14 Change Management

Change Order Management is the process used in managing changes to a contract or vendor purchase order, which may involve changes to scope requirements, schedule duration, cost, or means and methods. The purpose of change management is to address change orders in a consistent and efficient manner. All change orders, regardless of driver/source, should be processed in the same manner. The primary strategy in any Change Management Plan should be to; (a) recognize that Change will happen and (b) develop a plan for its minimization, and (c) ensure that the change is merited and accurately priced.

Addressing the following key steps in the Change Order Management process should result in the appropriate level of diligence:

- Change order initiation
- Change order review and approval
- Change order tracking and reporting (through the change order log)
- Change order monitoring and compliance

The PM must stay alert for revised design drawings or changes on shop drawings, which the A/E consultants may make without being aware that additional cost or time are involved. The PM is responsible for reviewing the general conditions for specifications governing the CO process.

14.1 Change Initiation

Changes to work may be initiated by the following parties below and may involve changes to the contract amount and/or the schedule:

- Client Through notifying the PM
- FP&C Through notifying the Contractor
- Contractor Through Potential Change Order (PCO); may be trigged based on an RFI, ASI, or other as outlined in the contract documents.
- Architect/Engineer (A/E) Consultant Through an Architect's Supplemental Instruction (ASI) and notifying the PM

There are numerous causes for a change order, including but not limited to:

A/E error or omissions

- Scope and design changes
- Unforeseen conditions
- Client requests

FP&C may, at any time without notice to the sureties, by written order designated or indicated to be a change order, make any change in the Work within the general scope of the Contract, including, but not limited to, changes:

In the specifications (including drawings and designs).

In the method or manner of performance of the Work.

In the Owner-furnished facilities, equipment, materials, services, or job site.

Directing acceleration in the performance of the Work.

For Small Projects, the process begins directly with a Potential Change Order (PCO) supplied by a contractor via email or PMIS to the PM.

For Large Projects, the PCO initiation formalizes the process work flow for the contractor to submit a potential change order in PMIS and attaches its supporting documents for PM review. The Contractor may use their own PCO form to send the request to the PM; there is no specific FP&C form required. The resulting potential change will show up as a pending value against the contract/commitment in the Project Cost Summary in the PMIS.

14.2 Change Order Review and Approval

The PM reviews the PCO for approval or rejection with the following evaluation below. The Change Order Review Checklist (Appendix 14.2a) may be used for additional detail:

- Does the PCO contain the following items?
- Reason for the Change Order
- Initiating party (designer, owner, or contractor)
- Scope of work
- Total cost of work
- Detailed cost breakdown
- Schedule impact
- Does the PCO Qualify as Extra Work?
- Reevaluate the original scope document to ensure that the change scope should not have already been included
- Does the PCO match contract requirement?
- Is the PCO pricing reasonable?
- The PM verifies that the Contractor correctly understood the scope of the change, labor hours appear reasonable, the pricing is consistent with RSMeans, or compared to similar work, and documents this evaluation in a Record of Negotiation (RON).

If the PCO is found to be incomplete at any point in time, it is returned to the contractor.

After verification and approval, the PM completes and submits the PMIS CO form and attaches the PCO, Work Order-Project Agreement (WO-PA) form, Record of Negotiation (RON)¹² any budget change information and supporting documents for FM to review.

Upon approval of the FM, the FM evaluates on whether a budget change is required:

- If no budget change is required, the PM deducts the CO amount from the appropriate budget line in the PMIS
- If a budget change is required, then approval from the Director is required. If the change is the lesser of 1) 25% of the total project cost or 2) \$2.5 million, then the CO will require further approval¹⁰.

To help minimize COs, the PM must keep the following general guidelines in mind:

- Avoid changes to the maximum extent possible.
- Issue several PCO's at one time group them together into one CO.
- Do not allow contract PCOs to accumulate and go unresolved. All Contract Directives PCOs must be in a Change Order within 30 days.
- If the Client requests a change that is beyond the original scope, additional funding for such must first be obtained before proceeding (e.g. from Client's contingency).
- Avoid issuing a PCO changing a design to solve a problem caused by the contractor. The contractor must submit a solution for approval.
- Avoid issuing a PCO, no matter how small, after the date for Contract Completion. This is
 particularly critical in situations where the contractor has overrun the end date of a project and
 has not been granted a time extension.

14.3 Change Order Tracking and Reporting

The PM is responsible for maintaining a change order log as a means of recording and tracking expected change orders on the PMIS. The Change Order Log obtained from the PMIS should include, at a minimum, a brief description, a rough order of magnitude estimate (or requested change amount if received from contractor), and any potential schedule impact (Appendix 14.3).

14.4 Change Order Monitoring and Compliance

During the coordination meetings, change orders and potential change orders should be reviewed by the GC and the PM at a minimum, with the Architect/Engineering consultant (A/E) as appropriate.

The PM should include the designer(s) to review PCOs, where appropriate. The designer(s) should review issues of design feasibility and/or any required re-design when considering incorporating the PCO into the overall project work. For changes determined to be legitimate, the Architect will issue written direction to the PM and contractor by issuing an Architect's Supplemental Instructions (ASI) or responding to the contractor's RFI.

¹⁰ Refer to Section 7.10 – Project Change Approval