

SPECIAL SPECIFICATION

SECTION 01311-S

PROJECT SCHEDULE

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PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. SUMMARY

The Contractor shall prepare and maintain a detailed resource loaded progress schedule utilizing Critical Path Method (CPM). This schedule shall be the Contractor's working schedule and used to plan, organize and execute the work, record and report actual performance and progress and outlines how the Contractor plans to complete all remaining work.

The Contractor shall prepare a schedule of values associated with each item of scope from the drawing package. The schedule dollar value for each activity in the detailed progress schedule will be used for monthly payment application and cash flow predictions.

1.02 SUBMITTALS

A. Within fourteen (14) days after award of contract, the Contractor shall submit for review and approval a detailed progress schedule in the form of a CPM network diagram, a tabular report for each activity including the corresponding proposed dollar values per activity and a copy of the proposed monthly billing format. A CD of the schedule files shall be submitted with the original schedule. The schedule produced and submitted shall indicate a project completion date on or before the contract completion date. Before submission of the schedule to Sandia National Laboratories (SNL), it must be reviewed and signed off by the Prime Contractor's on-site superintendent and a representative from each subcontractor performing at least twenty (20) percent of the contracted work. The schedule will be reviewed by SNL's Project Manager, Construction Manager and project scheduler and returned to the Contractor within fourteen (14) days. Receipt and review of the schedule is a requirement for issuance of the first progress payment.

B. Updates: The first update shall occur one week after the return of the first submittal schedule to the Contractor. Updates shall be submitted Monthly and with each pay application thereafter, and shall be used as the basis for evaluation of monthly progress payments. The Contractor will be required to project month-end status in accordance with SNL's monthly cut-off dates. This is usually 3-5 days prior to the end of the month. The updates shall be in the form of the following:

1. Detailed progress schedule on CD or emailed to project scheduler,
2. Paper copy of a two-week look ahead bar chart,

3. Written narrative explaining significant changes in the schedule and their impact to the schedule since the last update. Items should include but not limited to duration changes, logic changes, new activities, milestone, changes, etc.
4. A detailed recovery schedule for any delayed activity.

PART 2 - PRODUCTS

2.01 SOFTWARE

A. Contractor is required to use a software package compatible with the most current (SNL approved) version of Primavera Project Planner for Windows for all scheduling activities. The following software packages are compatible and acceptable:

1. Primavera Project Planner
2. Primavera Suretrack
3. Microsoft Project

The scheduling software used by the Contractor for the original schedule and all updates shall be compatible with the most current version of Primavera Project Planner for Windows.

2.02 NETWORK DIAGRAMS

The network diagram shall be printed on tabloid size sheets, large enough to clearly show all activities. All network diagrams shall have a title block including the date, revision number, contract number, page number, Contractor name and project title.

PART 3 - EXECUTION

3.01 NETWORK DETAIL

A. Detailed Network Diagram: The detailed network diagram shall show all activities required to complete the project and their dependency relationships. Include intermediate milestones as necessary to track important events such as phased completion dates, permanent power, outages, Sandia furnished equipment delivery, required commissioning checklists for startups etc., and all items specified in the "Other Conditions" of the contract. Each activity should have an associated activity identification, activity description, duration, early and late start and finish dates, and total float. Logic relationships may include finish to start, start-to-start, start to finish, and finish to finish with lags times as required.

B. Required Activities: Activities to be included in the network shall be: Notice to Proceed; construction activities; submittal/shop drawing preparation activities; submittal/shop drawing review activities; purchase, manufacture/fabricate, and

delivery for major equipment and materials activities; critical inspection activities; commissioning start-up checklists; utility shutdown activities; and close-out activities.

C. Activity Detail: The activities shall meet the following criteria:

1. Unique numbering system along with descriptive title.
2. Whole day units.
3. Construction activities shall have a maximum duration of 15 days.
4. Cost loading of each activity.
5. Resource loading of each activity (labor, equipment, etc.)
6. Activity codes will map to the owners Work Breakdown Structure (WBS) with no activities including multiple WBS elements.

3.02 UPDATING

A. The updates will cover:

1. Actual start/finish dates
2. Activity percent complete 0% (not started), 50% (activity started, not complete), 80% (activity complete, start-up/commissioning or other documentation not complete) or 100%.
3. Cost value of work reported in place.
4. Duration changes.
5. Logic changes.
6. Reasons for changes and associated impact (Narrative)
7. Recovery schedules for all late activities

B. Sandia and the Prime Contractor will perform a joint update of the schedule bi-weekly to record actual start dates, actual finish dates, percent complete, and any delays or changes to the schedule. Attendance of prime subcontractors will be determined jointly by Sandia and the Prime Contractor.

3.03 CHANGE ORDERS

A. A written time impact analysis illustrating the influence of each change or delay on the current contract schedule completion date shall be submitted by the Contractor for review by Sandia. This narrative shall be included with each monthly update as specified in 1.02 (B) of this specification. Negotiations for time extensions shall be considered only to the extent that equitable time adjustments for the activity or activities affected exceed the total or remaining float along the path of activities at the time of actual delay or at the time notice to proceed was issued for the change.

END OF SECTION