

Pipeline Safety Enhancement Plan (PSEP)

Quality Control and Quality Assurance
Overview Work Implementation Phase



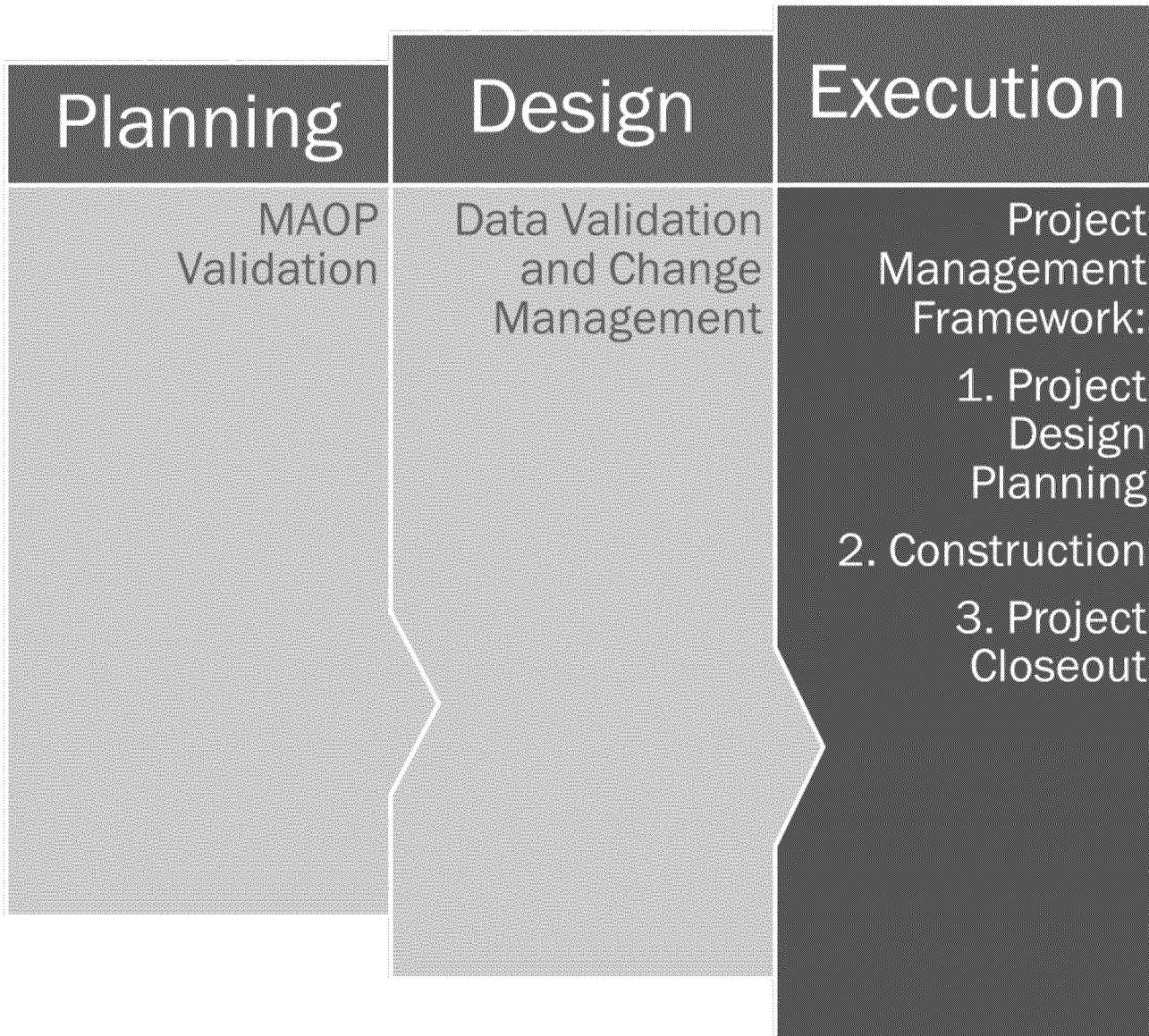


Contents/Agenda

- Overview QA/QC Activities – CPUC SED category format
- Project Management Control Framework
 - Project Design/Planning
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 - Project Closeout
- Organizational overview – QA/QC activities



QA/QC Activities





Project Management Control Framework

Project Design/Planning Quality Control Points

| | | |
|---|---|--|
| Initial Job Authorizations | Competitive Bidding & Alliance Target Pricing | Program Governance* |
| 50% Job Walks | Safety –Site Specific Safety Plans and Traffic Control Plans* | Project Management |
| Engineering Design Reviews* | Construction Approval* (permitting, engineering and project management) | Cost and Schedule Management |
| Project Job Estimate (pre-construction) | Customer Outreach Open Houses and Letters/Calls | Contract Approval per Delegated Authority Limits |

*Control subject to a Quality Assurance check.



Project Management Control Framework

| Construction Quality Control Points | |
|---|--|
| <u>Safety</u> Site Inspections Leadership on-site visits | <u>NDE Inspection*</u> Random Field Observation by ATS SMEs (commenced July 2012) |
| <u>Environmental Compliance</u> Site Inspections | <u>Construction Oversight</u> Bureau Veritas (2011 Strength Testing only) |
| <u>Construction Management Inspection*</u> (per Level I QC field manual) | <u>RCP Independent Certification of Hydrotest Results</u> (Strength Testing only) |
| <u>Operator Qualification*</u> | <u>Site Restoration</u> |
| <u>Program Quality Assurance Site Inspections</u> (Level II QA Field Manual) | <u>Supplier Quality Audits</u> |

*Control subject to a Quality Assurance check.



Project Management Control Framework

Project Closeout Quality Control Points

Completion of As-Builts (checklist)*

Mapping
(Pipeline information entered into Asset database)

Project Record Archival*

*Control subject to a Quality Assurance check.



Organizations Performing QA/QC Activities

