Exception Policy for SMART Program Sub-metering

STGU + AC Coupled Energy Storage Systems ("ESS") Sub-metering with Primary Service.

In National Grid's service territory, customers are typically required to install a Utility Service Meter, a Utility PV Generation Meter, and a Utility Storage Meter, outside of any project fencing, between the distribution system and any customer-owned equipment. This general requirement is intended to ensure the safety of utility personnel, both during the installation and while performing future maintenance of the meter and all other Company-owned equipment. Plus, it provides utility personnel with easy access to Company-owned equipment and an easy means of disconnecting all energy sources in the case of emergency or planned work. It also allows the Company easy access to Company-owned equipment, as opposed to creating access issues if such equipment is installed within a customer's fenced area, and ensures a safe means of proving that all electrical sources are disconnected and grounded prior to Company metering personnel conducting any necessary maintenance.

For customers participating in the SMART Program, the Company requires a National Grid-owned meter to be installed on the generation source prior to its interconnection point, in addition to requiring a primary service meter at the point of common coupling. These generation meter (or "sub-meter") requirements are described in the current SMART Program metering specification document in conjunction with Electric Service Bulletin (ESB) 750. In the case of SMART Program standalone Solar Tariff Generation Units ("STGUs") with AC coupled ESS served by primary service voltage, the PV and/or ESS equipment could be located separate and remote from the point of connection of the STGU to the premise being served, and co-location of all three meters could cause additional cost to the customer.

In response to customer feedback on National Grid's application of the current SMART Program metering configuration to the sub-meters required by the SMART Program, National Grid initiated a review of its current policies.

The Company found that in appropriate circumstances, an exception to the existing metering configuration requirement regarding the grouping of all meters would better align with the SMART Program and customer needs, would allow flexibility to place the Company meters in arrangements that are more logical to the electrical design, and would still provide ease of access to the Company and ensure the safety of the individuals operating and maintaining the meters during emergencies and planned work in appropriate circumstances.
Company's side of demarcation line.

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An illustrative example of the Typical Metering Configuration is shown in Appendix A:when all three meters are to be installed, all shall be grouped at one location. The line of demarcation is shown after the Company meters and no Customer equipment can be installed on the

Exception to Typical Metering Configuration

The Company will permit the following Exception in appropriate cases. A Customer who elects to opt out of the current typical metering configuration can request this Exception and propose installation of Customer owned pad mount primary metering switchgear designed and built to the Company's Requirements and Specifications as described below. This Customer owned switchgear must have Company owned metering equipment and must follow the process described below to have Company owned metering installed inside the switchgear. An illustrative example of this Exception is shown in Appendix B. **BOTH APPENDIX A AND APPENDIX B ARE ILLUSTRATIVE EXAMPLES AND THE COMPANY MAY REQUIRE OTHER CONFIRGURATIONS.**

Requirements to comply with Exception

1. The Customer shall follow requirements specified in ESB 750 Errata on Page 14 "M. Primary switchgear Metering Specifications".
2. The Customer shall provide isolation devices on both the line side and the load side of the sub-metering.
3. The Company shall have 24/7 access to the Company owned equipment installed inside the Customer's fence. The Customer must provide double locking capability to gate for ease of access. The Company will install its own WB lock.
4. The Customer will be responsible for actual cost of meter installation and an estimate will be provided as part of Interconnection Service Agreement ("ISA") and in cases where the ISA has already been executed, the Company will have right to amend the ISA in order to include scope and adjust timeline for sub-meter installation.
5. The Customer must send switchgear specification and updated facility oneline for review and approval. The Customer shall only begin metering switchgear procurement after approval from the Company.
6. The Customer will be responsible for maintaining the metering switchgear and will be responsible for any cost associated with it.
7. Prior to the Company performing any work, the Customer shall de-energize the switchgear and make safe to the Company's switching and tagging procedure.
8. The switchgear must be a freestanding enclosure installed on its own concrete pad.
9. The Customer may purchase the switchgear through the Company approved vendor(s). If the Customer proposes to purchase from a non-approved vendor, the Customer should submit proposed shop drawings for the Company's review and approval so that the proposed vendor can be added to approved list. Please note that this may add delay to the procurement process and the Company recommends that the Customer start the approval process as early as possible.
10. The customer must install a plaque or a site map at the entrance near the PCC meter showing the location of the other two sub-meters.

Metering Switchgear Specification for procurement

1. Three phase primary metering cabinet meeting applicable standards. Switchgear per ANSI/IEEE C37.74 standard, bushings per ANSI/IEEE 386 & enclosure per ANSI/IEEE C57.12.28
2. The voltage class rating meeting the service class voltage (15kV/ 25kV/ 35kV) at PCC
3. GA Mild Steel Enclosure with removable lifting brackets, stainless steel ground pads with copper ground bar
4. NEMA grade GPO-3 barrier switch
5. Operating handle and switch position indicator, Switch viewing window
6. Warning signs & labels
7. Provisions for Company to install CT's and VTs

Procurement Process

1. The Customer will submit shop drawings and oneline to the Company's Customer Energy Integration Consultant for the Company's review and approval.
2. The Company's meter engineering and operations team will review and approve the drawings.
3. The Customer will then place an order for switchgear upon the Company's approval of the vendor.
4. Once the order is placed, the Customer will provide purchase order information to the Company so that the Company can ship necessary metering instrument transformers to the manufacturer.
5. The Customer will be responsible to pay the actual cost of all necessary equipment. The Company will invoice the customer prior to shipping the equipment.
6. The Customer will be responsible to install the switchgear at site as specified **in ESB 750 Errata on Page 14** including high-voltage elbows or T-bodies; the Company will then finish secondary wiring, test switch and meters.

Specimen Special Operating Requirement language for ISA
"The Interconnecting Customer shall provide 24/7 access to the Company owned equipment located on the Interconnecting Customer's property and must follow the Company's switching and tagging procedure when Company personnel will be working on the Company owned equipment. The Company will disconnect the Facility by opening the Company's protective device installed at the point of interconnection."

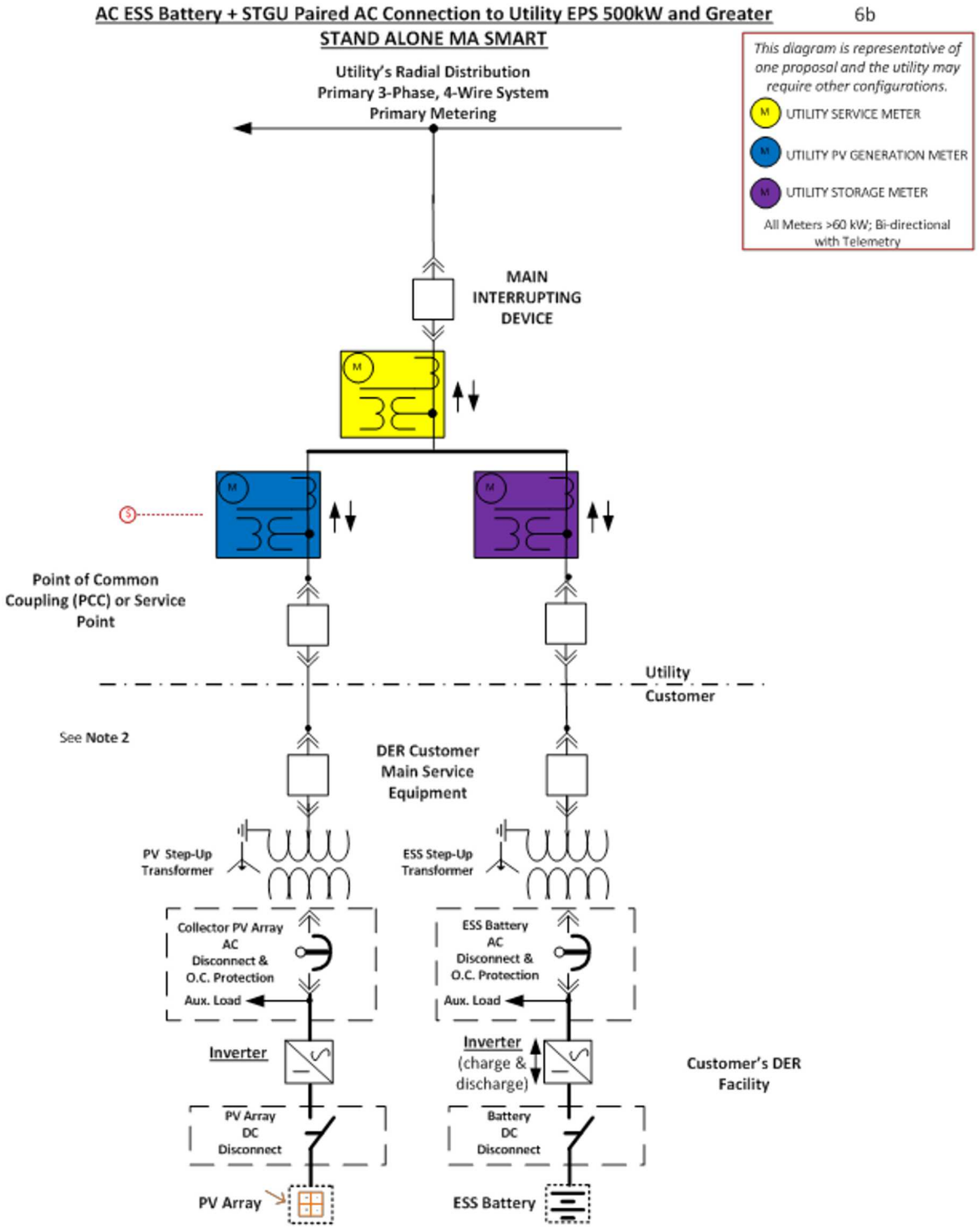
Implementation Plan

The Company plans on publishing this Exception Policy on the Company's website by October 7, 2019. The Company also plan on reviewing this Exception Policy during the October 17, 2019 Quarterly DG Seminar.

Any pending applicant can choose to request the Exception with an understanding that there might be additional review and a re-study required (if the study is already complete). There will be additional review/re-study time and cost. If there will be no change to system design (i.e. protection coordination, no change in impedance etc.) then additional review may only take 2-3 weeks and if the change is moderate then it may take longer than 3 weeks.

It is solely in the customer's discretion to utilize this Exception and the Company will not be responsible for any delay in the interconnection process due to this change.
For any Exception Policy questions please contact Vishal Ahirrao at vishal.ahirrao@nationalgrid.com.

Appendix A Typical Metering Configuration



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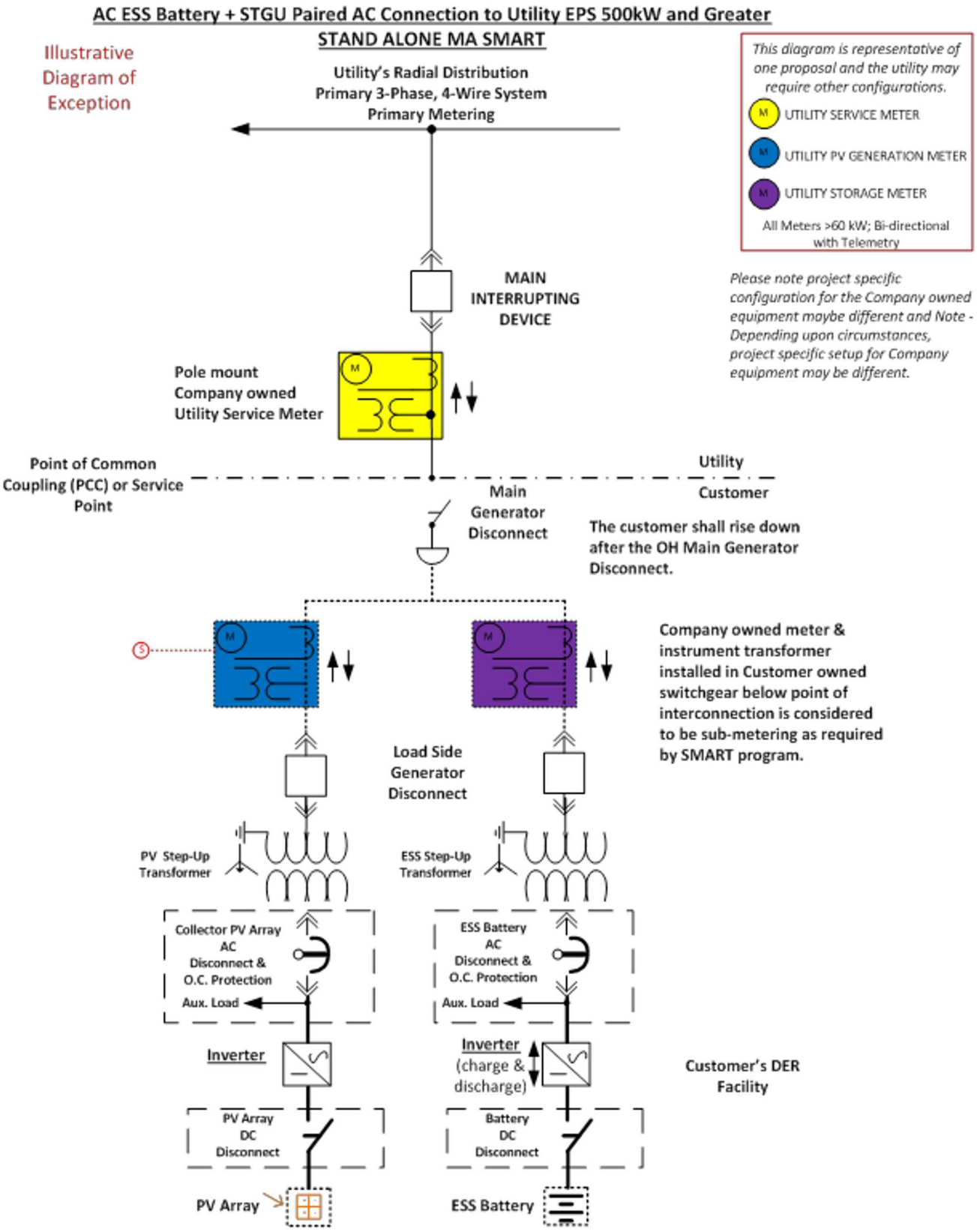
Appendix B Illustrative Example of Exception



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