1.1 Commissioning Prerequisites

The following steps describe the Commissioning process that Tesla Industrial Storage Support will follow. Tesla may perform this work either on site or remotely at the discretion of the Tesla representative and in accordance with any site-specific commissioning plan. Tesla will perform Commissioning at Tesla's earliest convenience, unless the Customer has indicated a necessary scheduled time.

The following conditions must be met before commissioning can begin:

Pre-Commision Step	Completed (Yes/No)
The Construction Checklist has been fully completed, sent back to Tesla, and approved by Tesla.	
Megapack is ready to be energized: • Trip terminals are open or closed as appropriate • Remote shut down terminals are closed. • Close permissive terminals are closed. • Key is on	
AC distribution to the terminals of all Tesla Megapacks must be complete and grid power available. Exemptions to this may be made at the discretion of the Tesla Project Engineer following a review of the current site conditions	
Energize the Tesla Site Controller, all meters (Site, Battery, PV), and networking.	
Tesla requires an onsite presence that is able to perform the following work: • Operate any circuit breakers • Measure circuit voltages • Debug and resolve any networking connection issues • Debug and resolve any meter connection issues • Debug and resolve power connection issues	
Charge and Discharge limits are identified in the Construction Checklist.	
Stable internet connection to Tesla/Internet from the Tesla Site Controller	
Internet access for Tesla personnel onsite, if applicable	

1.2 Sample Commissioning Activity Overview

Reach out to your Tesla Project Engineer for a Commissioning Timeline. Below is a list of specific activities that take a minimum of 8 hours to complete on a single Megapack site.

- Confirm communication to the Tesla Site Controller: Tesla remotely accesses the Tesla Site Controller and confirms its communication to the Tesla Servers.
- SCADA communications check: Tesla confirms communications from the Tesla Site Controller to any meters or other SCADA equipment present on the network as well as to the Megapacks. At this stage, Tesla requires power to all devices.
- Tesla internal system communication check: Tesla performs an initial communication check to each component of the Megapack system from the Tesla Site Controller.
- Firmware Update: Tesla performs an initial firmware update of the system. This update also involves loading the required Grid Codes. Onsite and Controls power must be maintained for the duration of the update; interruption of power may require personnel to manually update the firmware of every component in the system, which extends the commissioning timeline. The Tesla system does not charge or discharge during the Firmware Update.
- DC Self-test: Tesla performs a DC Self-test. The DC Self-test energizes the system's DC bus and tests the internal components, namely the thermal and controls subsystems. The system does not charge or discharge during a DC Self-test, but Onsite and Controls power are maintained for the duration of the update. Fans and other thermal subsystems operate during the test. Tesla may re-run the DC Self-test multiple times to confirm the system's operation.
- AC Self-test: Tesla performs an AC Self-test which energizes the system's DC bus and relies on grid voltage. Main component coverage are the power electronics. This test will place a parasitic load of <20kW on the grid AC connection.
- Grid Interactive Functionality: If applicable and as determined by the sales contract, Tesla will perform Grid Interactive, Performance, and/or Microgrid functionality tests. Tesla will confirm test results with written reports upon request.

NOTE: Additional activities such as setup of site networking, controls features and performance testing require site specific commissioning plans

1.3 Commissioning Results

Step	Measurement	Results
Tesla Database updated with site information	Pass/Fail:	
Confirm communications to Tesla Site Controller	Pass/Fail:	
File transfer	Pass/Fail:	
Meter communication check	Site Comms Check, P/F:	
	Battery Comms Check, P/F:	
	PV Solar Comms Check, P/F:	
Tesla internal communication check	Enable Line P/F:	
	No. Blocks:	
	No. Packs:	
Firmware update	Pass/Fail:	
	Firmware Githash:	
	Grid Code:	
DC Self-Test ⚠ **CAUTION:** Warn site before test begins	Pass/Fail:	
Initial AC Self-Test ⚠ **CAUTION:** Warn site before test begins	Site Meter Check, P/F:	
	Battery Meter Check, P/F:	
	PV Solar Meter Check, P/F:	
	Charge Power Achieved:	
	Discharge Power Achieved:	
Full AC Self-Test ⚠ **CAUTION:** Warn site before test begins	Site Meter Check, P/F:	
	Battery Meter Check, P/F:	
	PV Solar Meter Check, P/F:	
	Charge Power Achieved:	
	Discharge Power Achieved:	
Grid Interactive Functionality ⚠ **CAUTION:** Warn site before test begins	Off-Grid Functionality, P/F:Islanding Functionality, P/F:	

1.4 Site and Administrative Information

Site Name	Location	Controller VIN	Date	Tesla Personnel	Onsite Personnel	Other Notes

1.5 Outstanding Items (No Impact to System Nameplate)

	Outstanding Item
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	