AMI Round Trip Time by Month

Data quality is an important aspect of overall communications health. A communications interval is determined to be a “quality” interval when at least one reading within a given five-minute interval is received in which the data is within reasonable limits for key parameters like voltage, volt/var curve points, etc. One challenge within the analysis of historical inverter data is that many inverters reported

real power measurements that were above their rated nameplate, at times exceeding the nameplate by more than 10%. This can negatively impact the data quality, as it can cause readings to be identified as invalid despite other parameters being within expected ranges.

Between January 1, 2021 and March 21, 2023, 78.40% of communications intervals resulted in quality data. PPL Electric continually monitors data quality and has identified and implemented many enhancements to improve overall data quality and will continue such efforts in the future. Between January 1, 2023 and March 21, 2023, 84.17% of communications intervals resulted in quality data, demonstrating the results of communications improvement efforts.

13) Findings and information on PPL Electric's use cases

PPL Electric has compiled findings and information below related to the eight use cases identified within the Pilot Implementation Plan. These use cases capture both the benefits gained as a result of the pilot as well as the opportunities missed as a result of the inability to communicate with or manage DERs installed prior to the start of the pilot program.

Use Case #1 – Voltage Violation at DER Point of Interconnection (POI)

As of March 21, 2023, there have been 6,559 voltage violations recorded at autonomous DER locations on the system.

Voltage must be maintained within ANSI and PUC requirements at all levels in the distribution system to ensure safety and power quality for customers. DERs can sometimes intensify voltage violations on the network. Monitoring capabilities and alarms in ADMS/DERMS at the DER locations can provide real-time visibility that is needed allowing a proactive approach to identifying and responding to these violations. By monitoring the voltage levels, PPL Electric will be able to capture the added benefits each group has to mitigate voltage violations further.

As of March 21, 2023, there have been 6,559 voltage violations recorded at autonomous DER locations on the system.

Use Case #2 – Voltage Violation Mitigated by DERs on the Circuit

DER interconnections can create or intensify voltage issues, particularly if there is a high penetration of them on a single circuit. Without visibility and management capabilities, PPL Electric operators and planners will be faced with a deeper challenge to manage the system safely, reliably, and effectively. For the actively managed DER customers, PPL Electric will capture scenarios where the DERs may be utilized to help alleviate or mitigate voltage violations.

As of March 21, 2023, there have been six (6) cases studied that resulted in mitigated voltage violations for 1,310 customers through autonomous volt-var curves and an additional 309 customers with active management.

1. Case 1: A study was conducted with an initial voltage violation of 202 customers due to a capacitor mis-operation. Through mitigations identified in the study, 66 customer voltage violations were resolved, with 62 being attributed to Active Management.

2. Case 2: A study was conducted with an initial voltage violation of 111 customers due to a capacitor mis-operation. Through mitigations identified in the study, 42 customer voltage violations were resolved, with 7 being attributed to Active Management.
3. Case 3: A study was conducted with an initial voltage violation of 2,237 customers due to distribution circuit switching. Through mitigations identified in the study, 918 customer voltage violations were resolved, with 25 being attributed to Active Management.
4. Case 4: A study was conducted with an initial voltage violation of 397 customers due to a capacitor mis-operation. Through mitigations identified in the study, 397 customer voltage violations were resolved, with 37 being attributed to Active Management.
5. Case 5: A study was conducted with an initial voltage violation of 806 customers due to low loading and high transmission voltage. Through mitigations identified in the study, 88 customer voltage violations were resolved, with 37 being attributed to Active Management.
6. Case 6: A study was conducted with an initial voltage violation of 307 customers due to high transmission voltage. Through mitigations identified in the study, 152 customer voltage violations were resolved, with 141 being attributed to Active Management.

Use Case #3 – Voltage Violation During Planned Switching

Planned switching occurs when all or a portion of one circuit is transferred to an alternate source (e.g., a different feeder) for a planned de-energization of a portion of the system, often for maintenance or construction. During planned switching, because the system configuration is abnormal and customers may be served from a source that is further away than normal, there is an increased potential for voltage violations to arise. These events are pro-actively studied by PPL Electric to identify any such loading or voltage issues. Although some issues can be addressed with the use of existing voltage equipment, there may be instances where successful switching needs additional equipment installed, phase balancing, or additional load transfers to occur. If any violations are noticed during a planned switching study, DER management will be taken into consideration to decide if active management can support a successful switching event to minimize the installation of additional voltage equipment or other mitigation actions.

As of March 21, 2023, there have been no studies which have identified voltage violation mitigations with the use of settings changes during planned switching events.

Use Case #4 – System Restoration

When an outage occurs, all DERs within the outage area automatically shut off to avoid unintentional islanding. Following re-energization, the DERs are delayed from reconnecting for five minutes. During this window, the load the DERs were carrying will need to be sourced and brought online by PPL Electric's network, thereby creating a larger pick-up load than what was measured prior to the outage. The difference between the load measured passing through feeder equipment and the total load served by both the feeder and the DERs is referred to as hidden load. By being aware of the hidden load needing to be supplied by PPL Electric's equipment, restoration can be planned in a safe and effective manner without equipment damage or unexpected overload trips.

As of March 21, 2023, there have been zero restorations that resulted overloading due to hidden load being picked up.

Use Case #5 – Hidden Load Impact on Load Forecasting

Each year, PPL Electric reviews circuits' summer and winter peak load values to determine overload risks as well as hidden load. The hidden load caused by DERs without telemetry make the analysis less accurate, which can result in unnecessary capital projects. By monitoring the DERs, hidden load can be accurately accounted for and improve the load models, which could avoid the need for capital investment.

As of March 21, 2023, PPL Electric has calculated a peak hidden load of 10 MW totaled across the entire distribution system. This peak value was observed in February 2023.

Use Case #6 – DER Management Impact on Voltage Management

With DER monitoring, the accuracy of voltage profile studies will improve. Having more voltage data points will eliminate assumptions made today and will provide a more accurate voltage profile for precise studies. This will allow PPL Electric to prioritize system upgrades effectively. DER management and volt/var curves will be implemented in the power flow modeling process when applications are reviewed to show the customer cost savings of avoided reinforcements by being able to alleviate voltage violations using smart inverters. The DER data generated will be utilized by the Planning team to conduct studies and compile a list of voltage violations alleviated through DER monitoring, autonomous grid support functions, and active management.

As of March 21, 2023, a total of four (4) cases have been identified, and they resulted in projected customer cost savings of \$420,000, all attributed to autonomous volt-var curves.

1. Case 1: Can avoid the cost of a 3-PH voltage regulator through an autonomous volt-var curve. During the active management case, an improved operating voltage band, feeder head power factor, and fewer line losses were calculated.
2. Case 2: Can avoid the cost of a 3-PH voltage regulator through an autonomous volt-var curve. During the active management case, an improved feeder head power factor along with slightly less line losses were calculated.
3. Case 3: Can avoid the cost of a 3-PH voltage regulator through an autonomous volt-var curve.
4. Case 4: Can avoid the cost of a 3-PH voltage regulator through an autonomous volt-var curve.

Use Case #7 – DER Active Management Impact on Hosting Capacity Increase and Deferral of Capital Upgrade

Hosting Capacity is the amount of Distributed Generation that can be added to the distribution system before a load or voltage violation occurs or system reinforcements are required. By monitoring DERs' actual generation, a more accurate study can be conducted for a safe and reliable interconnection of DERs. During interconnection studies, scenarios will be conducted to determine what the cost savings

could be for the customer by using measured inverter data and active management functionality. Doing these studies and implementing active management can help reduce costs of reinforcements for customers, encourage more DER interconnections, and improve hosting capacity.

As of March 21, 2023, PPL Electric has identified three (3) studies which can result in \$841,500 (Autonomous) and \$1,500 (Active Management) cost savings for customers applying to interconnect to the distribution system. A summary of findings has been listed below for each case, which include both volt/var and Active Management savings.

1. Case 1: Can avoid a voltage violation for 497 customers through an autonomous volt-var curve. During a contingency analysis, a voltage violation would be observed where the autonomous curve would not respond to fix the violation. Through active management, a fixed PF would be pushed to the DERs which can eliminate the cost of a phase swap.
2. Case 2: Can avoid reconductoring 1.2 miles and mitigate a voltage violation for 169 customers through an autonomous volt-var curve.
3. Case 3: Can avoid the cost of a phase swap through an autonomous volt-var curve.

Use Case #8 – DER Operations in Emergency Conditions and in Active Work Zones

When there is a fire, gas leak, or down conductor reported, PPL Electric's field crews will be sent out to investigate and help resolve the issue. During this response, portions of the distribution system may need to be de-energized for the safety of the public and PPL Electric's workforce. Through DER monitoring, system operators can determine whether there are DERs in the active work zone and the DERs' current status. Through active management, the PPL Electric team can turn off the DERs remotely if they are operating in an area that was intended to be de-energized. As a result, safety risks in operations will be mitigated. During a localized emergency issue behind a single meter, PPL Electric may remotely shut off power at the meter. Having monitoring on the DERs allows PPL Electric to recognize the system is shut off. If the system is still producing when it should be offline, active management will allow the DER system to be shut off allowing for emergency work to safely continue.

As of March 1, 2023, there have been 106 emergency calls where 504 DER customers were within the emergency zone and observed offline. There have been zero cases where a DER was online and had to be remotely shut off.

Appendix A - DER Installation Data and VVC Points

Unique Customer Identifier	Pilot Group	Equipment Type	System Nameplate kW	Energy Storage	X1	X2	X3	X4	X5	X6	Y1	Y2	Y3	Y4	Y5	Y6
58670400	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688709	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688029	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693525	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692175	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694160	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674372	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679926	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644177	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691014	1	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694263	1	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58668303	1	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696509	1	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697505	1	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58652327	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58640968	1	SOLAR	7.6	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692033	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690663	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58701221	1	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693894	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700954	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58655884	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58658432	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58682148	1	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688024	1	SOLAR	7.6	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680811	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690276	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691086	1	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58701181	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58681989	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674007	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669850	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692882	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675449	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58687654	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674514	1	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644158	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696885	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58670914	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691188	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694542	1	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651155	1	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691619	1	SOLAR	7.6	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699155	1	SOLAR	7.6	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58625986	1	SOLAR	7.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58632112	1	SOLAR	7.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639516	1	SOLAR	7.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58649177	1	SOLAR	7.6	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58655576	1	SOLAR	7.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58663753	1	SOLAR	7.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58693569	1	SOLAR	5	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694008	1	SOLAR	5	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693344	1	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676799	1	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679317	1	SOLAR	5	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647583	1	SOLAR	5	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646273	1	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689369	1	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688111	1	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679037	1	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700485	1	SOLAR	5	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694092	1	SOLAR	5	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58687714	1	SOLAR	3.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58687679	1	SOLAR	3.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58658981	1	SOLAR	3.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694554	1	SOLAR	3.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690203	1	SOLAR	3.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696490	1	SOLAR	3.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697190	1	SOLAR	3.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689571	1	SOLAR	3.8	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692363	1	SOLAR	3.8	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696465	1	SOLAR	3.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688287	1	SOLAR	3.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58659998	1	SOLAR	3.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58650690	1	SOLAR	3.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620802	1	SOLAR	3.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699542	1	SOLAR	3	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695674	1	SOLAR	3	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679044	1	SOLAR	3	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697375	1	SOLAR	3	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695368	1	SOLAR	3	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699128	1	SOLAR	11.4	N/A	0.90	0.95	0.98	1.03	1.05	1.01	0.44	0.44	0.00	0.00	-0.44	-0.44
58674583	1	SOLAR	10	N/A	0.90	0.95	0.97	1.03	1.05	1.00	0.44	0.44	0.00	0.00	-0.44	-0.44
58637070	1	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58633047	1	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693882	1	SOLAR	10	N/A	0.90	0.96	0.99	1.04	1.00	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620203	1	SOLAR	6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58655734	1	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.06	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58631648	1	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645240	1	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58636896	1	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58663553	1	SOLAR	6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58664633	1	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697379	1	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675935	1	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694158	1	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58704365	1	SOLAR	7.6	N/A	0.90	0.95	0.97	1.01	1.03	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58681465	1	SOLAR	11.4	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647377	1	SOLAR	6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691984	1	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680445	1	SOLAR	3	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691883	1	SOLAR	3	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696577	1	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694217	1	SOLAR	10	BATTERY												

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58701689	1	SOLAR	5	N/A												
58702985	1	SOLAR	5	N/A												
58701343	1	SOLAR	7.6	N/A												
58709474	1	SOLAR	10	N/A												
58707138	1	SOLAR	7.6	N/A												
58709228	1	SOLAR	7.6	N/A												
58702770	1	SOLAR	10	N/A												
58706759	1	SOLAR	6	N/A												
58697951	1	SOLAR	10	N/A												
58701872	1	SOLAR	3.8	N/A												
58708511	1	SOLAR	11.4	N/A												
58706619	1	SOLAR	6	N/A												
58706700	1	SOLAR	3	N/A												
58702747	1	SOLAR	6	N/A												
58706799	1	SOLAR	10	N/A												
58704834	1	SOLAR	10	N/A												
58703553	1	SOLAR	7.6	N/A												
58694772	1	SOLAR	10	N/A												
58632111	1	SOLAR	12	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58636420	1	SOLAR	11	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592539	1	SOLAR	13.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672753	1	SOLAR	15.2	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58652135	1	SOLAR	11.52	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680974	1	SOLAR	11.52	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698483	1	SOLAR	15.36	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690647	1	SOLAR	45.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651071	1	SOLAR	11	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58643797	1	SOLAR	7.68	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692732	1	SOLAR	19	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58655876	1	SOLAR	46.08	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683130	1	SOLAR	165.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58660067	1	SOLAR	45.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680163	1	SOLAR	7.68	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675366	1	SOLAR	7.68	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674642	1	SOLAR	7.68	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698137	1	SOLAR	7.68	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697303	1	SOLAR	7.68	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58687742	1	SOLAR	22.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653701	1	SOLAR	20	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58663390	1	SOLAR	20	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58682988	1	SOLAR	20	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58633043	1	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58668506	1	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639540	1	SOLAR	12	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689434	1	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58625432	1	SOLAR	12	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58657240	1	SOLAR	12	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58682698	1	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691181	1	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672840	1	SOLAR	12	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651404	1	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58655205	1	SOLAR	15.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651531	1	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58635671	1	SOLAR	15.2	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58651174	1	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58682058	1	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690971	1	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58666244	1	SOLAR	15.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696548	1	SOLAR	15.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693554	1	SOLAR	15.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696646	1	SOLAR	15.2	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696970	1	SOLAR	15.2	BATTERY	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674570	1	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58648361	1	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689956	1	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693964	1	SOLAR	17.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642827	1	SOLAR	14.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58660300	1	SOLAR	9.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699059	1	SOLAR	11.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700338	1	SOLAR	12.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653205	1	SOLAR	13.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58650470	1	SOLAR	16	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689174	1	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683413	1	SOLAR	13	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696498	1	SOLAR	13	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696535	1	SOLAR	19	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651540	1	SOLAR	9.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58668528	1	SOLAR	16	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.40	-0.44
58689126	1	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58677765	1	SOLAR	13.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58622226	1	SOLAR	9.8	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58631472	1	SOLAR	11.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58677975	1	SOLAR	21.4	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669997	1	SOLAR	12.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683052	1	SOLAR	14.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669215	1	SOLAR	19	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58582591	1	SOLAR	4.8	N/A												
58617396	1	SOLAR	2.065	N/A												
58663967	1	SOLAR	40.32	N/A												
58702050	1	SOLAR	16	N/A												
58712309	1	SOLAR	12	N/A												
58697924	1	SOLAR	13.8	N/A												
58702368	1	SOLAR	22.8	N/A												
58677870	1	SOLAR	7.7	N/A												
58676426	1	SOLAR	150	N/A												
58639888	1	SOLAR	7.6	BATTERY	0.90	0.95	0.96	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651529	1	SOLAR	3.84	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58643771	1	SOLAR	11.52	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58652397	1	SOLAR	7.68	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58670110	1	SOLAR	11.52	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688268	1	SOLAR	7.6	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692517	1	SOLAR	15.2	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651528	1	SOLAR	11.4	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58575701	2	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58586492	2	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58588550	2	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58581530	2	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58590117	2	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58619314	2	SOLAR	3.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620771	2	SOLAR	3.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58616148	2	SOLAR	3.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58589906	2	SOLAR	3.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603375	2	SOLAR	3.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603163	2	SOLAR	3.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58596773	2	SOLAR	3.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58626624	2	SOLAR	3.8	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58632124	2	SOLAR	3.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630122	2	SOLAR	3.8	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58627503	2	SOLAR	3.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58633223	2	SOLAR	3.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58626969	2	SOLAR	3.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58633204	2	SOLAR	3.8	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58631669	2	SOLAR	3.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620795	2	SOLAR	3.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58625935	2	SOLAR	3.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639041	2	SOLAR	3.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642951	2	SOLAR	3.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58577286	2	SOLAR	3	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58573885	2	SOLAR	3	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58581288	2	SOLAR	3	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58583973	2	SOLAR	3	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58595853	2	SOLAR	3	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58612548	2	SOLAR	3	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58602217	2	SOLAR	3	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603870	2	SOLAR	3	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58624884	2	SOLAR	3	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58609684	2	SOLAR	3	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58628145	2	SOLAR	3	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58638899	2	SOLAR	3	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642583	2	SOLAR	3	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58589121	2	SOLAR	3.8	N/A	0.90	0.97	0.97	1.03	1.05	1.10	0.40	0.40	0.00	0.00	-0.44	-0.44
58640349	2	SOLAR	10	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.40	0.00	0.00	-0.44	-0.44
58576292	2	SOLAR	6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58581293	2	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58581304	2	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58588762	2	SOLAR	6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592923	2	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58596264	2	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58601045	2	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58595754	2	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58595875	2	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58618711	2	SOLAR	5	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58606734	2	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58615233	2	SOLAR	7.6	N/A	0.90	0.95	0.97	1.01	1.03	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58612660	2	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58616100	2	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58613928	2	SOLAR	3.8	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58585531	2	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58615290	2	SOLAR	3.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58612640	2	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58610174	2	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603157	2	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58611635	2	SOLAR	5	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58625498	2	SOLAR	3.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58624693	2	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58628170	2	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58625979	2	SOLAR	3	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58618432	2	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58571238	2	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58575342	2	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58581297	2	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58581687	2	SOLAR	11.4	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58588673	2	SOLAR	5	N/A	0.90	0.95	0.96	1.00	1.02	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58583123	2	SOLAR	11.4	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58587448	2	SOLAR	7.6	N/A	0.90	0.95	0.97	1.03	1.06	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58583697	2	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58590387	2	SOLAR	11.4	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58589937	2	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58577011	2	SOLAR	11.4	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58598632	2	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58582233	2	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58576649	2	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592858	2	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58599578	2	SOLAR	7.6	BATTERY	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592950	2	SOLAR	3	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58591151	2	SOLAR	6	N/A	0.90	0.95	0.97	1.01	1.03	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603846	2	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58610588	2	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58595641	2	SOLAR	11.4	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58598266	2	SOLAR	5	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58616969	2	SOLAR	5	N/A	0.90	0.95	0.97	1.01	1.03	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58607502	2	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58611602	2	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58616085	2	SOLAR	6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58618652	2	SOLAR	6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58578099	2	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58612555	2	SOLAR	11.4	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58624899	2	SOLAR	5	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58624871	2	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58624604	2	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58637120	2	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58617210	2	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58610115	2	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58618424	2	SOLAR	7.6	N/A												
58618401	2	SOLAR	11.4	N/A												
58620525	2	SOLAR	11.4	N/A												
58573357	2	SOLAR	9.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58572900	2	SOLAR	12	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58590279	2	SOLAR	12	N/A	0.90	0.95	0.97	1.02	1.03	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58602966	2	SOLAR	15.2	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592524	2	SOLAR	19	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58604372	2	SOLAR	12	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620953	2	SOLAR	15	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58615273	2	SOLAR	17.6	N/A	0.90	0.95	0.96	1.00	1.02	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58619284	2	SOLAR	20	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630152	2	SOLAR	16	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58622086	2	SOLAR	11	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58619078	2	SOLAR	11	BATTERY	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58573355	2	SOLAR	17.28	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58589668	2	SOLAR	12	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58609886	2	SOLAR	10.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58611110	2	SOLAR	9.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58614751	2	SOLAR	13.44	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58572156	2	SOLAR	24	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58572921	2	SOLAR	13.44	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58573364	2	SOLAR	8.64	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58584749	2	SOLAR	12	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58585472	2	SOLAR	13.44	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58581678	2	SOLAR	9.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592387	2	SOLAR	7.68	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58582243	2	SOLAR	15.36	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58593746	2	SOLAR	14.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58593446	2	SOLAR	9.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58600736	2	SOLAR	11.52	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58589773	2	SOLAR	7.68	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603518	2	SOLAR	9.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58611695	2	SOLAR	11.52	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58608404	2	SOLAR	13.44	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603496	2	SOLAR	7.68	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58622527	2	SOLAR	8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58638778	2	SOLAR	11	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620959	2	SOLAR	9.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630572	2	SOLAR	10.56	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58626716	2	SOLAR	7.68	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603727	2	SOLAR	9.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58641420	2	SOLAR	7.68	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58581167	2	SOLAR	15.36	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58579255	2	SOLAR	9.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58582972	2	SOLAR	9.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58580162	2	SOLAR	12	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58590151	2	SOLAR	15.36	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58588976	2	SOLAR	4.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58606388	2	SOLAR	13.44	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58600509	2	SOLAR	15.36	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58579503	2	SOLAR	8.64	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58612350	2	SOLAR	9.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58601689	2	SOLAR	14.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58600505	2	SOLAR	7.68	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58625309	2	SOLAR	7.68	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642620	2	SOLAR	5.76	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58576925	2	SOLAR	13.44	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58591526	2	SOLAR	9.6	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58585496	2	SOLAR	13.44	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58596202	2	SOLAR	7.68	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603891	2	SOLAR	23.04	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58593938	2	SOLAR	15.36	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58604396	2	SOLAR	12.48	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58616226	2	SOLAR	9.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58608574	2	SOLAR	17.28	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58596538	2	SOLAR	12.48	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

Appendix A - DER Installation Data and VVC Points

58596880	2	SOLAR	7.68	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58599081	2	SOLAR	10.56	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58589433	2	SOLAR	15.36	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58595696	2	SOLAR	21.12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58609227	2	SOLAR	11	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58606261	2	SOLAR	7.68	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58605938	2	SOLAR	12.48	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58584501	2	SOLAR	9.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58606655	2	SOLAR	4.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58598019	2	SOLAR	7.68	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639790	2	SOLAR	5.76	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58599662	2	SOLAR	22.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58619374	2	SOLAR	20	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620261	2	SOLAR	20	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58625976	2	SOLAR	22.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58621852	2	SOLAR	20	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58575042	2	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58584301	2	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58598201	2	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58625435	2	SOLAR	12	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58622506	2	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58610825	2	SOLAR	12	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58616927	2	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630170	2	SOLAR	12	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58579983	2	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58584656	2	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58572637	2	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58591111	2	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58590053	2	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603347	2	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58590949	2	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58601371	2	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58598977	2	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58609611	2	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58615346	2	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58616830	2	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58616179	2	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58617517	2	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58618870	2	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58635897	2	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630902	2	SOLAR	15.2	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58632012	2	SOLAR	15.2	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58616893	2	SOLAR	15.2	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58579594	2	SOLAR	15.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58643026	2	SOLAR	15.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58641008	2	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58588563	2	SOLAR	12.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592566	2	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58598101	2	SOLAR	12.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58604916	2	SOLAR	10.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58615916	2	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58617042	2	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58605239	2	SOLAR	17.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58614229	2	SOLAR	19	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58614820	2	SOLAR	9.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58631725	2	SOLAR	9.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58636925	2	SOLAR	9.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630990	2	SOLAR	17.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58621262	2	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58632822	2	SOLAR	9.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58571388	2	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58588755	2	SOLAR	14.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592552	2	SOLAR	13.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58591790	2	SOLAR	13.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58595692	2	SOLAR	13	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58605403	2	SOLAR	13.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58610554	2	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58612468	2	SOLAR	15	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58604412	2	SOLAR	9.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58604985	2	SOLAR	16.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58631914	2	SOLAR	9.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58578488	2	SOLAR	17.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58600544	2	SOLAR	12.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58605460	2	SOLAR	11.4	BATTERY	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592719	2	SOLAR	17.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58598082	2	SOLAR	13	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58595752	2	SOLAR	17.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58596194	2	SOLAR	13.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58600906	2	SOLAR	15.2	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58609716	2	SOLAR	15	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58612425	2	SOLAR	17.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58618323	2	SOLAR	15	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58627479	2	SOLAR	13.6	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58595296	2	SOLAR	16.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58625548	2	SOLAR	14.4	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630984	2	SOLAR	16	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58635478	2	SOLAR	16	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639735	2	SOLAR	9.8	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58635855	2	SOLAR	14.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58628190	2	SOLAR	13.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639593	2	SOLAR	13.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58572933	2	SOLAR	15.36	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58573374	2	SOLAR	13.44	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58573810	2	SOLAR	13.8	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58577100	2	SOLAR	19.2	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58577106	2	SOLAR	15.2	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58576592	2	SOLAR	7.6	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58580374	2	SOLAR	3.84	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58577347	2	SOLAR	19.2	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58583367	2	SOLAR	7.6	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58584589	2	SOLAR	9.84	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592364	2	SOLAR	11.4	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58577784	2	SOLAR	6	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58579856	2	SOLAR	12	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58579168	2	SOLAR	7.6	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58601724	2	SOLAR	12	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58590908	2	SOLAR	9.84	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58587272	2	SOLAR	11.52	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58595694	2	SOLAR	24	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58575011	2	SOLAR	9.6	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58599803	2	SOLAR	7.6	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58589984	2	SOLAR	3.84	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58598250	2	SOLAR	11.52	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58609340	2	SOLAR	7.68	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58607959	2	SOLAR	11.52	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58580333	2	SOLAR	7.68	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58589939	2	SOLAR	12	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58608630	2	SOLAR	11.4	BATTERY	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58614428	2	SOLAR	7.68	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592411	2	SOLAR	24	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58609949	2	SOLAR	13.44	BATTERY	0.99	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58613011	2	SOLAR	7.6	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603823	2	SOLAR	12	BATTERY	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58617751	2	SOLAR	7.68	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58611620	2	SOLAR	11.4	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58617763	2	SOLAR	10.8	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58588629	2	SOLAR	13.68	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58608469	2	SOLAR	6	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58597529	2	SOLAR	10	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58617838	2	SOLAR	7.68	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58617734	2	SOLAR	7.68	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58617849	2	SOLAR	11	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603950	2	SOLAR	10.56	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58621819	2	SOLAR	9.8	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58619516	2	SOLAR	7.6	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58616094	2	SOLAR	7.68	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58573345	2	SOLAR	15.2	BATTERY	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58593347	2	SOLAR	12	BATTERY	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58583681	2	SOLAR	7.6	BATTERY	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58582464	2	SOLAR	11.76	BATTERY	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58604728	2	SOLAR	15.2	BATTERY	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603670	2	SOLAR	7.68	BATTERY	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58632881	2	SOLAR	6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58570074	12	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58584557	12	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58575702	12	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58590563	12	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58596869	12	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58601061	12	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58585203	12	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58605243	12	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568176	12	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58570802	12	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58591286	12	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603633	12	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58617940	12	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58622535	12	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58627225	12	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568158	12	SOLAR	7.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568107	12	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568301	12	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568202	12	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58598975	12	SOLAR	10	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58606639	12	SOLAR	10	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58595706	12	SOLAR	10	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58616687	12	SOLAR	10	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58616798	12	SOLAR	10	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58619260	12	SOLAR	10	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58618706	12	SOLAR	10	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647260	12	SOLAR	10	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58574222	12	SOLAR	6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58618412	12	SOLAR	6	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58612229	12	SOLAR	6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58624755	12	SOLAR	6	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58627259	12	SOLAR	6	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646626	12	SOLAR	6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58570801	12	SOLAR	6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568241	12	SOLAR	6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58576390	12	SOLAR	6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58585740	12	SOLAR	6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58608296	12	SOLAR	6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58626722	12	SOLAR	6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58618708	12	SOLAR	6	N/A	0.99	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58583427	12	SOLAR	6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620032	12	SOLAR	6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568243	12	SOLAR	11.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58572850	12	SOLAR	11.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58587863	12	SOLAR	11.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58595635	12	SOLAR	11.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58603334	12	SOLAR	11.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58631456	12	SOLAR	11.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58570533	12	SOLAR	11.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58570523	12	SOLAR	11.4	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58618809	12	SOLAR	11.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58621443	12	SOLAR	11.4	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58577274	12	SOLAR	11.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58591348	12	SOLAR	11.4	N/A	0.90	0.95	0.96	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592140	12	SOLAR	11.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58569213	12	SOLAR	5	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58570803	12	SOLAR	5	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58606106	12	SOLAR	5	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58616391	12	SOLAR	5	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58619627	12	SOLAR	5	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58641374	12	SOLAR	5	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58571233	12	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58576975	12	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58579916	12	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630214	12	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58567580	12	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568151	12	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58600511	12	SOLAR	5	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58608427	12	SOLAR	5	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58610634	12	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620760	12	SOLAR	5	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58589138	12	SOLAR	3.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58581539	12	SOLAR	3.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58573549	12	SOLAR	3.8	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58597378	12	SOLAR	3.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58605258	12	SOLAR	3.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58598027	12	SOLAR	3.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58611191	12	SOLAR	3.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58619611	12	SOLAR	3.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620976	12	SOLAR	3.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58608526	12	SOLAR	3.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58569265	12	SOLAR	3	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58612540	12	SOLAR	3	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568251	12	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58567990	12	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58570082	12	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58567979	12	SOLAR	6	N/A	0.90	0.95	0.97	1.01	1.03	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58570108	12	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58567972	12	SOLAR	3	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58581305	12	SOLAR	6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592798	12	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58599115	12	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592561	12	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58593525	12	SOLAR	11.4	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58608301	12	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58635746	12	SOLAR	5	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58635598	12	SOLAR	5	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58636733	12	SOLAR	3	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568240	12	SOLAR	3.8	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568328	12	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568382	12	SOLAR	3.8	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58572272	12	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58572885	12	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58581315	12	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58581751	12	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58567974	12	SOLAR	16.4	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58601490	12	SOLAR	4.8	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58576381	12	SOLAR	9.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58608169	12	SOLAR	9.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568404	12	SOLAR	15.36	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58589869	12	SOLAR	11.52	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58593048	12	SOLAR	19.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58587901	12	SOLAR	28.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58618808	12	SOLAR	7.68	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58621846	12	SOLAR	9.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620117	12	SOLAR	5.76	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58626713	12	SOLAR	9.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58625511	12	SOLAR	7.68	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58599013	12	SOLAR	30	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58568206	12	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58599273	12	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58632195	12	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58567996	12	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58598094	12	SOLAR	15.2	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58577095	12	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58601066	12	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58614151	12	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58630399	12	SOLAR	15.2	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58590013	12	SOLAR	21.4	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58598084	12	SOLAR	13	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58569266	12	SOLAR	12.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58572655	12	SOLAR	12.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58581807	12	SOLAR	13	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58582381	12	SOLAR	13.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58615271	12	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58621814	12	SOLAR	13.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58567534	12	SOLAR	17.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58567561	12	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58591705	12	SOLAR	11.4	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58570798	12	SOLAR	21.4	N/A	0.90	0.95	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58609947	12	SOLAR	17.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58569960	12	SOLAR	15.36	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58570613	12	SOLAR	7.68	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58577777	12	SOLAR	10.8	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58570177	12	SOLAR	15.2	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592300	12	SOLAR	9.8	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58609592	12	SOLAR	19.2	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58609901	12	SOLAR	9.6	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58621021	12	SOLAR	11	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639061	12	SOLAR	7.68	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642154	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646965	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58635511	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645868	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647944	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642780	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58666815	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58643794	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689016	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690818	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58638620	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639697	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58652751	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647644	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653434	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58649178	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58661259	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683201	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675257	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645183	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646271	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699818	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700158	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672406	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58666110	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691969	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692784	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58650712	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58664787	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669033	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671638	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58669939	AM	SOLAR	3	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700413	AM	SOLAR	3	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651650	AM	SOLAR	3.3	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58670622	AM	SOLAR	20	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669727	AM	SOLAR	3	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679074	AM	SOLAR	3	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675079	AM	SOLAR	3	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58681532	AM	SOLAR	3	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694265	AM	SOLAR	3	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678378	AM	SOLAR	3	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669273	AM	SOLAR	3	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58677621	AM	SOLAR	3	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58681930	AM	SOLAR	3	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695288	AM	SOLAR	3	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690059	AM	SOLAR	3	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58677911	AM	SOLAR	3	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58681775	AM	SOLAR	3	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58682161	AM	SOLAR	50	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689405	AM	SOLAR	3	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688674	AM	SOLAR	3	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691190	AM	SOLAR	3	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694101	AM	SOLAR	3	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58648964	AM	SOLAR	3	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690838	AM	SOLAR	3	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691867	AM	SOLAR	3	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698161	AM	SOLAR	3	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698819	AM	SOLAR	6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.33	0.00	0.00	-0.44	-0.44
58703427	AM	SOLAR	7.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.47	0.00	0.00	-0.44	-0.44
58698151	AM	SOLAR	6	N/A	0.90	0.95	0.98	1.03	1.05	1.01	0.44	0.44	0.00	0.00	-0.44	-0.44
58687813	AM	SOLAR	5	N/A	0.90	0.95	0.97	1.03	1.05	1.00	0.44	0.44	0.00	0.00	-0.44	-0.44
58699954	AM	SOLAR	10	N/A	0.90	0.95	0.97	1.03	1.05	1.00	0.44	0.44	0.00	0.00	-0.44	-0.44
58691547	AM	SOLAR	10	N/A	0.90	0.90	0.96	1.01	1.04	1.05	0.44	0.44	0.00	0.00	-0.44	-0.44
58649758	AM	SOLAR	6	N/A	0.99	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653365	AM	SOLAR	10	BATTERY	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58640251	AM	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58624895	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646801	AM	SOLAR	5	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647304	AM	SOLAR	6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58638818	AM	SOLAR	10	N/A	0.90	0.95	0.97	1.01	1.03	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678626	AM	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58670984	AM	SOLAR	11.4	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693254	AM	SOLAR	5	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58661405	AM	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58670084	AM	SOLAR	10	N/A	0.90	0.97	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58654965	AM	SOLAR	3.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58638876	AM	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58635696	AM	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646632	AM	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58657699	AM	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645797	AM	SOLAR	3.8	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58638683	AM	SOLAR	3.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639638	AM	SOLAR	3.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58650944	AM	SOLAR	5	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646397	AM	SOLAR	10	N/A	0.90	0.95	0.98	1.03	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58696510	AM	SOLAR	6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699148	AM	SOLAR	6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645789	AM	SOLAR	11.4	N/A	0.90	0.95	0.98	1.03	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620098	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58658231	AM	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58656770	AM	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647604	AM	SOLAR	11.4	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58663443	AM	SOLAR	6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58663439	AM	SOLAR	3	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58664831	AM	SOLAR	5	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700866	AM	SOLAR	5	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58650631	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653609	AM	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58668969	AM	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58681962	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694502	AM	SOLAR	6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676680	AM	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679062	AM	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676597	AM	SOLAR	6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697133	AM	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58654956	AM	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58624905	AM	SOLAR	5	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698357	AM	SOLAR	5	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58663380	AM	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58664705	AM	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58659273	AM	SOLAR	5	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644405	AM	SOLAR	5	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58673081	AM	SOLAR	6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669212	AM	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676475	AM	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58670130	AM	SOLAR	3.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674608	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676782	AM	SOLAR	3.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58659055	AM	SOLAR	6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679094	AM	SOLAR	5	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694483	AM	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58677688	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694896	AM	SOLAR	6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58648836	AM	SOLAR	5	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698960	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700436	AM	SOLAR	3	N/A	0.90	0.95	0.97	1.01	1.03	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694759	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671717	AM	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58666672	AM	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683283	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689299	AM	SOLAR	6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58668472	AM	SOLAR	3.8	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675709	AM	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58682172	AM	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683583	AM	SOLAR	3.8	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692744	AM	SOLAR	6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689365	AM	SOLAR	5	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642194	AM	SOLAR	5	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645264	AM	SOLAR	6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58692925	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698334	AM	SOLAR	7.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690788	AM	SOLAR	3.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690326	AM	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653071	AM	SOLAR	3.8	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676590	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58655072	AM	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676553	AM	SOLAR	6	N/A	0.90	0.98	1.00	1.04	1.00	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58681405	AM	SOLAR	5	N/A	0.90	0.97	0.99	1.03	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690428	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698393	AM	SOLAR	10	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690064	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669514	AM	SOLAR	3.8	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689621	AM	SOLAR	5	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696830	AM	SOLAR	7.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700077	AM	SOLAR	5	N/A	0.90	0.95	0.97	1.01	1.03	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694416	AM	SOLAR	10	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700299	AM	SOLAR	3.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58706363	AM	SOLAR	7.6	N/A	0.90	0.95	0.97	1.01	1.03	1.03	0.44	0.44	0.00	0.00	-0.44	-0.44
58631390	AM	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644628	AM	SOLAR	10	BATTERY	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630714	AM	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58592403	AM	SOLAR	11.4	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58641115	AM	SOLAR	6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645662	AM	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647334	AM	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639063	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58670683	AM	SOLAR	3.3	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693304	AM	SOLAR	5	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58613181	AM	SOLAR	6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694411	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58648113	AM	SOLAR	6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58643027	AM	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653740	AM	SOLAR	10	BATTERY	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58661424	AM	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58702355	AM	SOLAR	5	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697604	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680890	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671217	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58659774	AM	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58666212	AM	SOLAR	11.4	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653386	AM	SOLAR	11.4	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620857	AM	SOLAR	5	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58652038	AM	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58661295	AM	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651390	AM	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651872	AM	SOLAR	3.8	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58677945	AM	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644646	AM	SOLAR	7.6	BATTERY	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671212	AM	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645454	AM	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693333	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699018	AM	SOLAR	11.4	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694855	AM	SOLAR	6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58696491	AM	SOLAR	11.4	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671052	AM	SOLAR	3	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58657251	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689088	AM	SOLAR	6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58668463	AM	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639649	AM	SOLAR	5	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630464	AM	SOLAR	6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58666404	AM	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669309	AM	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675488	AM	SOLAR	11.4	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691463	AM	SOLAR	11.4	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58613925	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688114	AM	SOLAR	11.4	N/A	0.90	0.95	0.96	1.00	1.02	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676886	AM	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58663173	AM	SOLAR	11.4	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676582	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672481	AM	SOLAR	11.4	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58664927	AM	SOLAR	6	BATTERY	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675294	AM	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58703634	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700197	AM	SOLAR	5	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58704333	AM	SOLAR	6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692222	AM	SOLAR	6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693587	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693539	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680351	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690323	AM	SOLAR	6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58673806	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58661439	AM	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680067	AM	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58614463	AM	SOLAR	3.8	N/A	0.90	0.95	0.96	1.00	1.02	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58648004	AM	SOLAR	6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696481	AM	SOLAR	5	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671507	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680159	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689123	AM	SOLAR	6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58657445	AM	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58670126	AM	SOLAR	3.8	N/A	0.90	0.95	0.97	1.01	1.03	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690055	AM	SOLAR	5	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690227	AM	SOLAR	6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58682072	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58631810	AM	SOLAR	5	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58673525	AM	SOLAR	5	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58687661	AM	SOLAR	11.4	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691184	AM	SOLAR	11.4	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691859	AM	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690387	AM	SOLAR	10	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680238	AM	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690258	AM	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690218	AM	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691097	AM	SOLAR	6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690076	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699187	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696408	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58699739	AM	SOLAR	3.8	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674492	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672407	AM	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689631	AM	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58638420	AM	SOLAR	5	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671619	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58702695	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694910	AM	SOLAR	11.4	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691338	AM	SOLAR	6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58703002	AM	SOLAR	10	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690209	AM	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698352	AM	SOLAR	11.4	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58703423	AM	SOLAR	6	N/A												
58701360	AM	SOLAR	11.4	N/A												
58696471	AM	SOLAR	7.6	N/A												
58706006	AM	SOLAR	6	N/A												
58709374	AM	SOLAR	6	N/A												
58682163	AM	SOLAR	50	N/A												
58704236	AM	SOLAR	10	N/A												
58697937	AM	SOLAR	10	N/A												
58707188	AM	SOLAR	10	N/A												
58705076	AM	SOLAR	7.6	BATTERY												
58693985	AM	SOLAR	5	N/A												
58701893	AM	SOLAR	5	N/A												
58691339	AM	SOLAR	3.8	N/A												
58695154	AM	SOLAR	5	N/A												
58706695	AM	SOLAR	6	N/A												
58702460	AM	SOLAR	7.6	N/A												
58709096	AM	SOLAR	7.6	N/A												
58708560	AM	SOLAR	7.6	N/A												
58706459	AM	SOLAR	7.6	N/A												
58704433	AM	SOLAR	7.6	N/A												
58707324	AM	SOLAR	6	N/A												
58669571	AM	SOLAR	7.6	N/A												
58691330	AM	SOLAR	11.4	N/A												
58707325	AM	SOLAR	6	N/A												
58663372	AM	SOLAR	6	N/A												
58711148	AM	SOLAR	11.4	N/A												
58711228	AM	SOLAR	7.6	N/A												
58702374	AM	SOLAR	10	N/A												
58704353	AM	SOLAR	10	N/A												
58705994	AM	SOLAR	10	N/A												
58703748	AM	SOLAR	11.4	N/A												
58707141	AM	SOLAR	10	N/A												
58666203	AM	SOLAR	11.4	N/A												
58707225	AM	SOLAR	6	N/A												
58682162	AM	SOLAR	50	N/A												
58702146	AM	SOLAR	6	N/A												
58702138	AM	SOLAR	10	N/A												
58698034	AM	SOLAR	10	N/A												
58697945	AM	SOLAR	7.6	N/A												
58705055	AM	SOLAR	10	N/A												
58706458	AM	SOLAR	3.8	N/A												
58707588	AM	SOLAR	7.6	N/A												

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58705395	AM	SOLAR	10	N/A
58694437	AM	SOLAR	3.8	N/A
58707000	AM	SOLAR	6	N/A
58704568	AM	SOLAR	10	N/A
58692064	AM	SOLAR	17.3	N/A
58703785	AM	SOLAR	11.4	N/A
58707459	AM	SOLAR	6	N/A
58703727	AM	SOLAR	10	N/A
58705305	AM	SOLAR	10	N/A
58702354	AM	SOLAR	10	N/A
58702348	AM	SOLAR	10	N/A
58702924	AM	SOLAR	3.8	N/A
58705403	AM	SOLAR	6	N/A
58703316	AM	SOLAR	7.6	N/A
58705324	AM	SOLAR	7.6	N/A
58707160	AM	SOLAR	7.6	N/A
58702619	AM	SOLAR	7.6	N/A
58703062	AM	SOLAR	10	N/A
58708427	AM	SOLAR	5	N/A
58706463	AM	SOLAR	7.6	N/A
58712023	AM	SOLAR	7.6	N/A
58702753	AM	SOLAR	5	N/A
58694895	AM	SOLAR	11.4	N/A
58703709	AM	SOLAR	6	N/A
58702445	AM	SOLAR	6	N/A
58701722	AM	SOLAR	7.6	N/A
58704651	AM	SOLAR	10	N/A
58702176	AM	SOLAR	5	N/A
58706706	AM	SOLAR	7.6	N/A
58711478	AM	SOLAR	7.6	N/A
58702294	AM	SOLAR	10	N/A
58690580	AM	SOLAR	10	N/A
58679105	AM	SOLAR	5	N/A
58693031	AM	SOLAR	7.6	N/A
58707807	AM	SOLAR	11.4	N/A
58704286	AM	SOLAR	10	N/A
58703546	AM	SOLAR	5	N/A
58704931	AM	SOLAR	7.6	N/A
58706462	AM	SOLAR	10	N/A
58708367	AM	SOLAR	10	N/A
58703000	AM	SOLAR	11.4	N/A
58702704	AM	SOLAR	7.6	N/A
58693220	AM	SOLAR	10	N/A
58701481	AM	SOLAR	3.8	N/A
58703559	AM	SOLAR	3.8	N/A
58706651	AM	SOLAR	10	N/A
58703912	AM	SOLAR	10	N/A
58694952	AM	SOLAR	10	N/A
58707421	AM	SOLAR	5	N/A
58708654	AM	SOLAR	11.4	N/A
58709772	AM	SOLAR	7.6	N/A
58705526	AM	SOLAR	10	N/A
58694867	AM	SOLAR	10	N/A
58705578	AM	SOLAR	5	N/A

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58706110	AM	SOLAR	6	N/A																
58702629	AM	SOLAR	6	N/A																
58710568	AM	SOLAR	10	N/A																
58707898	AM	SOLAR	10	N/A																
58706011	AM	SOLAR	10	N/A																
58701699	AM	SOLAR	7.6	N/A																
58703309	AM	SOLAR	6	N/A																
58699588	AM	SOLAR	7.6	N/A																
58683422	AM	SOLAR	11.4	N/A																
58692966	AM	SOLAR	6	N/A																
58703327	AM	SOLAR	10	N/A																
58693098	AM	SOLAR	6	N/A																
58693212	AM	SOLAR	6	N/A																
58666040	AM	SOLAR	80	N/A																
58702992	AM	SOLAR	7.6	N/A																
58703332	AM	SOLAR	11.4	N/A																
58702025	AM	SOLAR	5	N/A																
58707845	AM	SOLAR	7.6	N/A																
58701714	AM	SOLAR	10	N/A																
58701783	AM	SOLAR	10	N/A																
58701387	AM	SOLAR	6	N/A																
58704325	AM	SOLAR	6	N/A																
58698082	AM	SOLAR	3.3	N/A																
58706684	AM	SOLAR	11.4	N/A																
58707177	AM	SOLAR	10	N/A																
58702038	AM	SOLAR	5	N/A																
58708867	AM	SOLAR	3.8	N/A																
58698108	AM	SOLAR	3	N/A																
58708497	AM	SOLAR	11.4	N/A																
58711077	AM	SOLAR	5	N/A																
58710087	AM	SOLAR	6	N/A																
58704446	AM	SOLAR	6	N/A																
58702505	AM	SOLAR	7.6	N/A																
58703868	AM	SOLAR	11.4	N/A																
58705766	AM	SOLAR	5	N/A																
58713478	AM	SOLAR	6	N/A																
58712722	AM	SOLAR	6	N/A																
58706552	AM	SOLAR	7.6	N/A																
58704726	AM	SOLAR	7.6	N/A																
58714698	AM	SOLAR	7.6	N/A																
58706387	AM	SOLAR	10	N/A																
58705512	AM	SOLAR	10	N/A																
58701743	AM	SOLAR	10	N/A																
58704224	AM	SOLAR	6	N/A																
58707866	AM	SOLAR	6	N/A																
58613433	AM	SOLAR	12.48	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58636846	AM	SOLAR	7.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58614674	AM	SOLAR	13.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58647977	AM	SOLAR	16.4	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58691638	AM	SOLAR	19	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58669051	AM	SOLAR	27.8	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58631371	AM	SOLAR	19	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58695300	AM	SOLAR	20	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58692899	AM	SOLAR	13.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				

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58653015	AM	SOLAR	13.8	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651128	AM	SOLAR	13.8	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646915	AM	SOLAR	13.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651177	AM	SOLAR	11.4	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58635306	AM	SOLAR	20	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58632023	AM	SOLAR	6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58658124	AM	SOLAR	13	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639702	AM	SOLAR	22.8	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698496	AM	SOLAR	12	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58660027	AM	SOLAR	12	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58627392	AM	SOLAR	12.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676055	AM	SOLAR	15.2	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689020	AM	SOLAR	14.4	N/A	0.90	0.95	0.97	1.03	1.00	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692035	AM	SOLAR	14.4	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58652290	AM	SOLAR	15.2	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58681614	AM	SOLAR	22.8	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676738	AM	SOLAR	11.4	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676785	AM	SOLAR	15	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672122	AM	SOLAR	15.2	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58659000	AM	SOLAR	8	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674997	AM	SOLAR	22.8	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653901	AM	SOLAR	9.8	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674614	AM	SOLAR	12.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689548	AM	SOLAR	13.6	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58664876	AM	SOLAR	19	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688414	AM	SOLAR	16	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689122	AM	SOLAR	15.2	BATTERY	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58635449	AM	SOLAR	12	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689131	AM	SOLAR	15.2	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678772	AM	SOLAR	22.8	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699723	AM	SOLAR	20	N/A	0.90	0.95	0.96	1.01	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58621354	AM	SOLAR	11.52	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58643764	AM	SOLAR	16	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58652850	AM	SOLAR	9.8	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693866	AM	SOLAR	13.6	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58659096	AM	SOLAR	7.68	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58663082	AM	SOLAR	50	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58649648	AM	SOLAR	13.8	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58628214	AM	SOLAR	13.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696576	AM	SOLAR	17.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58620438	AM	SOLAR	22.8	N/A	0.99	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646753	AM	SOLAR	12	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669803	AM	SOLAR	19	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691783	AM	SOLAR	8	N/A	0.90	0.95	0.97	1.01	1.03	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58659143	AM	SOLAR	11.4	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58677477	AM	SOLAR	13.6	N/A	0.90	0.97	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678921	AM	SOLAR	15.2	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683426	AM	SOLAR	13	N/A	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680426	AM	SOLAR	17.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689000	AM	SOLAR	8.41	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692821	AM	SOLAR	9.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58577338	AM	SOLAR	2625	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58622531	AM	SOLAR	20	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58668966	AM	SOLAR		N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58665233	AM	SOLAR		N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58668375	AM	SOLAR		N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58640235	AM	SOLAR	9.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58611534	AM	SOLAR	5.76	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58650152	AM	SOLAR	22.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58624514	AM	SOLAR	7.68	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58615626	AM	SOLAR	9.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58673153	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651492	AM	SOLAR	11	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58633082	AM	SOLAR	15.36	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58661597	AM	SOLAR	8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58626718	AM	SOLAR	3.84	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58640631	AM	SOLAR	21.12	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691165	AM	SOLAR	26.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58652952	AM	SOLAR	26.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58667524	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675914	AM	SOLAR	7.68	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58670430	AM	SOLAR	7.68	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688367	AM	SOLAR	11.52	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58665958	AM	SOLAR	9.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58650807	AM	SOLAR	11.52	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58687822	AM	SOLAR	30.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688816	AM	SOLAR	5.76	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676946	AM	SOLAR	22.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683078	AM	SOLAR	11.52	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58637171	AM	SOLAR	51.9	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692826	AM	SOLAR	79.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58610539	AM	SOLAR	25	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58638518	AM	SOLAR	5.76	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639988	AM	SOLAR	17.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646635	AM	SOLAR	9.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58659989	AM	SOLAR	5	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642106	AM	SOLAR	15.36	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58611830	AM	SOLAR	10.56	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691753	AM	SOLAR	7.68	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692734	AM	SOLAR	7.68	BATTERY	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58650774	AM	SOLAR	11	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58602402	AM	SOLAR	7.68	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58670893	AM	SOLAR	100	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698638	AM	SOLAR	22	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58626719	AM	SOLAR	13.44	BATTERY	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58638491	AM	SOLAR	68.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692232	AM	SOLAR	22.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58625812	AM	SOLAR	7.68	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671509	AM	SOLAR	7.68	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695356	AM	SOLAR	15.36	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691927	AM	SOLAR	18	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689800	AM	SOLAR	22	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683054	AM	SOLAR	13.44	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675274	AM	SOLAR	13.44	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692416	AM	SOLAR	11.52	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644271	AM	SOLAR	9.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700640	AM	SOLAR	13	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58704534	AM	SOLAR	7.68	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

Appendix A - DER Installation Data and VVC Points

58688061	AM	SOLAR	19.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58633196	AM	SOLAR	22	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647836	AM	SOLAR	7	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58638453	AM	SOLAR	7.68	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58631391	AM	SOLAR	19.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58643070	AM	SOLAR	3.84	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689062	AM	SOLAR	8.64	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651175	AM	SOLAR	9.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644272	AM	SOLAR	7.68	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683566	AM	SOLAR	21.12	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689260	AM	SOLAR	45.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58613404	AM	SOLAR	19.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58648177	AM	SOLAR	11.52	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58664653	AM	SOLAR	7.68	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675399	AM	SOLAR	13.44	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644483	AM	SOLAR	7.68	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691524	AM	SOLAR	62.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58659246	AM	SOLAR	121.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675527	AM	SOLAR	17.28	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674332	AM	SOLAR	7.68	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674699	AM	SOLAR	7.68	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689953	AM	SOLAR	11.52	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58657536	AM	SOLAR	18	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674346	AM	SOLAR	7.68	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698624	AM	SOLAR	17.28	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695216	AM	SOLAR	4.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676120	AM	SOLAR	45.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688731	AM	SOLAR	21.12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58682386	AM	SOLAR	45.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700388	AM	SOLAR	7.68	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694816	AM	SOLAR	13.44	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683406	AM	SOLAR	10.56	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678735	AM	SOLAR	24.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699016	AM	SOLAR	11.52	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58687760	AM	SOLAR	25	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695365	AM	SOLAR	8.64	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639493	AM	SOLAR	20	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58637537	AM	SOLAR	22.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696665	AM	SOLAR	22.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58652947	AM	SOLAR	7.6	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694923	AM	SOLAR	20	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58655744	AM	SOLAR	7.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696381	AM	SOLAR	20	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58633544	AM	SOLAR	20	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646711	AM	SOLAR	20	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58632736	AM	SOLAR	20	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58625428	AM	SOLAR	22.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651098	AM	SOLAR	20	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58659226	AM	SOLAR	7.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676210	AM	SOLAR	40	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669034	AM	SOLAR	10	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58666708	AM	SOLAR	20	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694256	AM	SOLAR	20	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691761	AM	SOLAR	20	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58657528	AM	SOLAR	20	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672836	AM	SOLAR	20	N/A	0.90	0.95	0.98	1.08	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674708	AM	SOLAR	20	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671534	AM	SOLAR	20	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689928	AM	SOLAR	20	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694171	AM	SOLAR	22.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695820	AM	SOLAR	20	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672714	AM	SOLAR	20	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698410	AM	SOLAR	22.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693075	AM	SOLAR	20	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689993	AM	SOLAR	20	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695813	AM	SOLAR	22.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669364	AM	SOLAR	20	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697598	AM	SOLAR	22.8	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695812	AM	SOLAR	22.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58652748	AM	SOLAR	20	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688840	AM	SOLAR	20	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58663340	AM	SOLAR	7.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689129	AM	SOLAR	20	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694858	AM	SOLAR	22.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58687955	AM	SOLAR	20	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58703514	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.40	0.44	0.00	0.00	-0.44	-0.44
58694050	AM	SOLAR	12	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672064	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58652061	AM	SOLAR	12	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699500	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58658096	AM	SOLAR	12	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645899	AM	SOLAR	12	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645516	AM	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58649845	AM	SOLAR	12	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651844	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58657230	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58657745	AM	SOLAR	12	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693583	AM	SOLAR	12	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653789	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676884	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58667727	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58670013	AM	SOLAR	12	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675429	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698933	AM	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58650915	AM	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669687	AM	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671609	AM	SOLAR	12	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675503	AM	SOLAR	12	N/A	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674069	AM	SOLAR	12	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690106	AM	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689403	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691872	AM	SOLAR	12	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671033	AM	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671284	AM	SOLAR	12	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690660	AM	SOLAR	12	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58677674	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676702	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679343	AM	SOLAR	12	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58670055	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693595	AM	SOLAR	12	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695029	AM	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653464	AM	SOLAR	12	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58681682	AM	SOLAR	12	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688189	AM	SOLAR	12	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694085	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672910	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675100	AM	SOLAR	12	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678939	AM	SOLAR	12	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698846	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680347	AM	SOLAR	12	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697609	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653514	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58682737	AM	SOLAR	12	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689302	AM	SOLAR	12	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699579	AM	SOLAR	12	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58665322	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58607036	AM	SOLAR	15.2	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58652009	AM	SOLAR	15.2	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700391	AM	SOLAR	15.2	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674442	AM	SOLAR	15.2	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696913	AM	SOLAR	15.2	BATTERY	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647589	AM	SOLAR	15.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58636598	AM	SOLAR	15.2	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58640348	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642513	AM	SOLAR	15.2	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646306	AM	SOLAR	15.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630387	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647446	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683466	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58661404	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698839	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58641084	AM	SOLAR	15.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58643019	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630437	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690308	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645131	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58640693	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646602	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644221	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645262	AM	SOLAR	15.2	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690831	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680676	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58641005	AM	SOLAR	15.2	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58660514	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644485	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700883	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58633070	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58681791	AM	SOLAR	15.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669367	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680354	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653097	AM	SOLAR	15.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651176	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58649722	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630114	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693100	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671259	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678906	AM	SOLAR	15.2	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691722	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689184	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692657	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58677991	AM	SOLAR	15.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58664627	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58673956	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678864	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698497	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700382	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58701960	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58622538	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675401	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697434	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679363	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690936	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58677857	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58648233	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58613942	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58666528	AM	SOLAR	15.2	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693584	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690238	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699682	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58635348	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671081	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58682729	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678621	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689792	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671449	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692808	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700603	AM	SOLAR	15.2	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697728	AM	SOLAR	15.2	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690915	AM	SOLAR	9	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646927	AM	SOLAR	9.8	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58664624	AM	SOLAR	9.8	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642992	AM	SOLAR	15	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642847	AM	SOLAR	14.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58640009	AM	SOLAR	9.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645677	AM	SOLAR	13	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58650402	AM	SOLAR	19	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630325	AM	SOLAR	16	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58622017	AM	SOLAR	9.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647365	AM	SOLAR	17.4	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58640015	AM	SOLAR	9.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645751	AM	SOLAR	13.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676705	AM	SOLAR	17.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58626957	AM	SOLAR	14.4	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696282	AM	SOLAR	17.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644059	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58703208	AM	SOLAR	17.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58647923	AM	SOLAR	12.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642908	AM	SOLAR	11.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678549	AM	SOLAR	19	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58619461	AM	SOLAR	166.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696624	AM	SOLAR	13	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58666222	AM	SOLAR	17.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58657224	AM	SOLAR	13	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680874	AM	SOLAR	17.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647931	AM	SOLAR	19	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696429	AM	SOLAR	17.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678690	AM	SOLAR	15	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671678	AM	SOLAR	11.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58661147	AM	SOLAR	14.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639635	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669507	AM	SOLAR	15	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58622530	AM	SOLAR	15	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671111	AM	SOLAR	17.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674168	AM	SOLAR	9.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698011	AM	SOLAR	13.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58658442	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671268	AM	SOLAR	14.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58658167	AM	SOLAR	13.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58659113	AM	SOLAR	13	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679016	AM	SOLAR	21.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678547	AM	SOLAR	13	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58665189	AM	SOLAR	19	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700942	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642918	AM	SOLAR	17.4	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693996	AM	SOLAR	12.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695310	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696401	AM	SOLAR	12.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696560	AM	SOLAR	16.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694786	AM	SOLAR	14.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58677888	AM	SOLAR	16	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675873	AM	SOLAR	13.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695220	AM	SOLAR	15	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58670900	AM	SOLAR	13.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676964	AM	SOLAR	12.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653579	AM	SOLAR	220	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676495	AM	SOLAR	19	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58664635	AM	SOLAR	17.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58673152	AM	SOLAR	15	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691416	AM	SOLAR	15	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689223	AM	SOLAR	16.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693494	AM	SOLAR	16.4	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692927	AM	SOLAR	14.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683553	AM	SOLAR	13.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678616	AM	SOLAR	15.2	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693662	AM	SOLAR	13.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676212	AM	SOLAR	17.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58687973	AM	SOLAR	13.8	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679378	AM	SOLAR	13.6	N/A	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693850	AM	SOLAR	17.4	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696486	AM	SOLAR	13	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58695221	AM	SOLAR	15	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58704775	AM	SOLAR	15.2	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58667930	AM	SOLAR	13	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683368	AM	SOLAR	13.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58636204	AM	SOLAR	9.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639457	AM	SOLAR	12.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646725	AM	SOLAR	13.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644673	AM	SOLAR	17.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58668559	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690049	AM	SOLAR	17.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688010	AM	SOLAR	15	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699533	AM	SOLAR	12.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58647249	AM	SOLAR	14.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651626	AM	SOLAR	16	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679209	AM	SOLAR	13.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58630976	AM	SOLAR	13.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698416	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642232	AM	SOLAR	17.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642264	AM	SOLAR	9.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58649351	AM	SOLAR	13.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58664137	AM	SOLAR	17.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58657466	AM	SOLAR	17.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58634150	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58649698	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58639096	AM	SOLAR	16.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679823	AM	SOLAR	13	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58703279	AM	SOLAR	13	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697209	AM	SOLAR	17.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675270	AM	SOLAR	16.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679161	AM	SOLAR	17.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669751	AM	SOLAR	17.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696661	AM	SOLAR	21.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58648138	AM	SOLAR	11.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58664731	AM	SOLAR	17.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58650934	AM	SOLAR	21.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644267	AM	SOLAR	13.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58668602	AM	SOLAR	13.8	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675624	AM	SOLAR	13	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675663	AM	SOLAR	16	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58673826	AM	SOLAR	17.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675899	AM	SOLAR	19	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696508	AM	SOLAR	13.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695719	AM	SOLAR	12.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58699445	AM	SOLAR	16	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58663626	AM	SOLAR	16	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700574	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676935	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678576	AM	SOLAR	13	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675589	AM	SOLAR	14.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58680276	AM	SOLAR	17.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691193	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690165	AM	SOLAR	16	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697223	AM	SOLAR	17.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58669221	AM	SOLAR	16.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58691599	AM	SOLAR	13.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674039	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672345	AM	SOLAR	14.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679013	AM	SOLAR	13	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676527	AM	SOLAR	17.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693064	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692226	AM	SOLAR	21.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698426	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689727	AM	SOLAR	13.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690866	AM	SOLAR	13.8	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693363	AM	SOLAR	14.4	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58682017	AM	SOLAR	14.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679117	AM	SOLAR	13	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58663409	AM	SOLAR	11.4	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696399	AM	SOLAR	15	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678605	AM	SOLAR	13.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697677	AM	SOLAR	16	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688857	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688458	AM	SOLAR	13.6	N/A	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697129	AM	SOLAR	16	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697226	AM	SOLAR	13.6	N/A	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696331	AM	SOLAR	14.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688233	AM	SOLAR	11.4	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58626044	AM	SOLAR	13.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58632835	AM	SOLAR	13.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58631544	AM	SOLAR	13.6	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58642663	AM	SOLAR	11.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58648179	AM	SOLAR	14.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58651607	AM	SOLAR	16.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58644076	AM	SOLAR	12.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646587	AM	SOLAR	16.4	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646916	AM	SOLAR	16	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690116	AM	SOLAR	13	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691861	AM	SOLAR	12.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58673823	AM	SOLAR	17.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691514	AM	SOLAR	21.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58648371	AM	SOLAR	12.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58649700	AM	SOLAR	9.8	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58668505	AM	SOLAR	9.8	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678348	AM	SOLAR	17.6	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646828	AM	SOLAR	15.2	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58640918	AM	SOLAR	19	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58653565	AM	SOLAR	14.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58638862	AM	SOLAR	14.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58661762	AM	SOLAR	13.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58625280	AM	SOLAR	9.8	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695568	AM	SOLAR	12.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58661325	AM	SOLAR	13.6	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58658565	AM	SOLAR	14.4	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695019	AM	SOLAR	13	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58670791	AM	SOLAR	13.6	N/A	0.90	0.95	0.91	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58643629	AM	SOLAR	9.8	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58660531	AM	SOLAR	13.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674271	AM	SOLAR	13.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

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58666624	AM	SOLAR	13.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58661227	AM	SOLAR	17.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58664642	AM	SOLAR	17.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58666741	AM	SOLAR	17.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58674338	AM	SOLAR	13.8	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58681870	AM	SOLAR	13	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683499	AM	SOLAR	13.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690054	AM	SOLAR	17.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679892	AM	SOLAR	16	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675473	AM	SOLAR	19	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690839	AM	SOLAR	13.6	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692906	AM	SOLAR	14.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58682976	AM	SOLAR	13.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689501	AM	SOLAR	17.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672304	AM	SOLAR	17.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58676548	AM	SOLAR	16.4	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58671354	AM	SOLAR	17.6	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58660693	AM	SOLAR	15	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58687911	AM	SOLAR	13.6	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58660418	AM	SOLAR	19	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58667454	AM	SOLAR	19	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58677744	AM	SOLAR	12.6	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58677550	AM	SOLAR	13.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683040	AM	SOLAR	16	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646599	AM	SOLAR	19	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675199	AM	SOLAR	19	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58696629	AM	SOLAR	13	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672011	AM	SOLAR	15.2	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58682087	AM	SOLAR	13.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689801	AM	SOLAR	13	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697216	AM	SOLAR	11.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58691348	AM	SOLAR	17.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683557	AM	SOLAR	17.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58688528	AM	SOLAR	19	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58693876	AM	SOLAR	14.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58683429	AM	SOLAR	13.8	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58679215	AM	SOLAR	17.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690072	AM	SOLAR	17.6	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58697896	AM	SOLAR	11.4	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58673427	AM	SOLAR	11.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58689971	AM	SOLAR	13.8	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690338	AM	SOLAR	19	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58678702	AM	SOLAR	17.6	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58705706	AM	SOLAR	16.4	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58698160	AM	SOLAR	17.4	N/A	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58694266	AM	SOLAR	16.4	N/A	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58700604	AM	SOLAR	17.4	N/A	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58695239	AM	SOLAR	13.6	N/A	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58645748	AM	SOLAR	7.7	N/A												
58663112	AM	SOLAR	45.6	N/A												
58691189	AM	SOLAR	21.4	N/A												
58692579	AM	SOLAR	15	BATTERY												
58708394	AM	SOLAR	15.2	N/A												
58703621	AM	SOLAR	15.2	N/A												

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58660596	AM	SOLAR	200	N/A
58692490	AM	SOLAR	15	N/A
58705572	AM	SOLAR	15.2	N/A
58693889	AM	SOLAR	16	N/A
58701396	AM	SOLAR	13	N/A
58705308	AM	SOLAR	15.2	N/A
58674687	AM	SOLAR	140	N/A
58689476	AM	SOLAR	100	N/A
58701015	AM	SOLAR	45	BATTERY
58694147	AM	SOLAR	25	N/A
58662743	AM	SOLAR	160	N/A
58633914	AM	SOLAR	19.2	N/A
58699095	AM	SOLAR	86.4	N/A
58706735	AM	SOLAR	16.4	N/A
58674154	AM	SOLAR	13.44	BATTERY
58672092	AM	SOLAR	6	N/A
58666239	AM	SOLAR	7.7	N/A
58676103	AM	SOLAR	7.7	N/A
58692969	AM	SOLAR	15.2	N/A
58647613	AM	SOLAR	62.5	N/A
58680120	AM	SOLAR	50	N/A
58680126	AM	SOLAR	75	N/A
58702323	AM	SOLAR	13.6	N/A
58703074	AM	SOLAR	16	N/A
58698245	AM	SOLAR	14.4	N/A
58680212	AM	SOLAR	120	N/A
58701999	AM	SOLAR	6	N/A
58695238	AM	SOLAR	15	N/A
58698959	AM	SOLAR	10.64	N/A
58677693	AM	SOLAR	7.7	N/A
58693053	AM	SOLAR	13.6	N/A
58678237	AM	SOLAR	20	N/A
58660611	AM	SOLAR	225	N/A
58707749	AM	SOLAR	12	N/A
58692392	AM	SOLAR	30	BATTERY
58692463	AM	SOLAR	7	N/A
58666197	AM	SOLAR	50	N/A
58671729	AM	SOLAR	7.7	N/A
58692294	AM	SOLAR	60	N/A
58708556	AM	SOLAR	12	N/A
58706235	AM	SOLAR	14.4	N/A
58710356	AM	SOLAR	7.6	N/A
58698018	AM	SOLAR	15.2	BATTERY
58698019	AM	SOLAR	12	N/A
58711090	AM	SOLAR	15.2	N/A
58705044	AM	SOLAR	15.2	N/A
58698022	AM	SOLAR	16	N/A
58702830	AM	SOLAR	16	N/A
58683193	AM	SOLAR	22.8	N/A
58708713	AM	SOLAR	16.4	N/A
58675645	AM	SOLAR	75	N/A
58693146	AM	SOLAR	31.4	N/A
58708288	AM	SOLAR	13.6	N/A
58714827	AM	SOLAR	12	N/A

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58694168	AM	SOLAR	45.6	N/A																
58706410	AM	SOLAR	20	N/A																
58702155	AM	SOLAR	240	N/A																
58709178	AM	SOLAR	13.6	N/A																
58701696	AM	SOLAR	21.4	N/A																
58683023	AM	SOLAR	42.8	BATTERY																
58694005	AM	SOLAR	15	BATTERY																
58692377	AM	SOLAR	30	BATTERY																
58699921	AM	SOLAR	15.2	BATTERY																
58697767	AM	SOLAR	7.6	BATTERY																
58609195	AM	SOLAR	11.4	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58618966	AM	SOLAR	33	BATTERY	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58592924	AM	SOLAR	9.6	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58700448	AM	SOLAR	11.4	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58661766	AM	SOLAR	15.2	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58651532	AM	SOLAR	7.6	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58644428	AM	SOLAR	7.6	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58693783	AM	SOLAR	5	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58697099	AM	SOLAR	14.4	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58579929	AM	SOLAR	24	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58641349	AM	SOLAR	7.6	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58651178	AM	SOLAR	3.84	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58651527	AM	SOLAR	17.28	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58599786	AM	SOLAR	11.52	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58667481	AM	SOLAR	13	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58643745	AM	SOLAR	11	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58638719	AM	SOLAR	7.6	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58657754	AM	SOLAR	7.68	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58690268	AM	SOLAR	22	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58614125	AM	SOLAR	7.68	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58636482	AM	SOLAR	15.2	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58655739	AM	SOLAR	15.2	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58661744	AM	SOLAR	10	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58651534	AM	SOLAR	7.68	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58659898	AM	SOLAR	7.68	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58636481	AM	SOLAR	15.2	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58670095	AM	SOLAR	15.36	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58631313	AM	SOLAR	19.6	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58675279	AM	SOLAR	15	BATTERY	0.90	0.95	0.98	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58651172	AM	SOLAR	22	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58654797	AM	SOLAR	13.6	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58661369	AM	SOLAR	7.6	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58650810	AM	SOLAR	9.84	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58653429	AM	SOLAR	11	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58687945	AM	SOLAR	12	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58641360	AM	SOLAR	7.6	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58703277	AM	SOLAR	11	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58647576	AM	SOLAR	7.6	BATTERY	0.90	0.95	0.98	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58687647	AM	SOLAR	11	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58669884	AM	SOLAR	3.84	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58691041	AM	SOLAR	6	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58676598	AM	SOLAR	9.6	BATTERY	0.90	0.96	0.99	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58691750	AM	SOLAR	6	BATTERY	0.90	0.98	1.00	1.04	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				
58697314	AM	SOLAR	15.2	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44				

Appendix A - DER Installation Data and VVC Points

58698974	AM	SOLAR	17.28	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58690301	AM	SOLAR	15.2	BATTERY	0.90	0.97	0.99	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692361	AM	SOLAR	15	BATTERY	0.90	0.95	0.97	1.03	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58692030	AM	SOLAR	11	BATTERY	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58646900	AM	SOLAR	11	BATTERY	0.90	0.95	0.97	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58672874	AM	SOLAR	9	BATTERY	0.90	0.95	0.96	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58655052	AM	SOLAR	7.6	BATTERY	0.90	0.96	0.98	1.02	1.04	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44
58675584	AM	SOLAR	7.6	BATTERY	0.90	0.95	0.96	1.02	1.05	1.10	0.44	0.44	0.00	0.00	-0.44	-0.44

Appendix B - Aggregate Active Management Event Counts

Feeder	On/Off Event Count	On/Off Event Average Duration (Mins)	Power Factor Management Event Count	Power Factor Management Event Average Duration (Mins)
10101	0	0	0	0
10102	0	0	0	0
10105	0	0	0	0
10107	0	0	0	0
10109	0	0	0	0
10201	0	0	0	0
10203	0	0	0	0
10204	0	0	0	0
10205	0	0	0	0
10401	0	0	0	0
10503	0	0	0	0
10504	0	0	0	0
10602	0	0	0	0
10603	0	0	0	0
10701	0	0	0	0
10702	0	0	0	0
10703	0	0	0	0
10705	0	0	0	0
10707	0	0	0	0
10801	0	0	0	0
10805	0	0	0	0
10901	0	0	0	0
10903	0	0	0	0
11101	0	0	0	0
11102	0	0	0	0
11103	0	0	0	0
11104	0	0	0	0
11202	0	0	0	0
11203	0	0	0	0
11205	0	0	0	0
11301	0	0	0	0
11302	0	0	0	0
11303	0	0	0	0
11401	0	0	0	0
11404	0	0	0	0
11405	0	0	0	0
11406	0	0	0	0
11407	0	0	0	0
11502	0	0	0	0
11504	0	0	0	0
11601	0	0	0	0
11602	0	0	0	0
11801	0	0	0	0

Appendix B - Aggregate Active Management Event Counts

11803	0	0	0	0
11804	0	0	0	0
11805	0	0	0	0
11901	0	0	0	0
11903	0	0	0	0
11904	0	0	0	0
12002	0	0	0	0
12006	0	0	0	0
12007	0	0	0	0
12102	0	0	0	0
12202	0	0	0	0
12205	0	0	0	0
12206	0	0	0	0
12302	0	0	0	0
12304	0	0	0	0
12401	0	0	2	1241.03
12402	0	0	0	0
12502	0	0	0	0
12505	0	0	0	0
12601	0	0	0	0
12603	0	0	0	0
12604	0	0	0	0
12605	0	0	0	0
12701	0	0	0	0
12703	0	0	0	0
12704	0	0	0	0
12705	0	0	0	0
12801	0	0	0	0
12802	0	0	0	0
12803	0	0	0	0
12807	0	0	0	0
13001	0	0	0	0
13002	0	0	0	0
13003	0	0	0	0
13004	0	0	0	0
13005	0	0	0	0
13101	0	0	0	0
13103	0	0	1	1226.03
13105	0	0	0	0
13201	0	0	0	0
13202	0	0	0	0
13301	0	0	0	0
13302	0	0	30	1177.3
13303	0	0	0	0
13401	0	0	0	0
13501	0	0	0	0
13503	0	0	3	921.7

Appendix B - Aggregate Active Management Event Counts

13601	0	0	0	0
13604	0	0	0	0
13606	0	0	0	0
13702	0	0	0	0
13704	0	0	0	0
13801	0	0	0	0
13803	0	0	0	0
13806	0	0	0	0
13807	0	0	0	0
13901	0	0	0	0
13902	0	0	0	0
13903	0	0	0	0
13905	0	0	0	0
14006	0	0	0	0
14008	0	0	0	0
14101	0	0	0	0
14103	0	0	0	0
14201	0	0	0	0
14203	0	0	0	0
14204	0	0	0	0
14205	0	0	0	0
14301	0	0	0	0
14307	0	0	0	0
14401	0	0	0	0
14403	0	0	0	0
14404	0	0	0	0
14501	0	0	0	0
14502	0	0	0	0
14601	0	0	0	0
14603	0	0	0	0
14605	0	0	0	0
14702	0	0	9	953.59
14705	0	0	0	0
14801	0	0	7	1048.74
14802	0	0	0	0
15001	0	0	0	0
15101	0	0	0	0
15104	0	0	0	0
15201	0	0	0	0
15202	0	0	0	0
15404	0	0	0	0
15405	0	0	0	0
15603	0	0	0	0
15604	0	0	0	0
15701	0	0	0	0
15702	0	0	0	0
15704	0	0	0	0

Appendix B - Aggregate Active Management Event Counts

15803	0	0	2	1029.03
16001	0	0	0	0
16002	0	0	0	0
16004	0	0	0	0
16005	0	0	0	0
16006	0	0	0	0
16007	0	0	0	0
16101	0	0	5	1077.23
16102	0	0	0	0
16201	0	0	0	0
16202	0	0	0	0
16203	0	0	0	0
16301	0	0	1	1062.03
16302	0	0	0	0
16402	0	0	0	0
16403	0	0	0	0
16501	0	0	0	0
16502	0	0	0	0
16504	0	0	0	0
16505	0	0	0	0
16603	0	0	0	0
16605	0	0	0	0
16702	0	0	0	0
16901	0	0	0	0
16902	0	0	0	0
17001	0	0	0	0
17002	0	0	0	0
17401	0	0	0	0
17501	0	0	11	1141.67
17801	0	0	0	0
17802	0	0	0	0
17805	0	0	0	0
17901	0	0	0	0
17902	0	0	0	0
17903	0	0	0	0
18001	0	0	0	0
18502	0	0	0	0
18802	0	0	0	0
20103	0	0	0	0
20201	0	0	0	0
20401	0	0	0	0
20403	0	0	0	0
20501	0	0	0	0
20601	0	0	0	0
20602	0	0	0	0
20603	0	0	0	0
20801	0	0	0	0

Appendix B - Aggregate Active Management Event Counts

20802	0	0	0	0
21204	0	0	0	0
21206	0	0	0	0
21403	0	0	0	0
21702	0	0	0	0
21703	0	0	0	0
21901	0	0	0	0
22001	0	0	0	0
22101	0	0	0	0
22405	0	0	0	0
22601	0	0	0	0
22701	0	0	0	0
22901	0	0	0	0
22903	0	0	0	0
22904	0	0	0	0
22905	0	0	0	0
23001	0	0	0	0
23102	0	0	0	0
23201	0	0	0	0
23202	0	0	0	0
23203	0	0	0	0
23401	0	0	0	0
23402	0	0	0	0
23403	0	0	0	0
23604	0	0	0	0
23901	0	0	0	0
23902	0	0	0	0
24101	0	0	0	0
24102	0	0	0	0
24103	0	0	0	0
24104	0	0	0	0
24105	0	0	0	0
24201	0	0	0	0
24202	0	0	0	0
24603	0	0	0	0
24701	0	0	0	0
24702	0	0	0	0
24801	0	0	0	0
24802	0	0	0	0
24901	0	0	0	0
24902	0	0	0	0
25402	0	0	0	0
25501	0	0	15	1036.03
25503	0	0	0	0
25601	0	0	0	0
25602	0	0	0	0
25603	0	0	0	0

Appendix B - Aggregate Active Management Event Counts

25801	0	0	0	0
26001	0	0	5	1137.03
26301	0	0	0	0
26401	0	0	0	0
26402	0	0	0	0
26703	0	0	0	0
26704	0	0	0	0
26803	0	0	0	0
27004	0	0	0	0
27005	0	0	0	0
27101	0	0	0	0
27202	0	0	0	0
27301	0	0	0	0
27302	0	0	0	0
27502	0	0	0	0
27504	0	0	0	0
27603	0	0	0	0
27604	0	0	0	0
27605	0	0	0	0
27901	0	0	0	0
28102	0	0	0	0
28402	0	0	0	0
28403	0	0	0	0
28601	0	0	0	0
28602	0	0	0	0
28604	0	0	2	1182.03
28701	0	0	0	0
28702	0	0	0	0
28801	0	0	0	0
28803	0	0	0	0
28805	0	0	0	0
29301	0	0	0	0
29302	0	0	0	0
29401	0	0	19	1118.45
29402	0	0	0	0
29501	0	0	0	0
29802	0	0	0	0
29804	0	0	0	0
39601	0	0	0	0
40101	0	0	0	0
40201	0	0	0	0
40301	0	0	0	0
40302	0	0	0	0
40303	0	0	0	0
40502	0	0	24	1103.61
40504	0	0	0	0
40505	0	0	1	731.03

Appendix B - Aggregate Active Management Event Counts

40601	0	0	0	0
40602	0	0	0	0
40603	0	0	0	0
40702	0	0	0	0
40801	0	0	0	0
40802	0	0	0	0
40901	0	0	0	0
40902	0	0	0	0
41002	0	0	0	0
41202	0	0	0	0
41204	0	0	0	0
41205	0	0	0	0
41301	0	0	0	0
41303	0	0	0	0
41304	0	0	0	0
41501	0	0	0	0
41502	0	0	0	0
41504	0	0	0	0
41602	0	0	0	0
41701	0	0	0	0
41702	0	0	6	1259.2
41801	0	0	24	1098.99
41802	0	0	0	0
41901	0	0	0	0
41902	0	0	0	0
41903	0	0	0	0
42001	0	0	0	0
42002	0	0	0	0
42102	0	0	0	0
42201	0	0	4	1171.53
42203	0	0	0	0
42301	0	0	0	0
42302	0	0	0	0
42501	0	0	0	0
42503	0	0	0	0
42601	0	0	0	0
42701	0	0	11	1165.21
42801	0	0	0	0
42802	0	0	57	1170.99
42902	0	0	0	0
42903	0	0	0	0
43001	0	0	0	0
43101	0	0	0	0
43102	0	0	0	0
43103	0	0	0	0
43104	0	0	0	0
43105	0	0	0	0

Appendix B - Aggregate Active Management Event Counts

43106	0	0	0	0
43108	0	0	0	0
43201	0	0	0	0
43202	0	0	0	0
43301	0	0	0	0
43302	0	0	0	0
43304	0	0	0	0
43402	0	0	5	1102.43
43504	0	0	0	0
43701	0	0	0	0
43702	0	0	0	0
43802	0	0	0	0
44201	0	0	0	0
44202	0	0	0	0
44203	0	0	0	0
44301	0	0	0	0
44302	0	0	0	0
44401	0	0	0	0
44501	0	0	0	0
44502	0	0	0	0
44503	0	0	0	0
44504	0	0	0	0
44505	0	0	0	0
44601	0	0	0	0
44703	0	0	0	0
44801	0	0	0	0
44802	0	0	0	0
44901	0	0	3	1226.7
44902	0	0	8	919.9
44903	0	0	0	0
44904	0	0	0	0
44905	0	0	0	0
45002	0	0	0	0
45003	0	0	1	1025.03
45301	0	0	0	0
45302	0	0	0	0
45303	0	0	16	1139.91
45402	0	0	0	0
45403	0	0	0	0
45501	0	0	0	0
45502	0	0	0	0
45601	0	0	0	0
45602	0	0	0	0
45702	0	0	0	0
45801	0	0	0	0
45901	0	0	11	1150.3
45902	0	0	35	1189

Appendix B - Aggregate Active Management Event Counts

46001	0	0	0	0
46002	0	0	0	0
46004	0	0	0	0
46005	0	0	0	0
46101	0	0	0	0
46102	0	0	0	0
46203	0	0	0	0
46204	0	0	0	0
46206	0	0	0	0
46301	0	0	0	0
46302	0	0	4	1324.53
46401	0	0	0	0
46402	0	0	0	0
46501	0	0	0	0
46502	0	0	0	0
46503	0	0	0	0
46505	0	0	0	0
46506	0	0	0	0
46602	0	0	0	0
46701	0	0	0	0
46702	0	0	0	0
46801	0	0	0	0
46802	0	0	0	0
46803	0	0	0	0
46901	0	0	0	0
46903	0	0	0	0
47001	0	0	0	0
47002	0	0	0	0
47101	0	0	0	0
47103	0	0	0	0
47104	0	0	0	0
47203	0	0	0	0
47401	0	0	6	1009.7
47502	0	0	0	0
47703	0	0	0	0
47704	0	0	0	0
47705	0	0	0	0
47707	0	0	5	1207.43
47802	0	0	0	0
47901	0	0	0	0
48301	0	0	0	0
48302	0	0	1	905.03
48303	0	0	0	0
48601	0	0	0	0
48602	0	0	0	0
48901	0	0	0	0
48902	0	0	0	0

Appendix B - Aggregate Active Management Event Counts

49802	0	0	0	0
49803	0	0	0	0
49804	0	0	0	0
50103	0	0	12	1231.53
50105	0	0	0	0
50107	0	0	0	0
50201	0	0	0	0
50202	0	0	2	1243.03
50302	0	0	0	0
50303	0	0	0	0
50501	0	0	0	0
50502	0	0	0	0
50505	0	0	2	1199.53
50506	0	0	0	0
50701	0	0	0	0
50834	0	0	0	0
51002	0	0	0	0
51004	0	0	0	0
51006	0	0	0	0
51101	0	0	0	0
51102	0	0	0	0
51104	0	0	0	0
51107	0	0	0	0
51108	0	0	0	0
51109	0	0	0	0
51201	0	0	0	0
51202	0	0	0	0
51204	0	0	0	0
51301	0	0	0	0
51302	0	0	10	1170.73
51303	0	0	1	1299.03
51304	0	0	0	0
51305	0	0	4	1182.53
51306	0	0	5	1209.43
51401	0	0	0	0
51402	0	0	0	0
51502	0	0	0	0
51503	0	0	0	0
51505	0	0	0	0
51602	0	0	0	0
51603	0	0	0	0
51604	0	0	0	0
51701	0	0	0	0
51702	0	0	0	0
51704	0	0	0	0
51802	0	0	0	0
51804	0	0	0	0

Appendix B - Aggregate Active Management Event Counts

51901	0	0	0	0
51902	0	0	0	0
51903	0	0	0	0
51904	0	0	0	0
51905	0	0	0	0
51906	0	0	0	0
52001	0	0	0	0
52002	0	0	0	0
52004	0	0	0	0
52102	0	0	8	1197.78
52202	0	0	13	1156.41
52401	0	0	5	951.43
52402	0	0	0	0
52403	0	0	0	0
52404	0	0	0	0
52501	0	0	0	0
52502	0	0	5	948.23
52503	0	0	0	0
53102	0	0	0	0
53302	0	0	0	0
53501	0	0	7	1267.17
53502	0	0	0	0
53601	0	0	0	0
53602	0	0	0	0
53801	0	0	0	0
53802	0	0	8	763.16
53803	0	0	21	1104.89
53901	0	0	0	0
53902	0	0	0	0
53903	0	0	25	1145.79
54001	0	0	0	0
54201	0	0	0	0
54202	0	0	12	1095.2
54203	0	0	0	0
54501	0	0	0	0
54502	0	0	1	897.03
54503	0	0	0	0
54504	0	0	0	0
54505	0	0	0	0
54506	0	0	0	0
54601	0	0	0	0
54602	0	0	2	684.53
54603	0	0	0	0
54701	0	0	9	1045.47
55001	0	0	7	1045.74
55002	0	0	5	842.23
55003	0	0	0	0

Appendix B - Aggregate Active Management Event Counts

55101	0	0	1	1077.03
55102	0	0	0	0
55104	0	0	0	0
55105	0	0	0	0
55401	0	0	0	0
55405	0	0	0	0
55408	0	0	0	0
55502	0	0	0	0
55507	0	0	0	0
55508	0	0	0	0
55601	0	0	0	0
56501	0	0	1	803.03
56503	0	0	0	0
56504	0	0	0	0
56601	0	0	0	0
56603	0	0	1	987.03
56604	0	0	9	1032.7
56801	0	0	29	1130.1
56802	0	0	0	0
56803	0	0	0	0
57001	0	0	0	0
57002	0	0	2	1144.03
57004	0	0	0	0
57006	0	0	5	1144.03
57101	0	0	0	0
57102	0	0	0	0
57103	0	0	3	1263.03
57104	0	0	1	1195.03
57201	0	0	0	0
57203	0	0	10	1163.23
57204	0	0	0	0
57205	0	0	0	0
57301	0	0	0	0
57302	0	0	0	0
57304	0	0	0	0
57306	0	0	0	0
57401	0	0	19	1108.24
57402	0	0	0	0
57403	0	0	0	0
57404	0	0	8	1192.03
57501	0	0	0	0
57502	0	0	0	0
57504	0	0	0	0
57505	0	0	0	0
57506	0	0	0	0
57601	0	0	0	0
57602	0	0	0	0

Appendix B - Aggregate Active Management Event Counts

57701	0	0	0	0
57702	0	0	0	0
57704	0	0	0	0
58001	0	0	0	0
58003	0	0	0	0
58006	0	0	0	0
58102	0	0	0	0
58201	0	0	0	0
58202	0	0	0	0
58302	0	0	0	0
58303	0	0	0	0
58401	0	0	0	0
58402	0	0	0	0
58701	0	0	0	0
58702	0	0	4	1269.03
58703	0	0	0	0
58706	0	0	0	0
58801	0	0	0	0
58803	0	0	0	0
59003	0	0	0	0
59101	0	0	5	984.63
59102	0	0	0	0
59202	0	0	0	0
59301	0	0	2	1052.03
59302	0	0	0	0
59402	0	0	0	0
60101	0	0	0	0
60102	0	0	1	915.03
60103	0	0	0	0
60201	0	0	0	0
60301	0	0	0	0
60305	0	0	0	0
60404	0	0	0	0
60502	0	0	0	0
60504	0	0	0	0
60604	0	0	0	0
60605	0	0	0	0
60701	0	0	1	1128.03
60801	0	0	0	0
60802	0	0	0	0
60803	0	0	0	0
60902	0	0	0	0
60903	0	0	0	0
60904	0	0	0	0
61001	0	0	0	0
61002	0	0	0	0
61101	0	0	0	0

Appendix B - Aggregate Active Management Event Counts

61102	0	0	0	0
61103	0	0	0	0
61202	0	0	0	0
61301	0	0	0	0
61302	0	0	0	0
61303	0	0	0	0
61304	0	0	0	0
61306	0	0	0	0
61404	0	0	0	0
61501	0	0	0	0
61502	0	0	0	0
61503	0	0	0	0
61504	0	0	0	0
61505	0	0	0	0
61506	0	0	0	0
61701	0	0	0	0
61702	0	0	0	0
61703	0	0	0	0
61801	0	0	33	1127.55
61802	0	0	6	1072.86
62101	0	0	0	0
62102	0	0	0	0
62104	0	0	0	0
62105	0	0	7	1194.32
62601	0	0	0	0
62604	0	0	0	0
62605	0	0	0	0
62607	0	0	0	0
63201	0	0	0	0
63204	0	0	0	0
63303	0	0	0	0
63304	0	0	0	0
63305	0	0	0	0
63306	0	0	0	0
63401	0	0	0	0
63403	0	0	0	0
63501	0	0	0	0
63601	0	0	0	0
63602	0	0	20	1165.48
63801	0	0	0	0
63802	0	0	9	1063.59
63803	0	0	0	0
63804	0	0	0	0
64101	0	0	0	0
64201	0	0	0	0
64202	0	0	0	0
64203	0	0	0	0

Appendix B - Aggregate Active Management Event Counts

64301	0	0	17	1184.97
64302	0	0	0	0
64303	0	0	0	0
64304	0	0	0	0
64305	0	0	0	0
64401	0	0	2	1234.53
64402	0	0	0	0
64403	0	0	2	1120.03
64404	0	0	0	0
64501	0	0	0	0
64503	0	0	0	0
64601	0	0	0	0
64602	0	0	0	0
64603	0	0	0	0
64605	0	0	0	0
64701	0	0	0	0
64702	0	0	0	0
64704	0	0	0	0
64801	0	0	0	0
64802	0	0	0	0
64902	0	0	0	0
64903	0	0	0	0
64904	0	0	0	0
65001	0	0	0	0
65004	0	0	1	729.03
65005	0	0	0	0
65201	0	0	0	0
65203	0	0	0	0
65205	0	0	0	0
65207	0	0	0	0
65302	0	0	0	0
65303	0	0	0	0
65401	0	0	0	0
65402	0	0	0	0
65502	0	0	0	0
65503	0	0	1	42.03
65601	0	0	0	0
65603	0	0	0	0
65604	0	0	1	834.03
65701	0	0	3	1154.7
65702	0	0	0	0
65703	0	0	0	0
65801	0	0	0	0
65802	0	0	0	0
65804	0	0	1	1316.03
65901	0	0	0	0
65902	0	0	0	0

Appendix B - Aggregate Active Management Event Counts

65903	0	0	0	0
65904	0	0	0	0
66001	0	0	0	0
66103	0	0	0	0
66201	0	0	0	0
66202	0	0	0	0
66203	0	0	0	0
66301	0	0	0	0
66302	0	0	0	0
66401	0	0	0	0
66402	0	0	0	0
66502	0	0	0	0
66503	0	0	0	0
66504	0	0	3	1084.7
66505	0	0	5	1111.23
66701	0	0	0	0
66702	0	0	0	0
66703	0	0	0	0
66901	0	0	0	0
66902	0	0	1	906.03
66903	0	0	3	1232.03
67001	0	0	0	0
67002	0	0	0	0
67003	0	0	0	0
67004	0	0	0	0
67103	0	0	0	0
67106	0	0	0	0
67202	0	0	0	0
67203	0	0	0	0
67204	0	0	0	0
67303	0	0	0	0
67401	0	0	0	0
67402	0	0	0	0
67501	0	0	0	0
67502	0	0	0	0
67503	0	0	7	876.6
67504	0	0	0	0
67505	0	0	0	0
67601	0	0	0	0
67602	0	0	0	0
67603	0	0	1	721.03
67604	0	0	0	0
67605	0	0	14	1166.39
67702	0	0	0	0
67703	0	0	0	0
67801	0	0	0	0
67802	0	0	0	0

Appendix B - Aggregate Active Management Event Counts

67803	0	0	0	0
67804	0	0	0	0
67805	0	0	0	0
67901	0	0	0	0
67903	0	0	0	0
67904	0	0	0	0
	0	0	31	1082.64

Appendix C - Grid Benefits Achieved in Each Instance of Active Management

Event Start Time	Feeder	Substation Transformer	# Voltage Violations Before DER Management	# Voltage Violations After DER Management	Change in # of Voltage Violations	Avg Voltage Violation Magnitude Before DER Management (Per Unit)	Avg Voltage Violation Magnitude After DER Management (Per Unit)	Change in Avg Voltage Violation	Feeder MVAR Before DER Management	Feeder MVAR After DER Management	# of Capacitors Closed Before DER Management	# of Capacitors Closed After DER Management	# of Capacitors Operated	Total Size of Capacitors Closed Before DER Management (kVAR)	Total Size of Capacitors Closed After DER Management (kVAR)	Total Size of Capacitors Operated (kVAR)
10/11/2022 14:30	41801	GOCI_T2	1	1	0	0.1	0.1	0	0	0	0	0	0	0	0	0
10/28/2022 13:57	25502	MADI_T1	3	7	4	0.73	0.3	-0.43	0	0	0	0	0	0	0	0
10/28/2022 13:57	25503	MADI_T1	1007	1021	14	1.25	1.42	0.17	0	0	0	0	0	0	0	0
10/28/2022 13:57	25501	MADI_T1	179	202	23	0.33	0.42	0.09	0	0	0	0	0	0	0	0
10/31/2022 10:32	13302	ORVI_T2	0	1	1	0	0.2	0.2	0	0	0	0	0	0	0	0
11/1/2022 17:26	45303	WBER_T2	8	8	0	0.26	0.33	0.07	-0.77	-0.76	0	0	0	0	0	0
11/1/2022 23:19	56602	HAMP_T2	0	2	2	0	0.2	0.2	0	0	0	0	0	0	0	0
11/3/2022 11:47	45303	WBER_T2	0	1	1	0	0	0	0.44	0.45	0	0	0	0	0	0
11/3/2022 15:25	54701	NEBL_T1	1	6	5	1.5	0.38	-1.12	0	0	1	1	0	600	600	0
11/3/2022 15:31	44902	SCOT_T2	4	13	9	0.33	0.15	-0.18	-0.75	-0.82	1	1	0	1200	1200	0
11/3/2022 15:33	52503	PROG_T2	0	1	1	0	0.2	0.2	0	0	0	0	0	0	0	0
11/4/2022 20:53	42802	SELI_T1	1	1	0	1	0.9	-0.1	-0.92	-0.93	1	1	0	900	900	0
11/7/2022 12:34	16101	BING_T2	1	0	-1	0.1	0	-0.1	0.37	0.37	0	0	0	0	0	0
11/7/2022 12:48	40502	CRES_T2	10	12	2	0.46	0.49	0.03	0.02	0.02	0	0	0	0	0	0
11/7/2022 12:48	40501	CRES_T2	197	198	1	1.81	1.96	0.15	0	0	0	0	0	0	0	0
11/7/2022 12:50	13302	ORVI_T2	5	8	3	1.1	0.83	-0.27	0.85	0.85	0	0	0	0	0	0
11/8/2022 13:32	29402	BELT_T1	1	1	0	0.2	0.2	0	0	0	0	0	0	0	0	0
11/8/2022 13:51	54701	NEBL_T1	1	1	0	0.2	0.2	0	0	0	1	1	0	600	600	0
11/8/2022 15:33	44901	SCOT_T2	3	12	9	0.13	0.15	0.02	0	0	0	0	0	0	0	0
11/8/2022 15:33	44902	SCOT_T2	258	419	161	0.16	0.17	0.01	-0.87	-0.87	1	1	0	1200	1200	0
11/8/2022 18:27	16101	BING_T2	5	1	-4	0.62	0	-0.62	0.35	0.35	0	0	0	0	0	0
11/8/2022 19:34	57401	SPAN_T1	2	2	0	0.65	0.85	0.2	-0.02	-0.01	3	3	0	2400	2400	0
11/8/2022 20:58	67605	WARW_T1	2	5	3	0.16	0.16	0.06	0	0	0	0	0	0	0	0
11/8/2022 21:32	53802	MBRG_T2	773	732	-41	0.3	0.31	0.01	0.74	0.71	0	0	0	0	0	0
11/8/2022 21:32	53803	MBRG_T2	159	139	-20	0.41	0.43	0.02	0	0	0	0	0	0	0	0
11/8/2022 21:32	53801	MBRG_T2	410	420	10	0.32	0.3	-0.02	0	0	0	0	0	0	0	0
11/9/2022 14:27	41802	GOCI_T2	1	1	0	0.2	0.2	0	0	0	0	0	0	0	0	0
11/10/2022 16:04	44902	SCOT_T2	18	91	73	0.1	0.13	0.03	-0.82	-0.82	1	1	0	1200	1200	0
11/10/2022 17:04	53802	MBRG_T2	40	1	-39	0.14	0.1	-0.04	0.75	0.75	0	0	0	0	0	0
11/10/2022 17:04	53801	MBRG_T2	1	2	1	0.6	0.3	-0.3	0	0	0	0	0	0	0	0
11/10/2022 17:04	53803	MBRG_T2	26	0	-26	0.11	0	-0.11	0	0	0	0	0	0	0	0
11/10/2022 19:23	41802	GOCI_T2	1	8	7	0.1	0.11	0.01	0	0	0	0	0	0	0	0
11/11/2022 15:03	45303	WBER_T2	8	8	0	0.29	0.34	0.05	-0.11	-0.11	0	0	0	0	0	0
11/11/2022 21:46	54701	NEBL_T1	2	6	4	0.45	0.32	-0.13	0	0	1	1	0	600	600	0
11/14/2022 11:35	40501	CRES_T2	198	191	-7	1.94	0.7	-1.24	0	0	0	0	0	0	0	0
11/14/2022 11:35	40502	CRES_T2	322	166	-156	0.41	0.33	-0.08	-0.82	-0.83	0	0	0	0	0	0
11/14/2022 12:46	16101	BING_T2	1	0	-1	0.1	0.2	0.1	0.37	0.36	0	0	0	0	0	0
11/14/2022 12:46	16103	BING_T2	2	2	0	0.3	0.35	0.05	0	0	0	0	0	0	0	0
11/14/2022 12:50	25501	MADI_T1	1	1	0	0.4	0.2	-0.2	-0.25	-0.24	1	1	0	600	600	0
11/14/2022 12:50	25502	MADI_T1	1	1	0	0.2	0.6	0.4	0	0	0	0	0	0	0	0
11/14/2022 12:50	25503	MADI_T1	459	575	116	0.83	0.8	-0.03	0	0	0	0	0	0	0	0
11/14/2022 13:17	13302	ORVI_T2	30	28	-2	0.34	0.36	0.02	0.66	0.66	0	0	0	0	0	0
11/15/2022 11:24	40501	CRES_T2	198	200	2	1.97	2.4	0.43	0	0	0	0	0	0	0	0
11/15/2022 11:24	40502	CRES_T2	21	96	75	0.44	0.41	-0.03	-0.67	-0.69	0	0	0	0	0	0
11/15/2022 15:54	45003	LIME_2	2	2	0	1.5	2.2	0.7	0	0	4	4	0	3000	3000	0
11/15/2022 15:55	61803	EELI_T2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
11/15/2022 15:55	61802	EELI_T2	0	8	8	0	0	0	0	0	0	0	0	0	0	0
11/16/2022 9:20	53903	HALI_T2	36	30	-6	0.32	0.31	-0.01	-0.1	-0.1	0	0	0	0	0	0
11/16/2022 9:20	53901	HALI_T2	17	25	8	0.52	0.39	-0.13	0	0	0	0	0	0	0	0
11/16/2022 22:50	25503	MADI_T1	570	671	101	1.01	0.99	-0.02	0	0	0	0	0	0	0	0
11/17/2022 12:22	13302	ORVI_T2	6	13	7	0.15	0.22	0.07	0.79	0.77	0	0	0	0	0	0
11/17/2022 14:21	57401	SPAN_T1	19	149	130	0.54	0.35	-0.19	-1.66	-1.73	3	3	0	2400	2400	0
11/17/2022 14:21	57403	SPAN_T1	18	36	18	0.23	0.32	0.09	0	0	0	0	0	0	0	0
11/17/2022 14:37	40502	CRES_T2	51	56	5	0.55	0.73	0.18	-0.08	-0.1	0	0	0	0	0	0
11/17/2022 14:37	40501	CRES_T2	199	199	0	2.44	2.82	0.38	0	0	0	0	0	0	0	0
11/17/2022 14:48	52502	PROG_T2	0	1	1	0	0	0	-0.53	-0.54	1	1	0	900	900	0
11/17/2022 17:12	45301	WBER_T2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
11/17/2022 17:12	45302	WBER_T2	3	12	9	0.23	0.4	0.17	0	0	0	0	0	0	0	0
11/17/2022 17:12	45303	WBER_T2	2	1	-1	3.25	0.5	-2.75	0.62	0.63	0	0	0	0	0	0
11/18/2022 8:23	25503	MADI_T1	191	275	84	0.48	0.61	0.13	0	0	0	0	0	0	0	0
11/18/2022 8:23	25501	MADI_T1	1	1	0	0.7	0	-0.7	0.42	0.42	1	1	0	600	600	0
11/18/2022 8:34	29402	BELT_T1	1	1	0	3.5	0	-3.5	0	0	0	0	0	0	0	0
11/18/2022 8:34	29401	BELT_T1	46	53	7	0.34	0.4	0.06	0	0	1	1	0	900	900	0
11/28/2022 14:03	29401	BELT_T1	107	104	-3	0.7	0.67	-0.03	0	0	1	1	0	900	900	0
11/28/2022 15:40	40502	CRES_T2	526	530	4	0.58	0.58	0	-0.89	-0.92	0	0	0	0	0	0
11/28/2022 15:40	40501	CRES_T2	199	197	-2	1.6	1.51	-0.09	0	0	0	0	0	0	0	0

Appendix C - Grid Benefits Achieved in Each Instance of Active Management

11/28/2022 16:59	61801	EELI_T2	2	3	1	0.5	0.6	0.1	-0.33	-0.33	1	1	0	600	600	0
11/28/2022 17:06	13302	ORVI_T2	5	18	13	0.14	0.22	0.08	0.66	0.66	0	0	0	0	0	0
11/28/2022 17:28	52102	MEIS_T1	210	203	-7	0.96	0.75	-0.21	0	0	1	1	0	450	450	0
11/28/2022 17:28	52101	MEIS_T1	1	1	0	0.5	0.1	-0.4	0	0	0	0	0	0	0	0
11/28/2022 19:47	53901	HALI_T2	2	2	0	1	0.9	-0.1	0	0	0	0	0	0	0	0
11/28/2022 19:47	53903	HALI_T2	2	2	0	0.55	0.65	0.1	-0.24	-0.24	0	0	0	0	0	0
11/28/2022 20:58	25503	MADI_T1	401	493	92	0.95	1.12	0.17	0	0	0	0	0	0	0	0
11/28/2022 20:58	25501	MADI_T1	0	1	1	0	0	0	0.38	0.38	1	1	0	600	600	0
11/29/2022 15:10	57403	SPAN_T1	5	2	-3	0.12	0.1	-0.02	0	0	0	0	0	0	0	0
11/29/2022 15:10	57401	SPAN_T1	2	2	0	0.25	0.4	0.15	0.46	-0.07	0	0	0	0	0	0
11/29/2022 17:44	60101	COCA_T1	0	318	318	0	0.25	0.25	0	0	0	0	0	0	0	0
11/29/2022 17:44	60102	COCA_T1	0	36	36	0	0.12	0.12	-1.44	-1.4	3	3	0	2100	2100	0
11/29/2022 17:47	61801	EELI_T2	1	2	1	0.2	0.65	0.45	0	0	0	0	0	0	0	0
11/29/2022 18:25	56602	HAMP_T2	1	0	-1	0.1	0	-0.1	0	0	0	0	0	0	0	0
11/29/2022 19:26	61801	EELI_T2	1	1	0	0.8	0.8	0	-0.3	-0.3	0	0	0	0	0	0
11/29/2022 19:28	15801	WGAT_T1	3	3	0	0.73	0.4	-0.33	0	0.73	0	0	0	0	0	0
11/29/2022 19:48	52402	GRPA_T2	3	142	139	0.5	0.86	0.36	0	0	0	0	0	0	0	0
11/29/2022 19:48	52404	GRPA_T2	44	331	287	0.4	0.91	0.61	0	0	0	0	0	0	0	0
11/29/2022 19:48	52403	GRPA_T2	84	396	312	0.53	0.95	0.42	0	0	0	0	0	0	0	0
11/29/2022 19:48	52401	GRPA_T2	2	315	313	0.35	0.67	0.32	-1.04	-1.05	0	0	0	0	0	0
11/29/2022 21:35	25503	MADI_T1	571	851	280	1.09	1.13	0.04	0	0	0	0	0	0	0	0
11/29/2022 21:35	25502	MADI_T1	51	65	14	0.2	0.45	0.25	0	0	0	0	0	0	0	0
11/29/2022 21:35	25501	MADI_T1	156	201	45	0.48	0.58	0.1	-0.25	-0.26	1	1	0	600	600	0
11/29/2022 21:52	67503	WEWI_T2	1	1	0	0	0	0	-0.09	-0.12	0	0	0	0	0	0
11/29/2022 21:52	67502	WEWI_T2	0	3	3	0	0.13	0.13	0	0	0	0	0	0	0	0
11/29/2022 22:07	53801	MBRG_T2	1	0	-1	0.2	0	-0.2	0	0	0	0	0	0	0	0
11/30/2022 13:32	63804	HEMP_T1	1	1	0	5.8	5.9	0.1	0	0	0	0	0	0	0	0
11/30/2022 13:32	63803	HEMP_T1	0	1	1	0	0.1	0.1	0	0	0	0	0	0	0	0
11/30/2022 14:13	57401	SPAN_T1	2	2	0	1.25	1	-0.25	0.11	0.11	1	1	0	600	600	0
11/30/2022 20:48	52202	DEVO_T2	2	3	1	0.5	0.35	-0.15	-0.82	-0.82	0	0	0	0	0	0
11/30/2022 20:55	54701	NEBL_T1	2	2	0	0.35	0.4	0.05	0	0	0	0	0	0	0	0
11/30/2022 21:01	67502	WEWI_T2	0	9	9	0	0.12	0.12	0	0	0	0	0	0	0	0
11/30/2022 21:01	67503	WEWI_T2	1	1	0	0	0	-0.06	-0.03	0	0	0	0	0	0	0
12/1/2022 12:36	52101	MEIS_T1	1	0	-1	0.8	0	-0.8	0	0	0	0	0	0	0	0
12/1/2022 13:00	50105	HARR_T3	6	13	7	5.47	4.71	-0.76	0	0	0	0	0	0	0	0
12/1/2022 13:00	50103	HARR_T3	0	1	1	0	0.4	0.4	-1.48	-1.47	1	1	0	1200	1200	0
12/1/2022 13:00	50201	HARR_T3	1	1	0	0.7	0.8	0.1	0	0	0	0	0	0	0	0
12/1/2022 13:12	13302	ORVI_T2	185	213	28	0.23	0.26	0.03	0.72	0.69	0	0	0	0	0	0
12/1/2022 13:53	42802	SELI_T1	1	0	-1	0.4	0	-0.4	-0.07	-0.06	0	0	0	0	0	0
12/1/2022 14:10	51302	WIND_T1	103	171	68	0.15	0.16	0.01	0.03	0.03	0	0	0	0	0	0
12/1/2022 14:10	51306	WIND_T2	2	5	3	0.15	0.16	0.01	0	0	0	0	0	0	0	0
12/1/2022 14:16	64305	LINC_T1	3	3	0	0.43	0.53	0.1	0	0	0	0	0	0	0	0
12/1/2022 14:32	29401	BELT_T1	78	115	37	0.49	0.53	0.04	0	0	0	0	0	0	0	0
12/1/2022 15:25	57403	SPAN_T1	24	85	61	0.15	0.2	0.05	0	0	0	0	0	0	0	0
12/1/2022 15:25	57401	SPAN_T1	1056	1365	309	0.35	0.44	0.09	-1.81	-1.81	3	3	0	2400	2400	0
12/1/2022 15:49	16101	BING_T2	5	11	6	0.24	0.37	0.13	0.49	0.51	0	0	0	0	0	0
12/2/2022 11:25	57401	SPAN_T1	264	476	212	0.35	0.4	0.05	-1.7	-1.72	3	3	0	2400	2400	0
12/2/2022 11:25	57403	SPAN_T1	21	41	20	0.28	0.32	0.04	0	0	0	0	0	0	0	0
12/2/2022 11:32	64305	LINC_T1	1	0	-1	3.8	0	-3.8	0	0	0	0	0	0	0	0
12/2/2022 11:40	57401	SPAN_T1	306	530	224	0.35	0.41	0.06	-1.72	-1.74	3	3	0	2400	2400	0
12/2/2022 11:40	57403	SPAN_T1	34	54	20	0.27	0.29	0.02	0	0	0	0	0	0	0	0
12/2/2022 11:43	52204	DEVO_T2	0	1	1	0	0.2	0.2	0	0	0	0	0	0	0	0
12/2/2022 12:12	15801	WGAT_T1	4	4	0	0.53	0.63	0.1	0	0	0	0	0	0	0	0
12/2/2022 12:38	44902	SCOT_T2	0	1	1	0	0.3	0.3	-0.87	-0.88	1	1	0	1200	1200	0
12/2/2022 12:50	53803	MBRG_T2	4	5	1	0.38	0.4	0.02	0.04	0.03	0	0	0	0	0	0
12/2/2022 12:50	53801	MBRG_T2	1	1	0	0.5	0.5	0	0	0	0	0	0	0	0	0
12/2/2022 12:51	53901	HALI_T2	4	7	3	0.73	0.67	-0.06	0	0	0	0	0	0	0	0
12/2/2022 12:51	53903	HALI_T2	5	7	2	1.02	0.8	-0.22	-0.11	-0.11	0	0	0	0	0	0
12/2/2022 13:04	29401	BELT_T1	60	100	40	0.39	0.6	0.21	0	0	0	0	0	0	0	0
12/2/2022 13:04	29402	BELT_T1	0	3	3	0	0.33	0.33	0	0	0	0	0	0	0	0
12/2/2022 13:37	51302	WIND_T1	2	1	-1	0.15	0.1	-0.05	0.02	0.02	0	0	0	0	0	0
12/2/2022 14:04	63804	HEMP_T1	1	1	0	6.1	6	-0.1	0	0	0	0	0	0	0	0
12/2/2022 14:04	63803	HEMP_T1	1	1	0	0.5	0.5	0	0	0	0	0	0	0	0	0
12/5/2022 10:44	63804	HEMP_T1	1	1	0	5.6	5.8	0.2	0	0	0	0	0	0	0	0
12/5/2022 10:44	63801	HEMP_T1	2	2	0	0.15	0.3	0.15	0	0	0	0	0	0	0	0
12/5/2022 10:44	63802	HEMP_T1	2	2	0	0.15	0.25	0.1	-0.36	-0.34	0	0	0	0	0	0
12/5/2022 10:44	63803	HEMP_T1	5	4	-1	0.32	0.4	0.08	0	0	0	0	0	0	0	0
12/5/2022 10:50	54701	NEBL_T1	2	1	-1	1.3	1.8	0.5	0	0	1	0	-1	600	0	-600
12/5/2022 10:55	40502	CRES_T2	15	51	36	0.47	0.63	0.16	-0.61	-0.63	0	0	0	0	0	0
12/5/2022 10:55	40501	CRES_T2	8	198	190	0.25	0.87	0.62	0	0	0	0	0	0	0	0
12/5/2022 11:05	42801	SELI_T1	0	1	1	0	0	0	0	0	0	0	0	0	0	0

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12/5/2022 11:15	41801	GOCI_T2	0	2	2	0	0.15	0.15	0	0	0	0	0	0	0	0
12/5/2022 11:16	63601	LETO_T1	0	1	1	0	0	0	0	0	0	0	0	0	0	0
12/5/2022 11:46	41702	LOGA_T2	53	58	5	0.17	0.18	0.01	0	0	0	0	0	0	0	0
12/5/2022 12:31	50201	HARR_T3	1	1	0	0.6	0.6	0	0	0	0	0	0	0	0	0
12/5/2022 12:31	50103	HARR_T3	2	0	-2	0.15	0	-0.15	-1.43	-0.26	0	0	0	0	0	0
12/5/2022 12:31	50105	HARR_T3	6	6	0	5.77	5.73	-0.04	0	0	0	0	0	0	0	0
12/5/2022 13:04	52102	MEIS_T1	2	258	256	0.45	0.46	0.01	0	0	0	0	0	0	0	0
12/5/2022 13:04	52101	MEIS_T1	1	1	0	0.2	0.9	0.7	0	0	0	0	0	0	0	0
12/5/2022 14:25	51306	WIND_T2	0	4	4	0	0.13	0.13	0.26	0.26	0	0	0	0	0	0
12/5/2022 14:25	51304	WIND_T2	0	2	2	0	0.15	0.15	0	0	0	0	0	0	0	0
12/5/2022 14:25	51302	WIND_T2	1	226	225	0.1	0.14	0.04	0	0	0	0	0	0	0	0
12/5/2022 14:37	57403	SPAN_T1	13	18	5	0.35	0.3	-0.05	0	0	0	0	0	0	0	0
12/5/2022 14:37	57401	SPAN_T1	4	4	0	0.53	0.6	0.07	-0.54	-0.58	1	1	0	600	600	0
12/5/2022 14:41	51304	WIND_T2	2	1	-1	0.15	0.1	-0.05	0	0	0	0	0	0	0	0
12/5/2022 14:41	51302	WIND_T2	225	102	-123	0.14	0.12	-0.02	0	0	0	0	0	0	0	0
12/5/2022 14:41	51306	WIND_T2	4	0	-4	0.13	0	-0.13	0.26	0.27	0	0	0	0	0	0
12/5/2022 14:42	57403	SPAN_T1	13	18	5	0.35	0.3	-0.05	0	0	0	0	0	0	0	0
12/5/2022 14:42	57401	SPAN_T1	4	4	0	0.53	0.6	0.07	-0.54	-0.58	1	1	0	600	600	0
12/5/2022 14:46	53802	MBRG_T2	1	44	43	0.1	0.14	0.04	1.29	0.98	0	0	0	0	0	0
12/5/2022 14:46	53801	MBRG_T2	1	2	1	0.4	0.3	-0.1	0	0	0	0	0	0	0	0
12/5/2022 14:46	53803	MBRG_T2	4	54	50	0.28	0.15	-0.13	0	0	0	0	0	0	0	0
12/5/2022 14:46	29401	BELT_T1	103	74	-29	0.64	0.55	-0.09	0	0	0	0	0	0	0	0
12/5/2022 14:48	29401	BELT_T1	103	74	-29	0.64	0.55	-0.09	0	0	0	0	0	0	0	0
12/5/2022 14:52	53903	HALI_T2	11	3	-8	0.5	1.23	0.73	-0.11	-0.11	0	0	0	0	0	0
12/5/2022 14:52	53901	HALI_T2	8	10	2	0.59	0.51	-0.08	0	0	0	0	0	0	0	0
12/5/2022 14:52	53902	HALI_T2	1	0	-1	0.1	0	-0.1	0	0	0	0	0	0	0	0
12/6/2022 9:15	53903	HALI_T2	21	2	-19	0.37	1.4	1.03	-0.17	-0.17	0	0	0	0	0	0
12/6/2022 9:15	53901	HALI_T2	6	4	-2	0.8	0.73	-0.07	0	0	0	0	0	0	0	0
12/6/2022 10:03	25502	MADI_T1	3	3	0	0.1	0.1	0	0	0	0	0	0	0	0	0
12/6/2022 10:03	25503	MADI_T1	858	894	36	0.73	0.81	0.08	0	0	0	0	0	0	0	0
12/6/2022 10:03	25501	MADI_T1	195	218	23	0.46	0.66	0.2	-0.25	-0.25	1	1	0	600	600	0
12/6/2022 10:32	50105	HARR_T3	19	19	0	3.05	5.53	2.48	0	0	0	0	0	0	0	0
12/6/2022 10:32	50201	HARR_T3	1	1	0	1.7	1.6	-0.1	0	0	0	0	0	0	0	0
12/6/2022 10:32	50103	HARR_T3	1	2	1	0.2	0.6	0.4	-1.32	-1.32	1	1	0	1200	1200	0
12/6/2022 11:21	57401	SPAN_T1	2	3	1	0.45	0.73	0.28	-0.42	-0.44	1	1	0	600	600	0
12/6/2022 11:21	57403	SPAN_T1	14	38	24	0.22	0.39	0.17	0	0	0	0	0	0	0	0
12/6/2022 11:36	57401	SPAN_T1	3	2	-1	0.73	0.8	0.07	-0.44	-0.44	1	1	0	600	600	0
12/6/2022 11:36	57403	SPAN_T1	34	32	-2	0.41	0.33	-0.08	0	0	0	0	0	0	0	0
12/6/2022 14:39	29401	BELT_T1	142	173	31	0.63	0.74	0.11	0	0	0	0	0	0	0	0
12/6/2022 14:39	29402	BELT_T1	9	16	7	0.12	0.14	0.02	0	0	0	0	0	0	0	0
12/6/2022 14:44	41802	GOCI_T2	0	1	1	0	0.1	0.1	0	0	0	0	0	0	0	0
12/6/2022 19:48	63804	HEMP_T1	1	1	0	6.1	6.2	0.1	0	0	0	0	0	0	0	0
12/6/2022 19:48	53801	MBRG_T2	1	2	1	0.2	0.4	0.2	0	0	0	0	0	0	0	0
12/6/2022 19:48	53802	MBRG_T2	0	4	4	0	0.13	0.13	0	0	0	0	0	0	0	0
12/7/2022 10:55	26001	WDAM_T1	1	1	0	6.5	5.5	-1	-0.36	-0.37	0	0	0	0	0	0
12/7/2022 11:15	53901	HALI_T2	4	4	0	0.85	0.78	-0.07	0	0	0	0	0	0	0	0
12/7/2022 11:15	53903	HALI_T2	2	2	0	1.2	1.3	0.1	-0.11	-0.11	0	0	0	0	0	0
12/7/2022 12:06	57403	SPAN_T1	0	48	48	0	0.33	0.33	0	0	0	0	0	0	0	0
12/7/2022 12:06	57401	SPAN_T1	2	373	371	0.25	0.45	0.2	-1.06	-0.98	0	1	1	0	900	900
12/7/2022 13:44	56602	HAMP_T2	2	2	0	0.35	0.4	0.05	0	0	0	0	0	0	0	0
12/7/2022 14:30	50103	HARR_T3	0	1	1	0	0.2	0.2	0.07	-0.75	0	0	0	0	0	0
12/7/2022 14:30	50105	HARR_T3	6	6	0	6.97	6.27	-0.7	0	0	0	0	0	0	0	0
12/7/2022 14:30	50201	HARR_T3	0	1	1	0	0.5	0.5	0	0	0	0	0	0	0	0
12/7/2022 14:41	67503	WEWI_T2	1	1	0	0	0	0	-0.36	-0.36	0	0	0	0	0	0
12/7/2022 14:50	53802	MBRG_T2	0	2	2	0	0.1	0.1	0	0	0	0	0	0	0	0
12/7/2022 14:50	57403	SPAN_T1	2	69	67	0.15	0.2	0.05	0	0	0	0	0	0	0	0
12/7/2022 14:50	53803	MBRG_T2	0	1	1	0	0.1	0.1	0.04	0.04	0	0	0	0	0	0
12/7/2022 14:50	53801	MBRG_T2	0	1	1	0	0.5	0.5	0	0	0	0	0	0	0	0
12/7/2022 14:50	57401	SPAN_T1	32	87	55	0.28	0.38	0.1	-0.85	-0.88	2	2	0	1500	1500	0
12/7/2022 14:58	41802	GOCI_T2	0	6	6	0	0.13	0.13	0	0	0	0	0	0	0	0
12/8/2022 10:28	61801	EELI_T2	2	2	0	0.4	0.25	-0.15	-0.38	-0.38	0	0	0	0	0	0
12/8/2022 10:29	56602	HAMP_T2	2	2	0	0.7	0.55	-0.15	0	0	0	0	0	0	0	0
12/8/2022 10:32	53903	HALI_T2	2	2	0	1.7	1.65	-0.05	-0.14	-0.14	0	0	0	0	0	0
12/8/2022 10:32	53901	HALI_T2	5	5	0	0.58	0.66	0.08	0	0	0	0	0	0	0	0
12/8/2022 10:34	13302	ORVI_T2	11	12	1	0.12	0.12	0	0.64	0.64	0	0	0	0	0	0
12/8/2022 10:42	51302	WIND_T2	40	0	-40	0	0.12	0	-0.12	0	0	0	0	0	0	0
12/8/2022 12:21	63804	HEMP_T1	1	1	0	6	6.1	0.1	0	0	0	0	0	0	0	0
12/8/2022 14:02	50201	HARR_T3	0	1	1	0	0.1	0.1	0	0	0	0	0	0	0	0
12/8/2022 14:02	50107	HARR_T3	0	1	1	0	0	0	0	0	0	0	0	0	0	0
12/8/2022 14:02	50105	HARR_T3	6	6	0	6.78	6.43	-0.35	0	0	0	0	0	0	0	0
12/8/2022 14:41	41802	GOCI_T2	0	2	2	0	0.1	0.1	0	0	0	0	0	0	0	0

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12/9/2022 9:44	53903	HALI_T2	8	16	8	0.54	0.39	-0.15	-0.08	-0.08	0	0	0	0	0	0
12/9/2022 9:44	53901	HALI_T2	4	5	1	0.78	0.48	-0.3	0	0	0	0	0	0	0	0
12/9/2022 9:44	53902	HALI_T2	4	1	-3	0.2	0.2	0	0	0	0	0	0	0	0	0
12/9/2022 9:49	25502	MADI_T1	0	1	1	0	0.2	0.2	0	0	0	0	0	0	0	0
12/9/2022 10:01	52102	MEIS_T1	1	269	268	0.2	0.45	0.25	0	0	0	0	0	0	0	0
12/9/2022 10:01	52101	MEIS_T1	0	1	1	0	1.4	1.4	0	0	0	0	0	0	0	0
12/9/2022 10:12	40502	CRES_T2	10	1	-9	0.22	0.1	-0.12	0.89	0.88	0	0	0	0	0	0
12/9/2022 11:14	41801	GOCI_T2	3	4	1	0.4	0.45	0.05	0	0	0	0	0	0	0	0
12/9/2022 11:14	41802	GOCI_T2	3	2	-1	0.17	0.1	-0.07	0	0	0	0	0	0	0	0
12/9/2022 11:16	64303	LINC_T1	0	1	1	0	0.2	0.2	0	0	0	0	0	0	0	0
12/9/2022 12:03	53803	MBRG_T2	1	4	3	0.1	0.18	0.08	0.04	0.04	0	0	0	0	0	0
12/9/2022 12:17	41702	LOGA_T2	6	74	68	0.15	0.2	0.05	0	0	0	0	0	0	0	0
12/9/2022 12:22	51306	WIND_T2	0	1	1	0	0.1	0.1	0.15	0.14	0	0	0	0	0	0
12/9/2022 12:22	51302	WIND_T2	0	1	1	0	0.1	0.1	0	0	0	0	0	0	0	0
12/9/2022 13:04	44902	SCOT_T2	2	2	0	0.3	0.35	0.05	0	0	0	0	0	0	0	0
12/9/2022 14:32	53803	MBRG_T2	32	90	58	0.16	0.42	0.26	0	0	0	0	0	0	0	0
12/9/2022 14:32	53802	MBRG_T2	30	141	111	0.16	0.26	0.1	1.35	1.18	0	0	0	0	0	0
12/9/2022 14:32	53801	MBRG_T2	7	13	6	0.19	0.31	0.12	0	0	0	0	0	0	0	0
12/9/2022 14:38	67503	WEWI_T2	1	1	0	0	0	0	-0.28	-0.28	0	0	0	0	0	0
12/9/2022 14:38	67502	WEWI_T2	23	29	6	0.2	0.2	0	0	0	0	0	0	0	0	0
12/9/2022 14:46	53803	MBRG_T2	71	100	29	0.24	0.4	0.16	0	0	0	0	0	0	0	0
12/9/2022 14:46	53801	MBRG_T2	12	18	6	0.23	0.28	0.05	0	0	0	0	0	0	0	0
12/9/2022 14:46	53802	MBRG_T2	87	174	87	0.22	0.28	0.06	1.18	1.08	0	0	0	0	0	0
12/10/2022 7:06	67503	WEWI_T2	1	1	0	0	0	0	0.02	0.02	0	0	0	0	0	0
12/10/2022 9:34	45303	WBER_T2	0	1	1	0	0.1	0.1	-0.19	-0.19	0	0	0	0	0	0
12/10/2022 9:34	45302	WBER_T2	0	1	1	0	2.1	2.1	0	0	0	0	0	0	0	0
12/10/2022 9:47	25501	MADI_T1	2	54	52	1.2	0.21	-0.99	-0.2	-0.2	1	1	0	600	600	0
12/10/2022 10:00	63803	HEMP_T1	4	4	0	0.15	0.28	0.13	0	0	0	0	0	0	0	0
12/10/2022 10:00	63801	HEMP_T1	14	22	8	0.17	0.16	-0.01	0	0	0	0	0	0	0	0
12/10/2022 10:00	63802	HEMP_T1	1	1	0	0.2	0.3	0.1	-0.51	-0.52	0	0	0	0	0	0
12/10/2022 10:00	63804	HEMP_T1	5	5	0	1.26	1.26	0	0	0	0	0	0	0	0	0
12/10/2022 10:20	52502	PROG_T2	0	1	1	0	0.2	0.2	-0.5	-0.52	1	1	0	900	900	0
12/10/2022 10:37	57401	SPAN_T1	380	302	-78	0.23	0.24	0.01	-1.89	-1.92	3	3	0	2400	2400	0
12/10/2022 10:37	57403	SPAN_T1	1	7	6	0.1	0.2	0.1	0	0	0	0	0	0	0	0
12/10/2022 10:53	57401	SPAN_T1	87	342	255	0.34	0.23	-0.11	-1.92	-1.98	3	3	0	2400	2400	0
12/10/2022 10:53	57403	SPAN_T1	2	13	11	0.1	0.28	0.18	0	0	0	0	0	0	0	0
12/10/2022 11:03	47403	PENS_T1	4	12	8	0.43	0.32	-0.11	0	0	0	0	0	0	0	0
12/10/2022 11:03	47401	PENS_T1	8	5	-3	0.19	0.18	-0.01	1.01	1.07	0	0	0	0	0	0
12/10/2022 12:11	41801	GOCI_T2	62	4	-58	0.21	0.3	0.09	0	0	0	0	0	0	0	0
12/10/2022 12:19	54601	SUMM_T2	1	1	0	0.1	0.2	0.1	0	0	0	0	0	0	0	0
12/10/2022 15:09	26002	WDAM_T1	10	38	28	0.14	0.19	0.05	0	0	0	0	0	0	0	0
12/10/2022 15:09	26001	WDAM_T1	1	1	0	6.5	6.5	0	-0.62	-0.62	0	0	0	0	0	0
12/11/2022 9:46	13503	MCMI_T2	73	85	12	0.53	0.55	0.02	0.34	0.35	0	0	0	0	0	0
12/11/2022 9:48	25503	MADI_T1	193	222	29	0.6	0.51	-0.09	0	0	0	0	0	0	0	0
12/11/2022 9:48	25501	MADI_T1	99	100	1	0.32	0.26	-0.06	-0.17	-0.17	1	1	0	600	600	0
12/11/2022 10:00	52102	MEIS_T1	0	1	1	0	0	0	0	0	0	0	0	0	0	0
12/11/2022 10:11	40502	CRES_T2	2	16	14	0.8	0.27	-0.53	-0.04	-0.03	0	0	0	0	0	0
12/11/2022 11:44	41702	LOGA_T2	148	138	-10	1.03	0.86	-0.17	0	0	0	0	0	0	0	0
12/11/2022 12:28	50106	HARR_T3	0	4	4	0	0.1	0.1	0	0	0	0	0	0	0	0
12/11/2022 12:28	50105	HARR_T3	6	7	1	6.35	6.38	0.03	0	0	0	0	0	0	0	0
12/11/2022 12:28	50201	HARR_T3	1	1	0	0.8	0.9	0.1	0	0	0	0	0	0	0	0
12/12/2022 9:32	13302	ORVI_T2	6	0	-6	0.1	0	-0.1	0.78	0.78	0	0	0	0	0	0
12/12/2022 9:48	25503	MADI_T1	289	363	74	1.13	0.8	-0.33	0	0	0	0	0	0	0	0
12/12/2022 9:48	25501	MADI_T1	77	93	16	0.23	0.28	0.05	-0.23	-0.23	1	1	0	600	600	0
12/12/2022 11:01	41702	LOGA_T2	26	1	-25	0.12	0.1	-0.02	0	0	0	0	0	0	0	0
12/12/2022 11:16	54701	NEBL_T1	2	2	0	1.25	1.05	-0.2	0	0	0	0	0	0	0	0
12/12/2022 11:21	57401	SPAN_T1	16	54	38	0.73	0.32	-0.41	-1.97	-1.71	3	3	0	2400	2400	0
12/12/2022 11:46	50103	HARR_T3	2	4	2	1.15	1.03	-0.12	-0.91	-0.91	0	0	0	0	0	0
12/12/2022 11:46	50105	HARR_T3	6	6	0	5.62	5.53	-0.09	0	0	0	0	0	0	0	0
12/12/2022 11:46	50201	HARR_T3	1	1	0	0.7	0.8	0.1	0	0	0	0	0	0	0	0
12/12/2022 14:46	53801	MBRG_T2	1	3	2	0.3	0.33	0.03	0	0	0	0	0	0	0	0
12/12/2022 14:46	53802	MBRG_T2	0	31	31	0	0.14	0.14	0	0	0	0	0	0	0	0
12/12/2022 14:46	53803	MBRG_T2	0	50	50	0	0.15	0.15	0.05	0.05	0	0	0	0	0	0
12/13/2022 7:59	13503	MCMI_T2	230	299	69	0.78	1.28	0.5	0.44	0.43	0	0	0	0	0	0
12/13/2022 9:14	41702	LOGA_T2	107	133	26	0.31	0.57	0.26	0	0	0	0	0	0	0	0
12/13/2022 9:19	50103	HARR_T3	3	2	-1	1.03	0.9	-0.13	-0.91	-0.92	0	0	0	0	0	0
12/13/2022 9:19	50105	HARR_T3	6	17	11	5.78	5.75	-0.03	0	0	0	0	0	0	0	0
12/13/2022 9:19	50201	HARR_T3	1	1	0	1.6	1.7	0.1	0	0	0	0	0	0	0	0
12/13/2022 9:54	53803	MBRG_T2	2	4	2	0.3	0.23	-0.07	0.06	0.06	0	0	0	0	0	0
12/13/2022 9:54	53801	MBRG_T2	1	1	0	0.1	0.2	0.1	0	0	0	0	0	0	0	0
12/13/2022 10:38	53901	HALI_T2	5	5	0	0.56	0.6	0.04	0	0	0	0	0	0	0	0

Appendix C - Grid Benefits Achieved in Each Instance of Active Management

12/13/2022 10:38	53903	HALI_T2	6	7	1	0.62	0.73	0.11	-0.1	-0.1	0	0	0	0	0	0
12/13/2022 10:46	54701	NEBL_T1	1	1	0	2.8	1.9	-0.9	0	0	0	0	0	0	0	0
12/13/2022 10:47	25501	MADI_T1	177	209	32	0.52	0.56	0.04	-0.13	-0.24	1	1	0	600	600	0
12/13/2022 10:47	25503	MADI_T1	521	861	340	0.8	0.71	-0.09	0	0	0	0	0	0	0	0
12/13/2022 10:47	25502	MADI_T1	55	64	9	0.24	0.34	0.1	0	0	0	0	0	0	0	0
12/13/2022 10:52	52202	DEVO_T2	1	2	1	0.1	0.2	0.1	-0.81	-0.82	0	0	0	0	0	0
12/13/2022 10:52	52204	DEVO_T2	1	1	0	0.2	0.2	0	0	0	0	0	0	0	0	0
12/13/2022 13:06	29401	BELT_T1	0	44	44	0.3	0.3	0	0	0	1	1	0	900	900	0
12/13/2022 13:12	66903	SHIL_T2	0	1	1	0	0.1	0.1	-0.54	-0.54	0	0	0	0	0	0
12/13/2022 13:12	66901	SHIL_T2	2	2	0	0.25	0.3	0.05	0	0	0	0	0	0	0	0
12/13/2022 13:49	51302	WIND_T2	2	0	-2	0.1	0	-0.1	0.05	0.05	0	0	0	0	0	0
12/13/2022 13:49	51304	WIND_T2	1	0	-1	0.2	0	-0.2	0	0	0	0	0	0	0	0
12/13/2022 14:43	52403	GRPA_T2	32	19	-13	0.33	0.21	-0.12	0	0.33	0	0	0	0	0	0
12/13/2022 14:43	52402	GRPA_T2	3	3	0	0.83	0.97	0.14	0	0	0	0	0	0	0	0
12/13/2022 14:43	52404	GRPA_T2	17	3	-14	0.15	0.1	-0.05	0	0	0	0	0	0	0	0
12/13/2022 16:49	50502	MECH_T1	1	1	0	0.2	0.6	0	0	0	0	0	0	0	0	0
12/13/2022 16:49	50503	MECH_T1	0	1	1	0	0	0	0	0	0	0	0	0	0	0
12/13/2022 18:01	26002	WDAM_T1	277	281	4	0.79	1.01	0.22	0	0	0	0	0	0	0	0
12/13/2022 18:01	26001	WDAM_T1	89	109	20	1.06	1.09	0.03	-1.08	-1.07	0	0	0	0	0	0
12/13/2022 18:16	14801	TREI_T2	0	1	1	0	0.7	0.7	0.61	0.64	0	0	0	0	0	0
12/13/2022 18:16	14802	TREI_T2	1	0	-1	0.7	0	-0.7	0	0	0	0	0	0	0	0
12/14/2022 9:10	50503	MECH_T1	0	4	4	0	0	0	0	0	0	0	0	0	0	0
12/14/2022 9:10	50502	MECH_T1	0	1	1	0	0.4	0.4	0	0	0	0	0	0	0	0
12/14/2022 9:11	29401	BELT_T1	5	26	21	0.12	0.18	0.06	0	0	1	1	0	900	900	0
12/14/2022 9:11	29402	BELT_T1	0	1	1	0	0	0	0	0	0	0	0	0	0	0
12/14/2022 10:06	26001	WDAM_T1	108	134	26	0.97	0.84	-0.13	-1.06	-1.07	0	0	0	0	0	0
12/14/2022 10:06	26002	WDAM_T1	113	159	46	0.54	0.68	0.14	0	0	0	0	0	0	0	0
12/14/2022 13:04	13302	ORVI_T2	19	21	2	0.31	0.25	-0.06	0.76	0.74	0	0	0	0	0	0
12/14/2022 17:18	52101	MEIS_T1	1	1	0	0.6	0.6	0	0	0	0	0	0	0	0	0
12/14/2022 17:55	50201	HARR_T3	1	1	0	0.2	0.3	0.1	0	0	0	0	0	0	0	0
12/14/2022 17:55	50105	HARR_T3	6	6	0	6.57	6.55	-0.02	0	0	0	0	0	0	0	0
12/14/2022 17:55	50107	HARR_T3	6	6	0	0.85	0.45	-0.4	0	0	0	0	0	0	0	0
12/14/2022 17:55	50106	HARR_T3	4	4	0	0.93	0.73	-0.2	0	0	0	0	0	0	0	0
12/15/2022 9:12	29402	BELT_T1	1	1	0	4.7	1.8	-2.9	0	0	0	0	0	0	0	0
12/15/2022 9:12	29401	BELT_T1	3	7	4	0.1	0.16	0.06	0	0	1	1	0	900	900	0
12/17/2022 9:27	52401	GRPA_T2	8	4	-4	0.78	0	-0.78	-0.41	-0.42	0	0	0	0	0	0
12/17/2022 9:27	52403	GRPA_T2	2	2	0	0.2	0.25	0.05	0	0	0	0	0	0	0	0
12/17/2022 9:27	52402	GRPA_T2	0	2	2	0	0	0	0	0	0	0	0	0	0	0
12/19/2022 11:07	13503	MCM1_T2	53	76	23	0.67	0.49	-0.18	0.39	0.39	0	0	0	0	0	0
12/19/2022 13:20	42202	SHEN_T2	22	26	4	0.71	0.91	0.2	0	0	0	0	0	0	0	0
12/20/2022 10:03	45901	AUBU_T1	1	1	0	0.1	0.1	0	0	0	0	0	0	0	0	0
12/20/2022 10:03	25501	MADI_T1	83	48	-35	0.25	0.18	-0.07	-0.21	-0.21	1	1	0	600	600	0
12/20/2022 10:03	45902	AUBU_T1	36	36	0	0.34	0.41	0.07	-0.93	-0.94	1	1	0	600	600	0
12/20/2022 10:03	25502	MADI_T1	3	0	-3	0.1	0	-0.1	0	0	0	0	0	0	0	0
12/20/2022 10:03	25503	MADI_T1	308	329	21	0.72	0.62	-0.1	0	0	0	0	0	0	0	0
12/20/2022 10:18	42802	SELI_T1	1	0	-1	0.8	0	-0.8	0.01	0.01	0	0	0	0	0	0
12/20/2022 10:24	42801	SELI_T1	1	0	-1	0.8	0	-0.8	0.01	0.01	0	0	0	0	0	0
12/20/2022 10:27	13302	ORVI_T2	14	171	157	0.24	0.22	-0.02	0.85	0.84	0	0	0	0	0	0
12/20/2022 10:36	50103	HARR_T3	0	3	3	0	0.17	0.17	-0.84	-0.9	0	0	0	0	0	0
12/20/2022 10:36	50105	HARR_T3	6	6	0	5.88	5.77	-0.11	0	0	0	0	0	0	0	0
12/20/2022 10:36	50201	HARR_T3	1	1	0	0.6	0.8	0.2	0	0	0	0	0	0	0	0
12/20/2022 10:37	53903	HALI_T2	2	12	10	1.6	0.44	-1.16	-0.12	-0.12	0	0	0	0	0	0
12/20/2022 10:37	53901	HALI_T2	5	9	4	0.5	0.5	0	0	0	0	0	0	0	0	0
12/20/2022 12:08	41801	GOCI_T2	0	1	1	0	0.1	0.1	0	0	0	0	0	0	0	0
12/20/2022 12:08	41802	GOCI_T2	0	4	4	0	0.18	0.18	0	0	0	0	0	0	0	0
12/20/2022 12:35	64305	LINC_T1	2	2	0	0.4	0.35	-0.05	0	0	0	0	0	0	0	0
12/20/2022 15:12	50105	HARR_T3	10	16	6	3.19	2.02	-1.17	0	0	0	0	0	0	0	0
12/20/2022 15:12	50202	HARR_T3	15	9	-6	0.13	0.12	-0.01	-2.23	-2.23	0	0	0	0	0	0
12/20/2022 15:12	50201	HARR_T3	1	1	0	1.2	1.3	0.1	0	0	0	0	0	0	0	0
12/20/2022 15:12	50103	HARR_T3	8	3	-5	0.48	0.93	0.45	0	0	0	0	0	0	0	0
12/20/2022 15:12	50106	HARR_T3	18	38	20	0.14	0.15	0.01	0	0	0	0	0	0	0	0
12/20/2022 17:36	42802	SELI_T1	2	0	-2	0.45	0	-0.45	0.01	0.01	0	0	0	0	0	0
12/20/2022 17:54	48302	ORWI_T2	3	3	0	0.8	1.07	0.27	-0.02	-0.01	0	0	0	0	0	0
12/20/2022 18:10	43401	BENT_T1	1	1	0	0.1	0	-0.1	0	0	0	0	0	0	0	0
12/20/2022 18:10	43402	BENT_T1	2	0	-2	0.55	0	-0.55	-0.86	-0.87	1	1	0	900	900	0
12/20/2022 18:17	53801	MBRG_T2	1	0	-1	0.1	0	-0.1	0	0	0	0	0	0	0	0
12/21/2022 9:20	50103	HARR_T3	3	3	0	0.63	0.7	0.07	0	0	0	0	0	0	0	0
12/21/2022 9:20	50105	HARR_T3	6	6	0	5.8	5.63	-0.17	0	0	0	0	0	0	0	0
12/21/2022 9:20	50202	HARR_T3	0	3	3	0	0.1	0.1	-2.22	-2.21	0	0	0	0	0	0
12/21/2022 9:20	50201	HARR_T3	1	1	0	1.7	1.8	0.1	0	0	0	0	0	0	0	0
12/21/2022 9:58	53802	MBRG_T2	1	2	1	0.1	0.2	0.1	0	0	0	0	0	0	0	0

Appendix C - Grid Benefits Achieved in Each Instance of Active Management

12/21/2022 9:58	53801	MBRG_T2	1	5	4	0.5	0.2	-0.3	0	0	0	0	0	0	0	0
12/21/2022 9:58	53803	MBRG_T2	2	4	2	0.3	0.33	0.03	0.05	0.05	0	0	0	0	0	0
12/21/2022 10:04	25502	MADI_T1	1	0	-1	0.1	0	-0.1	0	0	0	0	0	0	0	0
12/21/2022 10:04	25503	MADI_T1	220	228	8	0.39	0.6	0.21	0	0	0	0	0	0	0	0
12/21/2022 10:04	25501	MADI_T1	146	106	-40	0.46	0.32	-0.14	-0.17	-0.18	1	1	0	600	600	0
12/21/2022 10:06	42802	SELI_T1	0	1	1	0	0	0	0.01	0.01	0	0	0	0	0	0
12/21/2022 10:12	64403	LAND_T1	0	1	1	0	0	0	0	0	0	0	0	0	0	0
12/21/2022 10:16	64403	LAND_T1	1	0	-1	4.7	0	-4.7	-1.59	-1.61	1	1	0	900	900	0
12/21/2022 13:31	50201	HARR_T3	1	1	0	0.5	0.7	0.2	0	0	0	0	0	0	0	0
12/21/2022 13:31	50103	HARR_T3	3	2	-1	0.83	1.05	0.22	-0.97	-0.97	0	0	0	0	0	0
12/21/2022 13:31	50105	HARR_T3	6	6	0	6.23	6.13	-0.1	0	0	0	0	0	0	0	0
12/21/2022 17:05	42802	SELI_T1	0	2	2	0	0	0	-32.4	-9.41	0	0	0	0	0	0
12/22/2022 9:11	29401	BELT_T1	24	35	11	0.22	0.28	0.06	0	0	1	1	0	900	900	0
12/22/2022 9:20	50201	HARR_T3	1	1	0	0.3	0.3	0	0	0	0	0	0	0	0	0
12/22/2022 9:20	50103	HARR_T3	2	2	0	0.6	1.05	0.45	-0.95	-0.95	0	0	0	0	0	0
12/22/2022 9:20	50105	HARR_T3	6	6	0	6.05	6.03	-0.02	0	0	0	0	0	0	0	0
12/22/2022 9:57	12401	MILF_T1	1	1	0	0.1	0	-0.1	-0.15	-0.12	0	0	0	0	0	0
12/22/2022 10:16	53903	HALI_T2	2	2	0	1.15	1.25	0.1	-0.22	-0.22	0	0	0	0	0	0
12/22/2022 10:16	53901	HALI_T2	5	5	0	0.32	0.18	-0.14	0	0	0	0	0	0	0	0
1/4/2023 13:20	57402	SPAN_T2	253	231	-22	0.24	0.24	0	0	0	0	0	0	0	0	0
1/4/2023 13:20	57404	SPAN_T2	94	74	-20	0.37	0.35	-0.02	0	0	0	0	0	0	0	0
1/4/2023 16:56	13302	ORVI_T2	11	0	-11	0.14	0	-0.14	0.66	0.66	0	0	0	0	0	0
1/4/2023 17:28	53901	HALI_T2	5	5	0	0.8	0.7	-0.1	0	0	0	0	0	0	0	0
1/4/2023 17:28	53903	HALI_T2	8	4	-4	0.5	0.9	0.4	-0.13	-0.13	0	0	0	0	0	0
1/4/2023 17:42	59302	MCAL_T1	23	14	-9	0.32	0.41	0.09	0	0	0	0	0	0	0	0
1/4/2023 17:42	59301	MCAL_T1	56	118	62	0.23	0.35	0.12	-1.08	-1.1	0	0	0	0	0	0
1/4/2023 18:00	59102	WALK_T2	19	75	56	0.25	0.39	0.14	0	0	0	0	0	0	0	0
1/4/2023 18:00	59101	WALK_T2	0	4	4	0	0.2	0.2	-1.65	-1.79	5	5	0	2850	2850	0
1/4/2023 18:05	14801	TREI_T2	1	0	-1	1.3	0	-1.3	0.31	0.32	0	0	0	0	0	0
1/4/2023 19:54	51306	WIND_T2	0	1	1	0	0.1	0.1	0	0	0	0	0	0	0	0
1/4/2023 19:54	51302	WIND_T2	115	193	78	0.15	0.19	0.04	0	0	0	0	0	0	0	0
1/5/2023 10:18	53903	HALI_T2	25	22	-3	0.4	0.48	0.08	-0.15	-0.15	0	0	0	0	0	0
1/5/2023 10:18	53901	HALI_T2	5	5	0	0.86	1	0.14	0	0	0	0	0	0	0	0
1/5/2023 10:18	53902	HALI_T2	2	2	0	0.15	0.3	0.15	0	0	0	0	0	0	0	0
1/5/2023 12:46	13302	ORVI_T2	0	1	1	0	0.3	0.3	0.64	0.64	0	0	0	0	0	0
1/5/2023 13:12	59301	MCAL_T1	4	4	0	0.5	0.33	-0.17	-1.44	-1.45	1	1	0	600	600	0
1/6/2023 16:30	66503	SMAN_T2	0	6	6	0	0.1	0.1	0	0	0	0	0	0	0	0
1/6/2023 16:30	66505	SMAN_T2	2	3	1	0.2	0.63	0.43	-0.32	-0.42	2	2	0	1200	1200	0
1/6/2023 19:29	53903	HALI_T2	2	3	1	1.25	0.93	-0.32	-0.14	-0.14	0	0	0	0	0	0
1/6/2023 19:29	53901	HALI_T2	4	5	1	0.58	0.8	0.22	0	0	0	0	0	0	0	0
1/6/2023 19:37	57402	SPAN_T2	4	4	0	1.8	1.93	0.13	0	0	0	0	0	0	0	0
1/6/2023 19:37	57404	SPAN_T2	6	6	0	1.85	2.1	0.25	0	0	0	0	0	0	0	0
1/6/2023 19:40	29402	BELT_T1	0	9	9	0	0.11	0.11	0	0	0	0	0	0	0	0
1/6/2023 19:40	29401	BELT_T1	146	171	25	0.7	0.86	0.16	0	0	0	0	0	0	0	0
1/6/2023 19:58	13302	ORVI_T2	8	13	5	0.18	0.21	0.03	0.68	0.68	0	0	0	0	0	0
1/6/2023 20:06	41802	GOCI_T2	0	2	2	0	0.1	0.1	0	0	0	0	0	0	0	0
1/6/2023 20:57	59102	WALK_T2	41	51	10	0.29	0.38	0.09	0	0	0	0	0	0	0	0
1/6/2023 20:57	59101	WALK_T2	1	2	1	0.1	0.2	0.1	-0.88	-0.99	4	4	0	2250	2250	0
1/7/2023 9:21	57404	SPAN_T2	6	6	0	0.8	0.97	0.17	0	0	0	0	0	0	0	0
1/7/2023 9:21	57402	SPAN_T2	4	4	0	0.7	0.53	-0.17	0	0	0	0	0	0	0	0
1/7/2023 9:57	66505	SMAN_T2	3	3	0	1.7	1.8	0.1	-0.81	0.04	2	2	0	1500	1500	0
1/7/2023 9:57	66503	SMAN_T2	1	1	0	0.1	0.3	0.2	0	0	0	0	0	0	0	0
1/7/2023 14:36	42701	AUGU_T1	0	1	1	0	0	0	0	0	1	1	0	600	600	0
1/7/2023 18:42	40501	CRES_T2	90	108	18	0.31	0.4	0.09	0	0	0	0	0	0	0	0
1/7/2023 18:42	40502	CRES_T2	17	23	6	0.16	0.43	0.27	0.16	0.15	0	0	0	0	0	0
1/8/2023 9:12	40502	CRES_T2	16	26	10	0.22	0.37	0.15	0.12	0.12	0	0	0	0	0	0
1/8/2023 9:12	40501	CRES_T2	125	139	14	0.42	0.57	0.15	0	0	0	0	0	0	0	0
1/8/2023 10:17	42802	SELI_T1	1	2	1	0.1	0.2	0.1	-0.2	-0.2	0	0	0	0	0	0
1/8/2023 10:17	42701	AUGU_T1	1	1	0	0.3	0	-0.3	0	0	1	1	0	600	600	0
1/8/2023 15:59	26002	WDAM_T1	34	55	21	0.16	0.28	0.12	0	0	0	0	0	0	0	0
1/8/2023 15:59	26001	WDAM_T1	45	57	12	0.75	0.8	0.05	-0.98	-0.98	0	0	0	0	0	0
1/8/2023 19:12	66504	SMAN_T2	0	1	1	0	0.1	0.1	-1.75	-1.78	1	1	0	1200	1200	0
1/8/2023 19:12	66505	SMAN_T2	0	3	3	0	0.13	0.13	0	0	0	0	0	0	0	0
1/8/2023 19:20	47403	PENS_T1	1	1	0	2.1	2.1	0	0	0	0	0	0	0	0	0
1/9/2023 9:36	66502	SMAN_T2	14	19	5	0.18	0.26	0.08	0	0	0	0	0	0	0	0
1/9/2023 9:36	66504	SMAN_T2	80	192	112	0.15	0.25	0.1	-1.55	-1.56	0	0	0	0	0	0
1/9/2023 9:36	66501	SMAN_T2	1	6	5	0.1	0.23	0.13	0	0	0	0	0	0	0	0
1/9/2023 9:36	66505	SMAN_T2	3	3	0	0.57	0.53	-0.04	0	0	0	0	0	0	0	0
1/9/2023 9:36	66503	SMAN_T2	143	179	36	0.17	0.24	0.07	0	0	0	0	0	0	0	0
1/9/2023 9:54	47402	PENS_T1	1	3	2	0.7	1	0.3	0	0	0	0	0	0	0	0
1/9/2023 9:54	47401	PENS_T1	0	1	1	0	0	0	0.83	0.82	0	0	0	0	0	0

Appendix C - Grid Benefits Achieved in Each Instance of Active Management

1/9/2023 10:17	61801	EELI_T2	0	1	1	0	0	-0.84	-0.84	1	1	0	600	600	0
1/9/2023 14:32	54701	NEBL_T1	1	1	0	1	1.3	0.3	0	0	0	0	0	0	0
1/9/2023 15:03	53803	MBRG_T2	2	2	0	0.4	0.25	-0.15	0.05	0.05	0	0	0	0	0
1/9/2023 15:03	53801	MBRG_T2	1	1	0	0.4	0.3	-0.1	0	0	0	0	0	0	0
1/9/2023 16:01	66503	SMAN_T2	0	15	15	0	0.13	0.13	0	0	0	0	0	0	0
1/9/2023 16:01	66505	SMAN_T2	2	3	1	0.2	0.43	0.23	-0.06	-0.04	1	1	0	600	600
1/9/2023 17:18	56602	HAMP_T2	1	0	-1	0.1	0	-0.1	0	0	0	0	0	0	0
1/9/2023 18:05	57402	SPAN_T2	4	4	0	1.18	1.8	0.62	0	0	0	0	0	0	0
1/9/2023 18:05	57404	SPAN_T2	6	6	0	1.1	1.5	0.4	0	0	0	0	0	0	0
1/10/2023 9:46	53903	HALI_T2	5	5	0	0.58	0.64	0.06	0	0	0	0	0	0	0
1/10/2023 9:46	53903	HALI_T2	2	2	0	1.6	1.5	-0.1	-0.24	-0.13	0	0	0	0	0
1/10/2023 17:15	29401	BELT_T1	2	0	-2	0.1	0	-0.1	0	0	1	1	0	900	900
1/10/2023 17:15	29402	BELT_T1	0	1	1	0	0	0	0	0	0	0	0	0	0
1/10/2023 17:28	59102	WALK_T2	27	33	6	0.28	0.36	0.08	0	0	0	0	0	0	0
1/10/2023 17:28	59101	WALK_T2	3	7	4	0.4	0.29	-0.11	-1.96	-1.59	4	4	0	2250	2250
1/11/2023 15:55	61801	EELI_T2	0	49	49	0	0	0	-0.3	-0.3	0	0	0	0	0
1/12/2023 9:11	29401	BELT_T1	30	42	12	0.22	0.31	0.09	0	0	1	1	0	900	900
1/12/2023 9:55	57404	SPAN_T2	6	6	0	1.5	1.3	-0.2	0	0	0	0	0	0	0
1/12/2023 9:55	57402	SPAN_T2	3	3	0	1.4	1.63	0.23	0	0	0	0	0	0	0
1/13/2023 9:19	57404	SPAN_T2	10	106	96	1.42	0.38	-1.04	0	0	0	0	0	0	0
1/13/2023 9:19	57402	SPAN_T2	32	258	226	0.42	0.31	-0.11	0	0	0	0	0	0	0
1/13/2023 10:07	61801	EELI_T2	1	1	0	0.5	0.1	-0.4	-1.03	-1.03	1	1	0	600	600
1/13/2023 10:07	61802	EELI_T2	0	1	1	0	0	0	0	0	0	0	0	0	0
1/18/2023 8:26	53901	HALI_T2	5	5	0	0.84	0.82	-0.02	0	0	0	0	0	0	0
1/18/2023 8:26	53903	HALI_T2	0	2	2	0	1.8	1.8	-0.14	-0.13	0	0	0	0	0
1/23/2023 13:23	57201	ROSS_T1	0	2	2	0	0	0	0	0	0	0	0	0	0
1/23/2023 15:58	62105	ELAN_T1	0	16	16	0	0.15	0.15	0.47	0.51	0	0	0	0	0
1/23/2023 16:01	57402	SPAN_T2	4	4	0	1.73	2.18	0.45	0	0	0	0	0	0	0
1/23/2023 16:01	57404	SPAN_T2	6	8	2	1.93	1.19	-0.74	0	0	0	0	0	0	0
1/23/2023 18:46	56602	HAMP_T2	0	1	1	0	0.2	0	0	0	0	0	0	0	0
1/23/2023 19:05	17501	FACT_T1	5	13	8	0.18	0.25	0.07	0	0	1	1	0	600	600
1/23/2023 19:15	42802	SELI_T1	4	0	-4	0.23	0	-0.23	-1.38	-1.41	0	0	0	0	0
1/23/2023 19:15	13302	ORVI_T2	158	8	-150	0.27	0.14	-0.13	0.89	0.76	0	0	0	0	0
1/23/2023 19:17	42203	SHEN_T2	0	1	1	0	8.4	8.4	0	0	0	0	0	0	0
1/23/2023 19:27	53901	HALI_T2	5	5	0	0.64	0.6	-0.04	0	0	0	0	0	0	0
1/23/2023 19:27	53903	HALI_T2	2	2	0	1.3	1.45	0.15	-0.21	-0.22	0	0	0	0	0
1/24/2023 6:34	61802	EELI_T2	0	8	8	0	0.29	0.29	0	0	0	0	0	0	0
1/24/2023 6:34	41801	GOCI_T2	1	1	0	0.2	0	-0.2	0	0	0	0	0	0	0
1/24/2023 6:34	47403	PENS_T1	1	1	0	1.3	2.2	0.9	0	0	0	0	0	0	0
1/24/2023 6:50	54601	SUMM_T2	0	1	1	0	0	0	0	0	0	0	0	0	0
1/24/2023 7:03	25501	MADI_T1	0	1	1	0	0	0	0.45	0.42	0	0	0	0	0
1/24/2023 7:06	63804	HEMP_T1	1	1	0	6.1	6.1	0	0	0	0	0	0	0	0
1/24/2023 7:51	42701	AUGU_T1	7	1	-6	0.21	0	-0.21	0	0	1	1	0	600	600
1/24/2023 9:18	57402	SPAN_T2	27	235	208	0.47	0.29	-0.18	0	0	0	0	0	0	0
1/24/2023 9:18	57404	SPAN_T2	17	116	99	0.93	0.39	-0.54	0	0	0	0	0	0	0
1/24/2023 9:56	57203	ROSS_T1	1	1	0	0.7	0	-0.7	0.51	0.48	0	0	0	0	0
1/24/2023 9:56	57205	ROSS_T1	0	1	1	0	0.4	0.4	0	0	0	0	0	0	0
1/24/2023 12:31	57401	SPAN_T1	2	2	0	0.6	0.85	0.25	0.16	0.16	0	0	0	0	0
1/24/2023 12:31	57403	SPAN_T1	11	8	-3	0.33	0.39	0.06	0	0	0	0	0	0	0
1/24/2023 12:59	62105	ELAN_T1	2	0	-2	0.15	0	-0.15	0.39	0.36	0	0	0	0	0
1/24/2023 13:04	57101	SPHI_T2	6	4	-2	0.17	0.18	0.01	0	0	0	0	0	0	0
1/24/2023 13:04	57106	SPHI_T2	3	3	0	0.3	0.5	0.2	0	0	0	0	0	0	0
1/24/2023 14:07	13302	ORVI_T2	1	2	1	2.4	1.15	-1.25	0.8	0.78	0	0	0	0	0
1/24/2023 14:44	53501	EVIL_T2	12	11	-1	1.1	1.06	-0.04	-2.02	-1.64	3	3	0	1400	1400
1/24/2023 14:46	57106	SPHI_T2	3	3	0	0.63	0.7	0.07	0	0	0	0	0	0	0
1/24/2023 14:46	57101	SPHI_T2	4	0	-4	0.23	0	-0.23	0	0	0	0	0	0	0
1/24/2023 16:17	58706	ROSE_T2	1	1	0	0.5	0	-0.5	0	0	0	0	0	0	0
1/25/2023 9:39	58706	ROSE_T2	1	1	0	0.4	0.4	0	0	0	0	0	0	0	0
1/25/2023 9:55	57106	SPHI_T2	3	3	0	1.63	1.57	-0.06	0	0	0	0	0	0	0
1/25/2023 9:55	57101	SPHI_T2	0	3	3	0	0.1	0.1	0	0	0	0	0	0	0
1/25/2023 10:03	42701	AUGU_T1	15	19	4	0.37	0.26	-0.11	0	0	1	1	0	600	600
1/25/2023 10:09	53502	EVIL_T2	3	0	-3	0.9	0	-0.9	0	0	0	0	0	0	0
1/25/2023 10:09	53501	EVIL_T2	0	1	1	0	0.4	0.4	-1.82	-1.74	3	3	0	2100	2100
1/26/2023 11:07	57106	SPHI_T2	2	0	-2	0.1	0	-0.1	0	0	0	0	0	0	0
1/26/2023 11:38	53502	EVIL_T2	1	1	0	1.2	0.9	-0.3	0	0	0	0	0	0	0
1/26/2023 11:38	53501	EVIL_T2	9	9	0	0.68	0.86	0.18	-2.84	-2.76	5	5	0	2900	2900
1/26/2023 11:42	58706	ROSE_T2	1	1	0	1.4	1.3	-0.1	0	0	0	0	0	0	0
1/26/2023 11:52	61801	EELI_T2	0	1	1	0	0	0	0	0	0	0	0	0	0
1/26/2023 13:37	56602	HAMP_T2	2	2	0	0.25	0.25	0	0	0	0	0	0	0	0
1/26/2023 13:38	13302	ORVI_T2	4	3	-1	0.2	0.1	-0.1	1.02	0.93	0	0	0	0	0
1/26/2023 13:45	62103	ELAN_T1	0	1	1	0	0	0	0	0	0	0	0	0	0

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1/26/2023 13:45	62105	ELAN_T1	0	1	1	0	0.1	0.1	0.42	0.43	0	0	0	0	0	0
1/26/2023 13:45	62101	ELAN_T1	0	1	1	0	0.1	0.1	0	0	0	0	0	0	0	0
1/26/2023 16:48	53903	HALL_T2	11	27	16	0.43	0.31	-0.12	-0.11	-0.1	0	0	0	0	0	0
1/26/2023 16:48	53901	HALL_T2	5	5	0	0.74	0.72	-0.02	0	0	0	0	0	0	0	0
1/26/2023 17:19	45902	AUBU_T1	6	2	-4	0.93	0.8	-0.13	-0.09	-0.16	0	0	0	0	0	0
1/27/2023 9:12	45902	AUBU_T1	0	1	1	0	0.1	0.1	-0.36	-0.44	0	0	0	0	0	0
1/27/2023 9:32	56602	HAMP_T2	0	2	2	0	0.15	0.15	0	0	0	0	0	0	0	0
1/27/2023 9:42	58706	ROSE_T2	1	1	0	0.7	0.8	0	0	0	0	0	0	0	0	0
1/27/2023 9:45	13302	ORVI_T2	1	0	-1	0.2	0	-0.2	0.97	0.96	0	0	0	0	0	0
1/27/2023 10:02	57205	ROSS_T1	1	1	0	0.7	0.4	-0.3	0	0	0	0	0	0	0	0
1/27/2023 10:08	61801	EELI_T2	1	0	-1	0.1	0	-0.1	-0.3	-0.33	0	0	0	0	0	0
1/27/2023 10:08	42701	AUGU_T1	0	3	3	0	0.35	0.35	0	0	1	1	0	600	600	0
1/27/2023 10:13	62105	ELAN_T1	1	0	-1	4.6	0	-4.6	0.43	0.48	0	0	0	0	0	0
1/27/2023 10:14	53501	EVIL_T2	1	6	5	0.5	0.52	0.02	-1	-1.04	2	2	0	1200	1200	0
1/27/2023 10:14	53502	EVIL_T2	1	1	0	2.6	0.5	-2.1	0	0	0	0	0	0	0	0
1/27/2023 11:05	46302	ROHR_T1	1	1	0	1.8	2.3	0.5	0.23	0.23	0	0	0	0	0	0
1/27/2023 12:47	51305	WIND_T1	131	118	-13	0.28	0.22	-0.06	0.3	0.26	0	0	0	0	0	0
1/27/2023 12:47	51303	WIND_T1	375	368	-7	0.28	0.21	-0.07	0	0	0	0	0	0	0	0
1/27/2023 12:47	51301	WIND_T1	50	50	0	0.31	0.27	-0.04	0	0	0	0	0	0	0	0
1/27/2023 14:34	54204	PENN_T2	2	2	0	0.1	0.15	0.05	0	0	0	0	0	0	0	0
1/27/2023 14:34	54206	PENN_T2	4	1	-3	0.1	0.1	0	0	0	0	0	0	0	0	0
1/27/2023 15:05	14802	TREI_T2	0	1	1	0	0.1	0.1	0	0	0	0	0	0	0	0
1/27/2023 15:05	14801	TREI_T2	1	1	0	0.2	0.3	0.1	0.41	0.43	0	0	0	0	0	0
1/27/2023 16:14	17501	FACT_T1	20	22	2	0.35	0.33	-0.02	0	0	1	0	-1	600	0	-600
1/27/2023 16:16	47403	PENS_T1	1	1	0	0.7	0.9	0.2	0	0	0	0	0	0	0	0
1/27/2023 16:24	41802	GOCI_T2	1	0	-1	0.1	0	-0.1	0	0	0	0	0	0	0	0
1/27/2023 21:12	53803	MBRG_T2	3	4	1	0.2	0.13	-0.07	0.05	0.06	0	0	0	0	0	0
1/27/2023 21:12	53801	MBRG_T2	1	2	1	0.1	0.2	0.1	0	0	0	0	0	0	0	0
1/27/2023 21:12	53802	MBRG_T2	5	6	1	0.1	0.12	0.02	0	0	0	0	0	0	0	0
1/28/2023 9:12	41801	GOCI_T2	2	2	0	8.4	0	-8.4	0	0	0	0	0	0	0	0
1/28/2023 9:49	47401	PENS_T1	0	5	5	0	0.18	0.18	0.67	0.81	0	0	0	0	0	0
1/28/2023 9:49	47403	PENS_T1	9	0	-9	0.18	0	-0.18	0	0	0	0	0	0	0	0
1/28/2023 9:55	53803	MBRG_T2	1	2	1	0.2	0.3	0.1	0.05	0.05	0	0	0	0	0	0
1/28/2023 10:11	53901	HALL_T2	3	5	2	0.93	0.56	-0.37	0	0	0	0	0	0	0	0
1/28/2023 10:11	53903	HALL_T2	2	4	2	1.4	0.9	-0.5	-0.13	-0.12	0	0	0	0	0	0
1/28/2023 10:11	42802	SELI_T1	0	2	2	0	0.1	0.1	-1.38	-1.42	0	0	0	0	0	0
1/28/2023 10:16	46302	ROHR_T1	3	1	-2	0.7	2.3	1.6	0.21	0.24	0	0	0	0	0	0
1/28/2023 10:16	51301	WIND_T1	5	25	20	0.44	0.2	-0.24	0	0	0	0	0	0	0	0
1/28/2023 10:16	46301	ROHR_T1	0	1	1	0	0.8	0.8	0	0	0	0	0	0	0	0
1/28/2023 10:16	51303	WIND_T1	13	52	39	0.13	0.14	0.01	0	0	0	0	0	0	0	0
1/28/2023 10:16	51305	WIND_T1	5	88	83	0.28	0.18	-0.1	-0.35	-0.37	0	0	0	0	0	0
1/28/2023 10:17	53501	EVIL_T2	6	9	3	0.45	0.48	0.03	-1.28	-1.3	1	1	0	600	600	0
1/30/2023 16:00	51303	WIND_T1	590	601	11	0.43	0.5	0.07	0	0	0	0	0	0	0	0
1/30/2023 16:00	51305	WIND_T1	183	202	19	0.41	0.48	0.07	0.23	0.23	0	0	0	0	0	0
1/30/2023 16:00	51301	WIND_T1	375	514	139	0.21	0.26	0.05	0	0	0	0	0	0	0	0
1/30/2023 19:18	53901	HALL_T2	3	5	2	0.7	0.88	0.18	0	0	0	0	0	0	0	0
1/30/2023 19:18	53903	HALL_T2	2	6	4	1.7	0.77	-0.93	-0.14	-0.15	0	0	0	0	0	0
1/30/2023 19:18	53801	MBRG_T2	1	10	9	0.1	0.17	0.07	0	0	0	0	0	0	0	0
1/30/2023 19:18	53802	MBRG_T2	0	70	70	0	0.15	0.15	0	0	0	0	0	0	0	0
1/30/2023 19:18	53803	MBRG_T2	0	32	32	0	0.15	0.15	0.04	0.04	0	0	0	0	0	0
1/30/2023 19:36	56501	ROCK_T2	40	17	-23	0.13	0.22	0.09	-0.17	-0.13	0	0	0	0	0	0
1/31/2023 12:03	46302	ROHR_T1	3	3	0	1.5	1.37	-0.13	0.21	0.21	0	0	0	0	0	0
1/31/2023 12:14	42802	SELI_T1	0	1	1	0	0.2	0.2	0.07	0.03	0	0	0	0	0	0
1/31/2023 12:28	53903	HALL_T2	2	2	0	1.65	1.65	0	-0.11	-0.12	0	0	0	0	0	0
1/31/2023 12:28	53901	HALL_T2	2	2	0	0.5	0.5	0	0	0	0	0	0	0	0	0
1/31/2023 18:36	53801	MBRG_T2	2	3	1	0.15	0.13	-0.02	0	0	0	0	0	0	0	0
1/31/2023 18:36	53802	MBRG_T2	2	2	0	0.1	0.2	0.1	0	0	0	0	0	0	0	0
1/31/2023 18:36	53803	MBRG_T2	1	3	2	0.1	0.17	0.07	0.07	0.06	0	0	0	0	0	0
1/31/2023 19:23	17501	FACT_T1	4	6	2	0.23	0.57	0.34	0	0	1	1	0	600	600	0
1/31/2023 19:43	64301	LINC_T1	0	4	4	0	0.1	0.1	-0.66	-0.06	1	0	-1	600	0	-600
1/31/2023 20:00	66505	SMAN_T2	0	3	3	0	0.37	0.37	-0.13	-0.23	2	2	0	800	1100	300
2/1/2023 9:51	66503	SMAN_T2	1	0	-1	0.1	0	-0.1	0	0	0	0	0	0	0	0
2/1/2023 9:51	66501	SMAN_T2	2	2	0	0.55	0.45	-0.1	0	0	0	0	0	0	0	0
2/1/2023 9:51	66504	SMAN_T2	1	1	0	0.1	0.1	0	0	0	0	0	0	0	0	0
2/1/2023 9:51	66502	SMAN_T2	1	1	0	0.2	0.2	0	0	0	0	0	0	0	0	0
2/1/2023 9:51	66505	SMAN_T2	0	3	3	0	0.2	0.2	0	0.11	2	2	0	1100	1100	0
2/1/2023 9:53	53802	MBRG_T2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
2/1/2023 9:53	53803	MBRG_T2	2	2	0	0.15	0.4	0.25	0.06	0.05	0	0	0	0	0	0
2/1/2023 9:59	17501	FACT_T1	0	5	5	0	0.26	0.26	0	0	1	1	0	600	600	0
2/1/2023 10:14	46302	ROHR_T1	3	3	0	0.33	0.7	0.37	0.27	0.24	0	0	0	0	0	0
2/1/2023 11:19	42202	SHEN_T2	24	20	-4	0.88	0.81	-0.07	0	0	0	0	0	0	0	0

Appendix C - Grid Benefits Achieved in Each Instance of Active Management

2/1/2023 11:32	45901	AUBU_T1	0	1	1	0	0.1	0.1	0	0	0	0	0	0	0	0
2/1/2023 11:32	45902	AUBU_T1	20	32	12	0.31	0.38	0.07	-1.55	-1.58	1	1	0	600	600	0
2/2/2023 9:12	45902	AUBU_T1	33	26	-7	0.86	0.81	-0.05	-0.13	-0.09	1	1	0	600	600	0
2/2/2023 9:55	53801	MBRG_T2	1	0	-1	0.1	0	-0.1	0	0	0	0	0	0	0	0
2/2/2023 9:55	53803	MBRG_T2	2	3	1	0.3	0.23	-0.07	0.06	0.06	0	0	0	0	0	0
2/2/2023 10:11	53903	HALI_T2	38	57	19	0.33	0.34	0.01	-0.06	-0.12	0	0	0	0	0	0
2/2/2023 10:11	53901	HALI_T2	2	4	2	0.7	0.43	-0.27	0	0	0	0	0	0	0	0
2/2/2023 10:16	14801	TREI_T2	0	1	1	0.1	0.1	0.1	0.51	0.55	0	0	0	0	0	0
2/3/2023 9:54	42202	SHEN_T2	1	1	0	0.2	0.2	0	0	0	0	0	0	0	0	0
2/6/2023 12:19	53901	HALI_T2	1	1	0	0.2	0.6	0.4	0	0	0	0	0	0	0	0
2/6/2023 12:19	53903	HALI_T2	2	2	0	0.85	1.05	0.2	-0.11	-0.12	0	0	0	0	0	0
2/6/2023 13:05	13302	ORVI_T2	1	0	-1	0.1	0	-0.1	0.78	0.8	0	0	0	0	0	0
2/6/2023 14:03	45902	AUBU_T1	0	2	2	0.3	0.3	-1.11	-1.23	1	1	0	600	600	0	0
2/6/2023 15:36	53501	EVIL_T2	11	17	6	0.37	0.47	0.1	-2.19	-2.24	3	3	0	1800	1800	0
2/7/2023 9:13	45902	AUBU_T1	17	18	1	1.19	0.78	-0.41	-0.25	-0.28	1	1	0	600	600	0
2/7/2023 9:52	13302	ORVI_T2	11	16	5	0.2	0.19	-0.01	0.84	0.86	0	0	0	0	0	0
2/7/2023 10:00	53801	MBRG_T2	0	1	1	0	0.2	0.2	0	0	0	0	0	0	0	0
2/7/2023 10:00	53803	MBRG_T2	0	1	1	0.1	0.1	0.06	0.07	0	0	0	0	0	0	0
2/7/2023 10:06	17501	FACT_T1	0	1	1	0	0.2	0.2	0	0	0	0	0	0	0	0
2/7/2023 10:25	53502	EVIL_T2	1	43	42	0.3	0.17	-0.13	0	0	0	0	0	0	0	0
2/7/2023 10:25	53501	EVIL_T2	8	22	14	1.1	0.48	-0.62	-2.42	-2.43	5	5	0	2900	2900	0
2/7/2023 13:05	61801	EELI_T2	1	0	-1	4.8	0	-4.8	-0.35	-0.36	0	0	0	0	0	0
2/7/2023 13:46	42802	SELI_T1	0	1	1	0	0.2	0.2	0.03	-0.92	1	1	0	900	900	0
2/8/2023 9:13	45902	AUBU_T1	0	1	1	0	0	0	-0.38	-0.28	1	1	0	600	600	0
2/8/2023 10:07	42802	SELI_T1	0	3	3	0	0.63	0.63	-1.25	-1.29	0	0	0	0	0	0
2/8/2023 10:18	61801	EELI_T2	1	0	-1	0.1	0	-0.1	-0.38	-0.4	0	0	0	0	0	0
2/8/2023 13:10	54206	PENN_T2	0	6	6	0	0.18	0.18	0	0	0	0	0	0	0	0
2/8/2023 13:10	54202	PENN_T2	0	4	4	0	0.1	0.1	0.69	0.76	0	0	0	0	0	0
2/14/2023 11:11	13302	ORVI_T2	9	14	5	0.43	0.51	0.08	0.61	0.61	0	0	0	0	0	0
2/14/2023 11:14	61802	EELI_T2	0	1	1	0	0.1	0.1	0	0	0	0	0	0	0	0
2/14/2023 11:14	61801	EELI_T2	5	7	2	0.44	0.54	0.1	-0.43	-0.4	0	0	0	0	0	0
2/14/2023 11:18	51304	WIND_T2	9	17	8	0.31	0.34	0.03	0	0	0	0	0	0	0	0
2/14/2023 11:18	51302	WIND_T2	227	427	200	0.18	0.27	0.09	0	0	0	0	0	0	0	0
2/14/2023 11:18	51306	WIND_T2	46	189	143	0.23	0.22	-0.01	0	0	0	0	0	0	0	0
2/14/2023 11:20	51301	WIND_T1	49	101	52	0.39	0.33	-0.06	0	0	0	0	0	0	0	0
2/14/2023 11:20	51303	WIND_T1	234	478	244	0.2	0.26	0.06	0	0	0	0	0	0	0	0
2/14/2023 11:20	51305	WIND_T1	91	123	32	0.2	0.32	0.12	0	0	0	0	0	0	0	0
2/14/2023 12:39	51304	WIND_T2	7	10	3	0.37	0.43	0.06	0	0	0	0	0	0	0	0
2/14/2023 12:39	51302	WIND_T2	107	313	206	0.13	0.21	0.08	0	0	0	0	0	0	0	0
2/14/2023 12:39	51306	WIND_T2	32	93	61	0.26	0.22	-0.04	0.09	0.1	0	0	0	0	0	0
2/14/2023 13:39	41801	GOCI_T2	145	337	192	0.3	0.44	0.14	0	0	0	0	0	0	0	0
2/14/2023 13:39	41802	GOCI_T2	18	28	10	0.31	0.29	-0.02	0	0	0	0	0	0	0	0
2/14/2023 14:03	51305	WIND_T1	132	202	70	0.19	0.5	0.31	0.22	0.26	0	0	0	0	0	0
2/14/2023 14:03	51303	WIND_T1	354	736	382	0.21	0.45	0.24	0	0	0	0	0	0	0	0
2/14/2023 14:03	51301	WIND_T1	62	592	530	0.31	0.27	-0.04	0	0	0	0	0	0	0	0
2/14/2023 14:13	53801	MBRG_T2	1	34	33	0.4	0.19	-0.21	0	0	0	0	0	0	0	0
2/14/2023 14:13	53802	MBRG_T2	3	197	194	0.23	0.22	-0.01	0	0	0	0	0	0	0	0
2/14/2023 14:13	53803	MBRG_T2	11	153	142	0.35	0.28	-0.07	0.03	0.03	0	0	0	0	0	0
2/14/2023 15:09	67503	WEWI_T2	1	2	1	0.1	0.15	0.05	-0.36	-0.37	0	0	0	0	0	0
2/14/2023 15:09	67502	WEWI_T2	50	206	156	0.19	0.26	0.07	0	0	0	0	0	0	0	0
2/14/2023 15:17	16301	ALPA_T1	3	2	-1	0.23	0.3	0.07	-0.39	-0.35	0	0	0	0	0	0
2/14/2023 15:35	63801	HEMP_T1	10	153	143	0.19	0.17	-0.02	0	0	0	0	0	0	0	0
2/14/2023 15:35	63802	HEMP_T1	14	119	105	0.13	0.13	0	-0.53	-0.47	0	0	0	0	0	0
2/14/2023 15:35	63803	HEMP_T1	3	60	57	0.4	0.17	-0.23	0	0	0	0	0	0	0	0
2/14/2023 15:35	63804	HEMP_T1	2	6	4	2.95	1.13	-1.82	0	0	0	0	0	0	0	0
2/14/2023 17:36	53903	HALI_T2	3	7	4	1.07	0.5	-0.57	-0.15	-0.15	0	0	0	0	0	0
2/14/2023 17:36	53901	HALI_T2	1	3	2	0.5	0.43	-0.07	0	0	0	0	0	0	0	0
2/14/2023 17:39	14801	TREI_T2	1	1	0	0.4	0.2	-0.2	0.29	0.29	0	0	0	0	0	0
2/14/2023 17:39	14802	TREI_T2	3	0	-3	0.17	0	-0.17	0	0	0	0	0	0	0	0
2/15/2023 9:09	28604	BLYT_T2	1	2	1	0.3	0.25	-0.05	-1.37	-1.39	0	0	0	0	0	0
2/15/2023 9:13	41801	GOCI_T2	0	2	2	0	0.1	0.1	0	0	0	0	0	0	0	0
2/15/2023 9:52	13302	ORVI_T2	20	19	-1	0.22	0.21	-0.01	0.94	1	0	0	0	0	0	0
2/15/2023 10:01	51304	WIND_T2	16	31	15	0.29	0.31	0.02	0	0	0	0	0	0	0	0
2/15/2023 10:01	53803	MBRG_T2	13	33	20	0.32	0.32	0	0.04	0.04	0	0	0	0	0	0
2/15/2023 10:01	51306	WIND_T2	155	350	195	0.16	0.21	0.05	0.16	0.15	0	0	0	0	0	0
2/15/2023 10:01	51302	WIND_T2	425	551	126	0.26	0.32	0.06	0	0	0	0	0	0	0	0
2/15/2023 10:01	53801	MBRG_T2	1	5	4	0.4	0.22	-0.18	0	0	0	0	0	0	0	0
2/15/2023 10:01	53802	MBRG_T2	1	27	26	0.1	0.13	0.03	0	0	0	0	0	0	0	0
2/15/2023 10:09	63801	HEMP_T1	2	9	7	0.2	0.22	0.02	0	0	0	0	0	0	0	0
2/15/2023 10:09	63803	HEMP_T1	2	28	26	0.3	0.17	-0.13	0	0	0	0	0	0	0	0
2/15/2023 10:09	63804	HEMP_T1	1	6	5	5.8	2.33	-3.47	0	0	0	0	0	0	0	0

Appendix C - Grid Benefits Achieved in Each Instance of Active Management

2/15/2023 10:09	63802	HEMP_T1	1	3	2	0.1	0.27	0.17	-0.43	-0.42	0	0	0	0	0	0
2/15/2023 10:10	67502	WEWI_T2	1	3	2	0.4	0.47	0.07	0	0	0	0	0	0	0	0
2/15/2023 10:19	53901	HALL_T2	10	10	0	0.42	0.39	-0.03	0	0	0	0	0	0	0	0
2/15/2023 10:19	53903	HALL_T2	217	186	-31	0.41	0.4	-0.01	-0.15	-0.13	0	0	0	0	0	0
2/15/2023 10:19	53902	HALL_T2	7	4	-3	0.19	0.23	0.04	0	0	0	0	0	0	0	0
2/15/2023 10:19	42802	SELI_T1	1	2	1	0.1	0.2	0.1	-0.81	-0.79	1	1	0	900	900	0
2/15/2023 10:25	14802	TREI_T2	7	13	6	0.2	0.25	0.05	0	0	0	0	0	0	0	0
2/15/2023 10:25	14801	TREI_T2	25	50	25	0.16	0.16	0	0.27	0.25	0	0	0	0	0	0
2/16/2023 19:09	55002	NEWP_T1	5	6	1	1.04	0.83	-0.21	-0.27	-0.27	0	0	0	0	0	0
2/18/2023 16:27	56803	BENV_T1	0	1	1	0	0	0	0	0	0	0	0	0	0	0
2/18/2023 16:27	56801	BENV_T1	12	12	0	0.78	0.48	-0.3	-0.77	-0.78	1	1	0	600	600	0
2/19/2023 10:09	56801	BENV_T1	9	12	3	1.01	0.98	-0.03	-0.62	-0.62	1	1	0	600	600	0
2/19/2023 10:09	56803	BENV_T1	1	0	-1	1	0	-1	0	0	0	0	0	0	0	0
2/20/2023 15:59	67605	WARW_T1	6	3	-3	0.12	0.1	-0.02	-0.7	-0.69	0	0	0	0	0	0
2/21/2023 13:01	56801	BENV_T1	39	31	-8	0.79	0.87	0.08	-0.85	-0.84	1	1	0	600	600	0
2/21/2023 13:01	56803	BENV_T1	4	5	1	0.35	0.4	-0.03	0	0	0	0	0	0	0	0
2/21/2023 15:27	56801	BENV_T1	40	37	-3	1	0.97	-0.03	-0.84	-0.83	1	1	0	600	600	0
2/21/2023 15:27	56803	BENV_T1	7	8	1	0.33	0.33	0	0	0	0	0	0	0	0	0
2/22/2023 9:12	45902	AUBU_T1	3	8	5	0.73	0.17	-0.56	-0.24	-0.17	1	1	0	600	600	0
2/22/2023 10:10	56801	BENV_T1	15	13	-2	0.58	0.45	-0.13	-0.61	-0.61	1	1	0	600	600	0
2/22/2023 10:10	56803	BENV_T1	1	0	-1	1.1	0	-1.1	0	0	0	0	0	0	0	0
2/22/2023 10:18	56801	BENV_T1	13	19	6	0.45	0.73	0.28	-0.61	-0.61	1	1	0	600	600	0
2/22/2023 10:18	56803	BENV_T1	0	1	1	0	0	0	0	0	0	0	0	0	0	0
2/22/2023 12:24	56801	BENV_T1	21	16	-5	1.08	0.54	-0.54	-0.64	-0.6	1	1	0	600	600	0
2/22/2023 12:24	56803	BENV_T1	1	1	0	1	0	-1	0	0	0	0	0	0	0	0
2/23/2023 11:10	67604	WARW_T1	2	2	0	0.2	0.6	0.4	0	0	0	0	0	0	0	0
2/23/2023 11:10	67603	WARW_T1	1	4	3	0.3	0.4	0.1	0	0	0	0	0	0	0	0
2/23/2023 11:10	67605	WARW_T1	12	31	19	0.28	0.35	0.07	-0.85	-0.87	0	0	0	0	0	0
2/23/2023 11:23	55002	NEWP_T1	102	75	-27	0.54	0.36	-0.18	-0.26	-0.28	0	0	0	0	0	0
2/23/2023 12:08	56801	BENV_T1	35	49	14	0.54	0.72	0.18	-0.23	-0.21	0	0	0	0	0	0
2/23/2023 12:08	56803	BENV_T1	5	7	2	0.74	0.74	0	0	0	0	0	0	0	0	0
2/23/2023 14:18	56801	BENV_T1	47	36	-11	0.7	0.74	0.04	-0.27	-0.26	0	0	0	0	0	0
2/23/2023 14:18	56803	BENV_T1	4	5	1	0.88	0.9	0.02	0	0	0	0	0	0	0	0
2/23/2023 14:27	45902	AUBU_T1	1	1	0	0.4	0.1	-0.3	-0.74	-0.74	1	1	0	600	600	0
2/23/2023 21:42	45902	AUBU_T1	0	2	2	0	0.1	0	0	0	0	0	0	0	0	0
2/24/2023 9:28	56801	BENV_T1	36	21	-15	0.77	0.74	-0.03	-0.82	-0.79	1	1	0	600	600	0
2/24/2023 9:28	56803	BENV_T1	1	3	2	0.3	0.45	0.15	0	0	0	0	0	0	0	0
2/24/2023 10:23	56801	BENV_T1	42	52	10	0.69	0.76	0.07	-0.82	-0.81	1	1	0	600	600	0
2/24/2023 10:23	56803	BENV_T1	5	7	2	0.74	0.82	0.08	0	0	0	0	0	0	0	0
2/24/2023 13:42	56803	BENV_T1	7	8	1	0.69	0.85	0.16	0	0	0	0	0	0	0	0
2/24/2023 13:42	56801	BENV_T1	47	53	6	0.9	0.86	-0.04	-0.82	-0.81	1	1	0	600	600	0
2/25/2023 10:14	56803	BENV_T1	0	1	1	0	1.3	1.3	0	0	0	0	0	0	0	0
2/25/2023 10:14	56801	BENV_T1	12	14	2	0.41	0.48	0.07	-0.54	-0.54	1	1	0	600	600	0
2/25/2023 10:23	56801	BENV_T1	14	14	0	0.47	0.53	0.06	-0.54	-0.54	1	1	0	600	600	0
2/25/2023 10:23	56803	BENV_T1	1	1	0	1.3	0	-1.3	0	0	0	0	0	0	0	0
3/2/2023 22:17	56801	BENV_T1	7	19	12	0.33	0.39	0.06	-0.81	-0.79	1	1	0	600	600	0
3/3/2023 10:17	56801	BENV_T1	7	13	6	0.41	0.76	0.35	-0.67	-0.72	1	1	0	600	600	0
3/4/2023 15:31	40502	CRES_T2	11	25	14	0.21	0.32	0.11	-0.92	-0.91	0	0	0	0	0	0
3/4/2023 21:41	45902	AUBU_T1	4	11	7	0.1	0.22	0.12	-1.23	-0.7	1	0	-1	600	0	-600
3/5/2023 12:12	40502	CRES_T2	4	5	1	0.1	0.1	0	-0.39	-0.42	0	0	0	0	0	0
3/5/2023 12:21	67603	WARW_T1	0	1	1	0	0.2	0.2	0	0	0	0	0	0	0	0
3/5/2023 12:21	67605	WARW_T1	2	4	2	0.45	0.38	-0.07	-1.18	-1	0	0	0	0	0	0
3/5/2023 13:47	40502	CRES_T2	8	20	12	0.15	0.23	0.08	-0.41	-0.42	0	0	0	0	0	0
3/6/2023 15:06	56801	BENV_T1	52	53	1	0.98	1	0.02	-0.88	-0.88	1	1	0	600	600	0
3/6/2023 15:06	56803	BENV_T1	4	6	2	0.7	0.62	-0.08	0	0	0	0	0	0	0	0
3/7/2023 13:30	56801	BENV_T1	50	58	8	0.83	0.97	0.14	-0.78	-0.8	1	1	0	600	600	0
3/7/2023 13:30	56803	BENV_T1	5	6	1	1.04	0.88	-0.16	0	0	0	0	0	0	0	0
3/8/2023 11:53	67604	WARW_T1	2	2	0	0.25	0.35	0.1	0	0	0	0	0	0	0	0
3/8/2023 11:53	67605	WARW_T1	23	30	7	0.45	0.45	0	-1.08	-0.91	0	0	0	0	0	0
3/8/2023 18:20	56801	BENV_T1	1	8	7	0.2	0.3	0.1	-0.74	-0.7	1	1	0	600	600	0
3/8/2023 18:20	40502	CRES_T2	0	7	7	0	0.2	0.2	-0.76	-0.74	0	0	0	0	0	0
3/9/2023 14:55	56801	BENV_T1	36	33	-3	0.47	0.44	-0.03	-0.2	-0.23	0	0	0	0	0	0
3/9/2023 14:55	56803	BENV_T1	4	8	4	0.45	0.39	-0.06	0	0	0	0	0	0	0	0
3/9/2023 18:18	56801	BENV_T1	6	2	-4	0.47	0.3	-0.17	-0.77	-0.79	1	1	0	600	600	0
3/9/2023 21:28	40502	CRES_T2	3	9	6	0.1	0.2	0.1	0.04	0.05	0	0	0	0	0	0
3/10/2023 8:36	55001	NEWP_T1	0	1	1	0	0	0	0	0	0	0	0	0	0	0
3/10/2023 8:36	55002	NEWP_T1	5	6	1	0.48	0.63	0.15	-0.19	-0.19	0	0	0	0	0	0
3/10/2023 18:14	40502	CRES_T2	15	17	2	0.26	0.28	0.02	-0.1	-0.11	0	0	0	0	0	0
3/10/2023 18:14	40501	CRES_T2	1	0	-1	0.2	0	-0.2	0	0	0	0	0	0	0	0
3/13/2023 22:22	55002	NEWP_T1	2	3	1	0.25	0.27	0.02	-0.24	-0.25	0	0	0	0	0	0
3/14/2023 14:42	56803	BENV_T1	3	3	0	0.7	0.67	-0.03	0	0	0	0	0	0	0	0

Appendix C - Grid Benefits Achieved in Each Instance of Active Management

3/14/2023 14:42	56801	BENV_T1	22	25	3	0.61	0.66	0.05	-0.68	-0.67	1	1	0	600	600	0
3/14/2023 16:32	40502	CRES_T2	3	11	8	0.1	0.14	0.04	-0.77	-0.69	0	0	0	0	0	0
3/14/2023 17:12	56801	BENV_T1	1	11	10	0.4	0.37	-0.03	-0.63	-0.6	1	1	0	600	600	0
3/17/2023 9:24	55002	NEWP_T1	4	3	-1	0.33	0.63	0.3	0	0	0	0	0	0	0	0
3/17/2023 10:56	56801	BENV_T1	17	28	11	0.62	0.56	-0.06	-0.8	-0.77	1	1	0	600	600	0
3/17/2023 10:56	56803	BENV_T1	1	3	2	0.8	0.15	-0.65	0	0	0	0	0	0	0	0
3/17/2023 11:58	67605	WARW_T1	2	3	1	0.7	0.63	-0.07	-0.89	-0.93	0	0	0	0	0	0
3/17/2023 17:13	55002	NEWP_T1	5	5	0	0.68	0.7	0.02	0	0	0	0	0	0	0	0
3/17/2023 19:13	40501	CRES_T2	2	1	-1	0.2	0.3	0.1	0	0	0	0	0	0	0	0
3/17/2023 19:13	40502	CRES_T2	8	8	0	0.54	0.54	0	-0.09	-0.07	0	0	0	0	0	0
3/18/2023 8:21	55002	NEWP_T1	0	5	5	0	0.4	0.4	0	0	0	0	0	0	0	0
3/18/2023 12:11	67605	WARW_T1	5	3	-2	0.64	0.77	0.13	-1.08	-1.12	0	0	0	0	0	0
3/18/2023 12:13	55002	NEWP_T1	5	5	0	0.26	0.46	0.2	0	0	0	0	0	0	0	0
3/18/2023 17:55	56801	BENV_T1	3	5	2	0.3	0.28	-0.02	-0.83	-0.82	1	1	0	600	600	0
3/19/2023 9:14	55001	NEWP_T1	1	2	1	0.2	0	-0.2	0	0	0	0	0	0	0	0
3/19/2023 9:14	55002	NEWP_T1	1	2	1	0.2	0.8	0.6	-0.2	-0.21	0	0	0	0	0	0
3/19/2023 11:48	56801	BENV_T1	5	7	2	0.36	0.74	0.38	-0.56	-0.54	1	1	0	600	600	0
3/19/2023 12:19	67605	WARW_T1	1	3	2	1	0.63	-0.37	-1.07	-1.09	0	0	0	0	0	0
3/19/2023 15:05	55002	NEWP_T1	7	8	1	0.59	0.81	0.22	0	0	0	0	0	0	0	0
3/19/2023 15:05	55001	NEWP_T1	1	0	-1	0.7	0	-0.7	-0.01	-0.03	0	0	0	0	0	0
3/20/2023 10:07	55002	NEWP_T1	4	6	2	1.18	1	-0.18	0	0	0	0	0	0	0	0
3/20/2023 11:53	67605	WARW_T1	6	12	6	0.72	0.59	-0.13	-1.03	-1.04	0	0	0	0	0	0
3/20/2023 11:53	67604	WARW_T1	0	1	1	0	0.3	0.3	0	0	0	0	0	0	0	0
3/20/2023 12:30	55002	NEWP_T1	7	10	3	0.84	0.7	-0.14	0	0	0	0	0	0	0	0
3/20/2023 13:24	45902	AUBU_T1	1	1	0	0.5	0.9	0.4	0	0	0	0	0	0	0	0
3/20/2023 13:24	45901	AUBU_T1	1	2	1	0.2	0.3	0.1	1.52	1.54	0	0	0	0	0	0
3/20/2023 15:44	56803	BENV_T1	6	5	-1	0.43	0.46	0.03	0	0	0	0	0	0	0	0
3/20/2023 15:44	56801	BENV_T1	38	41	3	0.4	0.51	0.11	-0.22	-0.24	0	0	0	0	0	0
3/20/2023 18:37	40502	CRES_T2	3	6	3	0.27	0.17	-0.1	-0.03	-0.01	0	0	0	0	0	0
3/20/2023 19:58	56801	BENV_T1	0	14	14	0	0.76	0.76	-0.73	-0.74	1	1	0	600	600	0
3/20/2023 20:49	56801	BENV_T1	15	17	2	0.87	0.87	0	-0.77	-0.75	1	1	0	600	600	0

Appendix D - Generation Loss or Gain Event Table

Unique Location Identifier	AM Event Start Time	AM Event End Time	Event Duration (Mins)	Generation Loss/Gain (kWhr)
1393633	10/11/2022 14:30	10/12/2022 9:00	1109	0
1538577	10/28/2022 11:54	10/29/2022 9:00	1265	0
1650561	10/28/2022 13:57	10/29/2022 9:00	1142	0
1393633	10/28/2022 18:25	10/29/2022 9:00	874	0
926657	10/31/2022 10:32	11/1/2022 9:00	1347	0
378229	10/31/2022 14:55	11/1/2022 9:00	1084	0
1538577	10/31/2022 16:11	11/1/2022 9:00	1008	0
264873	10/31/2022 16:52	11/1/2022 9:00	967	0
1350499	10/31/2022 17:47	11/1/2022 9:00	912	0
1441670	11/1/2022 17:26	11/2/2022 9:00	933	0
50431	11/1/2022 23:19	11/2/2022 9:00	580	0
264873	11/2/2022 13:40	11/3/2022 9:00	1159	0
264873	11/3/2022 11:16	11/4/2022 9:00	1303	0
1441670	11/3/2022 11:47	11/4/2022 9:00	1272	0
309233	11/3/2022 15:25	11/4/2022 9:00	1054	0
6564583	11/3/2022 15:31	11/4/2022 9:00	1048	0
265473	11/3/2022 15:33	11/4/2022 9:00	1046	0
675499	11/3/2022 15:33	11/4/2022 9:00	1046	0
378229	11/3/2022 18:01	11/4/2022 9:00	898	0
1538577	11/4/2022 20:53	11/5/2022 9:00	726	0
1441670	11/7/2022 11:40	11/8/2022 9:00	1279	0
675499	11/7/2022 12:34	11/8/2022 9:00	1225	0
1350499	11/7/2022 12:48	11/8/2022 9:00	1211	0
926657	11/7/2022 12:50	11/8/2022 9:00	1209	0
1538577	11/7/2022 18:26	11/8/2022 9:00	873	0
378229	11/7/2022 18:39	11/8/2022 9:00	860	0
1320619	11/8/2022 13:32	11/9/2022 9:00	1167	0
309233	11/8/2022 13:51	11/9/2022 9:00	1148	0
264873	11/8/2022 14:37	11/9/2022 9:00	1102	0
6564583	11/8/2022 15:33	11/9/2022 9:00	1046	0
675499	11/8/2022 18:27	11/9/2022 9:00	872	0
197561	11/8/2022 19:34	11/9/2022 9:00	805	0
378229	11/8/2022 20:55	11/9/2022 9:00	724	0
634779	11/8/2022 20:58	11/9/2022 9:00	721	0
6490578	11/8/2022 21:32	11/9/2022 9:00	687	0
304265	11/9/2022 4:54	11/9/2022 9:00	245	0
1393633	11/9/2022 14:27	11/10/2022 9:00	1112	0
265473	11/9/2022 14:39	11/10/2022 9:00	1100	0
1527886	11/9/2022 14:52	11/10/2022 9:00	1087	0
926657	11/10/2022 0:45	11/10/2022 9:00	494	0
1538577	11/10/2022 1:43	11/10/2022 9:00	436	0
1320619	11/10/2022 15:21	11/11/2022 9:00	1058	0
1577599	11/10/2022 15:57	11/11/2022 9:00	1022	0
6564583	11/10/2022 16:04	11/11/2022 9:00	1015	0

Appendix D - Generation Loss or Gain Event Table

264873	11/10/2022 16:47	11/11/2022 9:00	972	0
6490578	11/10/2022 17:04	11/11/2022 9:00	955	0
1393633	11/10/2022 19:23	11/11/2022 9:00	816	0
1441670	11/11/2022 15:03	11/12/2022 9:00	1076	0
378229	11/11/2022 19:11	11/12/2022 9:00	828	0
309233	11/11/2022 21:46	11/12/2022 9:00	673	0
1538577	11/11/2022 21:47	11/12/2022 9:00	672	0
1350499	11/14/2022 11:35	11/15/2022 9:00	1284	0
675499	11/14/2022 12:46	11/15/2022 9:00	1213	0
1650561	11/14/2022 12:50	11/15/2022 9:00	1209	0
926657	11/14/2022 13:17	11/15/2022 9:00	1182	0
1538577	11/14/2022 20:29	11/15/2022 9:00	750	0
6564583	11/14/2022 20:37	11/15/2022 9:00	742	0
309233	11/14/2022 20:41	11/15/2022 9:00	738	0
1350499	11/15/2022 11:24	11/16/2022 9:00	1295	0
1073095	11/15/2022 12:26	11/16/2022 9:00	1233	0
1441670	11/15/2022 15:00	11/16/2022 9:00	1079	0
1539469	11/15/2022 15:02	11/16/2022 9:00	1077	0
1527731	11/15/2022 15:54	11/16/2022 9:00	1025	0
378229	11/15/2022 15:55	11/16/2022 9:00	1024	0
7553375	11/16/2022 9:20	11/17/2022 9:00	1419	0
1650561	11/16/2022 22:50	11/17/2022 9:00	609	0
926657	11/17/2022 12:22	11/18/2022 9:00	1237	0
1538577	11/17/2022 13:51	11/18/2022 9:00	1148	0
197561	11/17/2022 14:21	11/18/2022 9:00	1118	0
1073095	11/17/2022 14:23	11/18/2022 9:00	1116	0
1350499	11/17/2022 14:37	11/18/2022 9:00	1102	0
265473	11/17/2022 14:48	11/18/2022 9:00	1091	0
378229	11/17/2022 16:37	11/18/2022 9:00	982	0
1441670	11/17/2022 17:12	11/18/2022 9:00	947	0
195839	11/17/2022 18:32	11/18/2022 9:00	867	0
1527886	11/17/2022 20:45	11/18/2022 9:00	734	0
6564583	11/17/2022 21:14	11/18/2022 9:00	705	0
1650561	11/18/2022 8:23	11/18/2022 9:00	36	0
1321750	11/18/2022 8:34	11/18/2022 9:00	25	0
1320619	11/28/2022 14:03	11/29/2022 9:00	1136	0
1437071	11/28/2022 15:28	11/29/2022 9:00	1051	0
1350499	11/28/2022 15:40	11/29/2022 9:00	1039	0
1441670	11/28/2022 16:03	11/29/2022 9:00	1016	0
587455	11/28/2022 16:29	11/29/2022 9:00	990	0
378229	11/28/2022 16:59	11/29/2022 9:00	960	0
926657	11/28/2022 17:06	11/29/2022 9:00	953	0
7518767	11/28/2022 17:28	11/29/2022 9:00	931	0
1527886	11/28/2022 17:31	11/29/2022 9:00	928	0
1538577	11/28/2022 17:44	11/29/2022 9:00	915	0
7553375	11/28/2022 19:47	11/29/2022 9:00	792	0
6564583	11/28/2022 20:50	11/29/2022 9:00	729	0

Appendix D - Generation Loss or Gain Event Table

1650561	11/28/2022 20:58	11/29/2022 9:00	721	0
1441670	11/29/2022 12:35	11/30/2022 9:00	1224	0
1437071	11/29/2022 13:08	11/30/2022 9:00	1191	0
1073095	11/29/2022 13:53	11/30/2022 9:00	1146	0
203334	11/29/2022 14:05	11/30/2022 9:00	1134	0
1539391	11/29/2022 14:07	11/30/2022 9:00	1132	0
1393633	11/29/2022 14:10	11/30/2022 9:00	1129	0
126219	11/29/2022 14:19	11/30/2022 9:00	1120	0
428179	11/29/2022 14:21	11/30/2022 9:00	1118	0
197561	11/29/2022 15:10	11/30/2022 9:00	1069	0
224277	11/29/2022 17:33	11/30/2022 9:00	926	0
551039	11/29/2022 17:44	11/30/2022 9:00	915	0
105957	11/29/2022 17:47	11/30/2022 9:00	912	0
105957	11/29/2022 17:47	11/30/2022 9:00	912	0
50431	11/29/2022 18:25	11/30/2022 9:00	874	0
378229	11/29/2022 19:26	11/30/2022 9:00	813	0
733328	11/29/2022 19:28	11/30/2022 9:00	811	0
304265	11/29/2022 19:48	11/30/2022 9:00	791	0
1650561	11/29/2022 21:35	11/30/2022 9:00	684	0
506261	11/29/2022 21:52	11/30/2022 9:00	667	0
352652	11/29/2022 22:07	11/30/2022 9:00	652	0
1473365	11/30/2022 11:57	12/1/2022 9:00	1262	0
735736	11/30/2022 12:33	12/1/2022 9:00	1226	0
392602	11/30/2022 13:32	12/1/2022 9:00	1167	0
195839	11/30/2022 14:13	12/1/2022 9:00	1126	0
264873	11/30/2022 20:48	12/1/2022 9:00	731	0
450309	11/30/2022 20:50	12/1/2022 9:00	729	0
309233	11/30/2022 20:55	12/1/2022 9:00	724	0
506261	11/30/2022 21:01	12/1/2022 9:00	718	0
578557	11/30/2022 21:19	12/1/2022 9:00	700	0
7518767	12/1/2022 12:36	12/2/2022 9:00	1223	0
169731	12/1/2022 13:00	12/2/2022 9:00	1199	0
1441670	12/1/2022 13:07	12/2/2022 9:00	1192	0
1073095	12/1/2022 13:07	12/2/2022 9:00	1192	0
926657	12/1/2022 13:12	12/2/2022 9:00	1187	0
1538577	12/1/2022 13:53	12/2/2022 9:00	1146	0
224277	12/1/2022 14:10	12/2/2022 9:00	1129	0
587455	12/1/2022 14:16	12/2/2022 9:00	1123	0
1320619	12/1/2022 14:32	12/2/2022 9:00	1107	0
197561	12/1/2022 15:25	12/2/2022 9:00	1054	0
1437071	12/1/2022 15:26	12/2/2022 9:00	1053	0
1393633	12/1/2022 15:32	12/2/2022 9:00	1047	0
675499	12/1/2022 15:49	12/2/2022 9:00	1030	0
1441670	12/2/2022 9:23	12/3/2022 9:00	1416	0
1437071	12/2/2022 10:07	12/3/2022 9:00	1372	0
1538577	12/2/2022 10:53	12/3/2022 9:00	1326	0
197561	12/2/2022 11:25	12/3/2022 9:00	1294	0

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587455	12/2/2022 11:32	12/3/2022 9:00	1287	0
195839	12/2/2022 11:40	12/3/2022 9:00	1279	0
264873	12/2/2022 11:43	12/3/2022 9:00	1276	0
733328	12/2/2022 12:12	12/3/2022 9:00	1247	0
6564583	12/2/2022 12:38	12/3/2022 9:00	1221	0
352652	12/2/2022 12:50	12/3/2022 9:00	1209	0
7553375	12/2/2022 12:51	12/3/2022 9:00	1208	0
1321750	12/2/2022 13:04	12/3/2022 9:00	1195	0
224277	12/2/2022 13:37	12/3/2022 9:00	1162	0
392602	12/2/2022 14:04	12/3/2022 9:00	1135	0
479380	12/2/2022 15:40	12/3/2022 9:00	1039	0
1527886	12/2/2022 15:41	12/3/2022 9:00	1038	0
1538577	12/5/2022 10:35	12/6/2022 9:00	1344	0
224277	12/5/2022 10:38	12/6/2022 9:00	1341	0
1073095	12/5/2022 10:44	12/6/2022 9:00	1335	0
392602	12/5/2022 10:44	12/6/2022 9:00	1335	0
309233	12/5/2022 10:50	12/6/2022 9:00	1329	0
1437071	12/5/2022 10:51	12/6/2022 9:00	1328	0
1350499	12/5/2022 10:55	12/6/2022 9:00	1324	0
1539469	12/5/2022 11:05	12/6/2022 9:00	1314	0
1393633	12/5/2022 11:15	12/6/2022 9:00	1304	0
428179	12/5/2022 11:16	12/6/2022 9:00	1303	0
1577599	12/5/2022 11:46	12/6/2022 9:00	1273	0
378229	12/5/2022 12:18	12/6/2022 9:00	1241	0
169731	12/5/2022 12:31	12/6/2022 9:00	1228	0
1441670	12/5/2022 12:39	12/6/2022 9:00	1220	0
304265	12/5/2022 12:46	12/6/2022 9:00	1213	0
7518767	12/5/2022 13:04	12/6/2022 9:00	1195	0
1473365	12/5/2022 13:18	12/6/2022 9:00	1181	0
228073	12/5/2022 14:25	12/6/2022 9:00	1114	0
195839	12/5/2022 14:37	12/6/2022 9:00	1102	0
228282	12/5/2022 14:41	12/6/2022 9:00	1098	0
197561	12/5/2022 14:42	12/6/2022 9:00	1097	0
6490578	12/5/2022 14:46	12/6/2022 9:00	1093	0
1320619	12/5/2022 14:46	12/6/2022 9:00	1093	0
1321750	12/5/2022 14:48	12/6/2022 9:00	1091	0
264873	12/5/2022 14:50	12/6/2022 9:00	1089	0
7553375	12/5/2022 14:52	12/6/2022 9:00	1087	0
456084	12/6/2022 8:17	12/6/2022 9:00	42	0
7553375	12/6/2022 9:15	12/7/2022 9:00	1424	0
1441670	12/6/2022 9:26	12/7/2022 9:00	1413	0
1650561	12/6/2022 10:03	12/7/2022 9:00	1376	0
378229	12/6/2022 10:28	12/7/2022 9:00	1351	0
1538577	12/6/2022 10:30	12/7/2022 9:00	1349	0
169731	12/6/2022 10:32	12/7/2022 9:00	1347	0
926657	12/6/2022 10:36	12/7/2022 9:00	1343	0
1073095	12/6/2022 10:55	12/7/2022 9:00	1324	0

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1437071	12/6/2022 11:21	12/7/2022 9:00	1298	0
197561	12/6/2022 11:21	12/7/2022 9:00	1298	0
195839	12/6/2022 11:36	12/7/2022 9:00	1283	0
428179	12/6/2022 11:46	12/7/2022 9:00	1273	0
224277	12/6/2022 12:54	12/7/2022 9:00	1205	0
1664763	12/6/2022 13:53	12/7/2022 9:00	1146	0
1320619	12/6/2022 14:39	12/7/2022 9:00	1100	0
1393633	12/6/2022 14:44	12/7/2022 9:00	1095	0
352652	12/6/2022 19:48	12/7/2022 9:00	791	0
392602	12/6/2022 19:48	12/7/2022 9:00	791	0
926657	12/7/2022 10:51	12/8/2022 9:00	1328	0
1441670	12/7/2022 10:54	12/8/2022 9:00	1325	0
1267978	12/7/2022 10:55	12/8/2022 9:00	1324	0
1350499	12/7/2022 10:57	12/8/2022 9:00	1322	0
378229	12/7/2022 11:00	12/8/2022 9:00	1319	0
7553375	12/7/2022 11:15	12/8/2022 9:00	1304	0
264873	12/7/2022 11:17	12/8/2022 9:00	1302	0
1538577	12/7/2022 11:54	12/8/2022 9:00	1265	0
197561	12/7/2022 12:06	12/8/2022 9:00	1253	0
1473365	12/7/2022 12:35	12/8/2022 9:00	1224	0
428179	12/7/2022 13:29	12/8/2022 9:00	1170	0
203334	12/7/2022 13:38	12/8/2022 9:00	1161	0
50431	12/7/2022 13:44	12/8/2022 9:00	1155	0
561758	12/7/2022 14:11	12/8/2022 9:00	1128	0
169731	12/7/2022 14:30	12/8/2022 9:00	1109	0
506261	12/7/2022 14:41	12/8/2022 9:00	1098	0
352652	12/7/2022 14:50	12/8/2022 9:00	1089	0
195839	12/7/2022 14:50	12/8/2022 9:00	1089	0
1393633	12/7/2022 14:58	12/8/2022 9:00	1081	0
1664763	12/7/2022 15:02	12/8/2022 9:00	1077	0
203334	12/8/2022 9:06	12/9/2022 9:00	1433	0
378229	12/8/2022 10:28	12/9/2022 9:00	1351	0
50431	12/8/2022 10:29	12/9/2022 9:00	1350	0
7553375	12/8/2022 10:32	12/9/2022 9:00	1347	0
926657	12/8/2022 10:34	12/9/2022 9:00	1345	0
1350499	12/8/2022 10:39	12/9/2022 9:00	1340	0
224277	12/8/2022 10:42	12/9/2022 9:00	1337	0
1538577	12/8/2022 10:53	12/9/2022 9:00	1326	0
587455	12/8/2022 11:30	12/9/2022 9:00	1289	0
392602	12/8/2022 12:21	12/9/2022 9:00	1238	0
7518767	12/8/2022 13:05	12/9/2022 9:00	1194	0
169731	12/8/2022 14:02	12/9/2022 9:00	1137	0
1393633	12/8/2022 14:41	12/9/2022 9:00	1098	0
1441670	12/9/2022 8:21	12/9/2022 9:00	38	0
264873	12/9/2022 9:14	12/10/2022 9:00	1425	0
7553375	12/9/2022 9:44	12/10/2022 9:00	1395	0
1650561	12/9/2022 9:49	12/10/2022 9:00	1390	0

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7518767	12/9/2022 10:01	12/10/2022 9:00	1378	0
1350499	12/9/2022 10:12	12/10/2022 9:00	1367	0
1538577	12/9/2022 10:22	12/10/2022 9:00	1357	0
1393633	12/9/2022 11:14	12/10/2022 9:00	1305	0
587455	12/9/2022 11:16	12/10/2022 9:00	1303	0
1073095	12/9/2022 11:24	12/10/2022 9:00	1295	0
1437071	12/9/2022 11:51	12/10/2022 9:00	1268	0
352652	12/9/2022 12:03	12/10/2022 9:00	1256	0
1577599	12/9/2022 12:17	12/10/2022 9:00	1242	0
228073	12/9/2022 12:22	12/10/2022 9:00	1237	0
1434359	12/9/2022 13:04	12/10/2022 9:00	1195	0
6490578	12/9/2022 14:32	12/10/2022 9:00	1107	0
506261	12/9/2022 14:38	12/10/2022 9:00	1101	0
7415409	12/9/2022 14:46	12/10/2022 9:00	1093	0
506261	12/10/2022 7:06	12/10/2022 9:00	113	0
6490578	12/10/2022 7:06	12/10/2022 9:00	113	0
7415409	12/10/2022 7:06	12/10/2022 9:00	113	0
1441670	12/10/2022 9:34	12/11/2022 9:00	1405	0
1650561	12/10/2022 9:47	12/11/2022 9:00	1392	0
392602	12/10/2022 10:00	12/11/2022 9:00	1379	0
66685	12/10/2022 10:02	12/11/2022 9:00	1377	0
265473	12/10/2022 10:20	12/11/2022 9:00	1359	0
378229	12/10/2022 10:27	12/11/2022 9:00	1352	0
197561	12/10/2022 10:37	12/11/2022 9:00	1342	0
428179	12/10/2022 10:42	12/11/2022 9:00	1337	0
1538577	12/10/2022 10:46	12/11/2022 9:00	1333	0
195839	12/10/2022 10:53	12/11/2022 9:00	1326	0
1557676	12/10/2022 11:03	12/11/2022 9:00	1316	0
1473365	12/10/2022 11:17	12/11/2022 9:00	1302	0
587455	12/10/2022 11:30	12/11/2022 9:00	1289	0
578557	12/10/2022 11:31	12/11/2022 9:00	1288	0
1437071	12/10/2022 11:50	12/11/2022 9:00	1269	0
1393633	12/10/2022 12:11	12/11/2022 9:00	1248	0
98438	12/10/2022 12:19	12/11/2022 9:00	1240	0
1321750	12/10/2022 14:37	12/11/2022 9:00	1102	0
264873	12/10/2022 14:40	12/11/2022 9:00	1099	0
1267978	12/10/2022 15:09	12/11/2022 9:00	1070	0
981933	12/11/2022 9:46	12/12/2022 9:00	1393	0
1650561	12/11/2022 9:48	12/12/2022 9:00	1391	0
7518767	12/11/2022 10:00	12/12/2022 9:00	1379	0
1350499	12/11/2022 10:11	12/12/2022 9:00	1368	0
1577599	12/11/2022 11:44	12/12/2022 9:00	1275	0
587455	12/11/2022 11:46	12/12/2022 9:00	1273	0
1538577	12/11/2022 11:49	12/12/2022 9:00	1270	0
169731	12/11/2022 12:28	12/12/2022 9:00	1231	0
378229	12/11/2022 14:29	12/12/2022 9:00	1110	0
1473365	12/11/2022 15:11	12/12/2022 9:00	1068	0

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1393633	12/11/2022 16:31	12/12/2022 9:00	988	0
66685	12/12/2022 8:18	12/12/2022 9:00	41	0
926657	12/12/2022 9:32	12/13/2022 9:00	1407	0
1441670	12/12/2022 9:36	12/13/2022 9:00	1403	0
1650561	12/12/2022 9:48	12/13/2022 9:00	1391	0
1538577	12/12/2022 10:22	12/13/2022 9:00	1357	0
378229	12/12/2022 10:43	12/13/2022 9:00	1336	0
1577599	12/12/2022 11:01	12/13/2022 9:00	1318	0
487418	12/12/2022 11:03	12/13/2022 9:00	1316	0
309233	12/12/2022 11:16	12/13/2022 9:00	1303	0
195839	12/12/2022 11:21	12/13/2022 9:00	1298	0
169731	12/12/2022 11:46	12/13/2022 9:00	1273	0
428179	12/12/2022 12:16	12/13/2022 9:00	1243	0
352652	12/12/2022 14:46	12/13/2022 9:00	1093	0
981933	12/13/2022 7:59	12/13/2022 9:00	60	0
1577599	12/13/2022 9:14	12/14/2022 9:00	1425	0
169731	12/13/2022 9:19	12/14/2022 9:00	1420	0
352652	12/13/2022 9:54	12/14/2022 9:00	1385	0
7518767	12/13/2022 10:38	12/14/2022 9:00	1341	0
7553375	12/13/2022 10:38	12/14/2022 9:00	1341	0
1073095	12/13/2022 10:46	12/14/2022 9:00	1333	0
309233	12/13/2022 10:46	12/14/2022 9:00	1333	0
1650561	12/13/2022 10:47	12/14/2022 9:00	1332	0
264873	12/13/2022 10:52	12/14/2022 9:00	1327	0
378229	12/13/2022 11:31	12/14/2022 9:00	1288	0
1320619	12/13/2022 13:06	12/14/2022 9:00	1193	0
631067	12/13/2022 13:12	12/14/2022 9:00	1187	0
224277	12/13/2022 13:49	12/14/2022 9:00	1150	0
304265	12/13/2022 14:43	12/14/2022 9:00	1096	0
12746	12/13/2022 16:49	12/14/2022 9:00	970	0
1267978	12/13/2022 18:01	12/14/2022 9:00	898	0
188639	12/13/2022 18:02	12/14/2022 9:00	897	0
903630	12/13/2022 18:16	12/14/2022 9:00	883	0
1664763	12/13/2022 21:56	12/14/2022 9:00	663	0
1664763	12/14/2022 3:14	12/14/2022 9:00	345	0
1073095	12/14/2022 9:07	12/15/2022 9:00	1432	0
12746	12/14/2022 9:10	12/15/2022 9:00	1429	0
1320619	12/14/2022 9:11	12/15/2022 9:00	1428	0
631067	12/14/2022 9:40	12/15/2022 9:00	1399	0
1267978	12/14/2022 10:06	12/15/2022 9:00	1373	0
224277	12/14/2022 10:08	12/15/2022 9:00	1371	0
264873	12/14/2022 11:38	12/15/2022 9:00	1281	0
926657	12/14/2022 13:04	12/15/2022 9:00	1195	0
1539469	12/14/2022 17:06	12/15/2022 9:00	953	0
1393633	12/14/2022 17:11	12/15/2022 9:00	948	0
1527886	12/14/2022 17:12	12/15/2022 9:00	947	0
6490578	12/14/2022 17:15	12/15/2022 9:00	944	0

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1538577	12/14/2022 17:16	12/15/2022 9:00	943	0
7518767	12/14/2022 17:18	12/15/2022 9:00	941	0
587455	12/14/2022 17:25	12/15/2022 9:00	934	0
428179	12/14/2022 17:30	12/15/2022 9:00	929	0
169731	12/14/2022 17:55	12/15/2022 9:00	904	0
1320619	12/15/2022 9:12	12/16/2022 9:00	1427	0
1393633	12/15/2022 9:13	12/16/2022 9:00	1426	0
1538577	12/15/2022 13:12	12/16/2022 9:00	1187	0
1527886	12/16/2022 9:16	12/17/2022 9:00	1423	0
304265	12/17/2022 9:27	12/18/2022 9:00	1412	0
981933	12/19/2022 11:07	12/20/2022 9:00	1312	0
1434359	12/19/2022 12:25	12/20/2022 9:00	1234	0
1393633	12/19/2022 13:07	12/20/2022 9:00	1192	0
1417138	12/19/2022 13:20	12/20/2022 9:00	1179	0
1363415	12/20/2022 10:03	12/21/2022 9:00	1376	0
1650561	12/20/2022 10:03	12/21/2022 9:00	1376	0
1539469	12/20/2022 10:18	12/21/2022 9:00	1361	0
1538577	12/20/2022 10:24	12/21/2022 9:00	1355	0
926657	12/20/2022 10:27	12/21/2022 9:00	1352	0
169731	12/20/2022 10:36	12/21/2022 9:00	1343	0.08
7553375	12/20/2022 10:37	12/21/2022 9:00	1342	0
378229	12/20/2022 10:50	12/21/2022 9:00	1329	0
1393633	12/20/2022 12:08	12/21/2022 9:00	1251	0
1434359	12/20/2022 12:08	12/21/2022 9:00	1251	0
1664763	12/20/2022 12:09	12/21/2022 9:00	1250	0
587455	12/20/2022 12:35	12/21/2022 9:00	1224	0
631067	12/20/2022 14:29	12/21/2022 9:00	1110	0
419709	12/20/2022 14:37	12/21/2022 9:00	1102	0
181427	12/20/2022 15:12	12/21/2022 9:00	1067	0
1538398	12/20/2022 17:36	12/21/2022 9:00	923	0
1437071	12/20/2022 17:49	12/21/2022 9:00	910	0
1073506	12/20/2022 17:53	12/21/2022 9:00	906	0
1368745	12/20/2022 17:54	12/21/2022 9:00	905	0
1073095	12/20/2022 17:59	12/21/2022 9:00	900	0
1431752	12/20/2022 18:10	12/21/2022 9:00	889	0
352652	12/20/2022 18:17	12/21/2022 9:00	882	0
1567827	12/20/2022 18:22	12/21/2022 9:00	877	0
1664763	12/21/2022 1:42	12/21/2022 9:00	437	0
181427	12/21/2022 9:20	12/22/2022 9:00	1419	0
352652	12/21/2022 9:58	12/22/2022 9:00	1381	0
1650561	12/21/2022 10:04	12/22/2022 9:00	1375	0
1538398	12/21/2022 10:06	12/22/2022 9:00	1373	0
419709	12/21/2022 10:12	12/22/2022 9:00	1367	0
1567827	12/21/2022 10:16	12/22/2022 9:00	1363	0
169731	12/21/2022 13:31	12/22/2022 9:00	1168	0
1320619	12/21/2022 14:37	12/22/2022 9:00	1102	0
523018	12/21/2022 14:39	12/22/2022 9:00	1100	0

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1538577	12/21/2022 16:57	12/22/2022 9:00	962	0
1539469	12/21/2022 17:05	12/22/2022 9:00	954	0
1431752	12/21/2022 17:52	12/22/2022 9:00	907	0
1320619	12/22/2022 9:11	12/23/2022 9:00	1428	0
1539469	12/22/2022 9:17	12/23/2022 9:00	1422	0
169731	12/22/2022 9:20	12/23/2022 9:00	1419	0
523018	12/22/2022 9:57	12/23/2022 9:00	1382	0
1538577	12/22/2022 10:15	12/23/2022 9:00	1364	0
7553375	12/22/2022 10:16	12/23/2022 9:00	1363	0
1431752	12/22/2022 10:16	12/23/2022 9:00	1363	0
199271	1/4/2023 13:20	1/5/2023 9:00	1179	0
1664763	1/4/2023 13:36	1/5/2023 9:00	1163	0
1538577	1/4/2023 15:48	1/5/2023 9:00	1031	0
378229	1/4/2023 15:50	1/5/2023 9:00	1029	0
501300	1/4/2023 15:55	1/5/2023 9:00	1024	0
41508	1/4/2023 16:32	1/5/2023 9:00	987	0
50431	1/4/2023 16:47	1/5/2023 9:00	972	0
926657	1/4/2023 16:56	1/5/2023 9:00	963	0
7553375	1/4/2023 17:28	1/5/2023 9:00	931	0
326453	1/4/2023 17:42	1/5/2023 9:00	917	0
325050	1/4/2023 18:00	1/5/2023 9:00	899	0
903630	1/4/2023 18:05	1/5/2023 9:00	894	0
224277	1/4/2023 19:54	1/5/2023 9:00	785	0
7553375	1/5/2023 10:18	1/6/2023 9:00	1361	0
926657	1/5/2023 12:46	1/6/2023 9:00	1213	0
326453	1/5/2023 13:12	1/6/2023 9:00	1187	0
1538577	1/6/2023 10:17	1/7/2023 9:00	1362	0
1664763	1/6/2023 13:48	1/7/2023 9:00	1151	0
1431752	1/6/2023 16:28	1/7/2023 9:00	991	0
496500	1/6/2023 16:30	1/7/2023 9:00	989	0
7553375	1/6/2023 19:29	1/7/2023 9:00	810	0
199271	1/6/2023 19:37	1/7/2023 9:00	802	0
1320619	1/6/2023 19:40	1/7/2023 9:00	799	0
926657	1/6/2023 19:58	1/7/2023 9:00	781	0
1362855	1/6/2023 20:01	1/7/2023 9:00	778	0
1393633	1/6/2023 20:06	1/7/2023 9:00	773	0
325050	1/6/2023 20:57	1/7/2023 9:00	722	0
1320619	1/7/2023 9:12	1/8/2023 9:00	1427	0
1362855	1/7/2023 9:13	1/8/2023 9:00	1426	0
1393633	1/7/2023 9:13	1/8/2023 9:00	1426	0
199271	1/7/2023 9:21	1/8/2023 9:00	1418	0
926657	1/7/2023 9:51	1/8/2023 9:00	1388	0
496500	1/7/2023 9:57	1/8/2023 9:00	1382	0
1538577	1/7/2023 10:16	1/8/2023 9:00	1363	0
1431752	1/7/2023 10:17	1/8/2023 9:00	1362	0
1350499	1/7/2023 13:32	1/8/2023 9:00	1167	0
1509487	1/7/2023 14:36	1/8/2023 9:00	1103	0

Appendix D - Generation Loss or Gain Event Table

1348130	1/7/2023 18:42	1/8/2023 9:00	857	0
1350499	1/8/2023 9:12	1/9/2023 9:00	1427	0
926657	1/8/2023 9:51	1/9/2023 9:00	1388	0
1509487	1/8/2023 10:17	1/9/2023 9:00	1362	0
1538577	1/8/2023 10:17	1/9/2023 9:00	1362	0
66685	1/8/2023 12:05	1/9/2023 9:00	1254	0
378229	1/8/2023 14:43	1/9/2023 9:00	1096	0
8145578	1/8/2023 15:10	1/9/2023 9:00	1069	0
1671261	1/8/2023 15:25	1/9/2023 9:00	1054	0
1267978	1/8/2023 15:59	1/9/2023 9:00	1020	0
501300	1/8/2023 19:12	1/9/2023 9:00	827	0
1557188	1/8/2023 19:20	1/9/2023 9:00	819	0
501300	1/9/2023 9:36	1/10/2023 9:00	1403	0
1557188	1/9/2023 9:54	1/10/2023 9:00	1385	0
66685	1/9/2023 10:15	1/10/2023 9:00	1364	0
378229	1/9/2023 10:17	1/10/2023 9:00	1362	0
1509487	1/9/2023 10:17	1/10/2023 9:00	1362	0
1538577	1/9/2023 10:17	1/10/2023 9:00	1362	0
8145578	1/9/2023 10:23	1/10/2023 9:00	1356	0
325050	1/9/2023 10:24	1/10/2023 9:00	1355	0
1664763	1/9/2023 10:29	1/10/2023 9:00	1350	0
309233	1/9/2023 14:32	1/10/2023 9:00	1107	0
121748	1/9/2023 15:02	1/10/2023 9:00	1077	0
352652	1/9/2023 15:03	1/10/2023 9:00	1076	0
496500	1/9/2023 16:01	1/10/2023 9:00	1018	0
324045	1/9/2023 16:03	1/10/2023 9:00	1016	0
50431	1/9/2023 17:18	1/10/2023 9:00	941	0
199271	1/9/2023 18:05	1/10/2023 9:00	894	0
105957	1/9/2023 19:25	1/10/2023 9:00	814	0
105957	1/9/2023 19:25	1/10/2023 9:00	814	0
7553375	1/10/2023 9:46	1/11/2023 9:00	1393	0
1509487	1/10/2023 11:06	1/11/2023 9:00	1313	0
1320619	1/10/2023 17:15	1/11/2023 9:00	944	0
324045	1/10/2023 17:28	1/11/2023 9:00	931	0
926657	1/11/2023 9:41	1/12/2023 9:00	1398	0
587455	1/11/2023 13:42	1/12/2023 9:00	1157	0
378229	1/11/2023 15:55	1/12/2023 9:00	1024	0
105957	1/11/2023 15:55	1/12/2023 9:00	1024	0
105957	1/11/2023 15:55	1/12/2023 9:00	1024	0
1538577	1/11/2023 15:56	1/12/2023 9:00	1023	0
1320619	1/12/2023 9:11	1/13/2023 9:00	1428	0
587455	1/12/2023 9:34	1/13/2023 9:00	1405	0
926657	1/12/2023 9:43	1/13/2023 9:00	1396	0
105957	1/12/2023 9:45	1/13/2023 9:00	1394	0
105957	1/12/2023 9:45	1/13/2023 9:00	1394	0
199271	1/12/2023 9:55	1/13/2023 9:00	1384	0
378229	1/12/2023 10:04	1/13/2023 9:00	1375	0

Appendix D - Generation Loss or Gain Event Table

1538577	1/12/2023 10:04	1/13/2023 9:00	1375	0
352652	1/12/2023 10:49	1/13/2023 9:00	1330	0
1509487	1/12/2023 18:32	1/13/2023 9:00	867	0
199271	1/13/2023 9:19	1/14/2023 9:00	1420	0
378229	1/13/2023 10:07	1/14/2023 9:00	1372	0
7553375	1/18/2023 8:26	1/18/2023 9:00	33	0
926657	1/18/2023 8:26	1/18/2023 9:00	33	0
1509487	1/23/2023 11:30	1/24/2023 9:00	1289	0
1538398	1/23/2023 12:56	1/24/2023 9:00	1203	0
106076	1/23/2023 13:23	1/24/2023 9:00	1176	0
1539469	1/23/2023 15:40	1/24/2023 9:00	1039	0
105957	1/23/2023 15:53	1/24/2023 9:00	1026	0
105957	1/23/2023 15:53	1/24/2023 9:00	1026	0
1671261	1/23/2023 15:58	1/24/2023 9:00	1021	0
199271	1/23/2023 16:01	1/24/2023 9:00	1018	0
587455	1/23/2023 18:36	1/24/2023 9:00	863	0
50431	1/23/2023 18:46	1/24/2023 9:00	853	0
428179	1/23/2023 19:03	1/24/2023 9:00	836	0
572916	1/23/2023 19:05	1/24/2023 9:00	834	0
680322	1/23/2023 19:05	1/24/2023 9:00	834	0
203334	1/23/2023 19:15	1/24/2023 9:00	824	0
926657	1/23/2023 19:15	1/24/2023 9:00	824	0
1538577	1/23/2023 19:15	1/24/2023 9:00	824	0
1417138	1/23/2023 19:17	1/24/2023 9:00	822	0
7553375	1/23/2023 19:27	1/24/2023 9:00	812	0
1073095	1/24/2023 6:34	1/24/2023 9:00	145	0
265473	1/24/2023 6:34	1/24/2023 9:00	145	0
378229	1/24/2023 6:34	1/24/2023 9:00	145	0
1557676	1/24/2023 6:34	1/24/2023 9:00	145	0
1393633	1/24/2023 6:34	1/24/2023 9:00	145	0
98438	1/24/2023 6:50	1/24/2023 9:00	129	0
195839	1/24/2023 6:51	1/24/2023 9:00	128	0
1437071	1/24/2023 6:55	1/24/2023 9:00	124	0
1650561	1/24/2023 7:03	1/24/2023 9:00	116	0
392602	1/24/2023 7:06	1/24/2023 9:00	113	0
66685	1/24/2023 7:14	1/24/2023 9:00	105	0
1509487	1/24/2023 7:51	1/24/2023 9:00	68	0
199271	1/24/2023 9:18	1/25/2023 9:00	1421	0
587455	1/24/2023 9:33	1/25/2023 9:00	1406	0
428179	1/24/2023 9:46	1/25/2023 9:00	1393	0
106076	1/24/2023 9:56	1/25/2023 9:00	1383	0
1538577	1/24/2023 10:01	1/25/2023 9:00	1378	0
194491	1/24/2023 12:31	1/25/2023 9:00	1228	0
1671261	1/24/2023 12:59	1/25/2023 9:00	1200	0
111983	1/24/2023 13:04	1/25/2023 9:00	1195	0
926657	1/24/2023 14:07	1/25/2023 9:00	1132	0
345647	1/24/2023 14:44	1/25/2023 9:00	1095	0

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106837	1/24/2023 14:46	1/25/2023 9:00	1093	0
77869	1/24/2023 16:17	1/25/2023 9:00	1002	0
587455	1/25/2023 9:34	1/26/2023 9:00	1405	0
77869	1/25/2023 9:39	1/26/2023 9:00	1400	0
106837	1/25/2023 9:55	1/26/2023 9:00	1384	0
66685	1/25/2023 10:01	1/26/2023 9:00	1378	0
1509487	1/25/2023 10:03	1/26/2023 9:00	1376	0
345647	1/25/2023 10:09	1/26/2023 9:00	1370	0
1509487	1/26/2023 10:41	1/27/2023 9:00	1338	0
106837	1/26/2023 11:07	1/27/2023 9:00	1312	0
345647	1/26/2023 11:38	1/27/2023 9:00	1281	0
77869	1/26/2023 11:42	1/27/2023 9:00	1277	0
1538577	1/26/2023 11:46	1/27/2023 9:00	1273	0
105957	1/26/2023 11:52	1/27/2023 9:00	1267	0
105957	1/26/2023 11:52	1/27/2023 9:00	1267	0
106076	1/26/2023 12:00	1/27/2023 9:00	1259	0
203334	1/26/2023 13:31	1/27/2023 9:00	1168	0
126219	1/26/2023 13:31	1/27/2023 9:00	1168	0
378229	1/26/2023 13:37	1/27/2023 9:00	1162	0
50431	1/26/2023 13:37	1/27/2023 9:00	1162	0
926657	1/26/2023 13:38	1/27/2023 9:00	1161	0
1671261	1/26/2023 13:45	1/27/2023 9:00	1154	0
7553375	1/26/2023 16:48	1/27/2023 9:00	971	0
1362855	1/26/2023 17:19	1/27/2023 9:00	940	0
428179	1/26/2023 17:31	1/27/2023 9:00	928	0
1362855	1/27/2023 9:12	1/28/2023 9:00	1427	0
50431	1/27/2023 9:32	1/28/2023 9:00	1407	0
77869	1/27/2023 9:42	1/28/2023 9:00	1397	0
926657	1/27/2023 9:45	1/28/2023 9:00	1394	0
106076	1/27/2023 10:02	1/28/2023 9:00	1377	0.01
378229	1/27/2023 10:08	1/28/2023 9:00	1371	0.17
1538577	1/27/2023 10:08	1/28/2023 9:00	1371	0
1509487	1/27/2023 10:08	1/28/2023 9:00	1371	0
1671261	1/27/2023 10:13	1/28/2023 9:00	1366	0
345647	1/27/2023 10:14	1/28/2023 9:00	1365	0
1464949	1/27/2023 11:05	1/28/2023 9:00	1314	0
226615	1/27/2023 12:47	1/28/2023 9:00	1212	0
66685	1/27/2023 14:34	1/28/2023 9:00	1105	0
903630	1/27/2023 15:05	1/28/2023 9:00	1074	0
680322	1/27/2023 16:14	1/28/2023 9:00	1005	0
1557188	1/27/2023 16:16	1/28/2023 9:00	1003	0
587455	1/27/2023 16:21	1/28/2023 9:00	998	0
1393633	1/27/2023 16:24	1/28/2023 9:00	995	0
428179	1/27/2023 16:51	1/28/2023 9:00	968	0
352652	1/27/2023 21:12	1/28/2023 9:00	707	0
1393633	1/28/2023 9:12	1/29/2023 9:00	1427	0
587455	1/28/2023 9:37	1/29/2023 9:00	1402	0

Appendix D - Generation Loss or Gain Event Table

926657	1/28/2023 9:47	1/29/2023 9:00	1392	0
1557188	1/28/2023 9:49	1/29/2023 9:00	1390	0
428179	1/28/2023 9:52	1/29/2023 9:00	1387	0
352652	1/28/2023 9:55	1/29/2023 9:00	1384	0.14
680322	1/28/2023 10:00	1/29/2023 9:00	1379	0
378229	1/28/2023 10:11	1/29/2023 9:00	1368	0.97
1509487	1/28/2023 10:11	1/29/2023 9:00	1368	0
7553375	1/28/2023 10:11	1/29/2023 9:00	1368	0
1538577	1/28/2023 10:11	1/29/2023 9:00	1368	0
226615	1/28/2023 10:16	1/29/2023 9:00	1363	0
1464949	1/28/2023 10:16	1/29/2023 9:00	1363	0
345647	1/28/2023 10:17	1/29/2023 9:00	1362	0
226615	1/30/2023 16:00	1/31/2023 9:00	1019	0
378229	1/30/2023 17:34	1/31/2023 9:00	925	0
428179	1/30/2023 17:55	1/31/2023 9:00	904	0
680322	1/30/2023 18:11	1/31/2023 9:00	888	0
352652	1/30/2023 19:18	1/31/2023 9:00	821	0
7553375	1/30/2023 19:18	1/31/2023 9:00	821	0
1538577	1/30/2023 19:26	1/31/2023 9:00	813	0
275018	1/30/2023 19:36	1/31/2023 9:00	803	0
66685	1/31/2023 10:10	2/1/2023 9:00	1369	0
378229	1/31/2023 11:50	2/1/2023 9:00	1269	0
1464949	1/31/2023 12:03	2/1/2023 9:00	1256	0
1538577	1/31/2023 12:14	2/1/2023 9:00	1245	0.03
7553375	1/31/2023 12:28	2/1/2023 9:00	1231	0
352652	1/31/2023 18:36	2/1/2023 9:00	863	0
1434905	1/31/2023 18:46	2/1/2023 9:00	853	0
680322	1/31/2023 19:23	2/1/2023 9:00	816	0
428179	1/31/2023 19:33	2/1/2023 9:00	806	0
587455	1/31/2023 19:43	2/1/2023 9:00	796	0
496500	1/31/2023 20:00	2/1/2023 9:00	779	0
496500	2/1/2023 9:51	2/2/2023 9:00	1388	0
352652	2/1/2023 9:53	2/2/2023 9:00	1386	0.08
680322	2/1/2023 9:59	2/2/2023 9:00	1380	0
66685	2/1/2023 10:07	2/2/2023 9:00	1372	0
1538577	2/1/2023 10:09	2/2/2023 9:00	1370	0
1464949	2/1/2023 10:14	2/2/2023 9:00	1365	0
1417138	2/1/2023 11:19	2/2/2023 9:00	1300	0
1362855	2/1/2023 11:32	2/2/2023 9:00	1287	0.51
428179	2/1/2023 11:43	2/2/2023 9:00	1276	0
903630	2/1/2023 18:46	2/2/2023 9:00	853	0
1362855	2/2/2023 9:12	2/3/2023 9:00	1427	0.04
428179	2/2/2023 9:52	2/3/2023 9:00	1387	0
352652	2/2/2023 9:55	2/3/2023 9:00	1384	0.25
1538577	2/2/2023 10:10	2/3/2023 9:00	1369	0
7553375	2/2/2023 10:11	2/3/2023 9:00	1368	0
903630	2/2/2023 10:16	2/3/2023 9:00	1363	0

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1417138	2/3/2023 9:54	2/4/2023 9:00	1385	0
1538577	2/6/2023 12:10	2/7/2023 9:00	1249	0
7553375	2/6/2023 12:19	2/7/2023 9:00	1240	0
66685	2/6/2023 12:35	2/7/2023 9:00	1224	0
926657	2/6/2023 13:05	2/7/2023 9:00	1194	0
1362855	2/6/2023 14:03	2/7/2023 9:00	1136	0
428179	2/6/2023 14:18	2/7/2023 9:00	1121	0
345647	2/6/2023 15:36	2/7/2023 9:00	1043	0
680322	2/6/2023 17:06	2/7/2023 9:00	953	0
1073095	2/6/2023 21:49	2/7/2023 9:00	670	0
352652	2/6/2023 22:29	2/7/2023 9:00	630	0
1073095	2/7/2023 9:08	2/8/2023 9:00	1431	0
1362855	2/7/2023 9:13	2/8/2023 9:00	1426	0
926657	2/7/2023 9:52	2/8/2023 9:00	1387	0
428179	2/7/2023 9:57	2/8/2023 9:00	1382	0
352652	2/7/2023 10:00	2/8/2023 9:00	1379	0
680322	2/7/2023 10:06	2/8/2023 9:00	1373	0
66685	2/7/2023 10:15	2/8/2023 9:00	1364	0
1538577	2/7/2023 10:17	2/8/2023 9:00	1362	0
345647	2/7/2023 10:25	2/8/2023 9:00	1354	0
1671261	2/7/2023 12:49	2/8/2023 9:00	1210	0
378229	2/7/2023 13:05	2/8/2023 9:00	1194	0
1538398	2/7/2023 13:46	2/8/2023 9:00	1153	0
1362855	2/8/2023 9:13	2/9/2023 9:00	1426	0.02
680322	2/8/2023 10:06	2/9/2023 9:00	1373	0
1538398	2/8/2023 10:07	2/9/2023 9:00	1372	0
378229	2/8/2023 10:18	2/9/2023 9:00	1361	0.5
1671261	2/8/2023 10:24	2/9/2023 9:00	1355	0
66685	2/8/2023 13:10	2/9/2023 9:00	1189	0
926657	2/14/2023 11:11	2/15/2023 9:00	1308	0
378229	2/14/2023 11:14	2/15/2023 9:00	1305	0.61
224277	2/14/2023 11:18	2/15/2023 9:00	1301	0
224176	2/14/2023 11:20	2/15/2023 9:00	1299	0
228073	2/14/2023 12:39	2/15/2023 9:00	1220	0
680322	2/14/2023 13:14	2/15/2023 9:00	1185	0
428179	2/14/2023 13:32	2/15/2023 9:00	1167	0
1393633	2/14/2023 13:39	2/15/2023 9:00	1160	0
226615	2/14/2023 14:03	2/15/2023 9:00	1136	0
352652	2/14/2023 14:13	2/15/2023 9:00	1126	0
506261	2/14/2023 15:09	2/15/2023 9:00	1070	0
791282	2/14/2023 15:17	2/15/2023 9:00	1062	0
392602	2/14/2023 15:35	2/15/2023 9:00	1044	0
1190820	2/14/2023 17:25	2/15/2023 9:00	934	0
1538577	2/14/2023 17:27	2/15/2023 9:00	932	0
7553375	2/14/2023 17:36	2/15/2023 9:00	923	0
903630	2/14/2023 17:39	2/15/2023 9:00	920	0
1190820	2/15/2023 9:09	2/16/2023 9:00	1430	0

Appendix D - Generation Loss or Gain Event Table

1393633	2/15/2023 9:13	2/16/2023 9:00	1426	0
926657	2/15/2023 9:52	2/16/2023 9:00	1387	0
428179	2/15/2023 9:58	2/16/2023 9:00	1381	0
228073	2/15/2023 10:01	2/16/2023 9:00	1378	0
352652	2/15/2023 10:01	2/16/2023 9:00	1378	0.14
680322	2/15/2023 10:07	2/16/2023 9:00	1372	0
392602	2/15/2023 10:09	2/16/2023 9:00	1370	0
506261	2/15/2023 10:10	2/16/2023 9:00	1369	0.61
7553375	2/15/2023 10:19	2/16/2023 9:00	1360	0
1538577	2/15/2023 10:19	2/16/2023 9:00	1360	0
903630	2/15/2023 10:25	2/16/2023 9:00	1354	0
646026	2/16/2023 15:53	2/17/2023 9:00	1026	0
7902724	2/16/2023 19:09	2/17/2023 9:00	830	0
1362855	2/16/2023 19:49	2/17/2023 9:00	790	0
1362855	2/17/2023 9:12	2/18/2023 9:00	1427	0
646026	2/17/2023 9:54	2/18/2023 9:00	1385	0
646026	2/18/2023 9:54	2/19/2023 9:00	1385	0
315708	2/18/2023 16:27	2/19/2023 9:00	992	0
1363415	2/18/2023 17:09	2/19/2023 9:00	950	0
1362855	2/18/2023 17:48	2/19/2023 9:00	911	0
315708	2/19/2023 10:09	2/20/2023 9:00	1370	0.39
1363415	2/19/2023 10:10	2/20/2023 9:00	1369	0.01
1362855	2/19/2023 16:49	2/20/2023 9:00	970	0
1362855	2/20/2023 9:12	2/21/2023 9:00	1427	1.32
1363415	2/20/2023 10:13	2/21/2023 9:00	1366	0.1
646026	2/20/2023 15:59	2/21/2023 9:00	1020	0
1356945	2/21/2023 11:12	2/22/2023 9:00	1307	0
315484	2/21/2023 13:01	2/22/2023 9:00	1198	0
315708	2/21/2023 15:27	2/22/2023 9:00	1052	0
1362855	2/22/2023 9:12	2/23/2023 9:00	1427	0
646026	2/22/2023 10:02	2/23/2023 9:00	1377	0
315484	2/22/2023 10:10	2/23/2023 9:00	1369	0
315708	2/22/2023 10:18	2/23/2023 9:00	1361	0
315752	2/22/2023 12:24	2/23/2023 9:00	1235	0
646026	2/23/2023 11:10	2/24/2023 9:00	1309	0
7902724	2/23/2023 11:23	2/24/2023 9:00	1296	0
315752	2/23/2023 12:08	2/24/2023 9:00	1251	0
315708	2/23/2023 14:18	2/24/2023 9:00	1121	0.14
1362855	2/23/2023 14:27	2/24/2023 9:00	1112	0
1356945	2/23/2023 21:42	2/24/2023 9:00	677	0
1362855	2/24/2023 9:13	2/25/2023 9:00	1426	0.21
315752	2/24/2023 9:28	2/25/2023 9:00	1411	0.42
1356945	2/24/2023 10:06	2/25/2023 9:00	1373	0
315708	2/24/2023 10:23	2/25/2023 9:00	1356	1.87
315484	2/24/2023 13:42	2/25/2023 9:00	1157	0
1363415	2/24/2023 16:04	2/25/2023 9:00	1015	0
1356945	2/25/2023 10:07	2/26/2023 9:00	1372	0

Appendix D - Generation Loss or Gain Event Table

315484	2/25/2023 10:14	2/26/2023 9:00	1365	0
315708	2/25/2023 10:23	2/26/2023 9:00	1356	0
1362855	2/25/2023 15:13	2/26/2023 9:00	1066	0
1362855	2/26/2023 9:15	2/27/2023 9:00	1424	0.53
1356945	2/26/2023 10:11	2/27/2023 9:00	1368	0
646026	3/2/2023 0:28	3/2/2023 9:00	511	0
1362855	3/2/2023 10:13	3/3/2023 9:00	1366	0.05
315484	3/2/2023 22:17	3/3/2023 9:00	642	0
1356945	3/2/2023 22:55	3/3/2023 9:00	604	0
1356945	3/3/2023 9:58	3/4/2023 9:00	1381	0
315484	3/3/2023 10:17	3/4/2023 9:00	1362	0
1362855	3/3/2023 12:13	3/4/2023 9:00	1246	0
1363415	3/4/2023 12:55	3/5/2023 9:00	1204	0
1348300	3/4/2023 15:31	3/5/2023 9:00	1048	0
1362855	3/4/2023 21:41	3/5/2023 9:00	678	0
1348300	3/5/2023 12:12	3/6/2023 9:00	1247	0.07
646026	3/5/2023 12:21	3/6/2023 9:00	1238	0
1349502	3/5/2023 13:47	3/6/2023 9:00	1152	0
315484	3/6/2023 15:06	3/7/2023 9:00	1073	0
315484	3/7/2023 13:30	3/8/2023 9:00	1169	0
646026	3/8/2023 11:53	3/9/2023 9:00	1266	0
1362855	3/8/2023 12:03	3/9/2023 9:00	1256	0
1349502	3/8/2023 18:20	3/9/2023 9:00	879	0
315708	3/8/2023 18:20	3/9/2023 9:00	879	0
315752	3/9/2023 14:55	3/10/2023 9:00	1084	0
315484	3/9/2023 18:18	3/10/2023 9:00	881	0
7415418	3/9/2023 20:48	3/10/2023 9:00	731	0
1349502	3/9/2023 21:28	3/10/2023 9:00	691	0
7902724	3/10/2023 8:36	3/10/2023 9:00	23	0
1356945	3/10/2023 10:04	3/11/2023 9:00	1375	0
1363415	3/10/2023 17:22	3/11/2023 9:00	937	0
1348300	3/10/2023 18:14	3/11/2023 9:00	885	0
1362855	3/11/2023 17:27	3/12/2023 9:00	932	0
1362855	3/12/2023 13:59	3/13/2023 9:00	1140	0
1356945	3/13/2023 20:50	3/14/2023 9:00	729	0
7902724	3/13/2023 22:22	3/14/2023 9:00	637	0
315484	3/14/2023 14:42	3/15/2023 9:00	1097	0
1348300	3/14/2023 16:32	3/15/2023 9:00	987	0
315708	3/14/2023 17:12	3/15/2023 9:00	947	0
1362855	3/15/2023 10:02	3/16/2023 9:00	1377	0.06
1356945	3/15/2023 11:27	3/16/2023 9:00	1292	0
646026	3/15/2023 19:42	3/16/2023 9:00	797	0
311724	3/17/2023 9:24	3/18/2023 9:00	1415	0
315708	3/17/2023 10:56	3/18/2023 9:00	1323	0
1362855	3/17/2023 11:19	3/18/2023 9:00	1300	0
646026	3/17/2023 11:58	3/18/2023 9:00	1261	0
313770	3/17/2023 17:13	3/18/2023 9:00	946	0

Appendix D - Generation Loss or Gain Event Table

1349502	3/17/2023 19:13	3/18/2023 9:00	826	0
311724	3/18/2023 8:21	3/18/2023 9:00	38	0
646026	3/18/2023 12:11	3/19/2023 9:00	1248	0
313770	3/18/2023 12:13	3/19/2023 9:00	1246	0
315752	3/18/2023 17:55	3/19/2023 9:00	904	0
1349502	3/18/2023 18:05	3/19/2023 9:00	894	0
7902724	3/19/2023 9:14	3/20/2023 9:00	1425	0
315752	3/19/2023 11:48	3/20/2023 9:00	1271	0.01
646026	3/19/2023 12:19	3/20/2023 9:00	1240	0
313770	3/19/2023 15:05	3/20/2023 9:00	1074	0
311724	3/20/2023 10:07	3/21/2023 9:00	1372	0.16
646026	3/20/2023 11:53	3/21/2023 9:00	1266	0
313770	3/20/2023 12:30	3/21/2023 9:00	1229	0
1356945	3/20/2023 13:24	3/21/2023 9:00	1175	0
315752	3/20/2023 15:44	3/21/2023 9:00	1035	0
1349502	3/20/2023 18:37	3/21/2023 9:00	862	0
1363415	3/20/2023 18:50	3/21/2023 9:00	849	0
315708	3/20/2023 19:58	3/21/2023 9:00	781	0
315484	3/20/2023 20:49	3/21/2023 9:00	730	0

Appendix E

Hosting Capacity Methodology and Comparison Table

The Hosting Capacity values calculated for each feeder within the results table represents the expected change in hosting capacity for the average node on a distribution feeder under each of the four scenarios studied (Nameplate, Monitored, Autonomous, and Actively Managed). These values were calculated using CYME's Integration Capacity Analysis (ICA) tool and performing the analysis on PPL Electric's circuit models for both a daytime minimum load case (generally between 9 AM and 6 PM) and a daytime peak load case (the time of the largest concurrent load magnitude on the feeder and within the same time range). The ICA tool is intended to identify the maximum amount of generation that can be accommodated at each node of the distribution system. Within the ICA tool, the results will evaluate Hosting Capacity at each node with respect to the following constraints:

- Thermal Loading: Equipment Normal Ratings cannot be exceeded
- Overvoltage: Voltage values cannot exceed the ANSI requirements (1.05 per unit)
- Substation Transformer Reverse Flow: Injection cannot cause reverse flow onto the Transmission system

This method was utilized in four different scenarios, as described within the Pilot Implementation Plan, to capture the change in Hosting Capacity as a result of varying behaviors and potential benefits of DER capabilities within the pilot.

- "Nameplate" refers to the lack of any data monitoring or reactive power management capabilities, for which circuit models assume nameplate real power output at unity power factor
- "Monitoring" refers to the availability of historical real power output data, which is used in lieu of the nameplate value.
- "Autonomous" refers to the utilization of a volt/var curve to allow the DER to change its reactive power contribution in response to local voltage conditions
- "Active Management" refers to the utilization of a centralized management system (ADMS/DERMS) to adjust the DER's reactive power contribution based on all available circuit condition information.

Each of these capabilities is assessed in a progression which adds the new capabilities to those established in the previous scenario (e.g., DERs with volt/var curves in the "Autonomous" scenario will have their real power output set to the historical value set within the "Monitoring" scenario, minus any curtailment as a result of the volt/var curve). This meets the reporting requirements described within the Pilot Implementation Plan and enables direct comparisons across scenarios to determine both the discretionary value of the new functionality (by comparing against the previous scenario) and the value of the set of functionalities as a whole (when compared against the "Nameplate" baseline scenario).

The four functionalities correspond to the three types of DER categories within the DER Management Program.

- Grandfathered DERs have no communications or reactive power management. Their real power output is set to the inverter's nameplate capacity and their reactive power capabilities are disabled and set to unity power factor.

- Control Group DERs have Monitoring and Autonomous capabilities.
- Actively Managed DERs have Monitoring, Autonomous, and Active Management capabilities.

One of the key challenges in accounting for the impact of Active Management on Hosting Capacity is in accurately modeling the management logic used by PPL Electric's ADMS/DERMS to determine and execute reactive power management events. In the operational environment, the ADMS/DERMS utilizes a complex optimization function to determine optimal setpoints to mitigate voltage violations by selecting specific DERs and adjusting their power factor.

For the purpose of determining Hosting Capacity, each actively managed inverter within the circuit models will be initialized at 0.9 absorbing power factor, which will mimic the maximum expected contribution level of the DERs to mitigating voltage violations that would limit Hosting Capacity. Because we are primarily concerned with these limitations, utilizing a fixed 0.9 absorbing power will provide results which reflect the expected benefit without the need to implement complex and time-consuming optimization modeling. In some cases, the inability to model the actual operation of the ADMS/DERMS system may yield some results which are lower than the Autonomous calculation for the same feeder.

Using the methodology described above results in calculated Hosting Capacity values for each node for every distribution feeder under each of the four scenarios. In order to aggregate the results by feeder, PPL Electric calculated the average nodal Hosting Capacity by summing the Hosting Capacity values at each node and dividing by the number of nodes on the feeder. While the actual values at specific nodes on a given feeder will vary significantly, this average provides a reasonably understandable value to compare across feeders and across the different scenarios.

In order to accurately capture the impact of single-phase and two-phase laterals on the results, each node, for the purposes of this analysis, is considered as one phase at one location. As an example, a three-phase location with a total hosting capacity of 300kW would contribute at the level of 100kW per node.

Appendix E - Hosting Capacity Comparison Table

Feeder	Nameplate - Avg Nodal Hosting Capacity (kW)	Monitored - Avg Nodal Hosting Capacity (kW)	Autonomous - Avg Nodal Hosting Capacity (kW)	Active Management - Avg Nodal Hosting Capacity (kW)
10401	159.30	164.35	163.77	163.77
10402	181.90	181.90	181.90	181.90
10501	1065.60	1069.64	1069.64	1069.75
10503	121.96	140.82	148.38	159.12
10504	838.10	836.86	836.86	836.91
10505	744.28	745.34	745.34	745.46
10506	1694.30	1708.44	1708.44	1708.67
10601	342.22	341.03	341.03	341.03
10602	397.12	398.13	398.13	398.38
10603	282.86	282.88	282.88	282.88
10701	452.72	460.05	442.80	461.82
10702	642.98	663.43	665.56	631.19
10703	1146.05	1146.82	1141.12	1140.94
10704	979.51	974.44	974.30	968.77
10705	8.82	6.57	6.55	8.14
10707	491.85	492.84	492.59	493.24
10801	290.28	276.98	277.89	280.28
10802	1.67	1.67	1.67	1.67
10803	1069.03	1069.03	1069.00	1069.03
10805	1.29	1.29	1.29	1.29
10901	76.61	76.63	76.63	76.68
10902	624.42	633.82	640.72	640.72
10903	264.53	265.30	265.40	265.29
10904	197.97	203.31	203.89	203.89
11001	641.33	641.33	641.33	641.33
11002	1571.37	1571.37	1571.37	1571.37
11003	446.63	446.92	446.92	446.92
11004	307.86	307.20	307.20	307.20
11005	1331.27	1333.60	1333.60	1333.60
11101	630.26	633.21	633.22	633.22
11102	707.50	712.51	712.55	712.56
11103	740.82	746.62	746.47	746.58
11104	450.31	458.48	458.52	458.56
11201	705.10	705.11	705.18	705.15
11202	273.95	273.84	274.65	274.46
11203	651.53	651.18	651.18	650.89
11204	970.33	970.57	970.57	969.23
11205	788.68	788.80	788.80	788.13
11301	730.91	736.81	739.26	739.01
11302	712.70	716.30	717.06	716.81
11303	583.72	587.14	587.68	587.74
11401	0.00	0.00	0.00	0.00

Appendix E - Hosting Capacity Comparison Table

11402	0.00	0.00	0.00	0.00
11403	0.00	0.00	0.00	0.00
11404	0.00	0.00	0.00	0.00
11405	0.00	0.00	0.00	0.00
11406	0.00	0.00	0.00	0.00
11407	0.00	0.00	0.00	0.00
11501	3333.33	3333.33	3333.33	3333.33
11502	979.58	981.84	981.84	982.03
11503	1903.76	1903.79	1903.78	1903.78
11504	1423.16	1428.56	1428.50	1428.52
11505	1981.62	1993.20	1993.27	1993.31
11506	375.73	376.98	377.00	377.00
11507	3333.33	3333.33	3333.33	3333.33
11801	231.76	231.02	231.13	231.71
11802	761.54	761.90	761.79	761.72
11803	75.54	75.86	75.87	75.97
11804	215.30	213.76	213.75	213.72
11805	669.30	672.53	672.53	672.65
11901	625.02	625.83	625.87	627.32
11902	173.79	173.82	173.97	174.44
11903	134.37	135.85	136.84	139.78
11904	665.03	665.28	665.30	666.04
12001	226.22	227.02	227.02	227.02
12002	33.42	33.49	69.99	70.73
12003	573.53	573.68	600.19	600.35
12004	210.69	210.69	210.69	210.69
12005	871.90	873.60	873.60	873.60
12006	397.04	402.15	402.14	402.14
12007	560.88	562.54	562.54	562.54
12101	683.04	686.43	686.82	687.07
12102	573.59	576.34	576.59	576.77
12201	1294.88	1294.97	1294.97	1294.97
12202	3.23	2.43	2.97	2.67
12203	846.87	849.34	849.31	990.49
12204	1223.91	1224.00	1224.00	1224.00
12205	882.82	882.96	882.96	882.96
12206	773.75	776.79	776.75	976.19
12207	2248.60	2261.57	2261.40	2202.63
12301	412.08	412.13	412.13	412.45
12302	710.36	710.54	710.54	710.61
12303	1389.75	1390.95	1390.95	1390.49
12304	721.63	721.98	721.98	722.37
12305	708.55	708.79	708.79	708.73
12401	225.32	249.29	249.28	250.30
12402	340.43	341.16	341.20	341.25
12403	547.69	548.01	548.01	548.01
12501	1464.56	1465.21	1465.24	1465.24

Appendix E - Hosting Capacity Comparison Table

12502	1276.48	1278.12	1278.26	1278.21
12503	1526.07	1527.51	1527.66	1527.63
12504	1275.49	1275.63	1275.64	1275.64
12505	913.73	919.01	919.19	919.18
12601	789.59	789.61	789.63	790.09
12602	1096.47	1096.51	1096.53	1096.91
12603	619.90	619.92	619.92	619.90
12604	827.98	828.10	828.03	828.79
12605	885.98	886.14	886.15	887.89
12606	1173.36	1173.41	1173.47	1173.89
12701	220.58	220.44	220.42	220.46
12702	775.20	775.22	775.22	775.22
12703	723.05	723.07	723.07	723.07
12704	379.95	379.97	379.97	379.97
12705	804.53	804.56	804.56	804.56
12801	837.63	838.22	838.26	838.46
12802	780.81	781.86	781.89	782.07
12803	1131.66	1135.16	1135.11	1135.32
12804	1541.97	1547.52	1547.45	1547.60
12805	1427.97	1432.85	1432.91	1432.96
12806	1187.73	1189.78	1189.82	1190.04
12902	212.66	212.66	212.66	212.66
13001	665.47	667.88	669.19	670.36
13002	613.14	614.70	615.52	616.59
13003	841.70	844.37	844.04	844.59
13004	799.73	802.08	802.82	802.84
13101	581.44	583.44	583.94	587.73
13102	742.65	748.26	748.77	750.18
13103	619.16	621.41	620.87	619.78
13104	724.82	726.74	726.70	726.43
13105	765.90	769.45	770.29	771.84
13201	703.15	703.55	703.55	703.55
13202	641.23	641.52	641.52	641.52
13301	889.76	892.29	892.29	892.29
13302	573.26	574.56	574.97	575.94
13303	697.14	671.26	671.26	671.64
13401	553.26	553.31	553.31	553.18
13501	312.91	316.82	316.34	316.84
13502	535.42	533.39	533.52	533.39
13503	230.96	230.90	230.13	230.13
13601	621.52	621.52	621.52	621.52
13602	825.67	826.55	826.23	826.23
13603	602.35	602.31	602.01	602.01
13604	543.41	543.43	543.47	543.47
13605	588.40	588.26	587.45	587.45
13606	414.37	414.50	414.52	414.52
13701	352.42	353.73	355.14	357.59

Appendix E - Hosting Capacity Comparison Table

13702	731.08	733.96	733.96	733.96
13703	1416.19	1420.59	1420.59	1420.59
13704	206.31	228.06	246.03	251.83
13705	881.03	883.76	883.76	883.76
13801	1003.16	1005.61	1006.67	1006.55
13802	976.10	975.97	975.97	976.02
13803	1292.31	1292.30	1292.30	1292.28
13804	1423.72	1423.90	1424.06	1424.03
13805	2206.56	2206.55	2206.55	2206.54
13806	1441.16	1440.93	1441.20	1443.30
13807	1124.31	1124.40	1124.53	1125.85
13901	16.44	16.44	16.44	16.44
13902	7.68	7.68	7.68	7.68
13903	62.52	63.39	100.22	89.30
13904	3.03	3.01	3.59	3.59
13905	0.23	0.22	0.31	0.30
14001	215.73	215.74	215.78	215.82
14002	111.14	111.14	111.14	111.14
14003	1841.07	1883.17	1887.77	1883.37
14005	639.95	640.03	639.95	640.19
14006	757.04	757.44	757.37	757.57
14007	116.24	116.11	116.11	116.11
14008	475.44	475.78	475.47	476.54
14009	1749.59	1784.11	1787.17	1784.24
14101	243.89	244.37	244.08	243.99
14102	303.77	303.86	303.68	303.69
14103	98.35	98.20	97.99	97.99
14201	795.47	776.05	776.05	784.10
14202	1024.54	1024.68	1024.68	1024.68
14203	1328.20	1327.81	1328.29	1328.48
14204	1035.75	1035.85	1035.85	1035.85
14207	1228.35	1229.25	1229.53	1229.83
14301	1456.87	1457.36	1457.37	1457.48
14302	1582.99	1583.26	1583.26	1583.29
14303	1291.18	1291.52	1291.52	1291.61
14304	566.23	566.30	566.30	566.31
14305	1857.04	1857.60	1857.60	1857.67
14306	1639.73	1639.92	1639.92	1639.93
14307	1073.99	1074.33	1074.33	1074.37
14308	1513.39	1513.66	1513.66	1513.69
14401	801.77	808.78	808.75	808.76
14402	402.26	397.55	397.55	397.55
14403	286.29	319.97	324.96	320.09
14404	377.12	377.69	377.69	377.62
14501	326.57	328.84	329.20	328.26
14502	335.59	343.47	342.72	344.13
14503	535.23	538.44	539.39	539.39

Appendix E - Hosting Capacity Comparison Table

14504	730.53	733.22	733.22	733.22
14601	907.68	908.45	908.54	908.68
14602	235.97	235.53	235.52	235.54
14603	328.50	341.53	339.94	341.33
14604	420.83	421.63	421.30	421.27
14605	800.11	800.32	800.39	800.48
14701	1367.90	1372.41	1372.41	1374.43
14702	434.00	434.01	434.01	434.01
14703	1286.73	1289.89	1289.89	1289.93
14704	1582.56	1584.61	1584.61	1584.67
14705	686.42	688.17	688.17	688.17
14706	1117.77	1118.82	1118.82	1118.89
14801	444.56	461.20	461.38	461.37
14802	462.72	467.34	467.41	467.41
15001	88.71	117.66	116.83	117.75
15101	631.05	635.21	635.21	635.23
15102	417.79	418.51	418.51	418.82
15103	664.54	664.56	664.56	664.56
15104	327.68	327.68	327.68	327.68
15201	595.39	595.46	595.13	595.70
15202	813.09	820.02	820.38	821.47
15301	302.17	302.17	302.17	302.17
15401	2297.15	2304.85	2304.78	2304.81
15402	805.04	816.67	796.00	806.50
15403	1098.58	1099.28	1099.60	1102.52
15404	520.25	507.82	511.05	508.32
15405	536.18	536.34	536.33	536.35
15406	675.77	675.90	676.01	677.57
15601	391.70	391.70	391.70	391.70
15602	608.76	608.76	608.76	608.76
15603	822.99	822.99	822.99	822.99
15604	214.56	214.89	214.89	214.89
15701	589.13	589.27	589.27	589.63
15702	99.23	99.23	99.23	99.23
15703	606.64	606.64	606.64	606.64
15704	601.30	601.96	602.00	603.83
15801	531.13	531.71	531.72	531.68
15802	1015.55	1015.55	1015.55	1015.55
15803	518.67	519.49	519.52	519.43
15804	1198.62	1198.62	1198.62	1198.62
16001	113.84	129.65	129.65	126.74
16002	799.69	801.10	801.10	801.15
16004	26.73	30.51	30.51	29.94
16005	38.05	45.89	45.89	44.77
16006	542.09	551.81	551.90	551.67
16007	44.65	50.09	50.17	49.18
16101	0.00	0.00	0.00	0.00

Appendix E - Hosting Capacity Comparison Table

16102	0.03	0.23	0.23	0.22
16103	0.19	0.35	0.35	0.34
16201	288.93	288.91	289.96	289.96
16202	373.10	364.22	381.58	381.58
16204	604.37	605.32	605.49	605.49
16301	422.28	440.87	440.87	440.88
16302	417.55	417.55	417.55	417.55
16401	408.18	408.61	407.58	407.58
16402	67.45	67.01	66.52	71.43
16403	649.67	649.04	649.04	649.04
16404	901.02	901.09	901.09	901.09
16405	2083.69	2084.51	2084.51	2084.51
16406	655.59	655.71	655.50	655.50
16407	2840.87	2842.20	2842.20	2842.20
16501	1301.27	1302.27	1302.27	1301.75
16502	1348.15	1348.15	1348.15	1348.15
16503	1066.00	1066.00	1066.00	1066.00
16504	473.54	485.92	485.92	486.07
16505	914.46	914.89	914.89	914.50
16601	989.50	989.54	991.21	991.41
16602	1263.72	1263.72	1263.72	1263.72
16603	1399.00	1399.00	1399.00	1399.00
16604	1443.19	1443.34	1443.28	1443.59
16605	480.65	480.91	484.17	484.03
16606	1009.29	1009.29	1009.29	1009.29
16701	286.14	286.85	286.85	286.85
16702	298.15	298.61	298.61	298.61
16703	270.67	271.43	271.43	271.43
16801	77.79	77.79	77.79	77.79
16802	187.84	187.84	187.84	187.84
16803	294.84	294.84	294.84	294.84
16901	7.93	8.24	8.29	1.10
16902	24.03	25.23	25.66	18.52
17001	235.05	235.05	235.05	235.05
17002	343.94	344.91	344.91	346.98
17101	593.62	595.04	595.04	595.16
17102	1272.23	1281.42	1281.44	1281.68
17401	833.92	833.92	833.92	833.92
17402	1233.53	1233.53	1233.53	1233.53
17501	72.06	72.47	72.47	72.39
17801	217.83	217.23	218.02	217.61
17802	0.09	0.09	0.11	0.11
17803	378.94	379.41	381.69	379.29
17804	456.93	456.34	461.34	456.04
17805	499.76	500.53	501.73	500.77
17901	977.84	977.84	977.84	977.84
17902	528.44	528.44	528.44	528.44

Appendix E - Hosting Capacity Comparison Table

17903	883.24	883.24	883.24	883.24
18001	212.31	212.31	212.31	212.31
18201	369.69	369.69	369.69	369.69
18202	892.76	892.76	892.76	892.76
18203	707.91	707.91	707.91	707.91
18501	518.50	518.92	518.89	518.89
18502	454.26	437.67	437.86	437.86
18601	114.61	114.66	114.82	114.82
18602	189.49	189.49	189.49	189.49
18603	217.59	217.59	217.59	217.59
18604	268.26	268.76	268.89	268.89
18801	358.90	358.53	358.53	358.53
18802	601.61	604.33	604.34	604.34
20101	832.84	833.20	833.20	833.20
20102	690.00	691.09	690.86	691.25
20103	710.62	715.86	715.88	716.29
20105	856.92	857.18	857.18	857.21
20106	864.45	864.78	864.79	864.84
20201	459.26	459.96	459.96	459.96
20401	225.74	226.22	226.17	225.45
20402	451.24	451.40	451.50	451.93
20403	64.17	68.73	64.70	75.50
20501	810.23	810.23	810.23	810.23
20502	943.30	943.30	943.30	943.30
20601	205.93	207.17	207.15	207.15
20602	349.33	349.34	349.54	349.54
20603	353.52	353.58	353.86	353.86
20701	615.01	615.01	615.01	615.01
20702	541.08	541.08	541.08	541.08
20801	435.48	438.28	438.29	438.29
20802	612.39	613.79	613.79	613.79
20803	1456.18	1465.40	1465.26	1465.26
20901	390.70	390.70	390.70	390.70
20902	757.53	757.53	757.53	757.53
21201	183.29	183.29	183.29	183.29
21202	1053.21	1053.21	1053.21	1053.21
21203	53.86	53.87	53.86	53.90
21204	898.99	898.96	898.96	898.96
21205	1398.48	1398.48	1398.48	1398.48
21206	291.16	290.12	290.12	289.18
21401	719.10	719.10	719.10	719.10
21402	684.22	684.22	684.22	684.22
21403	990.67	990.67	990.67	990.67
21501	502.89	502.90	502.90	502.90
21502	715.60	715.91	715.91	715.91
21503	826.77	826.77	826.77	826.77
21504	350.45	350.45	350.45	350.45

Appendix E - Hosting Capacity Comparison Table

21601	325.29	325.30	325.30	325.30
21602	820.40	820.40	820.40	820.40
21603	969.12	969.12	969.12	969.12
21604	859.32	859.32	859.32	859.32
21605	790.27	790.28	790.28	790.28
21606	319.47	319.55	319.68	319.68
21701	1157.38	1157.57	1157.72	1157.86
21702	1437.31	1437.67	1437.83	1437.98
21703	994.46	993.90	994.02	994.13
21704	1491.49	1491.87	1492.10	1492.33
21705	1171.55	1172.75	1172.98	1173.22
21801	292.27	292.27	292.27	292.27
21802	151.63	151.63	151.63	151.63
21901	10.10	12.12	12.24	12.55
21903	1.20	1.52	1.54	1.57
21904	504.90	504.90	504.90	504.90
21905	422.65	422.65	422.65	422.65
21906	956.77	956.93	956.93	961.35
22001	548.59	549.61	549.69	549.69
22002	712.78	712.94	712.95	712.95
22003	496.28	496.39	496.41	496.41
22101	1.12	1.19	1.50	1.51
22102	663.03	663.03	663.03	663.03
22103	0.87	1.05	1.95	1.95
22104	760.50	760.50	760.50	760.50
22201	32.31	32.31	32.31	32.31
22401	27.93	27.60	26.80	27.22
22402	8.27	8.43	5.90	6.21
22403	12.30	12.45	10.76	11.06
22404	557.63	557.69	557.69	557.69
22405	188.73	189.61	190.72	189.84
22406	0.98	1.13	0.10	0.10
22501	409.51	412.10	412.10	412.10
22601	170.11	169.80	169.80	169.80
22602	63.03	65.09	65.09	65.09
22701	737.18	737.67	738.06	737.78
22702	701.18	701.60	702.21	701.78
22703	640.06	640.05	641.10	641.10
22704	826.27	826.22	826.22	826.22
22705	788.57	788.51	788.51	788.51
22801	0.03	0.03	0.03	0.03
22802	0.17	0.17	0.17	0.17
22803	0.10	0.10	0.10	0.10
22805	0.13	0.13	0.13	0.13
22806	1.55	1.55	1.55	1.55
22901	799.73	798.46	798.46	799.15
22903	1102.12	1105.97	1105.98	1107.24

Appendix E - Hosting Capacity Comparison Table

22904	436.17	435.10	435.40	435.66
22905	854.97	859.64	859.47	862.34
22906	2349.19	2349.19	2349.19	2350.47
22907	1035.68	1036.87	1037.42	1037.97
23001	3.45	3.48	3.55	3.61
23002	0.30	0.30	0.30	0.30
23003	0.11	0.11	0.11	0.11
23101	210.67	208.94	208.37	208.37
23102	759.39	759.86	759.86	759.84
23201	370.34	370.35	370.36	371.09
23202	377.58	377.59	377.59	377.60
23203	431.14	430.16	430.16	430.16
23301	449.35	449.35	449.35	449.35
23401	25.36	25.36	25.36	25.36
23402	595.62	597.03	597.03	596.99
23403	10.87	10.87	10.87	10.87
23404	612.33	614.68	614.68	614.67
23510	1295.70	1295.70	1295.70	1295.70
23601	16.24	16.24	16.24	16.24
23602	2344.03	2344.03	2344.03	2344.02
23603	8.06	8.06	8.06	8.06
23604	3.86	4.14	4.14	4.42
23605	2680.27	2680.27	2680.27	2680.27
23901	222.00	218.29	213.27	218.44
23902	450.40	451.07	451.10	453.61
24001	446.77	447.01	447.00	447.00
24002	574.82	574.35	574.35	574.35
24003	876.43	876.72	876.72	876.72
24004	506.07	505.84	505.84	505.84
24005	952.85	953.89	953.89	953.89
24006	616.53	616.58	616.58	616.58
24101	13.38	13.50	13.05	11.19
24102	0.42	0.42	0.25	0.25
24103	366.75	366.48	366.57	367.10
24104	822.48	823.55	823.80	824.13
24105	0.32	0.32	0.32	0.32
24201	34.07	36.49	39.59	37.93
24202	1660.77	1660.77	1660.77	1660.77
24203	1202.75	1202.75	1202.75	1202.75
24204	689.94	689.89	689.89	689.85
24205	1124.31	1124.40	1124.53	1125.85
24206	1596.89	1596.89	1596.89	1596.89
24401	125.77	130.04	130.03	130.03
24402	330.14	330.67	330.67	330.67
24501	259.33	259.33	259.33	259.33
24502	20.28	20.28	20.28	20.28
24602	516.42	516.42	516.42	516.42

Appendix E - Hosting Capacity Comparison Table

24603	409.03	409.03	409.03	409.03
24701	175.10	173.24	173.47	178.03
24702	76.62	76.51	76.54	81.34
24703	267.93	268.05	267.98	268.68
24801	896.04	910.12	910.12	910.12
24802	1117.54	1119.31	1119.31	1119.31
24803	18.35	18.35	24.41	25.64
24804	1158.80	1161.03	1161.03	1161.03
24805	1005.13	1006.79	1006.81	1006.79
24806	824.71	825.15	825.15	825.15
24901	134.46	133.36	133.05	133.04
24902	2.26	2.26	2.26	2.26
25101	585.37	585.37	585.37	585.37
25401	355.82	355.82	355.82	355.82
25402	275.18	275.27	275.27	275.27
25404	353.35	353.52	353.52	353.52
25501	503.94	505.97	505.95	508.94
25502	421.27	421.36	421.36	422.01
25503	366.52	369.72	369.82	371.26
25601	96.93	96.92	96.92	96.92
25602	175.44	175.61	175.47	175.47
25603	76.27	77.03	77.03	77.03
25801	128.13	128.13	128.13	128.13
25901	16.09	16.09	16.09	16.09
25902	14.89	14.89	14.89	14.89
25903	2.30	2.30	2.30	2.30
25904	17.57	17.57	17.57	17.57
26001	15.23	15.25	15.25	15.25
26002	135.34	137.02	137.17	137.72
26101	1219.40	1219.40	1219.40	1219.40
26102	937.92	937.92	937.92	937.92
26103	848.01	848.01	848.01	848.01
26104	562.00	562.00	562.00	562.00
26105	1896.77	1896.77	1896.77	1896.77
26106	648.12	648.12	648.12	648.12
26301	877.57	878.81	878.80	878.89
26302	996.82	999.13	999.12	999.28
26401	14.75	13.64	12.09	12.38
26402	244.40	208.31	186.03	191.10
26601	34.95	34.95	34.95	34.95
26602	71.69	71.69	71.69	71.69
26603	69.71	69.71	69.71	69.71
26604	167.83	167.83	167.83	167.83
26701	391.18	391.18	391.18	391.18
26702	453.56	453.62	453.68	454.00
26703	86.82	86.82	86.82	86.82
26704	496.90	497.10	497.18	497.62

Appendix E - Hosting Capacity Comparison Table

26801	584.23	584.23	584.27	584.30
26802	396.21	395.51	392.98	395.61
26803	478.47	478.40	479.97	480.23
27001	357.77	357.77	357.77	357.77
27002	302.69	302.69	302.69	302.69
27003	1095.56	1096.38	1096.38	1096.38
27004	13.31	13.31	13.31	13.31
27005	1.08	1.08	1.08	1.08
27101	318.38	322.87	322.88	322.86
27102	307.19	306.07	308.22	306.14
27201	1050.58	1050.68	1050.68	1050.68
27202	400.80	400.80	400.80	400.80
27203	995.38	995.38	995.38	995.38
27204	555.11	555.11	555.11	555.11
27205	993.31	994.60	994.59	994.59
27206	1284.50	1284.50	1284.50	1284.50
27302	454.09	454.68	454.92	455.47
27401	716.26	716.25	716.25	716.25
27402	498.15	498.15	498.15	498.15
27403	199.29	209.20	214.61	214.61
27404	1049.80	1049.80	1049.80	1049.80
27501	288.00	288.74	288.73	289.94
27502	554.24	555.29	555.21	556.16
27503	536.30	536.83	536.81	537.28
27504	620.21	672.42	672.40	674.95
27601	841.16	841.71	841.71	841.71
27602	1034.18	1034.36	1034.36	1034.36
27603	902.78	903.27	903.28	903.32
27604	306.49	306.79	306.79	306.79
27605	623.21	623.98	624.00	624.17
27701	623.42	623.67	623.70	623.70
27702	939.75	940.82	940.83	940.83
27901	373.93	373.93	373.93	373.93
27902	191.39	191.39	191.39	191.39
28001	7.92	7.92	7.92	7.92
28002	39.02	39.02	39.02	39.02
28101	189.00	188.47	188.47	188.47
28102	122.82	127.62	136.24	138.99
28301	206.63	206.63	206.63	206.63
28302	407.26	407.26	407.26	407.26
28303	389.87	389.87	389.87	389.87
28401	1123.90	1123.90	1123.90	1123.90
28402	163.59	163.59	163.59	163.59
28403	445.82	445.82	445.82	445.82
28501	690.57	690.57	690.57	690.57
28601	536.86	538.29	538.29	538.37
28602	260.39	260.37	260.37	260.38

Appendix E - Hosting Capacity Comparison Table

28604	219.78	222.33	222.33	222.25
28701	46.90	46.93	47.05	47.36
28702	204.49	205.24	205.62	206.16
28703	146.88	146.89	146.96	147.15
28704	130.11	130.13	130.20	130.44
28801	59.63	60.11	59.96	59.96
28802	82.11	88.62	88.73	88.73
28803	100.25	111.08	111.09	111.09
28804	74.08	79.54	79.40	79.40
28805	36.41	39.30	39.42	39.42
29101	289.67	289.67	289.67	289.67
29102	324.01	324.01	324.01	324.01
29201	448.84	449.07	449.05	449.05
29202	406.52	406.84	406.86	406.86
29301	428.51	428.51	428.51	428.51
29302	374.58	374.58	374.58	374.58
29401	374.21	375.02	375.02	362.90
29402	213.19	213.72	213.72	214.85
29501	361.31	362.36	362.36	362.62
29502	342.93	343.10	343.10	343.69
29503	262.33	262.34	262.34	262.45
29701	364.53	364.53	364.53	364.53
29702	352.33	352.33	352.33	352.33
29801	921.63	921.63	921.63	921.63
29802	1162.61	1162.83	1162.83	1162.79
29803	1221.96	1221.96	1221.96	1221.96
29804	988.50	988.64	988.64	988.78
39601	390.99	390.99	390.99	390.99
40101	90.65	93.37	94.05	94.10
40201	12.70	13.89	13.87	18.42
40301	486.62	487.16	488.01	492.60
40302	235.41	235.63	236.60	237.19
40303	876.87	878.22	886.16	878.25
40501	395.95	396.18	404.38	409.13
40502	4.98	9.33	9.36	19.03
40503	399.64	398.20	398.29	400.24
40504	451.41	451.05	449.99	450.55
40505	110.81	116.09	110.28	92.07
40601	94.02	94.01	94.01	94.00
40602	250.56	257.82	259.79	262.44
40603	201.99	209.94	210.77	212.85
40701	66.50	67.65	69.02	69.18
40702	0.07	0.16	0.17	0.16
40703	19.92	22.35	22.75	22.94
40801	400.34	406.47	398.58	405.27
40802	115.59	141.96	121.42	141.20
40901	124.05	124.97	0.00	0.00

Appendix E - Hosting Capacity Comparison Table

40902	239.85	235.89	235.91	251.79
40903	485.90	492.20	0.00	0.00
41001	182.09	192.51	192.51	192.51
41002	301.52	301.94	301.94	301.94
41201	622.70	624.17	624.63	624.48
41202	492.62	496.18	496.42	496.41
41203	1229.01	1231.75	1231.79	1231.77
41204	453.69	453.97	454.06	454.03
41205	1256.38	1255.45	1255.45	1255.64
41206	550.07	550.71	550.79	550.77
41301	539.92	540.00	540.05	541.36
41302	1355.83	1356.14	1356.14	1356.05
41303	683.29	683.78	683.87	691.45
41304	796.41	794.45	794.45	796.11
41305	923.80	923.90	923.95	926.35
41306	1053.42	1053.43	1053.43	1053.47
41401	45.41	43.25	43.26	43.26
41501	511.74	511.74	511.74	511.74
41502	436.47	436.47	436.47	436.47
41503	886.34	886.34	886.34	886.34
41504	1391.55	1391.55	1391.55	1391.55
41601	400.89	400.89	400.89	400.89
41602	74.35	74.39	74.42	74.42
41701	245.19	241.60	241.60	241.51
41702	285.50	285.91	285.91	286.46
41801	8.64	8.64	8.67	8.61
41802	113.02	113.10	112.03	113.99
41901	195.13	211.01	234.62	237.37
41902	198.91	198.97	199.19	191.43
41903	502.01	502.02	502.03	502.27
42001	404.28	403.71	403.73	404.51
42002	822.12	822.34	822.34	823.14
42101	321.77	322.07	322.07	322.07
42102	307.51	307.55	307.55	307.55
42201	199.45	198.40	197.81	195.79
42202	522.03	521.74	521.74	521.42
42203	1551.64	1552.65	1552.65	1532.32
42204	1482.34	1483.24	1483.24	1467.51
42301	445.42	456.09	456.41	459.66
42302	482.82	490.94	491.11	491.74
42401	211.06	211.06	211.06	211.06
42501	1119.61	1121.96	1121.96	1122.86
42502	1132.39	1133.42	1133.42	1133.58
42503	709.87	711.13	711.13	711.20
42504	1368.33	1370.31	1370.31	1370.26
42601	572.19	572.36	571.52	570.86
42701	276.70	278.92	278.92	278.96

Appendix E - Hosting Capacity Comparison Table

42801	10.62	10.61	10.61	10.61
42802	5.99	6.01	6.01	6.03
42803	0.26	0.26	0.26	0.26
42901	219.65	222.66	222.06	217.88
42902	127.54	128.22	132.90	140.21
42903	119.83	120.54	123.49	123.11
43001	10.29	10.56	10.58	10.62
43101	0.00	0.00	0.00	0.00
43102	0.00	0.00	0.00	0.00
43103	0.00	0.00	0.00	0.00
43104	0.00	0.00	0.00	0.00
43105	126.42	126.52	126.52	126.52
43106	0.00	0.00	0.00	0.00
43108	0.00	0.00	0.00	0.00
43201	335.22	339.97	340.10	320.46
43202	277.36	277.82	277.84	280.94
43301	425.83	425.85	425.85	427.28
43302	89.37	89.37	89.33	89.37
43303	0.00	0.00	0.00	0.00
43304	242.39	242.55	242.62	239.16
43401	297.30	297.38	297.38	297.33
43402	263.20	264.26	264.26	264.21
43501	1458.24	1460.98	1461.04	1461.39
43502	1238.33	1239.54	1239.31	1239.87
43503	1076.18	1076.90	1076.76	1077.09
43504	898.81	899.59	899.60	899.74
43505	1002.91	1003.48	1003.36	1003.65
43506	1274.37	1276.36	1276.40	1276.64
43801	534.48	534.51	534.51	534.62
43802	650.88	650.96	650.96	650.94
44201	393.17	392.98	387.65	389.72
44202	2.59	2.60	2.61	2.64
44203	8.75	8.76	8.84	8.84
44301	0.00	0.00	0.00	0.00
44302	0.00	0.00	0.00	0.00
44401	696.19	696.81	696.81	696.81
44501	1353.27	1354.90	1354.93	1355.02
44502	299.42	300.11	299.94	303.18
44503	1211.14	1212.09	1212.11	1212.14
44504	1328.52	1329.96	1329.92	1329.94
44505	520.35	522.55	520.35	522.83
44601	367.90	367.90	367.90	367.90
44701	374.03	374.03	374.00	374.00
44702	725.81	725.80	725.75	725.75
44703	642.79	642.77	642.30	642.30
44704	860.21	860.21	860.21	860.21
44705	1035.91	1035.91	1035.91	1035.91

Appendix E - Hosting Capacity Comparison Table

44801	376.77	380.42	388.17	392.29
44802	476.33	460.65	473.72	472.52
44901	516.34	586.67	586.67	589.21
44902	621.87	629.46	629.46	632.70
44903	508.90	508.92	508.91	514.08
44904	452.82	458.31	458.33	460.61
45001	40.90	44.26	48.44	43.38
45002	16.83	19.51	20.39	19.07
45003	15.18	18.89	20.36	18.20
45004	437.83	438.69	438.69	438.69
45201	395.38	395.38	395.38	395.38
45301	0.00	0.00	0.00	0.00
45302	38.03	38.14	38.14	33.66
45303	260.73	293.24	293.44	293.85
45401	1254.18	1254.74	1254.74	1254.74
45402	178.56	176.33	176.32	176.32
45403	1474.24	1475.36	1475.36	1475.36
45501	148.11	148.29	148.28	149.35
45502	91.62	103.75	104.13	104.67
45601	340.20	340.18	340.39	340.80
45602	308.56	308.71	308.67	309.36
45701	248.50	248.50	248.50	248.50
45702	374.14	374.14	374.14	374.14
45703	1178.83	1178.83	1178.83	1178.83
45704	1638.44	1638.44	1638.44	1638.44
45801	348.69	350.28	350.28	345.46
45802	177.07	177.07	177.07	177.07
45901	242.02	243.22	245.78	247.81
45902	110.70	117.10	116.10	115.35
46001	403.07	413.35	458.87	458.85
46002	1144.54	1144.09	1144.15	1144.27
46003	1184.44	1185.39	1185.77	1186.40
46004	473.52	475.37	475.41	475.44
46005	1172.87	1133.12	1184.26	1184.31
46101	788.53	788.94	788.94	789.03
46102	805.33	805.79	805.79	805.92
46201	1524.92	1524.62	1524.61	1524.61
46202	984.10	984.32	984.40	984.36
46203	348.12	349.50	349.50	349.71
46204	983.13	985.03	985.91	985.75
46205	1044.38	1044.09	1043.98	1043.97
46206	375.65	376.73	409.69	378.20
46301	198.80	199.64	200.25	203.08
46302	178.39	178.27	179.26	180.23
46401	770.12	770.74	770.81	770.81
46402	264.70	266.56	267.47	267.47
46501	871.16	871.71	871.70	871.79

Appendix E - Hosting Capacity Comparison Table

46502	306.29	306.55	306.52	307.79
46503	992.55	992.62	992.60	992.90
46504	361.19	361.31	361.29	361.83
46505	892.72	893.69	893.69	896.38
46506	481.25	482.66	482.56	482.38
46602	221.76	221.56	221.58	221.56
46701	446.15	446.89	446.89	447.11
46801	500.27	501.59	501.59	502.91
46802	229.10	229.14	229.14	229.14
46803	353.64	354.70	354.70	356.97
46901	655.95	657.60	657.54	659.56
46902	853.05	856.34	856.17	834.87
46903	159.27	161.06	161.05	161.19
47001	305.81	307.55	307.55	307.55
47002	270.87	272.19	272.20	272.20
47101	558.04	560.61	560.61	560.65
47102	766.23	766.31	766.31	766.55
47103	727.96	728.11	728.11	728.38
47104	746.52	746.49	746.56	746.49
47201	30.41	30.41	30.41	30.41
47202	38.48	38.48	38.48	38.48
47203	140.22	140.22	140.22	140.22
47401	102.58	103.23	105.39	100.58
47402	393.77	395.78	395.37	396.61
47403	248.09	249.09	248.95	249.34
47501	778.26	779.42	779.41	779.41
47502	598.76	597.02	597.57	596.85
47801	683.72	683.72	683.72	683.72
47802	399.87	400.72	402.20	404.08
47803	346.20	346.20	346.20	346.20
47901	534.20	536.54	536.21	536.21
47902	1260.48	1260.48	1260.48	1260.48
48301	646.31	655.39	655.39	656.78
48302	3.47	3.45	3.45	3.45
48303	3.94	3.93	3.93	3.92
48601	895.77	896.85	896.85	896.85
48602	912.23	913.19	913.19	913.19
48901	313.43	313.84	313.88	319.03
48902	393.59	394.58	394.59	396.57
49801	665.61	665.61	665.61	665.61
49802	1325.51	1325.51	1325.51	1325.51
49803	93.07	97.16	105.30	105.81
49804	99.95	100.27	99.94	100.00
50102	792.77	793.02	793.09	793.85
50103	657.87	656.21	656.19	657.62
50105	1010.68	1012.37	1012.89	1012.86
50106	1090.25	1110.33	1090.91	1111.84

Appendix E - Hosting Capacity Comparison Table

50107	420.59	420.66	420.68	420.76
50201	826.06	821.19	853.36	817.38
50202	1080.74	1081.08	1081.05	1082.07
50301	1126.43	1127.84	1127.84	1127.84
50302	728.56	729.65	729.65	729.70
50303	706.62	707.42	707.42	707.39
50501	163.18	164.43	164.55	166.53
50502	600.98	604.61	605.10	608.62
50503	186.45	191.89	192.30	193.15
50504	218.23	218.91	219.04	219.35
50505	683.36	685.57	686.00	686.68
50506	636.22	637.26	637.41	637.74
50701	638.33	638.54	638.54	638.54
51001	0.00	0.00	0.00	0.00
51002	0.00	0.00	0.00	0.00
51003	0.00	0.00	0.00	0.00
51004	0.00	0.00	0.00	0.00
51005	0.00	0.00	0.00	0.00
51006	0.00	0.00	0.00	0.00
51101	276.25	276.38	277.41	279.87
51102	541.51	541.59	542.66	544.02
51103	1305.96	1305.96	1305.95	1305.93
51104	660.62	660.82	661.20	661.65
51107	198.11	198.70	202.08	203.16
51108	308.65	308.06	308.08	308.18
51109	621.78	620.50	620.68	621.60
51201	573.79	574.57	574.57	574.70
51202	374.29	378.93	378.92	378.93
51204	542.22	544.86	544.86	546.23
51301	166.70	168.32	168.37	168.35
51302	582.43	584.35	584.35	586.23
51303	624.44	626.63	626.78	626.76
51304	495.08	496.33	496.33	496.89
51305	474.78	475.04	475.05	475.05
51306	523.41	524.17	524.31	530.40
51401	81.42	85.65	91.24	100.34
51402	317.37	317.79	318.06	320.27
51501	654.75	654.81	654.82	654.83
51502	919.93	919.71	919.86	919.28
51503	326.41	326.42	326.42	326.41
51504	1497.68	1498.04	1498.04	1498.04
51505	1399.76	1405.73	1419.04	1418.68
51601	163.44	164.29	164.30	164.41
51602	0.47	0.46	0.47	0.47
51603	840.80	841.84	841.84	843.37
51604	379.77	620.97	621.25	571.20
51701	1037.36	1038.03	1038.03	1038.00

Appendix E - Hosting Capacity Comparison Table

51702	664.87	665.50	665.75	665.65
51703	898.36	898.42	898.42	898.41
51704	673.68	674.81	674.76	677.24
51802	67.98	68.12	66.98	69.56
51804	120.78	120.78	121.01	121.35
51901	793.95	792.90	793.83	792.48
51902	837.90	838.11	838.47	838.65
51903	604.24	603.57	604.29	607.30
51904	781.01	786.04	785.45	791.74
51905	390.43	403.08	401.37	404.55
51906	275.75	277.13	276.19	277.44
52001	243.65	245.61	264.48	265.93
52002	418.56	417.34	417.42	417.19
52003	199.87	201.27	201.00	201.71
52004	157.37	151.77	151.75	151.76
52006	431.35	442.70	442.53	443.52
52101	253.68	254.32	254.64	254.16
52102	224.02	223.44	223.58	223.55
52201	181.62	179.47	182.38	182.38
52203	84.34	82.86	85.47	85.47
52401	168.42	169.14	170.98	175.12
52402	69.87	70.00	70.02	70.69
52403	84.68	85.05	84.93	87.26
52404	129.75	129.30	128.32	132.96
52501	626.78	632.67	632.67	632.97
52502	127.06	138.35	312.56	315.25
52503	519.27	602.22	651.19	653.90
52504	578.44	585.64	585.66	586.05
53101	381.48	384.91	383.60	384.92
53102	499.16	503.66	503.65	506.96
53301	446.96	446.03	446.05	446.00
53302	71.76	86.52	86.59	87.43
53501	0.92	0.93	0.95	1.01
53502	8.55	8.69	9.33	9.62
53601	309.69	309.60	309.60	308.38
53602	158.00	158.04	158.04	158.00
53801	204.21	204.59	204.63	204.57
53802	206.20	206.46	206.50	206.41
53803	443.90	443.99	444.18	445.11
53901	159.14	164.20	164.33	160.85
53902	116.07	116.98	116.99	117.11
53903	296.91	325.40	331.89	354.23
54001	71.72	72.19	72.15	72.14
54101	162.11	160.00	154.82	154.82
54201	450.56	450.66	450.66	450.64
54202	595.91	596.12	603.47	593.71
54203	733.86	733.87	733.87	733.84

Appendix E - Hosting Capacity Comparison Table

54204	797.19	797.24	797.27	0.00
54205	682.66	682.66	682.66	682.62
54206	764.12	764.13	764.13	764.09
54501	31.50	31.67	31.67	31.65
54502	489.90	491.01	491.08	499.45
54503	218.38	219.24	219.24	219.09
54504	742.17	742.53	742.53	742.30
54505	947.34	948.56	948.59	950.45
54506	1021.09	1022.71	1022.48	1022.80
54601	29.01	29.87	30.69	31.31
54602	70.29	71.86	75.66	75.23
54603	151.73	152.96	157.18	156.72
54701	361.61	363.92	363.92	363.87
55002	19.89	20.23	20.13	144.89
55003	0.00	0.00	0.00	0.00
55101	214.21	214.63	214.63	214.64
55102	700.96	701.82	701.82	701.80
55103	274.56	274.53	0.00	0.00
55104	928.27	930.46	930.46	930.44
55401	1024.37	1032.28	1032.28	1043.67
55402	612.60	612.60	612.60	612.60
55405	196.85	198.46	198.46	199.73
55406	710.43	710.47	710.47	710.47
55407	579.99	582.30	582.30	585.67
55408	312.98	313.00	313.00	313.00
55501	736.87	736.82	729.58	729.58
55502	796.74	797.42	797.79	797.93
55503	856.93	856.93	857.07	857.08
55504	690.58	689.59	689.59	689.90
55505	1684.80	1686.53	1686.60	1686.60
55507	346.22	346.68	346.64	346.54
55508	107.02	108.01	108.01	108.01
56501	1.18	1.36	1.25	1.48
56503	4.02	4.13	3.89	4.22
56504	284.42	286.90	286.90	286.79
56601	47.20	51.03	51.08	51.07
56602	665.73	665.75	665.82	665.77
56603	284.44	289.15	289.16	289.13
56604	429.12	434.70	434.71	434.70
56801	49.09	51.42	51.53	53.15
56802	140.94	143.92	146.18	150.57
56803	337.90	341.58	342.22	351.89
57001	46.99	0.00	0.00	0.00
57002	8.06	8.01	8.01	6.64
57003	343.24	343.39	343.39	295.53
57004	468.45	469.39	469.38	441.18
57005	17.85	17.85	17.85	10.57

Appendix E - Hosting Capacity Comparison Table

57006	12.15	12.15	12.15	8.44
57007	2074.91	2074.92	2074.92	1407.54
57101	908.07	908.53	908.58	908.47
57102	855.33	855.49	855.64	855.49
57103	971.33	972.45	972.48	972.35
57104	302.16	303.60	303.58	303.59
57106	715.50	715.88	715.55	715.40
57201	577.09	577.36	578.32	582.03
57202	749.98	749.98	749.98	749.98
57203	95.56	97.22	107.89	112.37
57204	698.50	698.50	698.50	698.50
57205	214.14	218.25	218.25	219.77
57301	409.42	405.98	405.98	405.77
57302	351.98	352.24	352.24	352.02
57303	698.52	699.16	699.28	697.39
57304	143.48	143.08	143.10	143.17
57306	354.79	354.86	354.89	354.86
57402	333.28	333.27	333.29	333.26
57403	150.05	150.56	150.06	150.60
57404	442.64	443.85	445.80	441.94
57501	200.76	197.38	197.92	197.80
57502	454.87	439.47	439.71	440.88
57503	1260.66	1260.69	1260.67	1260.57
57504	41.85	41.85	41.85	41.85
57505	817.98	817.98	817.81	818.31
57506	189.33	185.34	184.82	185.71
57601	202.12	193.40	193.40	194.83
57602	693.36	698.10	698.10	699.15
57603	335.86	395.17	395.17	395.21
57701	717.53	718.32	720.19	728.21
57702	507.59	510.25	511.02	515.93
57703	340.84	343.88	353.39	369.92
57704	972.09	972.89	974.39	976.99
58001	537.92	540.22	679.76	679.91
58002	355.42	355.98	356.25	356.23
58003	632.89	633.78	633.62	633.60
58004	619.42	619.90	619.37	618.99
58006	333.55	333.54	333.60	333.59
58101	255.44	256.60	256.59	256.59
58102	406.73	409.00	408.98	408.98
58201	644.35	644.98	644.85	644.85
58202	357.07	357.05	356.98	357.14
58203	231.38	231.48	231.51	231.52
58301	1092.78	1092.78	1092.79	1092.77
58302	711.16	711.15	711.18	711.12
58303	1108.44	1108.44	1108.44	1108.44
58304	1513.94	1513.96	1513.96	1513.94

Appendix E - Hosting Capacity Comparison Table

58401	92.13	92.26	92.33	92.33
58402	34.30	34.33	34.31	34.31
58701	0.00	0.00	0.00	0.00
58702	0.00	0.00	0.00	0.00
58703	0.00	0.00	0.00	0.00
58704	0.00	0.00	0.00	0.00
58705	0.00	0.00	0.00	0.00
58706	59.66	59.96	59.89	58.63
58801	1036.66	1036.66	1036.66	1036.66
58802	887.76	887.76	887.76	887.76
58803	211.08	211.55	211.48	211.32
59001	251.38	251.91	248.47	248.47
59002	231.63	233.93	244.29	244.29
59101	16.46	19.35	19.35	20.43
59102	260.06	260.61	262.95	0.00
59201	0.35	0.35	0.35	0.53
59202	233.37	225.34	225.34	225.41
59301	82.94	83.05	83.08	83.29
59302	214.85	214.89	211.32	215.26
59401	73.20	154.69	156.34	156.34
59402	271.38	272.62	272.85	272.87
60102	0.08	0.02	0.08	0.08
60103	533.99	535.09	535.49	540.74
60104	181.94	183.43	192.95	193.05
60105	614.06	614.16	614.70	617.29
60201	89.66	89.67	89.67	89.67
60301	259.06	259.26	259.04	261.54
60302	285.76	285.76	285.76	285.76
60303	1047.11	1047.30	1047.28	1047.87
60305	513.35	513.56	513.56	513.55
60401	1.67	1.67	1.67	1.67
60402	5.09	5.09	5.09	5.09
60403	29.09	29.09	29.09	29.09
60404	107.65	107.65	107.65	107.65
60406	50.16	50.16	50.16	50.16
60501	548.15	548.53	548.54	549.04
60502	439.29	437.35	429.89	434.13
60504	921.89	921.78	921.83	924.61
60602	1135.64	1136.86	1137.00	1137.23
60603	1025.84	1055.38	1055.34	1055.22
60604	796.89	796.99	797.79	799.22
60605	423.27	460.88	492.79	498.12
60701	121.51	121.70	122.07	121.79
60801	212.28	212.49	213.71	214.20
60802	39.85	39.85	39.85	39.85
60901	286.96	287.15	286.95	287.19
60902	251.11	252.55	252.54	250.48

Appendix E - Hosting Capacity Comparison Table

60903	509.00	509.68	509.62	509.71
60904	149.33	149.70	149.60	149.71
61001	216.82	217.45	217.44	217.29
61002	259.84	260.37	260.40	260.71
61003	1409.07	1415.27	1415.10	1413.60
61004	1058.99	1060.91	1060.99	1062.12
61005	1194.47	1198.03	1197.93	1197.09
61101	328.88	334.76	334.38	343.07
61102	246.27	254.21	254.21	258.61
61103	888.03	889.40	889.28	889.35
61201	649.93	651.85	651.71	651.10
61202	462.42	464.33	464.23	464.17
61301	686.74	686.72	686.57	687.16
61302	611.95	612.22	612.28	612.62
61303	496.44	496.66	496.66	496.91
61304	122.97	123.13	123.23	123.60
61305	551.91	552.00	552.29	553.38
61306	761.98	763.53	763.51	764.08
61401	803.64	798.46	803.64	803.64
61402	371.50	371.72	371.75	371.76
61404	537.34	537.74	537.40	540.60
61502	849.10	849.11	849.11	849.10
61503	1185.02	1184.98	1184.98	1184.98
61504	358.36	358.45	358.45	358.47
61505	403.62	403.62	403.62	403.62
61506	902.76	903.72	903.72	903.37
61701	744.62	747.94	765.33	772.22
61702	85.44	85.64	86.40	86.40
61703	288.44	290.13	311.70	316.46
61704	280.19	280.96	281.20	281.20
61706	113.04	113.05	0.00	112.84
61801	121.55	121.80	121.87	122.09
61802	302.40	302.38	302.57	302.35
61803	657.99	658.00	657.99	657.91
62101	661.00	660.98	660.98	660.98
62102	719.45	741.60	741.60	744.17
62103	984.02	984.36	984.36	986.43
62104	1294.08	1294.96	1294.95	1297.38
62105	629.47	637.29	637.25	637.13
62106	1370.52	1371.30	1371.32	1371.22
62601	394.31	394.50	395.52	396.02
62602	321.82	321.85	321.84	321.88
62604	229.05	227.61	227.80	228.26
62605	708.56	710.36	710.22	710.20
62606	542.13	543.32	545.47	546.17
62607	321.93	322.61	322.60	322.04
62608	2792.83	2792.83	2792.82	2792.81

Appendix E - Hosting Capacity Comparison Table

62609	2644.80	2644.79	2644.79	2644.78
63201	400.81	401.39	401.38	400.74
63202	448.77	448.84	448.84	449.16
63203	422.01	424.75	424.75	424.75
63204	405.29	410.00	410.00	410.00
63205	1084.13	1086.89	1086.89	1080.92
63301	831.92	832.25	832.20	832.21
63302	456.72	456.98	456.71	456.60
63303	666.45	669.39	669.43	669.43
63304	65.39	65.41	65.38	65.38
63305	375.96	376.24	376.14	376.37
63306	827.33	828.55	828.46	828.81
63401	73.26	74.22	74.17	74.17
63402	67.41	77.07	77.41	77.53
63403	115.32	123.79	126.35	128.87
63404	247.53	248.63	248.63	248.63
63501	161.91	163.46	159.95	161.96
63502	887.00	887.00	887.00	887.00
63801	187.78	187.78	187.78	187.78
63802	137.95	137.95	137.95	137.95
63803	309.27	309.27	309.27	309.27
63804	72.64	72.64	72.64	72.64
64101	356.23	356.42	356.59	356.62
64201	135.15	135.07	135.10	135.13
64202	41.89	42.23	42.13	42.20
64203	208.84	210.15	210.25	210.14
64204	182.47	182.94	183.28	183.44
64301	346.83	351.80	351.81	349.96
64302	484.34	483.42	483.42	483.33
64303	173.94	173.45	173.45	173.45
64304	75.60	75.59	75.59	75.59
64305	601.98	599.74	599.79	603.51
64401	557.34	558.91	559.08	560.64
64402	547.62	547.82	547.82	547.78
64403	130.31	132.79	132.78	132.77
64404	390.58	391.63	391.63	391.28
64501	381.64	392.69	392.68	393.88
64502	134.42	134.04	132.07	133.36
64503	478.56	478.77	478.71	478.82
64601	675.63	676.25	676.25	677.51
64602	997.53	998.53	998.53	998.38
64604	926.42	927.43	927.43	927.37
64701	501.02	503.10	503.09	503.08
64702	416.38	417.38	417.40	418.57
64703	752.26	752.51	752.54	753.85
64704	748.46	750.00	749.99	749.92
64801	12.35	12.83	12.30	13.98

Appendix E - Hosting Capacity Comparison Table

64802	26.74	27.87	30.18	31.95
64901	1942.15	1945.85	1945.85	1946.17
64902	149.06	154.29	154.29	155.47
64903	128.43	128.53	128.53	128.53
64904	1371.65	1372.94	1372.94	1373.24
65001	443.39	443.44	443.65	446.84
65002	286.99	287.10	287.07	287.08
65003	303.91	304.47	304.49	304.36
65004	346.64	346.76	346.59	347.24
65005	437.26	437.27	437.39	437.32
65301	602.09	624.04	624.04	624.04
65302	477.41	478.18	478.02	478.34
65303	431.82	432.37	432.33	432.98
65401	155.15	155.23	155.23	156.27
65402	373.01	373.20	373.20	376.83
65501	316.70	318.45	318.45	318.35
65502	1001.34	1005.19	1005.20	1005.77
65503	73.29	74.93	75.28	76.47
65504	316.43	318.83	318.83	318.67
65601	92.71	92.84	92.84	92.84
65602	261.19	261.20	261.21	261.60
65603	379.91	379.89	379.93	380.59
65604	288.87	289.43	290.32	293.35
65701	189.98	190.07	190.07	190.07
65702	609.11	624.68	624.84	625.26
65703	728.36	729.53	729.18	729.83
65801	5.93	5.93	5.93	5.93
65802	289.22	289.02	289.02	289.02
65803	477.45	477.45	477.45	477.45
65804	1.27	1.27	1.27	1.27
65901	462.28	462.58	463.16	465.09
65902	365.23	365.26	365.26	365.49
65903	416.06	416.46	416.46	416.45
66001	798.35	799.12	799.12	800.92
66002	943.94	944.44	944.44	945.43
66101	1272.90	1283.06	1283.10	1283.10
66102	189.29	189.63	189.79	189.79
66103	417.18	417.35	417.35	417.36
66201	597.63	598.04	598.04	597.05
66202	340.76	339.94	339.94	341.49
66203	1009.99	1012.41	1012.41	1012.97
66301	935.15	937.55	934.06	937.80
66302	3.43	3.63	33.03	33.89
66303	547.69	548.74	548.75	548.83
66401	542.48	542.56	542.57	543.01
66402	276.49	276.85	276.85	276.76
66501	418.37	418.57	407.42	425.97

Appendix E - Hosting Capacity Comparison Table

66502	407.46	410.14	411.62	410.27
66503	390.13	390.57	390.08	381.36
66504	7.85	7.87	7.90	7.21
66505	86.14	86.29	86.35	86.36
66701	382.52	384.22	385.69	385.47
66702	215.50	217.27	216.83	217.19
66703	105.51	101.41	101.39	101.39
66901	494.55	495.61	495.64	496.88
66902	285.25	285.81	285.87	286.32
66903	190.51	191.19	191.82	191.92
67001	567.89	568.47	568.47	572.00
67002	587.38	589.15	589.15	591.59
67003	312.18	312.18	312.18	312.18
67004	326.22	326.22	326.22	326.22
67005	85.99	85.99	85.99	85.99
67101	792.56	792.77	792.77	792.77
67102	346.35	348.41	348.41	348.41
67103	507.34	507.49	507.50	507.50
67104	831.13	831.15	831.16	831.16
67105	189.60	189.84	190.56	190.56
67106	415.12	415.41	415.37	415.37
67201	25.43	25.62	25.02	24.70
67202	151.07	151.06	151.05	150.66
67203	68.50	68.54	67.74	67.71
67204	453.86	454.00	454.08	455.35
67301	0.28	0.28	0.28	0.28
67302	101.64	102.00	102.14	102.14
67303	124.47	124.43	124.42	124.49
67304	122.13	122.13	122.15	122.15
67305	769.94	769.86	769.86	770.24
67401	43.97	44.02	44.22	44.52
67402	16.71	16.76	16.80	17.96
67501	779.18	779.33	779.40	779.46
67502	382.99	384.00	384.14	399.99
67503	565.72	565.99	566.00	566.67
67504	1004.08	1004.85	1004.82	1005.37
67505	616.05	616.79	617.80	616.95
67601	347.35	345.87	345.87	345.74
67602	267.81	268.09	268.09	267.90
67603	308.08	309.05	309.07	310.02
67604	364.57	366.58	366.58	366.55
67605	0.00	0.00	0.00	0.00
67701	455.28	451.70	450.91	449.90
67702	239.24	240.25	244.60	248.74
67703	561.37	560.17	559.74	560.58
67801	678.31	692.36	692.49	693.45
67802	400.50	394.74	395.05	395.36

Appendix E - Hosting Capacity Comparison Table

67803	366.41	365.46	382.82	381.06
67804	313.37	313.83	313.76	314.01
67805	609.19	685.29	742.14	749.07
67901	393.23	416.88	418.94	418.89
67902	757.01	763.23	765.80	765.83
67903	1134.23	1150.18	1150.05	1150.08
67904	905.74	911.09	911.74	911.91
67905	2035.95	2082.37	2081.97	2082.13

Appendix F - Active Management Operational Implementation Event Logs

Timestamp	Number of DER Actions	Number of Capacitor Actions	Preplan Violation Count	Postplan Violation Count	Delta Violation Count	Preplan Average Voltage Violation	Postplan Average Voltage Violation	Delta Average Voltage Violation	Preplan Power Factor	Postplan Power Factor	Delta Power Factor
10/28/2022 10:32	1	0	2	2	0	1.0676	1.0673	-0.0003	0.9968	0.9967	0.0001
10/31/2022 10:30	1	0	7	8	-1	1.0461	1.0458	-0.0003	0.9809	0.9808	0.0001
10/31/2022 14:09	1	0	1	1	0	1.0657	1.0654	-0.0003	0.9974	0.9973	0.0001
11/1/2022 15:35	1	0	1	1	0	1.0619	1.0611	-0.0008	0.9997	0.9997	0.0000
11/3/2022 10:20	1	2	4	1	3	1.0634	1.0588	-0.0046	-0.9710	0.9999	0.0581
11/3/2022 10:53	1	0	48	48	0	1.0507	1.0506	-0.0001	0.9960	0.9960	0.0000
11/3/2022 14:16	1	0	7	7	0	1.0503	1.0502	-0.0001	0.9982	0.9982	0.0000
11/7/2022 10:36	1	0	4	4	0	0.9092	0.9092	0.0000	0.9976	0.9976	0.0000
11/7/2022 11:04	1	0	1	1	0	1.0605	1.0595	-0.0010	1.0000	1.0000	0.0000
11/8/2022 12:01	1	1	506	78	428	1.0649	1.0556	-0.0093	-0.8721	-0.9880	0.2318
11/8/2022 12:06	1	0	14	12	2	1.0479	1.0474	-0.0005	0.9220	0.9220	0.0000
11/8/2022 13:38	1	0	67	67	0	1.0533	1.0532	-0.0001	0.9885	0.9885	0.0000
11/10/2022 15:08	1	0	91	88	3	1.0532	1.0531	-0.0001	0.9960	0.9960	0.0000
11/14/2022 10:52	1	4	455	222	233	0.8963	1.0164	0.1201	0.9733	0.9944	-0.0211
11/14/2022 10:52	1	4	455	222	233	1.0925	1.0164	-0.0761	0.9733	0.9944	-0.0211
11/14/2022 12:06	1	2	4	2	2	0.9440	0.9441	0.0001	0.9919	0.9919	0.0000
11/14/2022 12:06	1	2	4	2	2	1.0517	0.9441	-0.1076	0.9919	0.9919	0.0000
11/14/2022 12:30	1	0	31	30	1	1.0561	1.0558	-0.0003	0.9479	0.9478	0.0001
11/15/2022 11:13	1	1	460	346	114	0.9032	0.9279	0.0247	0.9947	0.9979	-0.0032
11/15/2022 11:13	1	1	460	346	114	1.0908	0.9279	-0.1629	0.9947	0.9979	-0.0032
11/15/2022 11:57	1	0	28	27	1	1.0500	1.0498	-0.0002	0.9914	0.9913	0.0001
11/15/2022 14:14	1	0	1	1	0	1.0647	1.0643	-0.0004	0.9926	0.9925	0.0001
11/17/2022 10:45	1	0	15	13	2	1.0509	1.0497	-0.0012	0.9622	0.9620	0.0002
11/17/2022 14:07	1	0	536	532	4	0.9054	0.9197	0.0143	0.9860	0.9860	0.0000
11/17/2022 14:07	1	0	536	532	4	1.0986	0.9197	-0.1789	0.9860	0.9860	0.0000
11/17/2022 16:33	1	0	22	22	0	0.6634	1.0133	0.3499	0.9998	0.9998	0.0000
11/17/2022 16:33	1	0	22	22	0	1.0483	1.0133	-0.0350	0.9998	0.9998	0.0000
11/28/2022 13:36	1	0	23	23	0	0.9291	1.0422	0.1131	0.9383	0.9382	0.0001
11/28/2022 13:36	1	0	23	23	0	1.0597	1.0422	-0.0175	0.9383	0.9382	0.0001
11/28/2022 15:03	1	1	16	18	-2	0.9302	1.0447	0.1145	-0.9995	-0.9926	-0.0138
11/28/2022 15:03	1	1	16	18	-2	1.0494	1.0447	-0.0047	-0.9995	-0.9926	-0.0138
11/29/2022 11:04	1	2	4	1	3	1.0626	1.0596	-0.0030	-0.9819	0.9990	0.0372
11/29/2022 11:54	1	2	3	2	1	0.9290	0.9920	0.0630	0.9991	-0.9943	-0.0123
11/30/2022 10:09	1	0	1	1	0	1.1083	1.1079	-0.0004	0.9963	0.9963	0.0000
11/30/2022 12:26	1	4	81	73	8	0.9397	1.0490	0.1093	0.9977	0.9797	0.0180
11/30/2022 12:26	1	4	81	73	8	1.0547	1.0490	-0.0057	0.9977	0.9797	0.0180
11/30/2022 12:26	1	0	93	93	0	1.0540	1.0540	0.0000	0.9608	0.9607	0.0001
11/30/2022 12:52	1	0	15	15	0	0.7478	1.0311	0.2833	0.9873	0.9873	0.0000
11/30/2022 12:52	1	0	15	15	0	1.0514	1.0311	-0.0203	0.9873	0.9873	0.0000
12/1/2022 12:04	1	0	4	4	0	1.0655	1.0632	-0.0023	0.9989	0.9989	0.0000
12/1/2022 12:14	1	0	135	132	3	1.0620	1.0620	0.0000	0.9660	0.9604	0.0056
12/1/2022 12:16	1	0	27	27	0	1.0554	1.0550	-0.0004	0.9639	0.9638	0.0001
12/1/2022 12:21	1	0	41	41	0	1.0537	1.0536	-0.0001	0.9903	0.9903	0.0000
12/1/2022 12:41	1	0	49	49	0	0.9240	1.0445	0.1205	-0.9992	-0.9992	0.0000
12/1/2022 12:41	1	0	49	49	0	1.0470	1.0445	-0.0025	-0.9992	-0.9992	0.0000
12/1/2022 13:34	1	0	14	14	0	0.4014	1.0039	0.6025	-0.9987	-0.9987	0.0000
12/1/2022 13:34	1	0	14	14	0	1.0502	1.0039	-0.0463	-0.9987	-0.9987	0.0000
12/1/2022 13:48	1	0	2	2	0	1.0841	1.0840	-0.0001	0.9980	0.9980	0.0000
12/1/2022 14:03	1	0	3	3	0	0.9418	1.0218	0.0800	-0.9983	-0.9983	0.0000
12/1/2022 14:03	1	0	3	3	0	1.0619	1.0218	-0.0401	-0.9983	-0.9983	0.0000
12/1/2022 14:05	1	0	80	79	1	1.0506	1.0505	-0.0001	0.9787	0.9787	0.0000
12/1/2022 14:13	1	0	3	3	0	1.0606	1.0605	-0.0001	0.9981	0.9980	0.0001
12/1/2022 14:27	1	0	19	18	1	0.9386	0.9962	0.0576	0.9277	0.9274	0.0003
12/1/2022 14:27	1	0	19	18	1	1.0543	0.9962	-0.0581	0.9277	0.9274	0.0003
12/1/2022 14:40	1	0	5	5	0	1.0513	1.0512	-0.0001	0.9889	0.9886	0.0003
12/1/2022 15:45	1	0	13	13	0	0.9457	0.9457	0.0000	0.9896	0.9895	0.0001
12/2/2022 9:21	1	0	2	2	0	1.0573	1.0569	-0.0004	0.9990	0.9989	0.0001
12/2/2022 10:04	1	0	2	2	0	0.9358	0.9976	0.0618	-0.9994	-0.9994	0.0000
12/2/2022 10:04	1	0	2	2	0	1.0598	0.9976	-0.0622	-0.9994	-0.9994	0.0000
12/2/2022 10:49	1	0	2	2	0	1.0752	1.0749	-0.0003	0.9997	0.9997	0.0000
12/2/2022 11:07	1	0	39	39	0	0.9349	0.9532	0.0183	0.9392	0.9389	0.0003
12/2/2022 11:07	1	0	39	39	0	1.0539	0.9532	-0.1007	0.9392	0.9389	0.0003
12/2/2022 11:21	1	0	16	16	0	1.0469	1.0070	-0.0399	0.9987	0.9987	0.0000
12/2/2022 11:21	1	0	16	16	0	0.4081	1.0070	0.5989	0.9987	0.9987	0.0000
12/2/2022 11:29	1	0	3	3	0	1.0576	1.0560	-0.0016	0.9948	0.9939	0.0009
12/2/2022 11:36	1	0	14	14	0	0.4056	1.0017	0.5961	0.9989	0.9989	0.0000
12/2/2022 11:36	1	0	14	14	0	1.0475	1.0017	-0.0458	0.9989	0.9989	0.0000

Appendix F - Active Management Operational Implementation Event Logs

Timestamp	Number of DER Actions	Number of Capacitor Actions	Preplan Violation Count	Postplan Violation Count	Delta Violation Count	Preplan Average Voltage Violation	Postplan Average Voltage Violation	Delta Average Voltage Violation	Preplan Power Factor	Postplan Power Factor	Delta Power Factor
12/2/2022 11:39	1	0	85	84	1	1.0514	1.0513	-0.0001	0.9998	0.9998	0.0000
12/2/2022 12:06	1	0	43	42	1	1.0520	1.0519	-0.0001	-1.0000	-1.0000	0.0000
12/2/2022 12:34	1	0	19	18	1	0.9435	1.0442	0.1007	-0.9998	-0.9998	0.0000
12/2/2022 12:34	1	0	19	18	1	1.0505	1.0442	-0.0063	-0.9998	-0.9998	0.0000
12/2/2022 12:45	1	0	33	32	1	1.0486	1.0486	0.0000	0.9969	0.9969	0.0000
12/2/2022 13:31	1	0	85	84	1	1.0518	1.0517	-0.0001	0.9795	0.9795	0.0000
12/2/2022 13:57	1	0	40	39	1	1.0523	1.0523	0.0000	0.9852	0.9852	0.0000
12/2/2022 14:30	1	0	5	5	0	0.9358	0.9358	0.0000	0.9817	0.9815	0.0002
12/2/2022 14:34	1	0	40	40	0	1.0494	1.0494	0.0000	-0.9441	-0.9443	0.0004
12/5/2022 10:33	1	0	2	2	0	1.0753	1.0751	-0.0002	-0.9952	-0.9952	0.0000
12/5/2022 10:35	1	0	101	100	1	1.0533	1.0532	-0.0001	0.9806	0.9805	0.0001
12/5/2022 10:36	1	1	26	17	9	1.0502	1.0477	-0.0025	0.9930	0.9889	0.0041
12/5/2022 10:39	1	1	3	0	3	1.0548	1.0548	0.0000	0.9982	0.9896	0.0086
12/5/2022 10:41	1	1	155	51	104	1.0573	1.0525	-0.0048	0.9921	0.9821	0.0100
12/5/2022 10:45	1	1	205	34	171	1.0610	1.0531	-0.0079	-0.9591	-0.9991	0.0800
12/5/2022 10:48	1	2	75	6	69	0.9346	0.9389	0.0043	0.9936	-1.0000	-0.0064
12/5/2022 10:53	1	0	478	472	6	0.8878	0.9026	0.0148	0.9774	0.9777	-0.0003
12/5/2022 10:53	1	0	478	472	6	1.0927	0.9026	-0.1901	0.9774	0.9777	-0.0003
12/5/2022 11:03	1	0	4	4	0	0.9319	1.0018	0.0699	0.9934	0.9934	0.0000
12/5/2022 11:03	1	0	4	4	0	1.0713	1.0018	-0.0695	0.9934	0.9934	0.0000
12/5/2022 11:10	1	0	4	4	0	1.0464	1.0463	-0.0001	0.9963	0.9961	0.0002
12/5/2022 11:13	1	0	134	130	4	1.0573	1.0572	-0.0001	0.9293	0.9293	0.0000
12/5/2022 11:26	1	0	141	141	0	0.9208	1.0501	0.1293	-0.9943	-0.9944	0.0002
12/5/2022 11:26	1	0	141	141	0	1.0514	1.0501	-0.0013	-0.9943	-0.9944	0.0002
12/5/2022 11:41	1	2	121	14	107	1.0669	1.0369	-0.0300	-0.9943	1.0000	0.0114
12/5/2022 11:43	1	0	552	551	1	0.9120	0.9159	0.0039	0.9659	0.9661	-0.0002
12/5/2022 11:43	1	0	552	551	1	1.0490	0.9159	-0.1331	0.9659	0.9661	-0.0002
12/5/2022 12:20	1	0	6	6	0	1.0614	1.0601	-0.0013	0.9999	0.9999	0.0000
12/5/2022 12:59	1	0	49	47	2	1.0564	1.0563	-0.0001	0.9749	0.9744	0.0005
12/5/2022 14:05	1	0	109	108	1	1.0521	1.0521	0.0000	0.9791	0.9791	0.0000
12/5/2022 14:19	1	0	14	14	0	0.4203	1.0042	0.5839	0.9920	0.9920	0.0000
12/5/2022 14:19	1	0	14	14	0	1.0491	1.0042	-0.0449	0.9920	0.9920	0.0000
12/5/2022 14:20	1	0	275	272	3	1.0562	1.0562	0.0000	0.9784	0.9783	0.0001
12/5/2022 14:21	1	0	66	65	1	1.0513	1.0512	-0.0001	0.9911	0.9911	0.0000
12/5/2022 14:27	1	0	12	12	0	0.9365	0.9848	0.0483	0.9291	0.9288	0.0003
12/5/2022 14:27	1	0	12	12	0	1.0527	0.9848	-0.0679	0.9291	0.9288	0.0003
12/5/2022 14:34	1	0	14	14	0	0.4022	1.0018	0.5996	0.9918	0.9918	0.0000
12/5/2022 14:34	1	0	14	14	0	1.0479	1.0018	-0.0461	0.9918	0.9918	0.0000
12/5/2022 14:38	1	0	82	82	0	1.0520	1.0520	0.0000	0.9963	0.9963	0.0000
12/5/2022 14:42	1	0	15	15	0	0.9393	0.9773	0.0380	0.9322	0.9318	0.0004
12/5/2022 14:42	1	0	15	15	0	1.0532	0.9773	-0.0759	0.9322	0.9318	0.0004
12/5/2022 14:52	1	0	4	3	1	1.0626	1.0592	-0.0034	0.9753	0.9749	0.0004
12/6/2022 8:15	1	1	71	67	4	0.9191	0.9258	0.0067	0.9966	0.9996	-0.0030
12/6/2022 9:11	1	1	19	1	18	1.0502	1.0551	0.0049	0.9958	0.9882	0.0076
12/6/2022 9:20	1	0	1	1	0	1.0558	1.0554	-0.0004	-0.9984	-0.9984	0.0000
12/6/2022 9:59	1	0	2	2	0	0.9589	0.9592	0.0003	-0.9981	-0.9980	-0.0002
12/6/2022 10:23	1	0	3	3	0	0.9357	1.0205	0.0848	0.9983	0.9983	0.0000
12/6/2022 10:23	1	0	3	3	0	1.0632	1.0205	-0.0427	0.9983	0.9983	0.0000
12/6/2022 10:24	1	0	1	1	0	1.0579	1.0576	-0.0003	0.9963	0.9962	0.0001
12/6/2022 10:26	1	0	164	164	0	0.9154	1.0513	0.1359	-0.9898	-0.9899	0.0002
12/6/2022 10:26	1	0	164	164	0	1.0526	1.0513	-0.0013	-0.9898	-0.9899	0.0002
12/6/2022 10:31	1	0	1	0	1	1.0553		-1.0553	0.9677	0.9677	0.0000
12/6/2022 10:52	1	0	17	16	1	1.0478	1.0473	-0.0005	0.9925	0.9925	0.0000
12/6/2022 11:18	1	0	2	2	0	0.9311	0.9935	0.0624	-0.9996	-0.9996	0.0000
12/6/2022 11:18	1	0	2	2	0	1.0565	0.9935	-0.0630	-0.9996	-0.9996	0.0000
12/6/2022 11:19	1	0	180	180	0	0.4027	1.0374	0.6347	0.9982	0.9985	-0.0003
12/6/2022 11:19	1	0	180	180	0	1.0609	1.0374	-0.0235	0.9982	0.9985	-0.0003
12/6/2022 11:34	1	0	176	176	0	0.3994	1.0372	0.6378	0.9984	0.9986	-0.0002
12/6/2022 11:34	1	0	176	176	0	1.0608	1.0372	-0.0236	0.9984	0.9986	-0.0002
12/6/2022 11:43	1	0	105	101	4	1.0569	1.0569	0.0000	0.9469	0.9469	0.0000
12/6/2022 12:51	1	0	69	68	1	1.0515	1.0514	-0.0001	0.9796	0.9796	0.0000
12/6/2022 14:37	1	0	11	12	-1	0.9366	0.9862	0.0496	0.9496	0.9494	0.0002
12/6/2022 14:37	1	0	11	12	-1	1.0515	0.9862	-0.0653	0.9496	0.9494	0.0002
12/6/2022 14:41	1	0	7	7	0	1.0498	1.0498	0.0000	0.9969	0.9967	0.0002
12/7/2022 10:38	1	1	1	1	0	1.1228	1.1082	-0.0146	-0.9939	0.9959	0.0163
12/7/2022 10:40	1	0	2	1	1	1.0592	1.0561	-0.0031	0.9837	0.9834	0.0003
12/7/2022 10:45	1	0	15	13	2	1.0524	1.0511	-0.0013	0.9754	0.9752	0.0002

Appendix F - Active Management Operational Implementation Event Logs

Timestamp	Number of DER Actions	Number of Capacitor Actions	Preplan Violation Count	Postplan Violation Count	Delta Violation Count	Preplan Average Voltage Violation	Postplan Average Voltage Violation	Delta Average Voltage Violation	Preplan Power Factor	Postplan Power Factor	Delta Power Factor
12/7/2022 10:49	1	1	131	16	115	0.9098	0.9612	0.0514	0.9786	0.9992	-0.0206
12/7/2022 10:49	1	1	6	2	4	1.0615	1.0604	-0.0011	-0.9966	0.9992	0.0076
12/7/2022 10:52	1	1	10	9	1	0.9465	0.9639	0.0174	0.9953	0.9806	0.0147
12/7/2022 10:52	1	1	10	9	1	1.1046	0.9639	-0.1407	0.9953	0.9806	0.0147
12/7/2022 10:53	1	1	198	108	90	1.0539	1.0519	-0.0020	-0.9995	0.9980	0.0030
12/7/2022 10:53	1	0	1	1	0	1.0598	1.0594	-0.0004	0.9915	0.9913	0.0002
12/7/2022 11:47	1	2	2	2	0	1.0911	1.0776	-0.0135	-0.9954	0.9962	0.0130
12/7/2022 12:03	1	1	15	15	0	0.4036	1.0092	0.6056	0.9911	0.9980	-0.0069
12/7/2022 12:03	1	1	15	15	0	1.0510	1.0092	-0.0418	0.9911	0.9980	-0.0069
12/7/2022 13:27	1	0	68	67	1	1.0553	1.0553	0.0000	0.9188	0.9188	0.0000
12/7/2022 13:35	1	0	318	316	2	1.0566	1.0566	0.0000	0.9927	0.9931	-0.0004
12/7/2022 13:41	1	0	44	43	1	0.8232	1.0340	0.2108	-0.9985	-0.9985	0.0000
12/7/2022 13:41	1	0	44	43	1	1.0500	1.0340	-0.0160	-0.9985	-0.9985	0.0000
12/7/2022 14:07	1	1	29	4	25	1.0530	1.0489	-0.0041	0.9992	0.9616	0.0376
12/7/2022 14:19	1	0	29	28	1	1.0480	1.0477	-0.0003	0.9884	0.9884	0.0000
12/7/2022 14:26	1	4	1	103	-102	0.9278	1.0484	0.1206	0.9979	-0.9935	-0.0151
12/7/2022 14:29	1	0	22	21	1	1.0494	1.0491	-0.0003	0.9825	0.9825	0.0000
12/7/2022 14:34	1	1	14	21	-7	0.4076	1.0178	0.6102	0.9948	0.9996	-0.0048
12/7/2022 14:34	1	1	14	21	-7	1.0482	1.0178	-0.0304	0.9948	0.9996	-0.0048
12/7/2022 14:35	1	0	32	32	0	1.0525	1.0524	-0.0001	0.9967	0.9967	0.0000
12/7/2022 14:55	1	0	9	9	0	1.0502	1.0502	0.0000	0.9999	0.9998	0.0001
12/8/2022 10:23	1	0	1	1	0	1.0570	1.0567	-0.0003	0.9891	0.9889	0.0002
12/8/2022 10:26	1	0	18	18	0	0.8283	1.0108	0.1825	0.9924	0.9924	0.0000
12/8/2022 10:26	1	0	18	18	0	1.0473	1.0108	-0.0365	0.9924	0.9924	0.0000
12/8/2022 10:26	1	0	4	2	2	1.0594	1.0580	-0.0014	0.9796	0.9792	0.0004
12/8/2022 10:30	1	0	11	10	1	1.0500	1.0487	-0.0013	0.9934	0.9933	0.0001
12/8/2022 10:35	1	0	109	108	1	1.0521	1.0520	-0.0001	0.9797	0.9797	0.0000
12/8/2022 10:38	1	1	10	10	0	0.9430	0.9584	0.0154	0.9943	0.9796	0.0147
12/8/2022 10:38	1	1	10	10	0	1.0991	0.9584	-0.1407	0.9943	0.9796	0.0147
12/8/2022 10:48	1	0	4	4	0	1.0706	1.0070	-0.0636	0.9954	0.9954	0.0000
12/8/2022 10:48	1	0	4	4	0	0.9437	1.0070	0.0633	0.9954	0.9954	0.0000
12/8/2022 11:28	1	0	6	6	0	1.0535	1.0534	-0.0001	0.9944	0.9942	0.0002
12/8/2022 12:19	1	0	79	79	0	1.0534	1.0534	0.0000	0.9893	0.9893	0.0000
12/8/2022 12:59	1	0	6	4	2	1.0472	1.0479	0.0007	0.9565	0.9566	-0.0001
12/8/2022 13:56	1	1	1	24	-23	0.9328	1.0423	0.1095	0.9958	0.9990	-0.0032
12/8/2022 14:40	1	0	7	7	0	1.0490	1.0489	-0.0001	1.0000	0.9999	0.0001
12/9/2022 8:19	1	0	72	70	2	1.0560	1.0556	-0.0004	-1.0000	-1.0000	0.0000
12/9/2022 9:07	1	0	194	194	0	1.0564	1.0564	0.0000	-0.9991	-0.9991	0.0000
12/9/2022 9:40	1	1	5	1	4	1.0584	1.0572	-0.0012	0.9966	0.9878	0.0088
12/9/2022 9:43	1	0	77	71	6	0.9432	0.9434	0.0002	0.9759	0.9761	-0.0002
12/9/2022 9:58	1	4	127	181	-54	0.7920	1.0067	0.2147	0.9308	-0.9999	-0.0694
12/9/2022 10:07	1	0	11	10	1	0.9459	0.9774	0.0315	0.9811	0.9813	-0.0002
12/9/2022 10:07	1	0	11	10	1	1.0492	0.9774	-0.0718	0.9811	0.9813	-0.0002
12/9/2022 10:18	1	0	2	2	0	1.0692	1.0690	-0.0002	0.9957	0.9957	0.0000
12/9/2022 11:10	1	0	10	10	0	1.0519	1.0519	0.0000	0.9780	0.9773	0.0007
12/9/2022 11:12	1	0	9	9	0	1.0516	1.0516	0.0000	0.9949	0.9946	0.0003
12/9/2022 11:21	1	0	14	13	1	1.0478	1.0472	-0.0006	0.9886	0.9886	0.0000
12/9/2022 11:47	1	0	5	5	0	1.0538	1.0537	-0.0001	-0.9992	-0.9992	0.0000
12/9/2022 11:58	1	0	13	12	1	1.0499	1.0494	-0.0005	0.9835	0.9835	0.0000
12/9/2022 12:13	1	0	534	533	1	1.0494	0.9173	-0.1321	0.9645	0.9647	-0.0002
12/9/2022 12:13	1	0	534	533	1	0.9134	0.9173	0.0039	0.9645	0.9647	-0.0002
12/9/2022 12:20	1	0	317	317	0	1.0568	1.0568	0.0000	0.9763	0.9763	0.0000
12/9/2022 13:02	1	0	159	159	0	0.9445	1.0642	0.1197	-0.9976	-0.9976	0.0000
12/9/2022 13:02	1	0	159	159	0	1.0654	1.0642	-0.0012	-0.9976	-0.9976	0.0000
12/9/2022 14:28	1	0	92	91	1	1.0525	1.0524	-0.0001	0.9916	0.9916	0.0000
12/9/2022 14:35	1	0	95	94	1	1.0511	1.0512	0.0001	1.0000	1.0000	0.0000
12/9/2022 14:43	1	0	106	104	2	1.0532	1.0532	0.0000	0.9915	0.9915	0.0000
12/10/2022 9:32	1	0	42	35	7	1.0559	1.0552	-0.0007	-0.9957	-0.9957	0.0000
12/10/2022 9:41	1	0	92	81	11	0.9445	0.9447	0.0002	0.9878	0.9879	-0.0001
12/10/2022 9:54	1	0	100	100	0	1.0536	1.0536	0.0000	0.9949	0.9949	0.0000
12/10/2022 9:59	1	0	1253	1252	1	1.0692	1.0692	0.0000	0.9995	0.9995	0.0000
12/10/2022 10:14	1	0	67	67	0	1.0521	1.0520	-0.0001	1.0000	1.0000	0.0000
12/10/2022 10:21	1	0	1	0	1	1.0550	1.0550	0.0000	0.9942	0.9942	0.0000
12/10/2022 10:31	1	0	16	16	0	0.5181	1.0137	0.4956	-0.9989	-0.9989	0.0000
12/10/2022 10:31	1	0	16	16	0	1.0469	1.0137	-0.0332	-0.9989	-0.9989	0.0000
12/10/2022 10:40	1	0	115	113	2	1.0572	1.0570	-0.0002	0.9445	0.9445	0.0000
12/10/2022 10:45	1	0	2	2	0	1.0834	1.0831	-0.0003	-0.9916	-0.9916	0.0000

Appendix F - Active Management Operational Implementation Event Logs

Timestamp	Number of DER Actions	Number of Capacitor Actions	Preplan Violation Count	Postplan Violation Count	Delta Violation Count	Preplan Average Voltage Violation	Postplan Average Voltage Violation	Delta Average Voltage Violation	Preplan Power Factor	Postplan Power Factor	Delta Power Factor
12/10/2022 10:46	1	0	3	3	0	0.4148	0.8356	0.4208	-0.9998	-0.9998	0.0000
12/10/2022 10:46	1	0	3	3	0	1.0459	0.8356	-0.2103	-0.9998	-0.9998	0.0000
12/10/2022 10:51	1	0	1	1	0	1.1183	1.1178	-0.0005	-0.9961	-0.9961	0.0000
12/10/2022 10:59	1	0	43	42	1	1.0527	1.0526	-0.0001	0.9846	0.9846	0.0000
12/10/2022 11:26	1	0	2	2	0	1.0572	1.0570	-0.0002	0.9992	0.9991	0.0001
12/10/2022 11:27	1	1	1	101	-100	0.9299	1.0544	0.1245	0.9847	0.9944	-0.0097
12/10/2022 11:45	1	1	84	63	21	1.0581	1.0571	-0.0010	-0.9781	-0.9943	0.0324
12/10/2022 12:09	1	0	15	15	0	1.0572	1.0572	0.0000	-0.9986	-0.9986	0.0000
12/10/2022 12:16	1	0	245	245	0	1.0721	1.0721	0.0000	-0.9478	-0.9475	-0.0006
12/10/2022 14:35	1	0	33	33	0	0.9351	0.9351	0.0000	0.9521	0.9518	0.0003
12/10/2022 14:36	1	0	84	83	1	1.0523	1.0522	-0.0001	-0.9966	-0.9966	0.0000
12/10/2022 15:03	1	0	2	2	0	0.9315	0.9315	0.0000	0.9974	0.9973	0.0001
12/11/2022 9:42	1	0	247	247	0	0.9207	0.9208	0.0001	0.9927	0.9927	0.0000
12/11/2022 9:42	1	0	134	126	8	0.9405	0.9408	0.0003	-1.0000	-1.0000	0.0000
12/11/2022 9:58	1	0	133	123	10	1.0583	1.0582	-0.0001	1.0000	0.9999	0.0001
12/11/2022 10:07	1	0	10	9	1	0.9456	0.9614	0.0158	0.9913	0.9913	0.0000
12/11/2022 10:07	1	0	10	9	1	1.0852	0.9614	-0.1238	0.9913	0.9913	0.0000
12/11/2022 11:42	1	0	591	590	1	0.8946	0.9064	0.0118	0.9929	0.9928	0.0001
12/11/2022 11:42	1	0	2	2	0	1.0582	1.0579	-0.0003	1.0000	1.0000	0.0000
12/11/2022 11:42	1	0	591	590	1	1.0556	0.9064	-0.1492	0.9929	0.9928	0.0001
12/11/2022 11:47	1	0	2	2	0	1.0786	1.0784	-0.0002	1.0000	1.0000	0.0000
12/11/2022 12:25	1	0	33	33	0	0.8540	1.0417	0.1877	-0.9963	-0.9962	-0.0002
12/11/2022 12:25	1	0	33	33	0	1.0475	1.0417	-0.0058	-0.9963	-0.9962	-0.0002
12/11/2022 14:23	1	0	1	1	0	1.0586	1.0582	-0.0004	1.0000	1.0000	0.0000
12/11/2022 16:25	1	0	1	1	0	0.9387	0.9396	0.0009	0.9995	0.9995	0.0000
12/12/2022 8:15	1	0	1374	1374	0	1.0737	1.0737	0.0000	0.9949	0.9949	0.0000
12/12/2022 9:29	1	0	13	12	1	1.0501	1.0495	-0.0006	0.9914	0.9913	0.0001
12/12/2022 9:33	1	0	1	1	0	1.0561	1.0556	-0.0005	0.9995	0.9995	0.0000
12/12/2022 9:42	1	0	24	19	5	0.9451	0.9454	0.0003	-0.9993	-0.9993	0.0000
12/12/2022 10:17	1	0	2	2	0	1.0615	1.0612	-0.0003	0.9979	0.9979	0.0000
12/12/2022 10:38	1	0	1	1	0	1.0564	1.0561	-0.0003	-0.9999	-0.9999	0.0000
12/12/2022 10:57	1	1	11	11	0	1.0643	1.0627	-0.0016	0.9727	0.9147	0.0580
12/12/2022 11:01	1	0	132	131	1	1.0573	1.0573	0.0000	-0.9874	-0.9876	0.0004
12/12/2022 11:14	1	0	47	46	1	1.0543	1.0543	0.0000	-0.9981	-0.9981	0.0000
12/12/2022 11:17	1	0	2	2	0	0.4160	0.7312	0.3152	1.0000	1.0000	0.0000
12/12/2022 11:17	1	0	2	2	0	1.0462	0.7312	-0.3150	1.0000	1.0000	0.0000
12/12/2022 11:42	1	0	174	174	0	0.9369	1.0513	0.1144	-0.9976	-0.9976	0.0000
12/12/2022 11:42	1	0	174	174	0	1.0524	1.0513	-0.0011	-0.9976	-0.9976	0.0000
12/12/2022 12:11	1	0	193	192	1	1.0601	1.0600	-0.0001	0.9542	0.9542	0.0000
12/12/2022 14:43	1	0	23	22	1	1.0483	1.0480	-0.0003	0.9812	0.9812	0.0000
12/13/2022 7:57	1	0	277	277	0	0.8923	0.8924	0.0001	0.9899	0.9900	-0.0001
12/13/2022 9:12	1	0	11	11	0	1.0608	1.0607	-0.0001	0.9167	0.9165	0.0002
12/13/2022 9:20	1	0	73	72	1	1.0525	1.0524	-0.0001	0.9880	0.9880	0.0000
12/13/2022 9:28	1	0	519	518	1	1.0720	1.0720	0.0000	0.9718	0.9719	-0.0001
12/13/2022 9:42	1	0	18	16	2	0.9455	0.9457	0.0002	-0.9998	-0.9997	-0.0002
12/13/2022 9:44	1	0	133	132	1	1.0615	1.0615	0.0000	-0.9678	-0.9674	-0.0008
12/13/2022 9:55	1	0	2	1	1	1.0579	1.0574	-0.0005	0.9852	0.9850	0.0002
12/13/2022 10:22	1	0	144	143	1	1.0536	1.0536	0.0000	-0.9996	-0.9996	0.0000
12/13/2022 10:53	1	0	1	1	0	1.0617	1.0613	-0.0004	0.9999	0.9999	0.0000
12/13/2022 11:17	1	0	331	330	1	1.0573	1.0573	0.0000	-0.9771	-0.9771	0.0000
12/13/2022 13:56	1	0	16	16	0	0.9414	1.0354	0.0940	-1.0000	-1.0000	0.0000
12/13/2022 13:56	1	0	16	16	0	1.0512	1.0354	-0.0158	-1.0000	-1.0000	0.0000
12/14/2022 10:52	1	0	79	79	0	1.0524	1.0524	0.0000	-0.9998	-0.9998	0.0000
12/19/2022 10:43	1	0	231	229	2	0.9204	0.9209	0.0005	0.9930	0.9930	0.0000
12/19/2022 11:01	1	0	237	236	1	0.8934	0.8937	0.0003	0.9919	0.9920	-0.0001
12/19/2022 11:25	1	0	5	5	0	0.9368	0.9810	0.0442	0.9969	0.9967	0.0002
12/19/2022 11:25	1	0	5	5	0	1.0471	0.9810	-0.0661	0.9969	0.9967	0.0002
12/19/2022 11:48	1	0	1	1	0	0.9388	0.9388	0.0000	0.9919	0.9919	0.0000
12/20/2022 10:19	1	0	112	111	1	1.0573	1.0572	-0.0001	0.9938	0.9937	0.0001
12/20/2022 10:47	1	0	420	420	0	0.8976	0.8977	0.0001	0.9688	0.9689	-0.0001
12/20/2022 11:10	1	0	6	6	0	1.0485	1.0484	-0.0001	0.9946	0.9943	0.0003
1/4/2023 12:48	1	0	367	367	0	1.0640	1.0640	0.0000	-0.9995	-0.9995	0.0000
1/4/2023 13:19	1	0	33	32	1	1.0495	1.0493	-0.0002	0.9931	0.9931	0.0000
1/4/2023 14:09	1	0	1	1	0	1.0586	1.0583	-0.0003	0.9913	0.9912	0.0001
1/4/2023 15:59	1	0	4	4	0	0.3928	0.8835	0.4907	-0.9761	-0.9801	0.0080
1/4/2023 15:59	1	0	4	4	0	1.0470	0.8835	-0.1635	-0.9761	-0.9801	0.0080
1/6/2023 13:19	1	0	27	26	1	1.0489	1.0487	-0.0002	0.9896	0.9896	0.0000

Appendix F - Active Management Operational Implementation Event Logs

Timestamp	Number of DER Actions	Number of Capacitor Actions	Preplan Violation Count	Postplan Violation Count	Delta Violation Count	Preplan Average Voltage Violation	Postplan Average Voltage Violation	Delta Average Voltage Violation	Preplan Power Factor	Postplan Power Factor	Delta Power Factor
1/6/2023 15:48	1	1	43	9	34	0.9272	1.0331	0.1059	0.9994	0.9944	0.0050
1/6/2023 15:48	1	1	43	9	34	1.0519	1.0331	-0.0188	0.9994	0.9944	0.0050
1/7/2023 14:22	1	0	2	2	0	0.9406	0.9409	0.0003	-0.9683	-0.9679	-0.0008
1/8/2023 14:53	1	1	311	251	60	0.8907	0.8957	0.0050	0.9748	0.9877	-0.0129
1/9/2023 8:51	1	0	10	10	0	1.0477	1.0258	-0.0219	-0.9994	-0.9994	0.0000
1/9/2023 8:51	1	0	10	10	0	0.9394	1.0258	0.0864	-0.9994	-0.9994	0.0000
1/9/2023 10:04	1	0	63	61	2	1.0549	1.0548	-0.0001	0.9889	0.9888	0.0001
1/9/2023 10:09	1	0	2	2	0	1.0518	1.0517	-0.0001	0.9990	0.9989	0.0001
1/9/2023 14:18	1	0	10	10	0	0.9238	1.0352	0.1114	0.9989	0.9989	0.0000
1/9/2023 14:18	1	0	10	10	0	1.0475	1.0352	-0.0123	0.9989	0.9989	0.0000
1/9/2023 14:21	1	1	69	6	63	0.9324	0.9947	0.0623	0.9966	-1.0000	-0.0034
1/9/2023 14:21	1	1	69	6	63	1.0450	0.9947	-0.0503	0.9966	-1.0000	-0.0034
1/9/2023 14:59	1	0	14	13	1	1.0474	1.0468	-0.0006	0.9922	0.9922	0.0000
1/10/2023 9:26	1	0	2	2	0	1.0503	1.0501	-0.0002	0.9892	0.9890	0.0002
1/10/2023 10:51	1	0	2	2	0	0.9428	0.9432	0.0004	-0.9621	-0.9617	-0.0008
1/11/2023 14:17	1	0	2	2	0	1.0827	1.0824	-0.0003	0.9981	0.9981	0.0000
1/11/2023 14:23	1	0	1	1	0	1.0600	1.0596	-0.0004	0.9965	0.9965	0.0000
1/11/2023 14:32	1	0	675	673	2	1.0680	1.0680	0.0000	0.9991	0.9991	0.0000
1/12/2023 8:16	1	0	1183	1183	0	1.0667	1.0667	0.0000	-0.9993	-0.9993	0.0000
1/12/2023 9:32	1	0	373	373	0	1.0656	1.0656	0.0000	0.9996	0.9996	0.0000
1/23/2023 11:21	1	0	27	20	7	0.9425	0.9422	-0.0003	-0.9773	-0.9769	-0.0008
1/23/2023 11:32	1	2	1397	1281	116	1.0952	1.0879	-0.0073	0.9980	0.9888	0.0092
1/23/2023 12:02	1	0	4	4	0	0.9433	1.0112	0.0679	0.9951	0.9952	-0.0001
1/23/2023 12:02	1	0	4	4	0	1.0787	1.0112	-0.0675	0.9951	0.9952	-0.0001
1/24/2023 8:16	1	0	1476	1476	0	1.1011	1.1011	0.0000	0.9991	0.9990	0.0001
1/24/2023 9:42	1	0	52	51	1	1.0558	1.0558	0.0000	0.9006	0.9006	0.0000
1/26/2023 9:48	1	5	1863	1859	4	1.0877	1.0761	-0.0116	0.9984	0.9649	0.0335
1/26/2023 10:01	1	0	1699	1699	0	1.0882	1.0881	-0.0001	0.9906	0.9906	0.0000
1/26/2023 10:17	1	0	3	3	0	0.9402	1.0212	0.0810	0.9952	0.9952	0.0000
1/26/2023 10:17	1	0	3	3	0	1.0619	1.0212	-0.0407	0.9952	0.9952	0.0000
1/26/2023 10:21	1	0	16	12	4	0.9421	0.9415	-0.0006	-0.9733	-0.9730	-0.0006
1/26/2023 10:32	1	0	3	3	0	0.9415	1.0239	0.0824	0.9964	0.9964	0.0000
1/26/2023 10:32	1	2	1512	1388	124	1.1135	1.1061	-0.0074	0.9977	0.9878	0.0099
1/26/2023 10:32	1	0	3	3	0	1.0652	1.0239	-0.0413	0.9964	0.9964	0.0000
1/26/2023 10:36	1	0	9	9	0	0.9416	0.9416	0.0000	-0.9723	-0.9723	0.0000
1/26/2023 10:47	1	0	3	3	0	0.9430	1.0266	0.0836	0.9961	0.9961	0.0000
1/26/2023 10:47	1	0	1513	1513	0	1.1118	1.1118	0.0000	0.9964	0.9964	0.0000
1/26/2023 10:47	1	0	3	3	0	1.0683	1.0266	-0.0417	0.9961	0.9961	0.0000
1/26/2023 11:02	1	0	3	3	0	0.9427	1.0283	0.0856	0.9963	0.9963	0.0000
1/26/2023 11:02	1	0	3	3	0	1.0712	1.0283	-0.0429	0.9963	0.9963	0.0000
1/26/2023 11:09	1	0	5	5	0	0.9439	1.0271	0.0832	-0.9988	-0.9988	0.0000
1/26/2023 11:09	1	0	5	5	0	1.0479	1.0271	-0.0208	-0.9988	-0.9988	0.0000
1/26/2023 11:17	1	0	3	3	0	0.9429	1.0321	0.0892	0.9964	0.9964	0.0000
1/26/2023 11:17	1	0	3	3	0	1.0767	1.0321	-0.0446	0.9964	0.9964	0.0000
1/26/2023 11:24	1	0	4	4	0	1.0465	1.0465	0.0000	-0.9995	-0.9995	0.0000
1/26/2023 12:24	1	1	5	8	-3	0.9224	1.0332	0.1108	0.9440	0.9533	-0.0093
1/26/2023 12:24	1	1	5	8	-3	1.0478	1.0332	-0.0146	0.9440	0.9533	-0.0093
1/26/2023 15:52	1	1	173	187	-14	0.9049	0.9192	0.0143	0.9003	0.9232	-0.0229
1/27/2023 10:17	1	0	18	18	0	1.0528	1.0527	-0.0001	0.9708	0.9705	0.0003
1/27/2023 12:35	1	0	217	215	2	1.0553	1.0553	0.0000	0.9799	0.9799	0.0000
1/27/2023 14:46	1	0	26	25	1	1.0494	1.0492	-0.0002	0.9828	0.9827	0.0001
1/30/2023 14:20	1	0	254	253	1	1.0559	1.0559	0.0000	0.9761	0.9761	0.0000
1/31/2023 9:15	1	0	1221	1219	2	1.0650	1.0651	0.0001	0.9884	0.9884	0.0000
1/31/2023 10:16	1	0	599	598	1	1.0746	1.0745	-0.0001	0.9713	0.9710	0.0003
1/31/2023 10:38	1	0	1	1	0	1.0617	1.0614	-0.0003	0.9998	0.9998	0.0000
1/31/2023 10:47	1	0	3	3	0	0.9400	1.0230	0.0830	0.9959	0.9959	0.0000
1/31/2023 10:47	1	0	3	3	0	1.0649	1.0230	-0.0419	0.9959	0.9959	0.0000
2/1/2023 9:31	1	0	2	2	0	0.9401	0.9401	0.0000	0.9953	0.9953	0.0000
2/1/2023 9:36	1	1	250	222	28	0.8898	0.8963	0.0065	0.8864	0.9054	-0.0190
2/1/2023 9:46	1	0	1169	1168	1	1.0664	1.0664	0.0000	0.9889	0.9889	0.0000
2/1/2023 10:12	1	0	76	75	1	1.0570	1.0570	0.0000	0.9075	0.9075	0.0000
2/7/2023 9:30	1	0	31	30	1	1.0553	1.0552	-0.0001	0.9870	0.9870	0.0000
2/7/2023 11:54	1	1	7	16	-9	0.9219	1.0413	0.1194	0.9649	0.9727	-0.0078
2/7/2023 11:54	1	1	7	16	-9	1.0511	1.0413	-0.0098	0.9649	0.9727	-0.0078
2/14/2023 10:45	1	0	19	18	1	1.0538	1.0531	-0.0007	0.9895	0.9893	0.0002
2/14/2023 10:50	2	0	283	270	13	1.0560	1.0559	-0.0001	0.9775	0.9772	0.0003
2/14/2023 11:08	1	0	2	2	0	1.0645	1.0641	-0.0004	-0.9999	-0.9999	0.0000

Appendix F - Active Management Operational Implementation Event Logs

Timestamp	Number of DER Actions	Number of Capacitor Actions	Preplan Violation Count	Postplan Violation Count	Delta Violation Count	Preplan Average Voltage Violation	Postplan Average Voltage Violation	Delta Average Voltage Violation	Preplan Power Factor	Postplan Power Factor	Delta Power Factor
2/14/2023 11:50	1	0	310	309	1	1.0566	1.0566	0.0000	0.9752	0.9751	0.0001
2/14/2023 12:09	1	0	6	6	0	0.9186	1.0127	0.0941	0.9439	0.9395	0.0044
2/14/2023 12:09	1	0	6	6	0	1.0609	1.0127	-0.0482	0.9439	0.9395	0.0044
2/14/2023 13:05	1	0	263	263	0	1.0563	1.0563	0.0000	0.9740	0.9740	0.0000
2/14/2023 14:35	1	0	14	13	1	0.9196	1.0389	0.1193	0.9462	0.9457	0.0005
2/14/2023 14:35	1	0	14	13	1	1.0487	1.0389	-0.0098	0.9462	0.9457	0.0005
2/16/2023 15:49	1	0	15	15	0	1.0518	1.0517	-0.0001	0.9934	0.9933	0.0001
2/21/2023 10:06	1	0	302	301	1	0.8350	0.8353	0.0003	0.8403	0.8404	-0.0001
2/21/2023 12:21	1	0	39	39	0	1.0536	1.0530	-0.0006	-1.0000	-1.0000	0.0000
2/22/2023 8:51	1	0	451	451	0	0.8774	0.8775	0.0001	0.8432	0.8433	-0.0001
2/22/2023 11:21	1	0	11	11	0	0.9328	1.0259	0.0931	0.9993	0.9994	-0.0001
2/22/2023 11:21	1	0	11	11	0	1.0465	1.0259	-0.0206	0.9993	0.9994	-0.0001
2/23/2023 9:49	1	0	11	11	0	1.0484	1.0483	-0.0001	0.9982	0.9981	0.0001
2/23/2023 11:51	1	0	20	20	0	1.0524	1.0523	-0.0001	0.9970	0.9969	0.0001
2/23/2023 14:21	1	0	128	128	0	1.0581	1.0581	0.0000	0.9326	0.9322	0.0004
2/25/2023 8:37	1	0	280	280	0	0.8492	0.8492	0.0000	0.9134	0.9135	-0.0001
2/26/2023 9:05	1	0	280	280	0	0.8499	0.8500	0.0001	0.9071	0.9072	-0.0001
3/2/2023 9:51	1	0	118	116	2	0.9054	0.9055	0.0001	0.8712	0.8712	0.0000
3/3/2023 8:06	1	0	199	198	1	0.8986	0.8986	0.0000	0.9021	0.9021	0.0000
3/3/2023 10:51	1	0	29	28	1	0.9383	0.9991	0.0608	0.9279	0.9281	-0.0002
3/3/2023 10:51	1	0	29	28	1	1.0521	0.9991	-0.0530	0.9279	0.9281	-0.0002
3/4/2023 14:50	1	0	8	8	0	0.9447	0.9650	0.0203	-1.0000	-1.0000	0.0000
3/4/2023 14:50	1	0	8	8	0	1.1046	0.9650	-0.1396	-1.0000	-1.0000	0.0000
3/4/2023 15:05	1	0	10	10	0	0.9434	0.9594	0.0160	-1.0000	-1.0000	0.0000
3/4/2023 15:05	1	0	10	10	0	1.1033	0.9594	-0.1439	-1.0000	-1.0000	0.0000
3/5/2023 12:20	1	0	6	5	1	1.0482	1.0461	-0.0021	-0.9996	-0.9996	0.0000
3/6/2023 14:22	1	0	15	15	0	1.0496	1.0496	0.0000	0.9993	0.9993	0.0000
3/8/2023 10:49	1	0	8	7	1	1.0489	1.0476	-0.0013	0.9963	0.9963	0.0000
3/9/2023 13:51	1	0	16	16	0	1.0498	1.0498	0.0000	0.9989	0.9988	0.0001
3/10/2023 8:30	1	0	405	405	0	0.8749	0.8749	0.0000	0.9944	0.9944	0.0000
3/10/2023 9:05	1	0	274	274	0	0.8670	0.8671	0.0001	0.9000	0.9002	-0.0002
3/14/2023 14:21	1	0	24	19	5	1.0473	1.0472	-0.0001	0.9991	0.9991	0.0000
3/14/2023 14:36	1	0	14	14	0	1.0489	1.0489	0.0000	0.9994	0.9994	0.0000
3/15/2023 9:36	1	0	124	124	0	0.9094	0.9095	0.0001	0.9043	0.9044	-0.0001
3/15/2023 11:02	1	0	216	216	0	0.8733	0.8737	0.0004	0.9069	0.9071	-0.0002
3/17/2023 9:00	1	0	187	187	0	0.9234	0.9235	0.0001	0.9907	0.9909	-0.0002
3/17/2023 10:36	1	0	235	235	0	0.8915	0.8916	0.0001	0.8747	0.8747	0.0000
3/17/2023 11:34	1	0	12	11	1	1.0496	1.0488	-0.0008	0.9999	0.9999	0.0000
3/18/2023 8:15	1	0	198	197	1	0.9151	0.9152	0.0001	0.9959	0.9961	-0.0002
3/19/2023 8:30	1	0	351	350	1	0.9009	0.9010	0.0001	0.9926	0.9929	-0.0003
3/20/2023 9:01	1	0	260	260	0	0.9123	0.9123	0.0000	0.9870	0.9871	-0.0001
3/20/2023 9:16	1	0	328	327	1	0.9136	0.9136	0.0000	0.9866	0.9868	-0.0002
3/20/2023 9:31	1	0	183	183	0	0.9171	0.9171	0.0000	0.9873	0.9874	-0.0001
3/20/2023 9:46	1	0	209	209	0	0.9134	0.9134	0.0000	0.9874	0.9875	-0.0001
3/20/2023 11:50	1	0	8	6	2	1.0470	1.0458	-0.0012	0.9955	0.9955	0.0000
3/20/2023 14:22	1	0	16	16	0	1.0494	1.0493	-0.0001	-1.0000	-1.0000	0.0000