



Pipeline Project Claims Resolution Services

OVERVIEW

Long International, Inc. is a specialized consulting company focused on the analysis and resolution of claims and disputes that arise from the design and construction of major capital projects worldwide. Our senior-level personnel utilize their extensive experience in pipeline projects, including installation, project and construction management, and cost and schedule control, to analyze disputed change orders, requests for time extensions and schedule delay damages, and productivity loss claims.



Long International's Claims Analysis Process

We are experts in contract, insurance, and surety bond-related claims and disputes including their evaluation, analysis, preparation, and resolution. Our claims analysis process is:

- Performed in phases for better definition and control of scope, time, and cost
- Systematic to ensure our analyses are thorough, our findings credible, and our opinions defensible
- Tailored to each client's specific needs regarding services provided and resources utilized

A World of Experience

Since 1996, we have served clients and projects located in 70 countries spanning six continents. Our many years of experience equip us with the qualifications, capability, know-how, and credibility to properly analyze, prepare, and defend claims as well as meet all of our clients' pipeline project support needs. Our representative pipeline projects include:

- Angola – Offshore oil and gas pipelines
- Australia – Onshore and offshore oil and gas pipelines
- California – Water, oil, gas, and steam pipelines
- Canada – Gas and oil pipelines
- Colorado – Gas, oil, and product pipelines
- Florida – Water, reclaimed water, sewer pipelines
- India – Pipeline and compressor station
- Louisiana – Gas pipeline
- New Mexico – Water, oil, and gas pipelines
- Nigeria – Pipeline and compressor station
- Pennsylvania – Pipeline and compressor station
- Texas – Water, oil, gas, CO₂ pipelines
- Trinidad and Tobago – Onshore and offshore oil and gas pipelines, petroleum product pipelines, natural gas liquids (NGL) pipelines
- Tunisia – Gas pipeline
- Utah – Natural gas liquid gathering pipelines
- Wyoming – Oil and natural gas gathering pipeline system

Senior-Level Resources

Consultants in our pipeline expert group typically have 20 or more years of experience in the construction industry and offer unique perspectives based on their claims consulting skills, technical expertise, and "mud-on-the-boots" practical experience on pipeline projects. Their diverse experience allows them to function as:

- Our clients' support staff
- Our clients' technical advisor
- Our clients' solutions provider
- Our clients' expert witness
- A neutral third party

Phased Approach

Long International applies a phased approach to engineering and construction claims analysis and expert testimony services on pipeline construction projects, as described on pages 2 and 3 of this brochure. Our tasks depend on work a client has already performed, availability of project documentation, issues in



dispute, and the timing of required work products, defined by arbitration and litigation schedules. We make any necessary adjustments to the typical work tasks described herein.

We have the experience you can rely on for your claims analysis, preparation, and defense, as well as your pipeline project support needs.

PHASE I:

Project Orientation, Preliminary Document Review, and Work Plan Development

During Phase I, we first review any pleadings, statements of arbitration, contractor claims, and owner statements of defenses and counterclaims. We then perform a preliminary review of the relevant project documents prepared prior to and during project execution. Depending on our assignment scope, documents that we often review include but are not limited to the following:

- Documents that describe the scope of work and basis for the contractual relationship
- Cost estimates and proposals
- Drawings and specifications used to develop the control budget
- Pre-contract correspondence and meeting minutes
- Contract terms and conditions
- Execution phase correspondence
- Meeting minutes
- Monthly progress reports
- As-planned schedules and schedule updates in native file formats
- Periodic reports such as manpower, man-hours, equipment utilization, etc.
- Job cost reports including control budgets and monthly cost reports
- Photographs and videos if available
- Pay requests and invoices
- Change orders
- Requests for information
- Submittals
- Material delivery records
- Subcontracts
- Other relevant documentation

In addition, we interview key project personnel to discuss project problems and issues in depth. If possible, we also like to visit the project site.

This Phase I work normally takes two to six weeks, depending on the complexity of the case, the volume and availability of key documents, availability of client personnel, and any other tasks that our clients ask us to perform during this phase.



After our preliminary review of available documentation, we prepare preliminary observations, findings, recommendations, and opinions regarding the relevant claim and counterclaim issues. We develop a Phase II work plan, schedule, and budget corresponding to the scope of work necessary to meet our clients' objectives. We then discuss our proposed tasks with our clients to ensure our approach is consistent with their needs.



*Engineering and construction
claims analysis experience
you can rely on...*

PHASE II:

Document Database Development and Preliminary Analysis

During Phase II, we perform tasks that our client requires as part of an arbitration or litigation schedule. Typical Phase II tasks often include the following:

1. Develop a document database
2. Analyze the contract
3. Review the invitation to bid, job instructions, procedures, and contractor's proposal
4. Review drawings and specifications
5. Review and prepare (as required) a list of problems and issues for claims and counterclaims
6. Review approved and unapproved or outstanding change orders
7. Prepare a preliminary list of alleged delays
8. Identify, organize, and review schedule data
9. Identify any schedule software conversion requirements
10. Review the schedule analysis methodology in any submitted claims
11. Identify and review key schedule information
12. Identify, organize, and review the contractor's man-hour data, including control budget planned man-hours and actual man-hours
13. Identify, organize, and review bulk material quantity data
14. Identify, organize, and review cost data
15. Develop summary schedule variance comparisons
16. Develop a macro man-hour variance analysis
17. Develop a macro quantity variance analysis
18. Develop a macro labor productivity analysis
19. Develop a macro cost variance analysis
20. Evaluate and select schedule analysis methodology options
21. Develop Phase III and IV work plans, budgets, and schedules
22. Provide an overall assessment of the strengths and weaknesses of issues

Pipeline Project Claims Resolution Services

PHASE III:

Detailed Analysis

After our preliminary analyses of documentation and technical, schedule, and cost issues, we perform detailed analyses that support the opinions we express in our expert reports. The tasks listed below are definitive analyses that substantiate the preliminary findings. We tailor them to our client's needs, the actual scope of work and opinions required, and arbitration or litigation deadlines.

1. Prepare issue packages for the contractor's claim issues and the owner's counterclaim issues
2. Develop issue summaries and proof charts
3. Prepare detailed narratives with document references
4. Develop cause-effect relationships
5. Prepare a detailed schedule analysis
6. Prepare a detailed productivity loss analysis
7. Prepare a detailed damages analysis

Our comprehensive damages analysis provides adequate detail and supporting spreadsheets to fully explain the amount of a claim and/or counterclaim. Damages may arise from a variety of problems, and we endeavor to calculate specific damages for each problem from the data available, demonstrating the cause-effect relationships linking damages to entitlement for each problem, if possible. We often develop a damages analysis matrix for both man-hours and costs. This matrix delineates work activities and cost types on one axis and variances between budget and contract values and actual and projected values along the other axis. We then allocate these man-hour and cost variances to approved change orders, pending change orders, potential contractor bid error, contractor performance problems, compensable owner-caused problems, delay, and productivity loss, as applicable. Throughout the analysis process, we communicate clearly and frequently about the status of our work.

PHASE IV:

Report Preparation

The work products resulting from our detailed analyses may take many forms, including but not limited to claims or requests for equitable contract adjustments, reports supporting the defendant's positions against claims, PowerPoint presentations, or expert reports. Arbitration or litigation may require one or more expert reports, plus rebuttal reports to critique other experts' reports, and joint expert reports. Some arbitrations also require that opposing experts meet to attempt to narrow the issues and document this effort in reports.



For each claim document, presentation, or expert report, our work plan is as follows:

1. Prepare draft claim documents, presentations, or reports
2. Review our draft claim documents, presentations, or reports with the client
3. Prepare final claim documents, presentations, or reports



PHASE V:

Arbitration and Litigation Testimony

If arbitration or litigation requires expert testimony, our work may include the following:

1. Prepare for testimony
2. Provide expert testimony at depositions
3. Provide arbitration or litigation expert testimony

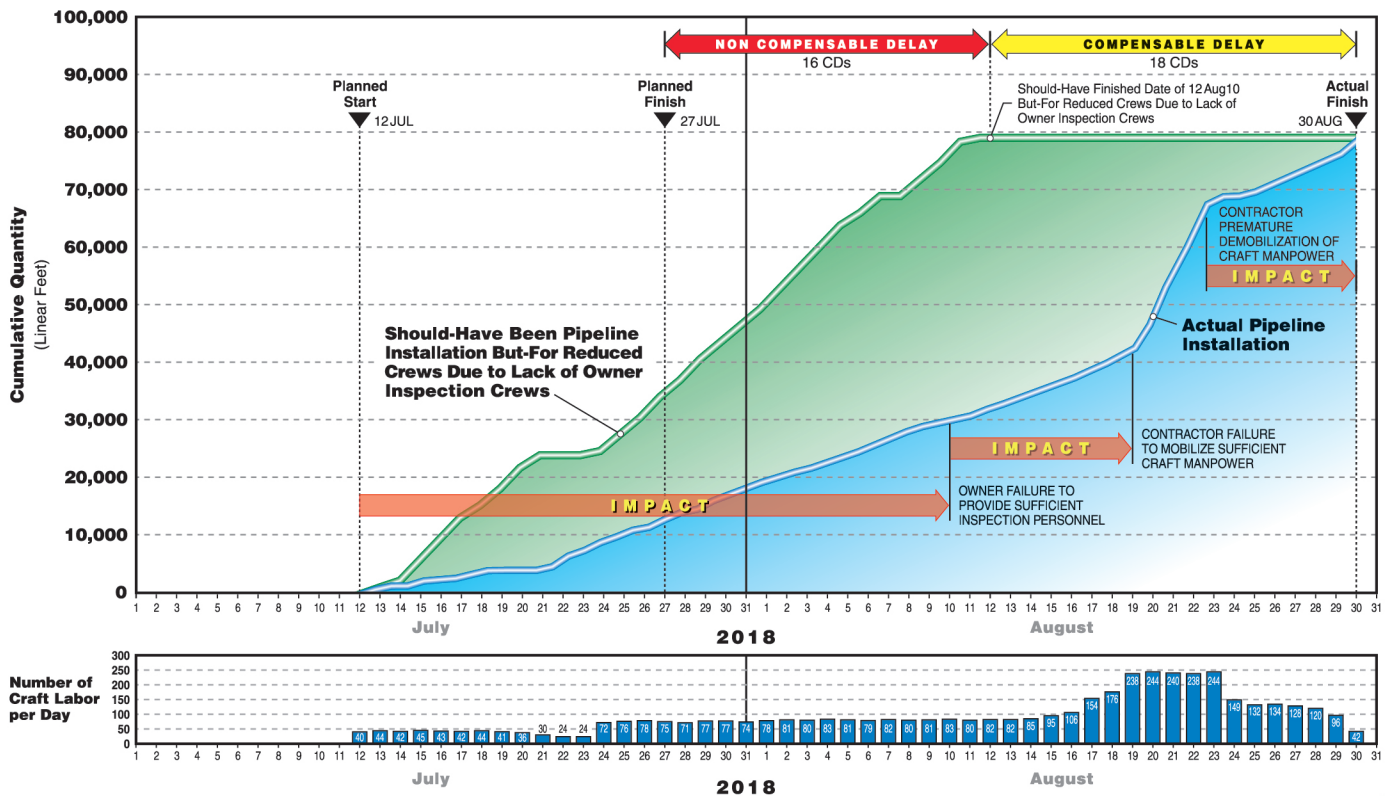


Our consultants offer unique perspectives based on a combination of their claims consulting skills, technical expertise, and “mud-on-the-boots” practical experience in pipeline projects.

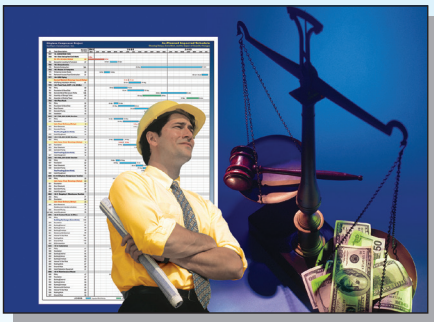
General Pipeline Construction Company – Midwestern Oil Pipeline

CUMULATIVE PIPELINE PROGRESS

Actual vs. Should-Have Been



LONG INTERNATIONAL



Experience matters...

Schedule Delay Analyses

Our contemporaneous and retrospective schedule delay analyses typically focus on comparing as-planned, updated, and as-built project schedules to identify and quantify delays to critical and near-critical paths. These delays may include variances in activity duration or in planned and actual relationship lag durations between predecessor and successor activities. We also analyze concurrent delays to properly understand owner and contractor liability for delay and impact damages. On pipeline projects, we often plot a progress chart on a time scale to demonstrate the impact of lower than planned progress on the completion date, as the above graphic exemplifies.

Loss of Productivity Analyses

Determining a contractor's entitlement to construction labor productivity loss claims often requires a detailed assessment of contemporaneous man-hours, crew progress, pipeline length installed, timing of changes, and delays and impacting events affecting work, as well as an allocation of responsibility for the various causes

of delay and disruption. Delays and impacting events often cause contractors to work overtime, perform work out of its planned sequence or in parallel rather than in series, work in weather conditions that are less favorable than they reasonably planned, employ multiple shifts, etc., all in an effort to make up time to mitigate delay and disruption. We analyze productivity loss using methods such as measured mile, earned value, overtime studies, other industry studies, and the impact of changes.

Damage Analyses

Long International employs numerous methods to analyze, demonstrate, or disprove a contractor's entitlement to recovery of increased costs as a result of engineering and construction labor productivity loss caused by delays and impacting events for which an owner and/or contractor may be responsible. After we have identified, evaluated for entitlement, and quantified a contractor's various types of damages, we may utilize various methods of presenting such damages, depending on the contract terms, legal issues, and availability of data and documentation.



LONG INTERNATIONAL