



**Appendix 11**  
**to**  
**Solar BOT Scope Book**

Rev. 1

June 6, 2024

REVISION RECORD			
Revision No.	Approval Date	Section / Page Revised	Reason / Description of Change
0	9/14/2023	All	Initial Issue
1	6/6/24	All	<ul style="list-style-type: none"> <li>Added required witness and hold points to QA/QC Plan</li> <li>Added 60 day deadline for PEP submission</li> <li>Added flow diagram to document control plan</li> </ul>

## APPENDIX 11: PROJECT CONTROLS

Our mutual goal is to have a safe construction environment in which we deliver a quality plant, on time, at the agreed upon cost, that can be safely, timely and efficiently operated for the next several decades by the Entergy Operating Company we are building it for. ***A key element of successful project delivery is having execution plans that clarify roles, responsibilities, and expectations for the various companies and persons managing the execution effort.*** It is presumed that Entergy is contracting with companies experienced in executing the work and that our partners already have their own set of plans. Entergy's execution team will then review our partners' plans to establish a confidence-level that the work will be executed safely, efficiently and to scope, and also offer suggestions based on lessons learned.

Entergy will not be providing templates of the required plans, because if we were to do so, we risk diminishing the ownership that a partner would have if the plan wasn't developed by their company with their own subject matter experts. However, the below guidelines may help provide context as to Entergy's minimum information expectations.

Entergy is not requiring its partners to rewrite or reformat their existing plans, we just want to confirm that our partners have established a methodical approach that serves as a roadmap for their internal management and their contractors to ensure successful project execution. Some plans might be stand-alone due to their complexity or importance, i.e. Environmental, Health and Safety or Quality plans, while other information may be embedded in an overall Project Execution Plan, as contemplated below.

### 1. Health, Safety, and Environmental Plan

*Purpose: Protocols to safeguard the health and safety of all persons who visit/work on the site, as well as environmental protections for the site, as well as adjacent landowners/public/communities.*

- Developer's and/or EPC's Corporate HS&E policy, setting forth minimum expectations and confirmation that all subcontractors' plans meet the minimum expectations
- Safety Programs
  - ✓ General Safety plan
  - ✓ Responsibilities of Contractors, Employees and Visitors
  - ✓ Subcontractor safety plans
  - ✓ Site specific safety protocols, including, but not limited to: drug testing, surveillance, on-site training/orientation, stop work authority, hazardous materials, LOTO-High Energy, emergency response, record retention, incident follow-up, commitment to action if a safety protocol and/or safeguard is violated, etc.
  - ✓ Reporting information: Timeline for reporting severe incidents between the contractors (sub to EPC to Developer) and to the Buyer, statistics information, incident investigations/lessons learned
  - ✓ Describe the steps that will be taken to educate and inform local law and EMS personnel about the site to increase their efficiency should their assistance be needed

- Extreme Weather / Hurricane Plan
  - ✓ Guidelines for protecting the workers and preparing the project site and loose materials for extreme weather i.e. hurricanes, tornadoes, freeze/ice-snow,
  - ✓ Establishing management communication before, during and after severe weather events, and
  - ✓ Assessing the site after an extreme weather event
- Environmental
  - ✓ Protection of the project land and biodiversity, as well as adjacent land/communities/public
  - ✓ Permitting: SWPPP, SPCC, Waters of the US, et al
  - ✓ Protocols for monitoring adherence to Best Management Practices listed in the permitting
  - ✓ Protocols for ensuring compliant disposal of damaged modules or other e-waste or haz waste
  - ✓ Protocols for preventing any new ENV issues from happening
- If a Developer's intention is to submit *their EPC's Environmental and/or Safety plan*, then articulate how the Developer will oversight their EPC's compliance with their plan

## 2. Quality Assurance/Quality Control Plan

*Purpose: Protocols for verification that the project is built in compliance with the Agreement, IFC drawings, the Scope of Work, and that the installation will meet the Performance Standard for a plant that can be safely maintained, and timely and efficiently operated.*

- Developer's and/or EPC's Corporate QA/QC policy, setting forth minimum expectations and confirmation that all subcontractors' plans meet the minimum expectations
- Accountability of contractors
- Process control
- Design Control
- Document Control
- Reporting
- Training
- Materials Quality
- Installation Quality Assurance (PV: civil, mechanical, electrical and HV: Collector Sub, transmission, distribution)
- Equipment calibration
- Identifying and managing nonconformance
- Articulate the process for tiered inspection oversight, i.e. Subs QA their work, the EPC then QAs the subs' work, the Developer then QAs the sub's work
- If a Developer's intention is to submit their EPC's QA/QC plan, then articulate how the Developer will oversight that EPC's compliance with their stated protocols
- Include information on the onsite inspection process/program that will be conducted by the major materials OEMs' QA/QC teams, i.e. for trackers, inverters, modules, major Collector Substation components, etc.

- Required Witness Points – The following inspection points, at a minimum, shall be included in the plan. Project Inspection presence at the “Event” is required. The contractor may proceed past the point, provided, the agreed notice of “Event” is given, and the Project Manager elects not to be present at the time of “Event”.
  - SWPP compliance and initial road cut
  - Medium voltage cable installation
  - Pile pull test
  - Inverter skid / MV rough in
  - Inverter set
  - DC cable / combiner box / CAB installation
  - PV wire harness management
  - Main step up (MSU) transformer pit
  - MSU transformer set
  - Backfeed
- Required Hold Points – The following hold points, at a minimum, shall be included in the plan. No work is to proceed beyond this point without Owner’s Engineer inspection witness and acceptance of the “Event” activity. Waiver of the Project presence at a hold point can only be given in writing by the Project Manager.
  - Golden Row
  - Mechanical Completion
  - Substantial Completion
  - Final Acceptance

### **Project Execution Plan (PEP) Overview Guidance**

*Purpose: A Project Execution Plan (PEP) is a governing document that establishes the means and methods to execute, monitor and control projects. In the context of the business partners working with Entergy to execute renewable projects, the PEP should contain high-level information about the project, discuss stakeholders and provide an organizational chart of the entities and persons that will manage the project. The PEP may include Design, Engineering and Construction management protocols, articulate the approach for contracting and procurement, intended methods for security of the site, people and material, how project performance will be monitored with scheduling and installation velocity tracking, identification of risks and risk-monitoring, and how documentation and required information will be transmitted. A completed PEP document shall be provided 60 days after FNTF with the final draft being provided 4 months prior to site mobilization.*

*The following plans can be stand-alone or grouped as one over-arching document:*

### **3. Project Organization Plan**

- Project Organization and Roles/Responsibilities
- Include primary companies (Developer and EPC), could also include Entergy’s primary contacts
- Meeting and Report Distribution Matrix (listing of personnel to be included in mtgs/reports/etc.)

### **4. Engineering Plan**

*Purpose: Acknowledge requirements in the Agreement and the Scope Of Work (SOW) by communicating the plan to meet key deliverables and expectations.*

- Articulates the engineering strategy, identify who is performing the engineering tasks
- Discuss Basis of Design document development (PV and HV)
- Provide a submittal list of ENG documents that correlates with the SOW and the engineering phase
- Design review cycle, i.e. 30-60-90 or Phase A/B/C, RFIs/tracking
  - ✓ List the deliverables that will be in each deliverable phase
  - ✓ Define what constitutes achieving IFC drawings
- Dates and Milestones for Engineering deliverables
  - ✓ PV Engineering, including civil, mechanical, electrical, Cx, et al
  - ✓ HV/Substation Engineering
  - ✓ Drawings, etc.
- Approach for developing plans defined in the Agreement/SOW, i.e. the Hot Commissioning Plan, the Performance Testing Plan, Harmonics Studies, etc.
- Establishing, implementing, and adhering to NERC-CIP requirements (as will be further detailed in the stand-alone Cyber Security Plan)

## **5. Document Control Plan**

- Describe the method for transmitting documentation deliverables to Entergy
- Articulate the process for tracking review comments and resolution of comments (ball-in-court process) including flow diagram showing the document issue and revision / comment process to ensure alignment
- Ensure that the external team members are aware of Entergy's >10MB email attachment restrictions

## **6. Contracting Plan**

- Articulates the contracting strategies, identify primary suppliers, discuss long-lead times
- List of anticipated contractors for major services
- Key supply risks and mitigating actions
- Narrative on actively pursuing using qualified/capable local and diverse suppliers and labor resources, and sharing this information with Entergy

## **7. Procurement Plan**

- Articulates the procurement strategies and approach used to purchase equipment and materials for the project
- Narrative of how procurement functions through contracts and responsibilities
- Estimated start and end delivery dates of equipment

- Key supply risks and mitigating actions

## **8. Construction Plan**

- Narrative of how the work will be managed and by whom, include titles and corresponding roles and responsibilities
- Articulate the planned approach to constructing the plant, from initial grading to cold and hot commissioning
- Due to the importance of commissioning (Cx), as well as the increased safety focus that is required, include discussion on the Cx plan
- Reference applicable project plans, i.e. Safety/ENV, QA/QC, Procurement, Performance Monitoring, and how the Developer/EPC will provide engagement and oversight to ensure plans are being followed
- Include specific discussion acknowledging the challenges for building in the Deep South, including weather, terrain, labor availability - list construction practices that will be implemented to ensure safety and schedule optimization
- Describe the plan to minimize items that can/will be addressed during the construction cycle to minimize elongated periods to achieve Mechanical Completion, Substantial Completion and Final Acceptance (drainage and water conveyance, high vegetation, Pre-Punch List items with the EPC, rut remediation, trash/litter, damaged components, etc.)
- Describe the oversight and communications that will occur between all entities to ensure continued focus of safety, environmental, and quality when personnel changes occur and/or conditions change on site, for example the transformation that often occurs on the site when transitioning to the Substantial Completion through Final Acceptance phase

## **9. Site Security Plan (Project Custody)**

- Explain how the site will be secured to protect the people on site as well as the project's assets
- Ensure how the site will restrict unauthorized access
- Describe the signage for the site that will communicate authorized access requirements, i.e. project signage, main gate(s) descriptor signage, directional signs, Site Rules and Required PPE signage, explanation of authorized access / badging if applicable, speed limit signs, muster locations, Hot Cx / LOTO signage/roping (i.e. Red Rope process)

## **10. Project Risk Register**

- Identify, track and manage risks, i.e.:
  - ✓ Safety, environmental, weather, labor/contractor resources
  - ✓ Design/Engineering progressing to IFC
  - ✓ Supply chain issues
  - ✓ PV Installation: Civil, mechanical/electrical/civil work, electrical
  - ✓ HV Installation: Collector substation, transmission lines, etc.
  - ✓ Handover requirements/readiness
  - ✓ Political changes

- Ensure risks are listed with potential schedule and/or cost impacts
- Articulate the frequency that the Risk Matrix will reviewed, updated and shared with Entergy, i.e. included in the monthly Report
- Request Entergy to share lessons learned from previous projects
- *Please provide an example of your risk matrix for review*

## **Schedule and Performance Management: “Plan The Work – Work The Plan”**

*Purpose: Planning the work involves having a project schedule that shows a sophisticated approach to planning the work, including demonstrating an understanding of the resources that will be required (Man Hours, equipment, subcontractors), weather, procurement, labor availability, etc.*

*Communicating the plan to all supervisors, managers, and project leaders is critical in establishing universal and unified performance. Ensuring that the plan is being worked involves tracking progress and updating the schedule and plan when challenges or changes occur; to accomplish this, frequent reporting to all project leadership is critical.*

### **11. Schedule Management Plan**

- Articulate the schedule strategy, control requirements, software tool selection, frequency of updates, etc. Refer to the detailed expectations in the Scope of Work document
- Describe how installation velocity will be tracked
- Articulate how often the velocity reporting and schedules will reviewed and updated and how the information will be shared with Entergy, i.e. Weekly for velocity, monthly for P6 schedule updates, etc.
- Refer to the detailed expectations in the Scope of Work document
- *Please provide an example of your weekly velocity tracker for review*

### **12. Preliminary Baseline Level I and Level II Project Schedules and WBS**

- Baseline schedules – provide the initial baseline schedule for the project
- Refer to the detailed expectations in the Scope of Work document

### **13. Performance Measurement Baseline**

- Describe how performance will be tracked, managed and reported, i.e. in the monthly report
- Describe key commodities that will be tracked via Velocity Installation Curves
- Refer to the detailed expectations in the Scope of Work document
- Articulate the information that will be shared in the Monthly Reporting/Weekly Reporting
- *Please provide an example of your Monthly Reporting / Weekly Reporting*

**\*\*\* END OF APPENDIX 11 \*\*\***