

Welcome to this presentation.

It explains and illustrates the most important clauses of Engineering & Construction CONTRACTS.

Comments are most welcome (herve.baron@gmail.com), which I will incorporate for the benefit of all.



The CONTRACT Terms & Conditions

- OBJECT OF CONTRACT
- DEFINITIONS AND SIGNIFICANCE OF EXPRESSIONS
- ENTIRE AGREEMENT
- NON-WAIVER MODIFICATIONS TO CONTRACT
- INTERPRETATION OF CONTRACT
- INDEPENDENCE OF CONTRACTOR
- COMPANY REPRESENTATIVE
- CONTRACTOR'S ORGANIZATION
- SUB CONTRACTORS
- ASSIGNMENT
- AWARENESS OF WORK CONDITIONS
- CORRECTNESS AND SUFFICIENCY OF CONTRACT DOCUMENTS
- CARRYING OUT THE WORK

- WORK TIME SCHEDULE AND PROGRESS CONTROL
- REPORTS
- QUALITY ASSURANCE TECHNICAL AND SAFETY AUDITS
- GUARANTEES AND WARRANTIES
- FINAL ACCEPTANCE
- CHANGE ORDERS
- APPLICABLE LAWS- CUSTOMS REGULATIONS- AUTHORIZATIONS
- SAFETY AND ENVIRONMENT
- CONTRACTOR'S PERSONNEL
- WORK LOCATIONS
- SITE REQUIREMENTS
- LOCAL PRODUCTS AND SERVICES



The CONTRACT Terms & Conditions

- DEFECTIVE PERFORMANCE BY CONTRACTOR: SUSPENSION-TERMINATION- TAKE-OVER
- COMPANY'S CONVENIENCE SUSPENSION TAKE-OVER - CONTRACT TERMINATION
- FORCE MAJEURE: SUSPENSION TERMINATION
- CONTRACT PRICE
- TAXES
- INVOICING AND PAYMENT
- BANK GUARANTEE
- LIQUIDATED DAMAGES
- ACCOUNTING AND AUDIT
- ADDITIONAL DEFINITIONS
- LIABILITIES BETWEEN CONTRACTOR AND COMPANY
- LIABILITIES TOWARDS THIRD PARTIES
- CONSEQUENTIAL DAMAGES

- INVOICING AND PAYMENT
- INSURANCES TO BE PLACED BY CONTRACTOR
- INSURANCES TO BE PLACED BY COMPANY
- CONFIDENTIALITY
- INDUSTRIAL PROPERTY RIGHTS PATENT INFRINGEMENT
- TITLE ON DOCUMENTS AND ITEMS
- LAW GOVERNING CONTRACT
- CONFLICT OF INTEREST
- CLAIMS
- LIENS
- SETTLEMENT OF DISPUTES
- FORMAL NOTICES
- **EFFECTIVE DATE**
- PROVISIONS SURVIVING CONTRACT



- Even though CONTRACT clauses seem to be the same from one CONTRACT to the other, each CONTRACT is unique
- Having a question about obligations, entitlement etc?
- There is no general rule. The answer is in the CONTRACT.



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- Contractor's liability
- The requirement to notify
- Awareness of Site Conditions
- Sufficiency of CONTRACT documents
- Engineering Basis Endorsement certificate and exclusions: rely-upon information/documents





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- PLANT Performance
- WORK TIME SCHEDULE
- MECHANICAL WARRANTY





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- PLANT Performance
 - Guarantees
 - Remedies





- CONTRACTOR's guarantees and COMPANY remedies
 - PLANT Performance
 - Guarantees
 - Remedies





- CONTRACTOR's guarantees and COMPANY remedies
 - PLANT Performance
 - Guarantees
 - Remedies

What are the key features of the Performance guarantee?





- PLANT Performance
 - Guarantees
 - » What is guaranteed? PLANT throughput, products specs
 - » Rely upon: feedstock composition, PROCESS LICENSOR's guarantees
 - » Tolerance band?
 - » Deemed APPROVAL?



- CONTRACTOR's guarantees and COMPANY remedies
 - PLANT Performance
 - Guarantees
 - Remedies

What are the key features of the remedies provision?





- PLANT Performance
 - Guarantees
 - Remedies
 - » Make good
 - » Possibility to pay liquidated damages instead? How much?



- PLANT Performance
- WORK TIME SCHEDULE
- MECHANICAL WARRANTY







- PLANT Performance
- WORK TIME SCHEDULE



What are the key features of the time schedule guarantee?



- PLANT Performance
- WORK TIME SCHEDULE
 - Milestones & Definition
 - Liquidated penalty calculation and limit
 - Liquidated damages are **sole** remedy?





- PLANT Performance
- WORK TIME SCHEDULE
- MECHANICAL WARRANTY





- CONTRACTOR's guarantees and COMPANY remedies
 - PLANT Performance
 - WORK TIME SCHEDULE
 - MECHANICAL WARRANTY



What does the Mechanical warranty cover?





- PLANT Performance
- WORK TIME SCHEDULE
- MECHANICAL WARRANTY



What does the Mechanical warranty cover?

Design, material and workmanship defects





- PLANT Performance
- WORK TIME SCHEDULE
- MECHANICAL WARRANTY







- PLANT Performance
- WORK TIME SCHEDULE
- MECHANICAL WARRANTY
 - Duration
 - Start
 - Long date limit?





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What has CPY at its disposal to ensure CTR complies with its warranty obligation?



- PLANT Performance
- WORK TIME SCHEDULE
- MECHANICAL WARRANTY
 - Duration
 - Start
 - Long date limit?

What has CPY at its disposal to ensure CTR complies with its warranty obligation?

The **Performance bond**, that expires after the warranty period only. If the Performance bond is at "first demand" CPY does not have to provide any justification to pull it.







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- CONTRACTOR's guarantees and COMPANY remedies

Contractor's liability

What are the key features of CTR's liability?





- Contractor's liability
 - Exclusions of consequential (indirect) damages





- Contractor's liability
 - Exclusions of consequential (indirect) damages example...







Contractor's liability

Exclusions of consequential (indirect) damages - example...

ARTICLE 43 - CONSEQUENTIAL DAMAGES

Unless otherwise provided for in the CONTRACT and without prejudice to any liquidated damages provisions stipulated for delay, or otherwise, neither PARTY shall be responsible or liable to the other PARTY for indirect or consequential loss or damage suffered by such other PARTY, including loss of contracts, loss of profits, loss of production or facility downtime whether such liability is based or claimed to be based upon any negligence or other act or omission on the part of the PARTY causing the damage or loss, or any of the INDEMNIFIED PARTIES associated to such PARTY or any of their respective agents or employees in connection with the performance of the CONTRACT.







Contractor's liability

Exclusions of consequential (indirect) damages - example...

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With whom lies the risk of the PLANT under-performance?



Contractor's liability

Exclusions of consequential (indirect) damages - example...

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With whom lies the risk of the PLANT under-performance?

With CTR up to the limit of liability for make good / LDs for PLANT performance and above with CPY.







- Contractor's liability
 - Exclusions of consequential (indirect) damages
 - Liability cap, e.g., 20% of the CONTRACT PRICE, but with exclusions, e.g.
 - Liquidated Damages
 - Make-good
 - Indemnification
 - "At law" claims





- CONTRACTOR's guarantees and COMPANY remedies

Contractor's liability

Examples...



Read the excerpt of the CONTRACT related to Performance guarantees

CONTRACTORS aggregate liability to COMPANY arising under this CONTRACT shall be limited to twenty percent (20%) of CONTRACT PRICE with respect to CONTRACTORS liabilities to COMPANY for WORK, except for the following:

- 44.4.1 Taxes and customs duties;
- 44.4.2 Indemnification in respect of patents and other rights;
- 44.4.3 CONTRACTOR'S indemnity to COMPANY INDEMNIFIED PARTIES in terms of Article 41;
- 44.4.4 Claims related to GROSS NEGLIGENCE or WILFUL MISCONDUCT;
- 44.4.5 Liquidated Damages of any type;
- 44.4.6 "At law" claims;
- 44.4.7 Make good and rework claims.

- 5.1.4 If the performance guarantees defined in Sections 1.1.1, 1.1.1 and 2.5.1 hereof have not been met at the conclusion of a second TEST RUN, but at least 95% of the guaranteed value has been achieved as demonstrated during testing, CONTRACTOR shall have the option to pay Liquidated Damages as set forth in section 5.2 below in lieu of undertaking modifications as set forth above.
- 5.2 <u>Liquidated Damages for Deficiency in the capacity of the Facilities</u>
- 5.2.1 Should the capacity of the facilities fall below the guaranteed capacity set out in Sections 1.1.1, 1.1.1 and 2.5.1 following the second performance TEST RUN, then CONTRACTOR shall pay to COMPANY Liquidated Damages calculated as follows:

Capacity(1)	<u>Liquidated Damages (2)</u>
100%	Nil
99%	0.25%
98%	0.50%
97%	2.00%
96%	3.50%
95%	5.00%

- (1) Actual capacity as demonstrated by TEST RUN (in percent (%) of guaranteed capacity)
- (2) Amount to be paid by CONTRACTOR by way of liquidated damages (in percent (%) of CONTRACT PRICE).



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What is CONTRACTOR's exposure in case of lower than guaranteed performance?

□ 15%

□ 20%

□ no limit



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- Below 95% PLANT performance: no limit: unlimited make good. No possibility to pay LDs + make-good excluded from CONTRACTOR's liability cap.
- Above 95% PLANT performance: the amount of the LDs, which depends on the number of guarantees not met and how far from the guaranteed value.



ARTICLE 19 GUARANTEES AND WARRANTIES

19.1 Re - performance Warranties

In the event of any deficiencies appearing in the WORK, during the Warranty Period, CONTRACTOR shall furnish at his own cost any additional services necessary to re - perform and/or correct such deficient WORK and meet the CONTRACT requirements.

19.2 Rework

When any defect(s) and/or deficiency(ies) in the WORK, is observed during Warranty Period(s) as set out here below, CONTRACTOR shall, upon receipt of COMPANY's written notice, rework the affected item(s) at a time and within a reasonable period of time requested by COMPANY, having regard to the urgency of the case and in such a manner as to cause minimum of disruption to COMPANY's operations and shall make good all damage to the WORK resulting from any such defect(s) and/or deficiency(ies).

ARTICLE 44 SPECIAL PROVISIONS

Notwithstanding anything to the contrary in the CONTRACT, CONTRACTOR's aggregate liability arising out of or in connection with this CONTRACT including negligence shall be limited to Seventy five percent (75%) of the Final CONTRACT PRICE, excluding

- i) Contractor's liability for indemnities under articles 40 and 41;
- ii) Contractor's re-performance obligations under articles 19.1 and 19.2
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What is CONTRACTOR's exposure to make good for not meeting PLANT performances?



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What is CONTRACTOR's exposure to make good for not meeting PLANT performances? 75%

What is CONTRACTOR's exposure to compensation to CPY for deficiencies?



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What is CONTRACTOR's exposure to make good for not meeting PLANT performances? 75%

What is CONTRACTOR's exposure to compensation to CPY for deficiencies? Unlimited





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- Engineering Basis Endorsement certificate and exclusions: rely-upon information/documents





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A Contract contains the following clause.

ARTICLE 54 - CLAIMS

CONTRACTOR shall notify COMPANY within seven (7) days of the occurrence of any event which CONTRACTOR believes in good faith is likely to affect the CONTRACT PRICE and/or to modify the COMPLETION DATE. Such time limit of seven (7) days shall be without prejudice to any shorter periods specifically expressed elsewhere in the CONTRACT DOCUMENTS.

CONTRACTOR shall substantiate in detail any of such estimated consequences within fourteen (14) days from the occurrence of such event, failing which and notwithstanding any other provisions of the CONTRACT, CONTRACTOR shall not be entitled to any claim based on the occurrence of such event.

What does it mean?



Notices:

 The CONTRACT requires that CONTRACTOR formally notifies COMPANY upon occurrence of certain events, within a specified period after the occurrence of the event.

These are notices for:

- Any event affecting the progress of the work, the PRICE or the SCHEDULE,
- Discrepancy, error in CONTRACT documents, with a request for clarification,
- Defect in provided COMPANY items
- Encounter of hidden obstacles or obstructions,
- Force Majeure,
- HSE incident or near incident,
- Notice of Readiness for Inspection, prior to cover up
- etc.

Notice of claims for:

 Any event affecting the PRICE or the SCHEDULE (attributable to CPY and for which CTR will seek compensation)





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AWARENESS OF SITE CONDITIONS: case study

The CONTRACT Clause:

ARTICLE 12 - AWARENESS OF WORK CONDITIONS

12.1 Acquaintance with WORK conditions

CONTRACTOR hereby declares that prior to entering into the CONTRACT he has fully acquainted himself as to all local, regional, national and SITE conditions which could affect the WORK, including:

- a) the nature and location of the SITE including means of access thereto,
- as applicable, the atmospheric, meteorological, topographic, marine, oceanographic, hydrological, geological, subsurface conditions and the like,



What happened?

Different soil quality than that indicated in the CONTRACT's soil survey report were identified.

It required CTR to enlarge foundations.

What do you think of CTR's entitlement to a CHANGE ORDER?

AWARENESS OF SITE CONDITIONS: case study

The CONTRACT Clause:

ARTICLE 12 - AWARENESS OF WORK CONDITIONS

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- as applicable, the atmospheric, meteorological, topographic, marine, oceanographic, hydrological, geological, subsurface conditions and the like,



What happened?

Different soil quality than that indicated in the CONTRACT's soil survey report were identified.

It required CTR to enlarge foundations.

What do you think of CTR's entitlement to a CHANGE ORDER?

Pursuant to Art. 12.1 CTR is not entitled to compensation for different than expected soil conditions.





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- Contractor's liability
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Sufficiency of CONTRACT documents

The Clause:

Correctness and sufficiency of CONTRACT DOCUMENTS

CONTRACTOR hereby declares that, he is fully satisfied as to the correctness and completeness of the CONTRACT DOCUMENTS and that they are in all points fit and sufficient for their intended purpose and do not contain any errors, omissions, deficiencies, inaccuracies, contradictions, ambiguities and/or discrepancies.

COMPANY shall have no obligation to provide CONTRACTOR with any other documents under the CONTRACT



What happened?

On a Revamping job, CTR needed some existing documents. Such existing documents were not available.

CONTRACTOR had to perform Site survey to mitigate.

What do you think of CONTRACTOR's entitlement to compensation for the survey?



The Clause:

Correctness and sufficiency of CONTRACT DOCUMENTS

CONTRACTOR hereby declares that, he is fully satisfied as to the correctness and completeness of the CONTRACT DOCUMENTS and that they are in all points fit and sufficient for their intended purpose and do not contain any errors, omissions, deficiencies, inaccuracies, contradictions, ambiguities and/or discrepancies.

COMPANY shall have no obligation to provide CONTRACTOR with any other documents under the CONTRACT



What happened?

On a Revamping job, CTR needed some existing documents. Such existing documents were not available.

CONTRACTOR had to perform Site survey to mitigate.

What do you think of CONTRACTOR's entitlement to compensation for the survey? None: CTR if fully satisfied with the completeness of CONTRACT documents.





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Critical Terms and Conditions for CONTRACTOR

Engineering Basis Endorsement and exclusions: rely-upon information/documents



- Endorsement
- Rely-Upon
- Design development

Explain these three words...







Endorsement

CTR has checked, verified and endorsed data and documents included in CONTRACT DOCUMENTS and takes full responsibility for such data and documents.

CTR shall make no claim in respect of the DESIGN PACKAGE (including for error, omission etc.)







- Endorsement
- Rely-Upon

This is the information/documents that CONTRACTOR has not endorsed. CONTRACTOR is not responsible for this information / the content of thes documents. CONTRACTOR has based its PRICE on it.

Should the latter change, CONTRACTOR will be entitled to an adjustment of the PRICE and/or SCHEDULE.





- Endorsement
- Rely-Upon

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What is the usual rely-upon information/documents?



Critical Terms and Conditions for CONTRACTOR

Engineering Basis Endorsement and exclusions: rely-upon information/documents



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- Rely-Upon

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- Site climatic conditions,
- Site soil conditions,
- Feedstock characteristics,
- PROCESS LICENSORS information,
- Interface Battery limits conditions,
- (for a revamping) Performance of existing equipment
- (for a revamping) Existing documentation





- Endorsement
- Rely-Upon
- Design development

Addition, deletion, substitution, correction to the DESIGN PACKAGE caused by progressing of the detailed design, incorporation of data from PROCESS LICENSORS and SUBCONTRACTORS, ensuring compliance with the CONTRACT DOCUMENTS







- Endorsement
- Rely-Upon
- Design development

Case study:

a CONTRACT contains the following articles and endorsement certificate

13.4 Responsibility of CONTRACTOR with respect to DESIGN PACKAGE Documents endorsed by CONTRACTOR

CONTRACTOR, by his signature of the DESIGN PACKAGE ENDORSEMENT CERTIFICATE attached in ANNEX 08, acknowledges his endorsement of the DESIGN PACKAGE in accordance with the provisions of such certificate, and agrees and accepts that he shall have no right to request a CHANGE ORDER in respect thereof except possibly in relation to the five (5) expressly mentioned exclusions set out within the DESIGN PACKAGE ENDORSEMENT CERTIFICATE and limited to the extent expressly set out in such certificate. Any CHANGE ORDER in respect of any exclusion expressly set out in the DESIGN PACKAGE ENDORSEMENT CERTIFICATE shall be subject to and in accordance with all of the requirements of the provisions of Article 21 of this AGREEMENT and the provisions of EXHIBIT G.

13.6 Development of the DESIGN PACKAGE

CONTRACTOR understands that he is responsible for further developing all drawings and documents included in the CONTRACT DOCUMENTS as he progresses the detailed design and receives data from PROCESS LICENSORS and SUBCONTRACTORS, and ensuring the PLANT complies in all respects with the requirements of the CONTRACT DOCUMENTS. Differences between the documents prepared by CONTRACTOR and the CONTRACT DOCUMENTS including for making additions, deletions, substitutions and/or corrections resulting from such further development shall be a part of CONTRACTOR's scope of WORK and, therefore, CONTRACTOR shall not be entitled to any CHANGE ORDER for a) such changes







- Endorsement
- Rely-Upon
- Design development

Case study...







- Endorsement
- Rely-Upon
- Design development
- 1. CONTRACTOR identifies, in the course of the design, that the capacity of one utility unit foreseen in the DESIGN PACKAGE is not enough. A unit with increased capacity is required.

Do you think CTR shall be entitled to a CHANGE ORDER in this case?





- Endorsement
- Rely-Upon
- Design development
- 1. CONTRACTOR identifies, in the course of the design, that the capacity of one utility unit foreseen in the DESIGN PACKAGE is not enough. A unit with increased capacity is required.

Do you think CTR shall be entitled to a CHANGE ORDER in this case?

No, typical case of Design Development







- Endorsement
- Rely-Upon
- Design development
- 2. A document part of the exclusions listed in the Endorsment Certificate specifies that Sea Water used for cooling should be discharged with no more than 10°C temperature increase. COMPANY now asks for 3°C. This requires CTR to put additional cooling facilities.

Do you think CTR shall be entitled to a CHANGE ORDER in this case?



Engineering Basis Endorsement and exclusions: rely-upon information/documents



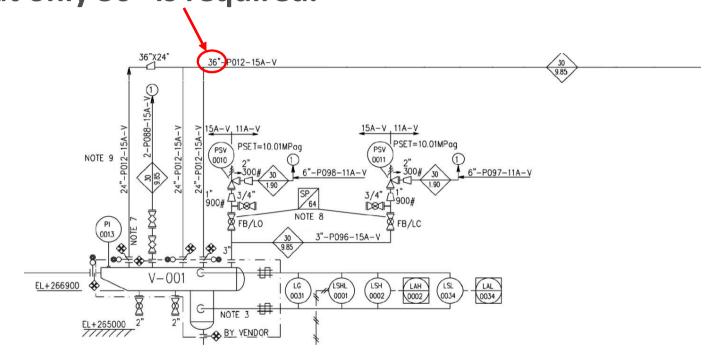
- Endorsement
- Rely-Upon
- Design development
- 2. A document part of the exclusions listed in the Endorsment Certificate specifies that Sea Water used for cooling should be discharged with no more than 10°C temperature increase. COMPANY now asks for 3°C. This requires CTR to put additional cooling facilities.

Do you think CTR shall be entitled to a CHANGE ORDER in this case?

Yes, as the 10°C is rely-upon information.



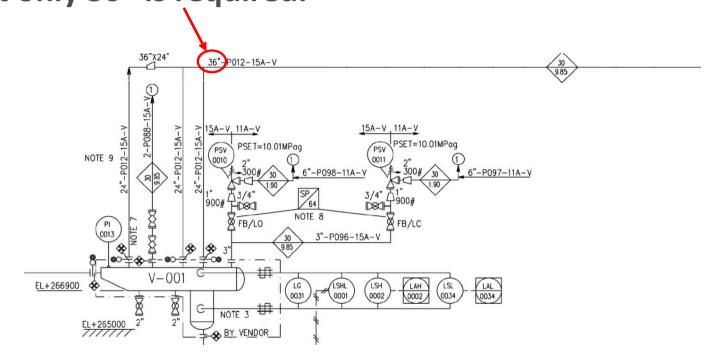
A 36" line is shown on the DESIGN PACKAGE P&IDs. EPC Contractor calculations show that only 30" is required.



Can the EPC Contractor reduce the line diameter to 30"?



A 36" line is shown on the DESIGN PACKAGE P&IDs. EPC Contractor calculations show that only 30" is required.



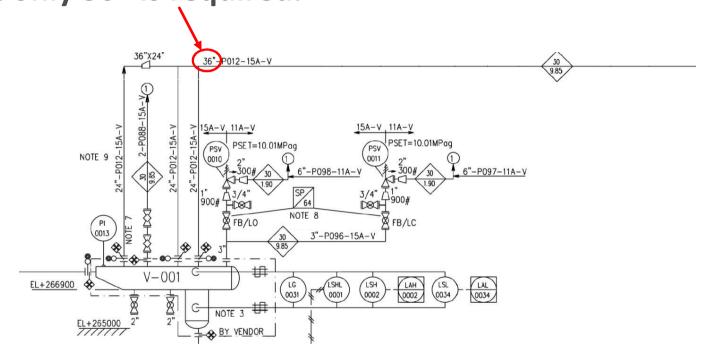
Can the EPC Contractor reduce the line diameter to 30"?

Consider 2 cases:

- The CONTRACT contains a line sizing criteria, e.g. velocity
- b) The CONTRACT does not contain a line sizing criteria.



A 36" line is shown on the DESIGN PACKAGE P&IDs. EPC Contractor calculations show that only 30" is required.



Can the EPC Contractor reduce the line diameter to 30"?

Consider 2 cases:

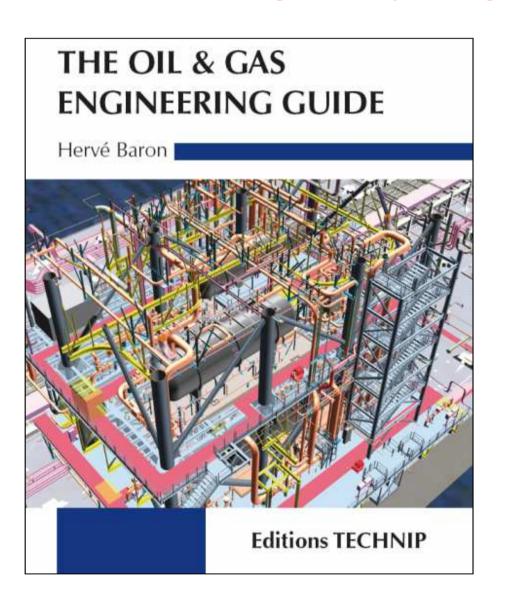
- The CONTRACT contains a line sizing criteria, e.g. velocity
- b) The CONTRACT does not contain a line sizing criteria.

CTR can change the diameter in case a) provided 30" fulfils the design criteria.



For more information and...

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- The schedule Clause
- The Change clause
- Responsibility for interfaces







- The schedule Clause
- The Change clause
- Responsibility for interfaces





Set-up of initial schedule and regular up-date

15.2 Detailed Work Time Schedule

Within thirty (30) days after EFFECTIVE DATE, CONTRACTOR shall submit for APPROVAL the Detailed Work Time Schedule clearly demonstrating how he intends to perform the WORK in accordance with the WORK TIME SCHEDULE, related to the engineering and procurement activities of the WORK as per the requirements set out in EXHIBIT G including as a minimum a logic network diagram in a graph form with a detailed breakdown of all major activities with start and finish dates and the procedure, sequence and means and the corresponding S curves by which the WORK will be performed and against which progress will be monitored, as well as the restraints on critical and sub critical paths.

15.11 Adjustments to Detailed Work Time Schedule and WORK TIME SCHEDULE

In accordance with the periods specified in EXHIBIT G, CONTRACTOR shall update and submit for APPROVAL the Detailed Work Time Schedule, taking into account APPROVED time extensions, as set out in CHANGE ORDERS, and all modifications to the Detailed Work Time Schedule resulting from the delays recorded in the progress of the WORK for which he is not entitled to any time extensions.



The Schedule Clause Entitlement to an EOT

15.6 Allowable Time Extensions

Subject to the provisions of the present Article 15, if CONTRACTOR can demonstrate that the COMPLETION DATE will be delayed solely due to one or more of the following reasons affecting the critical path of the WORK TIME SCHEDULE, CONTRACTOR may be entitled to request a CHANGE ORDER for an extension of time with the corresponding modification to the WORK TIME SCHEDULE for that part of the WORK so affected:

- a) Subject to the provisions of the CONTRACT, delays in the delivery of COMPANY supplied documents, and/or of COMPANY ITEMS, where expressly due within a specified period after EFFECTIVE DATE.
- b) Delays resulting from clarification of CONTRACT DOCUMENTS as per sub-Article 6.4.
- c) Defects in COMPANY ITEMS subject to sub-Article 14.3 and provided that CONTRACTOR can demonstrate that he has not contributed in any way to the defect.
- d) suspensions of WORK in accordance with the provisions of sub-Article 31.1.
- e) unnecessary re-inspection or re-testing at COMPANY's request as per sub-Article 17.3.6.1.
- f) time extensions, including those due as the result of any act and/or omission by COMPANY, SUPPLIERS, its agents, servants, or other contractors for whom COMPANY is responsible,



The Schedule Clause Requirement to notify

15.7 Notification of Delays in the performance of the WORK

CONTRACTOR shall forthwith notify COMPANY of the hour, date and reason of the occurrence of any delay or suspension of WORK caused by any of the events mentioned in sub-Article 15.6. Failure of CONTRACTOR to immediately notify, without any delay, COMPANY of the occurrence of such events shall debar CONTRACTOR from the right to present any claim for time extension to the WORK TIME SCHEDULE in relation to such events.

The Schedule Clause Determination of the EOT

15.9 Determination of Allowable Time Extension

Subject to the provisions of the sub-Articles 15.7 and 15.8, and provided always that no time extensions shall be made except pursuant to sub-Article 15.6 hereof, any and all time extensions and corresponding modifications to the WORK TIME SCHEDULE shall be mutually agreed, failing which COMPANY shall fairly determine any such extensions after due representation including provision of any supporting documents by CONTRACTOR.

For each part of the WORK affected, the time extension allowed shall not in any circumstance exceed a period of time equivalent to the delay, as evidenced by satisfactory supporting documents, anticipated or actually suffered by CONTRACTOR during the performance of such part of the WORK as a direct consequence of any of the events or a combination of the events mentioned in sub-Article 15.6 and calculated on the critical path of the WORK TIME SCHEDULE.

Furthermore, no time extension shall be allowed under the present Article for any period overlapping with delays due to any cause for which CONTRACTOR is not entitled to request a time extension.

Critical Terms and Conditions for CONTRACTOR

The schedule Clause

Submission and APPROVAL of the detailed Work Time

Schedule and its up-dates

- Conditions for an Extension of Time
 - Eligible events
 - » Delay, defect in CPY item
 - » Delay in CPY document, design basis, clarification etc.
 - » Force Majeure
 - Determination of the EOT
 - » Delay of the COMPLETION DATE due to this **sole** event's impact on the Critical Path of the WORK TIME SCHEDULE
 - » Unless CTR immediately notifies CPY, CTR forfeits its right to an EOT







- The schedule Clause
- The Change clause
- Responsibility for interfaces







- The schedule Clause
- The Change clause
- Responsibility for interfaces







- The schedule Clause
- The Change clause







The schedule Clause

The Change clause

- Full and final effect of changes
- Is CTR required to proceed if instructed by CPY in case of disagreement on CO conditions?







- The schedule Clause
- The Change clause
- Responsibility for interfaces





CONTRACTOR-initiated CHANGE ORDERS

Upon occurrence of an event affecting the Scope of WORK and/or COMPLETION DATE and provided CONTRACTOR can demonstrate that :

 a) such event is due to any failure by COMPANY to comply with its obligations under the CONTRACT (it being understood that CONTRACTOR remains responsible for the Interface Contractors mentioned in EXHIBIT A, paragraph 0.2.2 to the extent specified in the EXHIBITS),

and

- it could not be foreseen by an experienced contractor,
 and
- it would effectively modify the Scope of WORK and the CONTRACT PRICE and/or the critical path of the WORK TIME SCHEDULE,

CONTRACTOR may submit to COMPANY a request for CHANGE ORDER in accordance with the provisions of the present Article and in accordance with the provisions of EXHIBIT G.



CONTRACTOR-initiated CHANGE ORDERS

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and

- it could not be foreseen by an experienced contractor,
 and
- it would effectively modify the Scope of WORK and the CONTRACT PRICE and/or the critical path of the WORK TIME SCHEDULE,

CONTRACTOR may submit to COMPANY a request for CHANGE ORDER in accordance with the provisions of the present Article and in accordance with the provisions of EXHIBIT G.

What is the responsibility of CONTRACTOR for a delay in getting interface information from a third party?



CONTRACTOR-initiated CHANGE ORDERS

Upon occurrence of an event affecting the Scope of WORK and/or COMPLETION DATE and provided CONTRACTOR can demonstrate that :

 a) such event is due to any failure by COMPANY to comply with its obligations under the CONTRACT (it being understood that CONTRACTOR remains responsible for the Interface Contractors mentioned in EXHIBIT A, paragraph 0.2.2 to the extent specified in the EXHIBITS),

and

- it could not be foreseen by an experienced contractor,
 and
- it would effectively modify the Scope of WORK and the CONTRACT PRICE and/or the critical path of the WORK TIME SCHEDULE,

CONTRACTOR may submit to COMPANY a request for CHANGE ORDER in accordance with the provisions of the present Article and in accordance with the provisions of EXHIBIT G.

What is the responsibility of CONTRACTOR for a delay in getting interface information from a third party?

CTR is liable. This is a bit over the top as CTR has no contractual relationship with the third party!



CONTRACTOR-initiated CHANGE ORDERS

Upon occurrence of an event affecting the Scope of WORK and/or COMPLETION DATE and provided CONTRACTOR can demonstrate that :

 a) such event is due to any failure by COMPANY to comply with its obligations under the CONTRACT (it being understood that CONTRACTOR remains responsible for the Interface Contractors mentioned in EXHIBIT A, paragraph 0.2.2 to the extent specified in the EXHIBITS),

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Could CONTRACTOR recover something if the location of the interface changes and requires extra length of pipe/cable etc.?



CONTRACTOR-initiated CHANGE ORDERS

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 and
- it would effectively modify the Scope of WORK and the CONTRACT PRICE and/or the critical path of the WORK TIME SCHEDULE,

CONTRACTOR may submit to COMPANY a request for CHANGE ORDER in accordance with the provisions of the present Article and in accordance with the provisions of EXHIBIT G.

Could CONTRACTOR recover something if the location of the interface changes and requires extra length of pipe/cable etc.?

As per the above Clause: no! CTR could however easily make a compelling case showing the change of location from the bid documents.





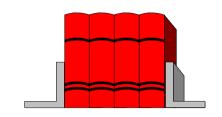
- The schedule Clause
- The Change clause
- Responsibility for interfaces
 - identification, definition and obtaining of all interface conditions
 - management and co-ordination of all interfaces



- Even though CONTRACT clauses seem to be the same from one CONTRACT to the other, each CONTRACT is unique
- Having a question about obligations, entitlement etc?
- There is no general rule. The answer is in the CONTRACT.
 - => What does the CONTRACT say?
- e.g. LD as sole remedy or not? Is CONTRACTOR required to proceed with a change in case of disagreement with COMPANY on the impact? What are the events that open right to an EOT etc.
- We will now look successively at the Critical then Standard CONTRACT clauses



- Independence of CONTRACTOR
- Entire agreement



- CPY AUTHORIZED REPRESENTATIVE / Validity of instructions
- Indemnification / "hold harmless"
- Force Majeure
- Clarification of CONTRACT documents: CTR's responsibility
- Analysis of new documents received from CPY
- CPY's APPROVAL
- Deviation from the CONTRACT
- Order of precedence of CONTRACT documents



The Principal document: standard clauses

Independence of CONTRACTOR

CPY has the right to instruct CTR as to the results which it wishes to obtain from the WORK and to inspect the WORK at all stages of execution in order to ascertain that these results are being obtained and that WORK is being carried out in accordance with CONTRACT requirements CPY shall not have the right to direct the execution of the WORK except in case of defective performance and take-over.



The Principal document: standard clauses

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Has CPY the right to direct the execution of the WORK?

e.g. ask CTR to mobilize additional resources



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Has CPY the right to direct the execution of the WORK?

e.g. ask CTR to mobilize additional resources

As per the CONTRACT CPY has no such rights but in fact there are numerous procedural requirements in the Co-ordination procedure (submittals, reporting requirements)





The co-ordination procedure entails numerous procedural requirements

Each section specifies requirements in detail, including deliverables and timing...

- Early Activities and General Execution
- Organization, Administration, and Reporting
- Interface Management
- Safety Management
- Quality Management
- Procurement (purchasing, subcontracting)
- Management of Change
- Schedule Management (progress reporting)

- Changes to the Work
- Risk Management
- Engineering and Technical Documentation
- Fabrication and Construction Completions and Turnover
- Commissioning and Start-Up
- Information Security
- Invoicing and Payment
- Regulatory and Environment



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In your opinion what part of the co-ordination procedure is critical?



The co-ordination procedure entails numerous procedural requirements

Each section specifies requirements in detail, including deliverables and timing...

- Early Activities and General Execution
- Organization, Administration, and Reporting
- Interface Management
- Safety Management
- Quality Management
- Procurement (purchasing, subcontracting)
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- Changes to the Work
- Risk Management
- Engineering and Technical Documentation
- Fabrication and Construction Completions and Turnover
- Commissioning and Start-Up
- Information Security
- Invoicing and Payment
- Regulatory and Environment

Progress measurement is critical, as CTR is paid as per APPROVED progress!



Independence of CONTRACTOR

- Entire agreement
- CPY AUTHORIZED REPRESENTATIVE / Validity of instructions
- Indemnification / "hold harmless"
- Force Majeure
- Clarification of CONTRACT documents: CTR's responsibility
- Analysis of new documents received from CPY
- CPY's APPROVAL
- Deviation from the CONTRACT
- Order of precedence of CONTRACT documents

A CONTRACT contains the following article:

If CONTRACTOR withdraws key personnel in violation of these provisions, COMPANY shall be entitled to apply as Liquidated Damages the amounts set out therefore in EXHIBIT B for the inconveniences and disturbances resulting therefrom.

CONTRACTOR's key personnel shall comprise the persons listed in EXHIBIT K.

The CONTRACT's Exhibit K is empty (it had not been filled at CONTRACT Award stage). Upon CONTRACT award, CTR's representative changes (Proposal Manager is replaced by Project Manager).

CPY notifies CTR that it is exercising liquidated damages due to the above substitution.

Is CONTRACTOR liable to such LDs?

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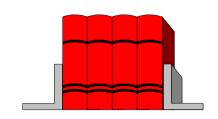
CPY notifies CTR that it is exercising liquidated damages due to the above substitution.

Is CONTRACTOR liable to such LDs?

No, as Exhibit K is empty. Same thing for an information transmitted through bit bulletin but not included in the CONTRACT documents.



- Independence of CONTRACTOR
- Entire agreement



- CPY AUTHORIZED REPRESENTATIVE / Validity of instructions
- Indemnification / "hold harmless"
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COMPANY REPRESENTATIVE / VALIDITY OF INSTRUCTIONS

8.2 COMPANY REPRESENTATIVE

The COMPANY REPRESENTATIVE shall be the only COMPANY authorized delegate vis-à-vis FEED CONTRACTOR for the purpose of this CONTRACT.

COMPANY shall appoint the COMPANY REPRESENTATIVE and shall inform FEED CONTRACTOR in writing of his name and the scope of his delegation. COMPANY may replace the COMPANY REPRESENTATIVE at any time.

Before complying with any COMPANY instruction(s), FEED CONTRACTOR shall have the responsibility of verifying that such instruction(s) have been issued by COMPANY REPRESENTATIVE or by his duly authorized delegate.

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As per the above article, what is the validity of CPY's instructions in:

- **Emails**
- Comments on deliverables
- Minutes of Meeting

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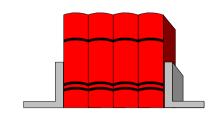
As per the above article, what is the validity of CPY's instructions in:

- Emails not valid
- Comments on deliverables cannot be considered as CPY instructions, as they are not signed by CPY rep
- Minutes of Meeting no, unless signed by CPY representative

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- Independence of CONTRACTOR
- Entire agreement



- CPY AUTHORIZED REPRESENTATIVE / Validity of instructions
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- Type 1: I pay if am solely responsible
- Type 2: I pay even if I am only partially responsible
- Type 3: I pay in all cases, even if the other party is solely responsible



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Example: CPY contracts to CTR. Joe is a CTR employees. Joe is injured. Joe's recovery from CTR is limited to the employer's liability insurance. Joe brings an action against CPY to recover more money.



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Example: CPY contracts to CTR. Joe is a CTR employees. Joe is injured. Joe's recovery from CTR is limited to the employer's liability insurance. Joe brings an action against CPY to recover more money.

Injury/Disease/Death and Personal Property Loss/Damage

Each PARTY shall indemnify, defend and hold the other PARTY harmless from and against any loss or liability (including legal expenses) arising out of any claim or cause of action for loss of or damage to property of its personnel and injuries to or disease or death of its personnel, regardless of the cause of or reason for said damage, loss, injuries, disease or death and even if caused by negligence.



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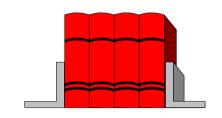
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The Principal document: standard clauses Force Majeure

ARTICLE 21 - FORCE MAJEURE

21.1 A delay in or total or partial failure of performance by either PARTY hereto shall not constitute default, suspension or termination hereunder or give rise to any claim for damages if and to the extent such delay or failure is caused by any occurrence demonstrably **beyond the reasonable control of the PARTY** affected and such occurrence falls within one or more of the following categories:

- acts of God;
- acts of war or the public enemy whether war be declared or not;
- insurrection, rebellion, sabotage or acts of terrorists;
- explosions, fires, floods, earthquakes, lightning, hail, or other natural calamities;
- strikes, boycotts or job actions, other than those involving CONTRACTOR's

21.2 Any delay attributable to an occurrence described in Section 21.1 shall be considered an excusable delay, and neither PARTY shall be entitled to compensation beyond the provisions of this AGREEMENT as a result thereof except as follows;



The Principal document: standard clauses Force Majeure

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21.3 Any delay attributable to an occurrence described in Section 21.1 shall be considered an excusable delay, and neither PARTY shall be entitled to compensation beyond the provisions of this AGREEMENT as a result thereof except as follows;

What happens in case of FM?
Can CTR get an extension of time?
Can CTR get compensated for the stand-by costs?



The Principal document: standard clauses Force Majeure

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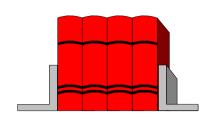
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21.3 Any delay attributable to an occurrence described in Section 21.1 shall be considered an excusable delay, and neither PARTY shall be entitled to compensation beyond the provisions of this AGREEMENT as a result thereof except as follows;

What happens in case of FM?
Can CTR get an extension of time? Yes, that is what "excusable delay" means
Can CTR get compensated for the stand-by costs? No



- Independence of CONTRACTOR
- Entire agreement



- CPY AUTHORIZED REPRESENTATIVE / Validity of instructions
- Indemnification / "hold harmless"
- Force Majeure
- Clarification of CONTRACT documents: CTR's responsibility
- Analysis of new documents received from CPY
- CPY's APPROVAL
- Deviation from the CONTRACT
- Order of precedence of CONTRACT documents



The Principal document: standard clauses

ARTICLE 6 INTERPRETATION OF CONTRACT

6.4 Clarifications

During the performance of the WORK, should any error, omission, deficiency, inaccuracy, contradiction, ambiguity, and/or discrepancy become apparent between or among the CONTRACT DOCUMENTS and/or additional or revised COMPANY supplied documents, CONTRACTOR shall promptly notify COMPANY of same and shall obtain COMPANY'S clarification prior to commencing any related part of the WORK, it being understood that performance of any such WORK prior to clarification shall be at CONTRACTOR'S risk and cost.



The Principal document: standard clauses

ARTICLE 6 INTERPRETATION OF CONTRACT

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- duty to clear any discrepancy between CONTRACT documents?
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The following 2 specs are part of the CONTRACT:

Date : 27/05/08	AMENDMENTS TO DESIGN SPECIFICATION PROTECTIVE	
Rev : D1	COATINGS	Page 2 of 12

2.3.8 Coatings shall be applied after completion of all required NOT and pressure testing. Inorganic zinc is the only primer which may be applied to welds prior to pressure testing. Epoxy coatings or other barrier type coatings shall not be applied to welds as minor leaks may not be detected during pressure testing.

Date	:	18/04/08	Amendments to technical specification for field testing of piping	
Rev	:	D1		Page 4 of 5

Para. 3.2.3 (Modification)... Replace with the following sentences.

Lines to be hot or cold insulated shall be tested before application of the insulation. For uninsulated lines, all joints and welds may be primed and painted prior to pressure testing, except for socket welds and seal welds.

What do you notice?



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What do you notice?

The 1st specification states that welds can only be painted after hydrotest while the second spec states that this only applies to a few welds (socket and seal welds).



The following 2 excerpts of the CONTRACT pertain to the standardization of Instruments:



COMPANY approved standardised instruments shall be used in all installations of the PROJECT including instruments and valves within the scope of Packaged VENDORS and sub-vendors.

Standardisation

CONTRACTOR shall design, engineer and select equipment and materials in such a manner that the variety of VENDORS and equipment types is reduced with the aim of minimising the investment in the stock of spare parts.

Is Contractor required to provide the same make for all instruments?



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Is Contractor required to provide the same make for all instruments?

No, as standardization is defined as supplying similar items from a few - not a unique - vendor

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What does the CONTRACT say?

ARTICLE 7 - CHANGES TO THE WORK

- 7.1 Discretionary Rights of COMPANY
- 7.1.1 COMPANY shall have the right, without additional consent from CONTRACTOR, to (i) revise JOB SPECIFICATION, (ii) change elements of WORK already completed or being performed in accordance with JOB SPECIFICATION, or (iii) omit a part of WORK previously authorized.
- 7.1.2 COMPANY shall have the right, without additional consent from CONTRACTOR, to (i) make final decisions on the interpretation of JOB SPECIFICATION and on matters where JOB SPECIFICATION permits alternatives or is not specific, (ii) provide, designate or reject sources of supply for services, equipment, materials or supplies that JOB SPECIFICATION requires CONTRACTOR to provide, and (iii) require CONTRACTOR to provide engineering studies and cost estimates needed to ascertain the effects of a proposed JOB SPECIFICATION revision.
- 7.1.3 A CHANGE ORDER shall be issued with respect to the matters specified in 7.1.1 and 7.1.2, if appropriate, under the provisions of 7.2.



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What does the CONTRACT say?

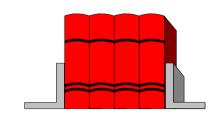
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Conclusion? CPY has the final word on the interpretation. CTR may claim.



- Independence of CONTRACTOR
- Entire agreement

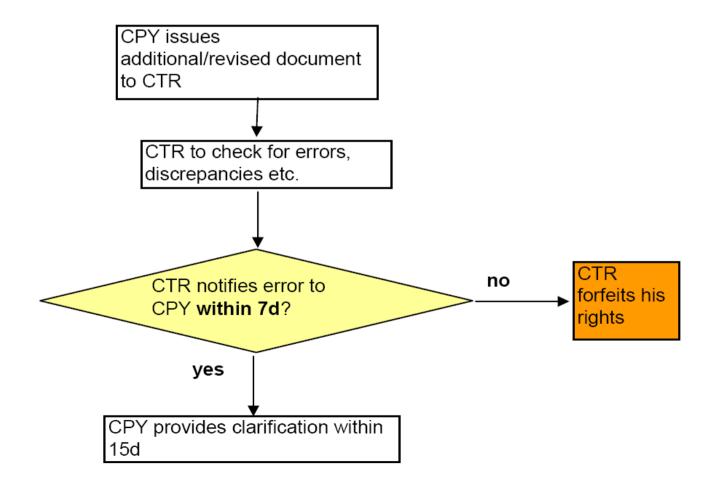


- CPY AUTHORIZED REPRESENTATIVE / Validity of instructions
- Indemnification / "hold harmless"
- Force Majeure
- Clarification of CONTRACT documents: CTR's responsibility
- Analysis of new documents received from CPY
- CPY's APPROVAL
- Deviation from the CONTRACT
- Order of precedence of CONTRACT documents



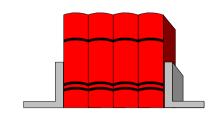
New information from COMPANY:

 COMPANY may provide at any time revised/additional information. CONTRACTOR shall review and check for errors or inconsistency and notify COMPANY of the same within the specified period otherwise CONTRACTOR forfeits its rights.





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The CONTRACT contains the following provisions for CPY's APPROVAL of CTR's deliverables

MINIMUM CONTRACTOR'S DOCUMENTS REQUIREMENT SCHEDULE

CONTRACTOR shall prepare and submit for APPROVAL the detailed Project Document List on which he shall have marked the classification of documents (for APPROVAL or review) based upon the classification guidelines herein.

Class 1 for APPROVAL

CONTRACTOR may not proceed until written comments have been given by COMPANY.. However CONTRACTOR may proceed at his own risk until such written comments are obtained. Document APPROVAL durations will be as specified in EXHIBIT G.

Class 2 for Review

CONTRACTOR may proceed if COMPANY has made no comment after fifteen (15) calendar days from the receipt by COMPANY. However, CONTRACTOR may proceed at his own risk prior to the expiration of fifteen (15) calendar days from the receipt by COMPANY.

Class 3 for Reference Only

COMPANY reserves the right to comment but CONTRACTOR may continue with his work.



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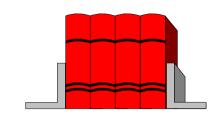
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No, it is only mentioned that CTR may proceed prior to APPROVAL from CPY at his own risk. Fair enough, CTR decides to proceed at its own risk but at least CTR is not delayed. CTR should consider CPY's review and APPROVAL as a service to CTR, that of checking the compliance with the CONTRACT, rather than a constraint.



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Can Contractor deviate from a CONTRACT requirement by submitting a specification containing such deviation and getting it APPROVED by CPY?



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No, the CONTRACT states that CPY's APPROVAL does not release CTR from its obligation to comply with the CONTRACT.

Some CONTRACT institute a dedicated vehicle for Deviation Request, such as the following:



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Some CONTRACT institute a dedicated vehicle for Deviation Request, such as the following:

7.0 DEVIATIONS FROM CONTRACT

Requests to deviate from specified requirements during execution of the WORK shall be made to COMPANY utilizing CONTRACTOR's Deviation Procedure.

Deviations from and clarification of COMPANY agreed CONTRACTOR design drawings and specifications shall also be processed using the Field Design Change Procedure.



Wrap-up

Which are the critical CONTRACT clauses for the EPC Contractor?



Wrap-up

Which are the critical CONTRACT clauses for the EPC Contractor?

- Consequential damages
- Liability
- Endorsement
- Guarantees
- Liquidated Damages
- Schedule Clause
- Change Clause

And also

- Settlement of disputes: place
- Conditions for drawing Performance bond

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