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ENGINEERING, PROCUREMENT, AND CONSTRUCTION CONTRACTS IN TEXAS: KEY PROVISIONS, ISSUES AND PITFALLS

I. INTRODUCTION – WHAT IS AN EPC CONTRACT?

Engineering, procurement, and construction (“EPC”) contracts are commonly used in the construction of large infrastructure and energy projects, such as ports, airports, power plants, refineries, petrochemical plants, and oil-storage terminals. Unlike the typical design-bid-build construction arrangement where the owner contracts with separate firms to design and construct a project, the key distinguishing feature of an EPC agreement is that it bundles all or some of the project design, engineering and procurement of materials and equipment, and construction of the facility, with a single EPC contractor.

Large energy and infrastructure projects are particularly suited to EPC contracts. One reason is such facilities typically have objective performance criteria, such as generation capacity for a power plant or storage capacity for a crude-oil terminal, that can be translated into the contractual design basis. Instead of providing a set of plans and specifications generated by an architect, in an EPC arrangement the owner typically provides the performance requirements that the facility has to meet and the EPC contractor in turn designs the facility to meet those performance requirements. Also, aesthetics are low on the priority list when developing industrial projects so owners generally are willing to cede this design role to the contractor in return for other benefits. By contrast, in commercial or residential projects, aesthetics are an important consideration and the owner/developer usually wants input and the final say on what the finished product looks like. Consequently, owners and developers play a greater role in the design stage of such projects and tend to engage architecture firms to prepare the “design basis” of the facility in the form of plans and specifications that

can be put out to bid. Another reason owners turn to the EPC model is that coordinating the various moving parts of the design and construction of such large projects is a challenge, and owners often prefer to hire a single “one-stop shop” EPC contractor with experience in delivering such complex projects.

From the owner’s perspective, a key purpose of EPC contracts is to shift the risk of integrating project design, engineering, procurement and construction from the owner to the EPC contractor. An EPC contractor tends to have little room to complain to the owner about design or engineering changes in project drawings or late-delivered equipment, because the EPC contractor is the one responsible for preparing the drawings, procuring the equipment, and constructing a finished project. EPC contractors of course do not assume these risks for free. Thus, the disadvantage of EPC contracts from the owner’s perspective and potential advantage from the contractor’s perspective is that they tend to include a higher risk premium built into the contract price than one would find in a typical design-bid-build contracting arrangement.³ In return for the higher risk premium, the owner (at least in theory) tends to gain greater certainty regarding the project’s schedule, cost, as well as additional options for project financing⁴

When drafting or negotiating an EPC contract, while there is much in common with other types of design-bid-build construction contracts, there are significant differences that need to be kept in mind. The purpose of this article is to highlight key issues, pitfalls, and provisions to be aware of when drafting or negotiating an EPC contract, with a focus on Texas law.⁵ Section II of this article provides an overview of the core EPC contract components of

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3. Dr. Patricia D. Galloway, *The Art of Allocating Risk in an EPC Contract to Minimize Disputes*, 38 Construction Law. 26, 27 (Fall 2018).
4. *Id.*; see also Damian McNair, *EPC Contracts in the Power Sector*, DLA Piper Asia Pacific Projects Update at 3–4 (2012).
5. Nothing in this article should be understood to represent or constitute legal advice, and parties should consult their own legal counsel when drafting or negotiating EPC contracts. In addition, several sample contract provisions are presented in this article as illustrations and examples of the concepts discussed. These provisions have been simplified for purposes of this article.

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engineering, procurement, and construction. Section III of this article addresses key contract provisions and issues to consider when negotiating or drafting an EPC contract. Section IV of this article addresses EPC-specific lien and bond issues and considerations under Texas law. Finally, Section V addresses alternative security for EPC contracts.

II. UNDERSTANDING THE CORE E, P, AND C COMPONENTS OF THE EPC MODEL

A. Engineering

Unlike a traditional construction contract, a true EPC contract explicitly places some or all the design/engineering responsibility on the EPC contractor. To achieve this intended result, the EPC contract should expressly address key design and engineering issues. These include the scope of work for design/engineering, the extent to which the owner or contractor is responsible for the facility's design basis, the standard of care for design/engineering services, and warranties on design/engineering services.

1. Scope of work for engineering

The “design basis” is typically found in larger EPC agreements where the engineer has full design responsibility or the project is more complex. The design basis usually lists the applicable codes, statutes, regulations, and overall project requirements. Project requirements include the essential purposes of the facility (i.e., how many barrels per day of crude a facility is designed to process, what type of petrochemicals are stored in a tank, how petrochemicals are stored, and the type of bags to be processed in a facility). In some instances, the design basis is not contractual. The design basis may be created before the EPC agreement or during the project. The attorney assisting with an EPC contract should inquire as to whether a design basis exists and attempt to facilitate a discussion with the client's technical team as to whether it should be incorporated into the agreement. In litigation, frequently the original assumptions in the design basis form the largest claims. (For example, the dispute may rest on one project participant's failure to identify the relevant technical code that applies under given project conditions.) If the design basis is not contractual, a possible ambiguity may exist regarding whether the requirement was intended to be incorporated into the agreement.

Depending on the nature of the project, the owner, EPC contractor, or both, may be contractually responsible for

the contents of the design basis. Joint responsibility may be appropriate in some cases where the owner is more sophisticated, more familiar with the site conditions or permitting, or is designing portions of the facility. For example, if the owner controls the permit process and the permit dictates which codes apply, the contract could potentially allocate responsibility for the design basis jointly to the owner and EPC contractor. Alternatively, the EPC contractor may require the owner to approve the design basis where appropriate before moving to more detailed design documents.

Industrial and petrochemical facilities are rarely constructed entirely by the same contractor. As a result, it is important for the EPC contractor and owner to delineate the scope of work, which may be less obvious than in commercial construction. At times “battery” limits are discussed in EPC agreements to delineate a contractor's responsibility for design and construction. The terms Inside Battery Limits (“ISBL”) and Outside Battery Limits (“OSBL”) are often used, but ambiguity is created through these terms as there is not necessarily an accepted way to define which portions of the facility are ISBL. The EPC's scope documents should spell out in some way such responsibility to remove ambiguity.

In connection with many EPC agreements, the engineering piece is limited to engineering unrelated to the process design. For example, a cryogenic gas processing facility may include a cryogenic kit that is designed and manufactured by a third party who owns the process design. However, engineering of the pipes and vessels and ancillary pieces of the facility, which are typically mechanical design, may still be necessary. If the EPC is only responsible for mechanical design, design provisions should delineate these partial design responsibilities (perhaps in a definitional way) so that the EPC contractor is not unwittingly accepting responsibility for others' design. Keeping in mind that under Texas law as of the date of this article, the *Loneragan* case and subsequent cases require the contractor to expressly disclaim responsibility for design, otherwise the contractor may bear the risk of design defects and errors.⁶

Senate Bill 219, however, may alter the application of *Loneragan* to construction contracts should it become law. S.B. 219 provides that the Contractor “is not responsible for the consequences of defects in and may not warranty the accuracy, adequacy, sufficiency, or suitability of

6. *Loneragan v. San Antonio Loan & Trust, Co.*, 104 S.W. 1061, 1065–66 (Tex. 1907); *Interstate Contracting Corp. v. City of Dallas*, 407 F.3d 708, 720–21, 726 (5th Cir. 2005); *El Paso Field Services, LP v. MasTec North America, Inc.*, 389 S.W.3d 802, 811 (Tex. 2012); Amy K. Wolfshohl, *Never Can Say Goodbye: Loneragan Reaffirmed by Texas Supreme Court 100 Years Later*, at 7–8, Presented to the 28th Construction Law Conference, San Antonio, Texas (2015).

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plans, specifications, or other design or bid documents provided to the contractor by: (1) the person with whom the contractor entered into the contract; or (2) another person on behalf of the person with whom the contractor entered into the contract.”⁷ S.B. 219 would require the Contractor to disclose known defects in the plans and specifications within a reasonable time.⁸ However, S.B. 219 exempts contracts for construction or repair of a “critical infrastructure facility” as defined by Section 423.0045 of the Texas Government Code, and further states that critical infrastructure facilities include (1) “pipelines and pipeline appurtenances or facilities,” and (2) “facilities used to manufacture or produce transportation fuels and similar products[.]”⁹ S.B. 219 further exempts “involved contractor contracts”—defined as contracts where “a single contractor agrees to: (A) construct, repair, alter, or remodel an improvement to real property; and (B) be responsible for the development of plans, specifications, or other design or bid documents used by the contractor to construct, repair, alter, or remodel the improvement.”¹⁰ *Id.*

As a result, if S.B. 219 becomes law as is expected, it would overrule *Lonergan* and its progeny in many but not all instances. Key instances where S.B. 219 would probably not apply by its own terms include (1) “full wrap” EPC contracts and (2) construction contracts for pipelines and petrochemical facilities (if such facilities meet the fairly broad definition of a “critical infrastructure facility” articulated in S.B. 219).

2. Standard of Care

Another crucial design/engineering issue to consider with respect to EPC contracts is the standard of care for design/engineering services. Under Texas law and the law of most common law jurisdictions, design professionals such as architects and engineers are held to a common law standard of care, *i.e.* the duty “to exercise the degree of care, skill, and competence that reasonably competent

members of the profession would exercise under similar circumstances.”¹¹ Contracting for professional services can give rise to this common law duty by the professional under Texas law,¹² and common form design contracts, such as the American Institute of Architects form, often restate this common law standard of care.¹³

For EPC contracts with respect to engineering/design services, the common law standard of care is typical. Nevertheless, some owners may wish to go further than this common law standard and negotiate for a contractually heightened “best” or “highest level” standard of care. While this may provide additional contractual protection to the owner,¹⁴ it carries a potentially unintended risk. Design and engineering professionals typically carry professional liability or errors and omissions policies to insure against professional negligence claims based on the common law standard of care. However, such policies often contain exclusions for contractual liability beyond professional practice, and no cases have been found under Texas law addressing whether professional liability/errors and omissions coverage is available to cover claims for breach of a contractually heightened standard of care. As a result, including such a “highest” or “best” standard in the contract may have the unintended effect of contracting the parties out of otherwise available errors and omissions coverage.

3. Engineering warranty

While design professionals often refuse to give warranties on their services in standalone design or engineering agreements due to the lack of professional liability coverage, EPC contracts are somewhat different in that the typical purpose is to produce a project that meets certain performance guarantees. For this reason, from the owner’s perspective it is important to make sure that the warranty provisions of the EPC contract are broad enough to include engineering services. For example, the parties could use the following warranty clause:

7. Tex. S.B. 219, 87th Leg., R.S. (2021).

8. *Id.*

9. *Id.*

10. *Id.*

11. *E.g., Collective Asset Partners, LLC v. Schamburg*, 432 S.W.3d 435, 441 (Tex. App.—Dallas 2014, pet. denied). However, at the time this article was published, the Texas House and Senate had passed (but the Texas Governor had not yet signed, vetoed, or otherwise allowed to become law) Senate Bill 219, which contains a new statutory standard of care for architectural or engineering services. See Tex. S.B. 219, 87th Leg., R.S. (2021). S.B. 219 provides that “[a] construction contract for architectural or engineering services or a contract related to the construction or repair of an improvement to real property that contains architectural or engineering services as a component part must require that the architectural or engineering services be performed with the professional skill and care ordinarily provided by competent architects or engineers practicing under the same or similar circumstances and professional license.” *Id.* It further provides that contract provisions establishing a different standard of care are void and unenforceable. *Id.*

12. *E.g., Averitt v. PriceWaterhouse Coopers, LLP*, 89 S.W.3d 330, 334 (Tex. App.—Fort Worth 2002, no pet.).

13. *See, e.g.,* AIA Document B101 – 2017 § 2.2, available at <https://help.aiacontracts.org/public/wp-content/uploads/2020/12/AIA-B101-2017-sample.pdf>. (“The Architect shall perform its services consistent with the professional skill and care ordinarily provided by architects practicing in the same or similar locality under the same or similar circumstances.”).

14. As noted in a preceding footnote, S.B. 219, if it becomes law, would void contractual standards of care that deviate from S.B. 219’s statutory standard and replace such provisions with S.B. 219’s statutory standard. *See* Tex. S.B. 219, 87th Leg., R.S. (2021).

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Warranty. Contractor represents and warrants that the Work will: (i) be carried out consistent with the generally accepted practices, methods, skill, care, techniques, and standards *employed by experienced and skilled engineers* and contractors *with respect to the engineering* and construction of work or facilities, or portions of work or facilities, like the Project described in the Agreement; (ii) conform to the Agreement, Drawings, Specifications, Applicable Codes and Standards, Applicable Law, and the Performance Guarantees; and (iii) be carried out in a good and workmanlike manner.¹⁵

In addition, it is important to make sure that the contractual definition of the “Work” includes engineering services. Otherwise, warranties like the above clause may not extend as far as intended. Use of this type of warranty clause that includes a warranty for the EPC contractor’s engineering services has the further benefit of reducing disputes over whether a particular issue is a matter of construction or engineering services. EPC contractors should be aware that professional liability coverage may not exist for accepting such responsibilities and try to limit warranties to that which is consistent with coverage. From any owner’s perspective, regardless of whether coverage exists, it is more reasonable for the engineer to take this responsibility than the owner given the purpose of the agreement.

B. Procurement

Another important issue the EPC contract must address is the extent the EPC contractor is responsible for procuring materials and equipment for the project. With respect to procurement, EPC contracts tend to come in two varieties: (1) “turnkey” or “full wrap;” and (2) and “partial wrap.”¹⁶ In “turnkey” or “full wrap” EPC contracts, the EPC contractor is responsible for procuring all equipment and materials, as well as the risks of equipment and material delivery delays and defective materials/equipment. Lenders and equity investors tend to prefer this approach, as it reduces the owner’s risk with respect

to major equipment defects or delays.¹⁷ The downside from the owner’s perspective, and benefit from the EPC contractor’s perspective, is an increased risk premium built into the contract price to account for the EPC contractor taking the material and equipment risk.¹⁸

By contrast, in a “partial wrap” EPC contract, the owner often procures the major equipment and certain materials with the EPC contractor responsible for installing and incorporating the equipment and owner-supplied materials into the work.¹⁹ This approach is in tension with the overarching purpose of an EPC contract to shift risk to the EPC contractor, including the risk of equipment/material delays. By procuring materials and equipment, the owner gives up some of the benefits of shifting procurement risk to the contractor and runs the risk of disputes with the EPC contractor in the event of late-delivered or defective equipment. However, owners may choose a partial wrap approach for several reasons. Sometimes, the owner may be able to procure equipment and materials at a much lower cost than an EPC contractor would charge. Other times, the owner will be positioned to procure materials at an earlier point in the project than the EPC contractor, allowing the project to be completed more quickly. If an owner wishes to supply materials to mitigate owner risk, it is important for the owner to understand and carefully track when material and equipment must be delivered. The best tool for this purpose is a well-written scheduling clause which requires the EPC contractor to regularly update a critical path schedule. Additionally, the owner’s negotiation of the change order clause and owner-caused-delay provision takes on more significance

C. Construction

In addition to addressing engineering and procurement, the EPC contract must address the issues found in an ordinary construction contract. Key specific construction provisions will be addressed in the following Section III of the article. However, depending on whether a “turnkey” or “partial wrap” EPC approach is desired, there are several big picture issues to keep in mind.

If the goal is to achieve a “turnkey” EPC, it is important to define the scope of work as broadly as possible to accomplish the parties’ goal of entering a single contract

15. Each of the capitalized terms should have careful appropriate definitions

16. Jill Van Dalen and Laura C. Fraher, *Not all Contract Models Have the Same Risk: Tips for Managing Power and Energy Projects*, 38 No. 9 ACC Docket 50, 52 (Nov. 2020).

17. *Id.*

18. *Id.*

19. *Id.*

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for a complete facility. As an example, consider the following clause that provides a broad general definition of the scope of work, while also incorporating a specific scope of work attachment

Scope of Work. The Work will include all engineering and procurement of material and labor necessary to complete the construction of the Project, including, but not limited to, consumable materials, Construction Equipment, Equipment, inspection, installation, delivery, transportation, storage, and all other items or tasks that are set forth in [Attachment], or otherwise required to achieve Substantial Completion and Final Completion of the Project in accordance with the requirements of this Agreement. Contractor will perform the Work in accordance with Applicable Law, Applicable Codes and Standards, Good Industry Practices, Drawings, Specifications, all other terms and provisions of this Agreement, and in a manner sufficient to achieve any Performance Guarantees. It is understood and agreed that the Work will include any incidental work that can reasonably be inferred as required and necessary to complete the Project in accordance with this Agreement, excluding only those services, materials, Equipment, labor, items, or tasks which Owner has specifically agreed to provide under [Attachment]. Without limiting the generality of the foregoing, the Work will be more specifically described in [Attachment].

An accurate description of the “Project” is also necessary given that in EPC agreements that concept is less understood than the typical building project and in many instances little or no drawings are developed.

By contrast, in a “partial wrap” arrangement, care should be taken at the outset to expressly define which portions of the facility are the responsibility of the contractor, and what the owner will provide or supply. For example, in some partial wrap scenarios, the contractor is simply responsible for assembling or integrating owner-supplied equipment modules (as well as the engineering and procurement of material to connect all the modules). If that is the case,

the EPC contract needs to be specific regarding where the owner responsibility stops and contractor responsibility begins. In other scenarios, the owner may only want the EPC contractor to construct a portion of the overall facility, while reserving other portions of the facility to be built by other specialized contractors. In any of these partial wrap situations, carefully defining the scope of work for construction is important at the outset to avoid unpleasant surprises and change order disputes during the project.

III. KEY PROVISIONS AND ISSUES TO CONSIDER IN DRAFTING OR NEGOTIATING EPC CONTRACTS

When drafting or negotiating an EPC contract, there are several key provisions and issues to consider. While many of the issues are like those found in typical construction contracts, the one-stop shop nature of many EPC contracts means that additional issues need to be addressed beyond those found in a typical construction contract.

A. Pricing

EPC contracts tend to use a variety of pricing models, which represent different methods for allocating risk on the project. The classic pricing model for an EPC contract is “lump sum” or fixed price. However, fixed price is not the exclusive approach, and other pricing models are commonly used. These other models include


- **Cost + Fixed Fee:** Contractor bills the owner for the cost of the work performed, as well as a fixed contractor fee stated as a percentage or a lump sum amount.
- **Unit Price:** Where the parties negotiate rates for various units of work. For instance, on a pipeline project, a rate per foot of pipeline constructed, with a different unit rate for horizontal directional drilling. Unit rates are fixed up front in the EPC contract, but unit quantities and the ultimate contract price can vary.
- **Time & Material (T&M):** Where the owner agrees to pay the Contractor based upon agreed rates relating to labor and equipment. There is no cap built into this type of agreement and as a result it is very risky for owners that have no control over labor productivity.

Another way to think of these various models is to place them on a continuum based on their relative risk to the owner and contractor by relative certainty regarding the project price. These models are arranged on a continuum in the table below, with the T&M model representing the greatest risk to the owner regarding the ultimate project

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price, while the lump sum model represents the greatest risk to the EPC contractor with respect to the contract price.

of all pipe welding, including tie-in welds (which are usually one of the last things done on a pipeline project). In that case, the EPC contractor may be financing the

Greatest risk to Owner			Greatest risk to EPC Contractor
T&M	Cost Plus Fixed Fee	Unit Price	Lump Sum

However, these models are not set in stone and hybrid payment provisions combining elements of two or more of these models are also common. For instance, parties could negotiate for different payment terms on different milestones or portions of the project. One portion may be for a lump sum price, another portion may be for a target price. Significant disputes can arise relating to inattention to appropriately describing the contract price. The EPC contract attorney must fully understand how the pricing is structured to make appropriate revisions to the agreement. Moreover, change order pricing may include a different type of pricing than the original scope. For example, the contract price may be lump sum, but change orders might be T&M. If this is the case, two separate clauses are necessary.

project for a long time without payment. This can cause cash flow issues and difficult with subcontractors, who are often compensated on a progress payment schedule. EPC contractors may also factor invoices,²⁰ which can cause a whole host of problems if defects or completion issues arise.

Whichever method for billings and payment is selected, an important concern for both the owner and the EPC contractor is when and under what circumstances the owner is permitted to withhold payments. For instance, does the contract allow the owner to withhold payments for defective work, is notice required to the EPC contractor for withholding, and are there limits on what can be withheld? Sometimes EPC contracts are insufficiently specific on the circumstances in which the owner may withhold payments or address the issue tangentially in multiple provisions of the agreement. Lack of specificity in this regard tends to lead to disputes or withholding when it is not expressly authorized. Instead, consider a standalone withholding clause setting forth the specific circumstances where the owner may withhold payment for specified reasons. This sample clause includes an owner friendly expansive list:

B. Payments

With respect to payment terms, the two most common arrangements are progress payments and milestone payments. Progress payments are typically based on a schedule of values agreed to at the beginning of the project. The EPC contractor is paid monthly based on the percentage of work complete, using prices for the work established in the schedule of values. This arrangement is the most common in commercial contracts and is less common in EPC construction.

By contrast, milestone billing involves making payments when the EPC contractor achieves some stated stage of engineering or construction. These milestones are commonly based on contractually specified criteria, such as procurement of all or certain sets of the equipment for the project. Often these are expressed as a percentage of the lump sum price. In milestone arrangements, owners need to avoid front-loaded milestones, such as: (1) for “setting” equipment, which would not necessarily require the equipment to be assembled or connected to the rest of the plant; or (2) fabrication of components tied to delivery. EPC contractors likewise should rarely agree with too few milestones or milestones spaced too far apart, as that may present cash flow issues. For example, on a pipeline project, one milestone might be completion of all ditching, but the next milestone might be completion

Payments Withheld. In addition to Retainage and disputed amounts set forth in an Invoice, Owner may, in addition to any other rights under this Agreement or under Applicable Law, withhold payment on an Invoice or a portion of an Invoice with respect to the Work, or any other contracts entered into for other work with Contractor or Contractor’s Affiliates in an amount and to the extent as may be reasonably necessary to protect Owner from loss due to (i) Defective Work not remedied in accordance with this Agreement; (ii) any breach by Contractor of any term or provision of this Agreement; (iii) the assessment of any fines or penalties against Owner as a result of Contractor’s

20. Factoring invoices involves a party selling its invoices or accounts receivable at a discount to a third-party financing company (in order to obtain funds before the invoice is paid or the receivable is collected), who then collects the factored invoices or accounts from the contractual counterparty.

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failure to comply with Applicable Law or Applicable Codes and Standards; (iv) amounts previously paid by Owner to Contractor incorrectly or for which there was insufficient or inaccurate supporting information or if Owner discovers that Work invoiced under a previous payment was not in fact performed; (v) any delay damages (including liquidated damages) which are due and owing by Contractor to Owner; (vi) failure of Contractor to make payments to Subcontractors as required under their respective Subcontracts; (vii) any other costs or liabilities which Owner has incurred or will incur for which Contractor is responsible; (viii) liens or other encumbrances on all or a portion of the Site or the Work, which are filed by any Subcontractor, any Sub-subcontractor or any other Person acting through or under any of them; or (ix) any other reason for which Owner is entitled to withhold payment under this Agreement.

A contractor friendly clause might require notice before an owner can withhold payment, would be restricted to the project at issue, and would be much narrower. For example:

Owner may only withhold payment otherwise due to Contractor following 30 days prior written notice where Contractor has materially breached the Contract by: (i) failing to pay subcontractors amounts previously paid to Contractor for the subcontractor's work; (ii) failing to correct defective work in a commercially reasonable time; or (iii) significantly delaying the project schedule and failing to demonstrate the recovery schedule will achieve project milestones.

Identifying clear withholding conditions benefits both the owner and the EPC contractor in that it gives the owner leverage in the event of a dispute while also protecting the contractor from over-withholding by the owner.

C. Change Order Provisions

Although the goal of EPC contracts is to limit the owner's risk of a contract price increase, changes in the work are inevitable on large construction project. Change orders can quickly become a source of contention on EPC projects and are often the subject of major disputes. As a result, it is important for owners and contractors to carefully draft and negotiate the change order and related provisions up front.

In drafting or negotiating change order provisions, Owners will want to negotiate for, and EPC contractors will want to negotiate against, language providing that compliance with the change order procedure is a condition precedent to payment for the work subject to the change order.²¹ Another important provision to include in a change order clause is a requirement that the party seeking the change give notice within a certain time after the change arises. Owners typically want to shorten this period and EPC contractors seek to expand or eliminate it altogether. If a notice of change provision is left out entirely, it may lead to disputes as the project nears completion because EPC contractors sometimes seek to use cumulative change orders for things such as weather delays or productivity impacts to offset losses or to negate liquidated damages for delay. It is also important to carefully draft the notice provision so that both parties understand when the clock begins to run.

In addition, change order provisions should address both the cost and time components, as many clauses fail to address how and when the project schedule will be modified because of a change. To address the cost component, one option more commonly seen in larger EPC contracts may include pre-negotiated amounts for anticipated potential changes, or pre-negotiated time and material rates to use in pricing change orders. To address the time component, change order provisions typically require the EPC Contractor to include all proposed adjustments to the contract time as part of the proposed change order. To make sure that change orders include this information and to help the project teams follow the change order clause, including a form change order as an exhibit to the contract is recommended.

If the owner wants to have the ability to change the work and have the EPC contractor proceed with the work without coming to an agreement on price, it is important to include a unilateral right for the owner to issue change

21. To do so, the Texas Supreme Court has stated that "[i]n order to make performance specifically conditional, a term such as 'if,' 'provided that,' 'on condition that,' or some similar phrase of conditional language must normally be included," otherwise courts are likely to construe the terms as a covenant." *Solar Applications Eng'g, Inc. v. T.A. Operating Corp.*, 327 S.W.3d 104, 109 (Tex. 2010) (quoting *Criswell v. European Crossroads Shopping, Ctr., Ltd.*, 792 S.W.2d 945, 948 (Tex. 1990)).

orders, commonly referred to as change directives. Naturally, a method or procedure for resolving pricing of the change directive after the fact should be included in the change order provision as well. Further, if the owner wishes to maintain flexibility to issue “deductive” change orders to remove scope from the EPC contractor (as discussed further in Section III.H.3 of this article), it is important to spell out in the change order provision that changes may increase or decrease the contract price. EPC contractors will want to carefully negotiate and often resist such a provision, as a partial termination for convenience often would put contractors in a better position than a deductive change order de-scoping certain work.

Finally, most owners desire a single negotiation over the effect of a change, including the cumulative effect of changes. If the change order provision and change orders themselves provide that the change order includes all claims prior to the change order and includes a release, the EPC contractor will likely be barred from asserting additional claims after the fact.²² If the change order provision does not indicate that all claims addressed in a change order are released or that all cumulative changes to date are addressed, it is possible that parties will later assert that the change order did not represent the parties’ final, integrated agreement on the subject.

D. Schedule and Allocating Responsibility for Delay

In EPC contracts, time is typically more critical than in other types of agreements. Monetary stakes for missing deadlines are high. As a result, the method of setting out contractual deadlines takes on critical significance

1. Establishing relevant milestones

Inserting a “time is of the essence” provision is the beginning of establishing clear and enforceable deadlines in a sophisticated EPC agreement.²³ Without identifying deadlines in some way, they can be much harder to enforce.

As a threshold matter, the owner and EPC contractor must negotiate the key milestones that the EPC contractor

will achieve. The owner and contractor should carefully negotiate the stage of completion that is required for each milestone because the milestones are often the same for schedule and for payment purposes.

In an EPC contract, key milestones often include some or all the following depending on the nature of the work: (1) mechanical completion; (2) completion of commissioning; (3) substantial completion; (4) final completion; and (5) completion of performance testing. Typically, however, it is most important to define mechanical or substantial completion and final completion. Mechanical completion definitions can include the concept that the work has reached the level of completion such that it can be used for its intended purpose or something short of that concept. For example, the point at which the facility is ready for commissioning activities. Final completion may include completion of the performance testing or again something less than that if the EPC contractor is unlikely to participate in that process.

The drafting attorney should be aware of how each of these milestones is understood by the engineers working on the project. Different technologies will drive the definitions of these milestones. When creating a form, a space should be provided to tailor each of these definitions for the purposes of a specific project. From the owner’s perspective, it is important to include definitions that require compliance with applicable laws, environmental regulations, and permits at one of these key milestones. At some point, the project must be ready for its intended commercial operation. This is likely at substantial or final completion.

2. Establishing the schedule

After defining key milestones conceptually, the deadlines for the milestones must be established in some way. Some EPC contracts either include or require the EPC contractor to prepare and follow a detailed critical path schedule. Others simply set substantial/final completion dates and leave details of scheduling to the EPC contractor. A middle ground approach to scheduling, which some

22. See *MMR Constructors, Inc. v. Dow Chem. Co.*, No. 01-19-00039-CV, 2020 WL 7062325, (Tex. App.—Houston [1st Dist.] Dec. 3, 2020, no pet.) (mem. op.) (affirming summary judgment for owner on mechanical contractor’s \$17MM claim, finding that release language included in change orders throughout the project barred subsequent claims, where each change order signed by the contractor and owner contained the following release language “THIS CONTRACT MODIFICATION REPRESENTS FINAL ADJUSTMENT FOR ANY AND ALL AMOUNTS DUE OR TO BECOME DUE TO CONTRACTOR FOR CHANGES REFERRED TO HEREIN. CONTRACTOR FURTHER RELEASES ALL OTHER CLAIMS, IF ANY (EXCEPT THOSE CLAIMS PREVIOUSLY SUBMITTED IN WRITING IN STRICT ACCORDANCE WITH THE CONTRACT), FOR ADDITIONAL COMPENSATION UNDER THIS CONTRACT, INCLUDING WITHOUT LIMITATION ANY RIGHTS CONTRACTOR MAY HAVE FOR ADDITIONAL COMPENSATION ARISING OUT OF DELAYS OR DISRUPTION OF CONTRACTOR’S SCHEDULE AS MAY HAVE ARISEN PRIOR TO THE DATE OF THIS CONTRACT MODIFICATION. UNLESS OTHERWISE EXPRESSLY PROVIDED HEREIN, THE TIME OF COMPLETION AND ALL OTHER TERMS AND CONDITIONS OF THE CONTRACT REMAIN UNCHANGED.”).

23. See *Mustang Pipeline Co., Inc. v. Driver Pipeline Co., Inc.*, 134 S.W.3d 195, (Tex. 2004) (“[I]f it is clear the parties intend that time is of the essence to a contract, timely performance is essential to a party’s right to require performance by the other party.”).

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EPC contracts employ, is to set out a “milestone” schedule with target dates for milestones that correspond to milestones for billing purposes. Using a milestone scheduling approach may be helpful when the owner is coordinating multiple contractors (such as an EPC contractor to construct a crude oil storage terminal and a specialty contractor to construct a marine dock adjacent to it), and where completion of intermediate steps is necessary to complete the work of the other contractor. It also provides a way to set out scheduling in the EPC contract at a higher level than trying to incorporate a full project schedule into the agreement itself.

Time sensitive projects, however, should consider incorporating a critical path schedule. Delays to the critical path are more easily analyzed when a thoughtful schedule is included. Moreover, progress can be tracked against a baseline. If a critical path schedule is not feasible from the outset, consider whether to require such a schedule which will become part of the agreement after sufficient design work is underway.

In addition to addressing the project schedule itself, the EPC contract should allocate responsibility for delays, whether caused by force majeure, weather, or the fault or responsibility of one of the parties to the contract.

3. Risk allocation for force majeure and weather delays

Force majeure clauses typically address when performance is excused because of either “acts of God” (such as hurricanes), or human events beyond a party’s control (wars or riots). Under Texas law, courts look first to the language of the force majeure clause and only use common law rules to fill in gaps where the contract is silent on an issue.²⁴ As a result, carefully defining what qualifies as a force majeure event in the EPC contract is important for both owners and EPC contractors.

Typically, contractors will want to define force majeure events broadly in the contract, such as by including a “catch-all” to the force majeure definition that includes “any other cause not within a party’s reasonable control.” Contractors also typically seek to negotiate both cost and schedule relief arising from force majeure events. Because the owner’s performance is less likely to be impacted by force majeure events, owners typically want to define force majeure events narrowly and advocate for only schedule relief as a remedy for force majeure events. The following is an example of a clause with recent COVID-related additions:

“**Force Majeure Event**” means any event or circumstance that is not reasonably foreseeable and arises after the date hereof, is beyond the reasonable control of the Party claiming the Force Majeure Event, is unavoidable or could not be prevented or overcome by the reasonable efforts and due diligence of the Party claiming the Force Majeure Event and has an impact which will actually, demonstrably, adversely and materially affect such Party’s ability to perform its obligations (other than payment obligations) in accordance with the terms of the Agreement. Subject to the satisfaction of the foregoing criteria, Force Majeure Events may include the following: acts of God, natural disasters, fires, earthquakes, lightning, floods, storms, civil disturbances, riots, war, military invasion, epidemic or pandemic (including COVID-19, except as stated below). Notwithstanding the foregoing, the definition of “Force Majeure Event” shall not include: strikes, work stoppages (or deteriorations), slowdowns labor or manpower shortages; unavailability, late delivery, or reasonably foreseeable weather conditions in the Project Site’s geographic area (Contractor acknowledges that it has factored into the schedule a sufficient number of lost days to account for such weather conditions). In light of the pre-existing nature of the COVID-19 pandemic as of the Effective Date, the Parties agree that quarantines, shelter-in-place orders, travel restrictions, social distancing requirements and other COVID-19 related impacts in effect before the Effective Date shall not form the basis of a claim of Force Majeure Event.

Performance Excused. So long as the conditions set forth in this Section [] are satisfied, neither Party shall be responsible or liable for or deemed in breach of this Agreement because of any failure or delay in complying with its obligations under or pursuant to the

24. *E.g., TEC Olmos, LLC v. ConocoPhillips Co.*, 555 S.W.3d 176, 181 (Tex. App.—Houston [1st Dist.] 2018, pet. denied).

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Agreement to the extent that such failure has been caused by a Force Majeure Event, and in such event:

(a) The Party claiming a Force Majeure Event shall give the other Party notice describing the particulars of the cause and nature of the occurrence, with written notice given promptly after the occurrence of the Force Majeure Event, and in no event more than two (2) Business Days after the affected Party becomes aware of such occurrence;

(b) The performance of the Party claiming the Force Majeure Event of its obligations hereunder shall be suspended, provided the suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the effects of the Force Majeure Event;

(c) The affected Party shall continually exercise all commercially reasonable efforts to alleviate and mitigate the cause and effect of such Force Majeure Event, remedy its inability to perform and limit damages to the other Party;

(d) The affected Party shall use all reasonable efforts to continue to perform its obligations hereunder and to correct or cure the event or condition excusing performance; and

(e) When the affected Party is able to resume performance of the affected obligations under the Agreement, that Party shall give the other Party written notice to that effect, and the affected Party promptly shall resume performance under the Agreement.

So long as the conditions set forth in this Section [] are satisfied, as its sole remedy, Contractor shall be entitled to suspension of performance or extension of time (including an extension of the Mechanical Completion Date) with respect to a Force Majeure Event to the extent agreed upon by both Parties pursuant to a Scope Change Order.

A Party's failure to comply with the provisions of this Section [] shall constitute a waiver of any claim of a Force Majeure Event.

While EPC contracts commonly contain express and detailed force majeure provisions that address severe weather events (such as hurricanes, tornadoes, or named storms), often EPC and other construction contracts do not expressly address weather delays that do not rise to the severe storm level. This issue often manifests where a contractor claims that rainy or snowy days are events of force majeure or otherwise entitle the contractor to schedule relief and extra compensation. Dealing with weather delays in an EPC contract or construction contract is challenging. While a major storm event such as the recent arctic blast that struck the entire state of Texas would likely meet most contractual definitions of a force majeure event, a month with four more rain days than the seasonal average probably would not be what most parties consider a force majeure event. Yet, if the contract is silent on who bears the risk of unseasonable weather, disputes on this issue are more likely. This is why contractors often seek to cap the number of weather days incorporated into the schedule. Owners on the other hand seek to have the contractor take the full risk of weather.

One way to expressly address this issue is to provide that seasonal weather conditions, as defined by a long-term average for the project location (such as by referencing a 30-year average for weather published by a reputable source), do not constitute force majeure and do not qualify as a compensable or excused delay under the contract. Another way is to expressly exclude seasonal weather from the definition of force majeure, while providing elsewhere in the agreement that the EPC contractor has inspected the site and assumed the risk of delays as a result of weather. In either case, the goal is to expressly address who bears the risk of weather delays up front in a manner that minimizes the risk of future disputes and allows both parties to plan for that risk, such as by accounting for rain days into the schedule and contract price.

4. Other kinds of delays

In addition to force majeure and weather delays, EPC contracts need to address other events that delay the project schedule. These tend to fall into two broad categories: (1) owner-caused delays (such as failure to timely obtain owner-responsible permits, directing the contractor to perform out of scope work, or late delivery of owner-supplied equipment); and (2) contractor-caused

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delays (such as contractor caused productivity issues or poor management). Generally speaking, EPC contracts allow contractors to obtain both schedule and cost relief for Owner caused delays, and liquidated damages for the owner for contractor-caused delays.

5. Owner's remedies for contractor-caused delay

With respect to negotiating remedies for contractor-caused delays, the owner's goals include incentivizing the contractor to complete the project timely while also attempting to compensate the owner for damages incurred in the event of a delay. Owner remedies for delay are typically: (1) that which is generally available at law; or (2) liquidated damages. While damages for delay provided by common law are an option, many EPC contracts include payment of liquidated damages to the owner in the event of a delay that is not otherwise excused (such as by the force majeure clause). Owner damages for delay not calculated through liquidated damages provisions are less common due to the uncertain risk and the difficult in calculating an owner's damages for delay. From the contractor's perspective, however, it is important to understand that the absence of a liquidated damages provision is not tantamount to a prohibition on delay damages. If delay damages are not addressed in the contract, in the absence of some other controlling provision, they are recoverable.²⁵

In a liquidated damages provision, the parties specify in advance a method of calculating damages if the contractor fails to achieve a specified date for completion. In EPC contracts, liquidated damages for each day of delay are often used as the owner remedy for failure by the contractor to meet contract milestones or mechanical completion.²⁶ These are often referred to as "delay liquidated damages" to distinguish from liquidated damages for other breaches of the agreement (such as the failure to meet performance guarantees). From the owner's perspective, the upside of delay liquidated damages is that they may result in a credit to the owner without resort to litigation, as the damages calculation is relatively straightforward.

While liquidated damages provisions are common, if not carefully drafted they can frustrate the owner's goals and not provide the expected remedy. Importantly, under Texas

law liquidated damages provisions can be enforceable, but to enforce them, the party asserting

liquidated damages bears the burden to establish at the time the liquidated provision was drafted: (1) "the harm caused by the breach is incapable or difficult of estimation;" and (2) "the amount of liquidated damages called for is a reasonable forecast of just compensation."²⁷ If the party asserting liquidated damages meets this burden, the party opposing liquidated damages can defeat the liquidated damages provision by presenting evidence that there is an "unbridgeable discrepancy" between the actual damages and liquidated damages (*i.e.*, that the actual damages would be significantly less than the liquidated damages).²⁸

In addition, liquidated damages provisions have several downsides for the owner. First, liquidated damages are not automatically proven if disputed. Second, liquidated damages provisions on an EPC project typically do not capture all, or even nearly all, of the owner's damages for delay. As a result, negotiating the amount of liquidated damages should depend on considerations such as: (1) additional project management and supervision costs the owner would incur as a result of contractor delays (which depending on the type of EPC contract and project, can be significant); (2) whether the owner is liable to customers for delays in project startup; and (3) projected lost revenue for the delays in commencing operations.²⁹ However, when sizing a delay liquidated damages provision, pricing the liquidated damages solely based on consequential damages (such as lost revenue or damages due under other contracts) carries some risk. This is because if the contract contains a waiver of consequential damages (and many EPC contracts do), in a dispute, the EPC contractor may be able to argue that consequential damages cannot be considered in determining whether the liquidated damage provision is a reasonable forecast of just compensation, because the parties' waived consequential damages up-front. While Texas courts have not addressed the issue, it is a potential risk for owners when negotiating delay liquidated damages provisions. It weighs in favor of considering other options such as negotiating for the recovery of consequential damages for delay or carving liquidated damages out from the exclusion of consequential damages.

25. *City of Houston v. R.F. Ball Const. Co., Inc.*, 570 S.W.2d 75, 77 (Tex. App.—Houston [14th Dist.] 1978, writ ref'd n.r.e.); *Tennessee Gas Pipeline Co. v. Technip USA Corp.*, 2008 WL 3876141, at *7 (Tex. App.—Houston [1st Dist.] 2008, pet. denied) (mem. op.) (holding that removal of liquidated damages provision did not mean that owner lacked remedy for delay, but that owner was free to pursue direct unliquidated damages for delay).

26. Derrick B. Carson, *Energy Project Construction Means EPC 3*, Presented before the 28th Annual Construction Law Conference, San Antonio, Texas (2015).

27. *Atrium Med. Ctr, LP v. Houston Red C LLC*, 595 S.W.3d 188, 192 (Tex. 2020).

28. *Id.* at 197–98.

29. See Carson, *supra* note 26, at 3.

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Finally, EPC contracts frequently contain caps on delay liquidated damages, often as low as 60 days of delay or sometimes set at a portion (or all) of the contractor's fee. In the case of a significant delay in excess of the delay liquidated damages cap, the cap can create an incentive for the contractor to slow its work after the cap is exceeded because there is no longer the motivation of additional liquidated damages to justify acceleration costs.

An additional issue to consider with respect to liquidated damages is how waivers of other damages in the EPC contract interact with the liquidated damages clause. As discussed below, EPC contracts frequently contain mutual waivers of consequential damages, and Texas courts have not addressed whether liquidated damages on the parties' contract can be waived by a consequential damage waiver. If the consequential damages waiver does not carve out liquidated damages, the owner runs the risk of losing the benefit of the liquidated damages provision (or at least that the provision is later found to be ambiguous) even though, in the opinion of the authors, that result would be contrary to existing case law.³⁰

6. Contractor's remedies for owner-caused or force majeure delays

On the other side of the coin, EPC contractors should consider their remedies for owner-caused or force majeure delays. EPC contractors will typically want to negotiate for a cost component as well—particularly for owner-caused delays. For example, the following is an example of a contractor-friendly clause with both schedule and cost relief to the EPC contractor for owner-caused delays, owner changes in the work, and force majeure events:

If the Contractor is delayed at any time in the commencement or progress of the Work by an act or omission of the Owner, or of a separate contractor employed by the Owner, any of their separate contractors or consultants, or by an employee of the Owner; or by changes ordered in the Work; or Force Majeure then the Contract Time shall be extended by Change Order. Delays caused by any subcontractor or supplier, of any tier to Contractor, shall be considered to be beyond the Contractor's control unless the Contractor's active negligence or wrongful act contributed to the delay or

was the primary cause of the delay. To the extent that Contractor is entitled to an extension of the Contract Time pursuant to this Section, the Contractor shall also be entitled to an increase in the Contract Sum for the Cost of the Work incurred by the Contractor for such delay.

Other possible options for EPC contractors to consider regarding contractor compensation for owner-caused delays could include pre-negotiated standby rates (such as for when late delivery of owner-supplied equipment causes a critical path delay) or unit prices for move-arounds on pipeline projects as a result of owner caused right-of-way delays. These remedies act like liquidated damages for delays caused by the owner.

Some owners will also seek to negotiate no-damages-for-delay clauses, providing that the EPC contractor assumes the risk of any delays and that the contractor's sole remedy for the delay is an extension of time. Such clauses are generally enforceable under Texas law against contractors within certain commonsense limits, chief of which is that owners cannot intentionally or recklessly delay the contractor and benefit from the no-damages-for-delay clause.³¹ However, no-damages-for-delay clauses are less common in EPC projects because projects tend to be more time-sensitive than ordinary construction projects. This provides an incentive for the owner to avoid actions that would delay the project.

E. Performance Guarantee and Standards

Performance guarantees and testing are uncommon in EPC agreements, but they are not included in all EPC agreements. For example, if the EPC contractor did not design portions of the facility or is not the most responsible party for the process or technology, it is less likely the EPC contractor will be required to meet performance guarantees. Where appropriate, performance guarantees are the metrics that the facility or improvements are designed to meet. For example, in the case of a facility that processes crude into other petrochemicals, a performance guarantee may relate to the quality of the propane or butane derived from the crude. These guarantees are typically stated as the results of an agreed test under an agreed testing standard. Other performance guarantees relate to the quantity the facility is designed to process over a specified period. For a quantity type test, the guarantee may be a unit of measurement per hour or day.

30. See, e.g., *Powell Elec. Sys., Inc. v. Hewlett Packard Co.*, 356 S.W.3d 113, 119–20 (Tex. App.—Houston [1st Dist.] 2011, no pet.) (holding that costs to repair equipment damaged by contractor were direct and not consequential damages because the contract provided for an express remedy to recover those damages in the form of testing and repair costs to repair contractor's defective work).

31. *Zachry Constr. Corp v. Port of Houston Auth. of Harris Cty.*, 449 S.W.3d 98, 115–16 (Tex. 2014).

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An owner should make sure to list all guarantees necessary to meet upstream contractual arrangements. In other words, if the owner plans to sell products to other parties and must meet certain criteria to do so, the EPC contract must have at least as stringent requirements. When drafting an EPC agreement to evaluate such requirements, the attorney should be aware of related contracts and any requirements that may affect the drafting of the EPC. Performance testing and criteria.

Performance tests may be performed by the contractor, owner, or some combination of both. For example, the performance test may be conducted by the owner under the contractor's supervision or with the contractor's staff. The EPC contract should be specific regarding who is to conduct the test, when it will be conducted, and the remedies in the event the performance guarantees are not met. Contractors may desire to stipulate the time for the facility to be commissioned before performance testing is conducted. This time period will demonstrate whether any issues may be encountered which could be repaired before the performance test is actually formally done. Performance testing is expensive and may require extensive tests. As a result, the owner and contractor likely will want to see a successful trial operation before formally conducting a test.

1. Timing of performance tests

Typically, EPC contractors will want to cap the time period to run any performance tests and limit the use of the facility to that for which it was intended. While contractors often want to make sure certain construction or commissioning issues are worked out before a performance test is conducted, it is undesirable to wait too long to conduct a performance test. In many instances, maintenance issues may begin to affect a facility. As a result, performance tests are often conducted within six-months of successful commissioning. If a contractor negotiates the period under which the performance test must be conducted, however, an owner should negotiate a carve-out for contractor-caused delays (*i.e.*, contractor repairs necessary to address known issues). For example:

The Parties will perform a test run on each Unit within a period mutually agreed by both Parties from the date of the initial charge of feedstock to such Unit. If Owner has not performed a test run on a Unit within forty-five (45) days of consistent feed above ninety percent (90%) design capacity, such Unit shall

be deemed to be accepted by Owner; provided, however, that such forty-five (45) day period shall be extended on a day for day basis for each day by which the commencement, performance or completion of a test run is delayed by (i) a Force Majeure Event or (ii) any act or failure to act of Contractor.

2. Opportunity for contractor to cure

EPC agreements often have separate provisions relating to remedies for defects in performance guarantees. Additionally, the notices to the contractor may be unusual, and the contractor may have a different opportunity to cure than in a standard warranty provision. For example, the agreement may provide that in the event the performance guarantees are not achieved during a performance test, then the contractor can make repairs, and then another test will be conducted. Moreover, the remedies afforded to the owner are frequently different than in the standard warranty provision, which may be limited to re-performance. For example, some provisions allow for more significant remedies, including the return of prior payments or all costs to perform repairs. Owners may desire to limit the number of tests in the event of failures and very strongly evaluate the remedies necessary for a facility that fails to meet its essential purpose.

3. Performance liquidated damages are an option but need to be carefully calibrated

More sophisticated contractors often insist upon performance liquidated damages as the sole remedy for failure to meet performance guarantees. In large part, these damages do not compensate the owner for the actual damages associated with failure to meet the performance guarantees. In many instances, performance liquidated damages are not appropriate where the EPC contractor has fully designed the facility and is not dependent upon information from the owner in the design. On the other hand, where the EPC contractor received and relied upon information pertaining to the design or a product to be processed, then performance liquidated damages may be appropriate. Moreover, given the risks these guarantees may create, an EPC contractor may be financially unable to take on all the risks.

F. Defective Work

The owner and contractor should agree on procedures to address repairs to the work: (1) while the work is ongoing; and (2) after the contractor has completed the work

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or after a certain stage of completion (*i.e.*, mechanical completion).

1. Repair of defective work during the Project

For dealing with defective work identified while the EPC Contractor is performing work on the Project, EPC contracts should address the scope of the owner's rights to repair defective work and back charge the EPC contractor. Generally, EPC contracts allow the owner to self-perform corrective work, but first, the owner must give notice of the defective work to the EPC contractor and an opportunity for the EPC contractor to remedy the issue. The following is an example clause addressing the owner's right to self-perform and deduct the reasonable cost of doing so from the EPC contractor after giving notice:

If any Work is Defective prior to Mechanical Completion, then Contractor will, at its own expense, promptly correct the Defective Work, whether by repair, replacement, or otherwise. Subject to Contractor's right to pursue a dispute under the dispute resolution provisions of this Agreement, the decision of Owner will be conclusive as to whether the Work is conforming or Defective, and Contractor will comply with the instructions of Owner while pursuing any Dispute. If Contractor fails to repair or replace any Defective Work within 1 (one) Week, then, Owner may (in addition to any other remedies that it has under this Agreement, under Applicable Law, or in equity) repair or replace the Defective Work and the reasonable expense for repair or replacement will be paid by Contractor.

Contractors typically seek longer periods to address defective work and may disagree entirely with the concept of an owner repair right.

2. Repair of Defective Work Following a Certain Stage of Completion aka Warranty Obligations

The issue of the EPC contractor's warranty is particularly important to the owner and the owner's lender since a facility with a specific level of performance is often the collateral securing the project financing.³² As noted above

in Section II.A.3 (*Engineering warranty*), it is important from the owner's perspective to draft the warranty broadly so that it includes a warranty on the EPC contractor's engineering services. One way to accomplish this is by drafting the warranty to cover "design, materials, and workmanship."³³ Express warranty periods in EPC contracts typically range from 12–24 months and generally obligate the EPC contractor to repair, replace, or otherwise correct deficiencies within that period.³⁴

Simply providing a particular contractual remedy such as an express warranty does not mean the remedy is exclusive.³⁵ Consequently, EPC contractors frequently seek to negotiate a warranty that is the owner's "sole" or "exclusive" remedy for defective work and thus bar other potentially applicable implied warranties or common law causes of action. In order to provide for the express warranty as an exclusive remedy, the agreement needs to clearly indicate the parties' intent that the warranty is an exclusive remedy.³⁶ If the parties do not clearly indicate their intent to do so in the agreement, the default position under Texas law is that implied warranties and other common law remedies are available.³⁷ Clearly, this favors the owner.

G. Contract Termination and Other Remedies for Default

Contract termination rights and other remedies for default are rarely a focus at the onset of a business relationship but given that termination or declaration of default can cause some of the most significant disputes on a failed project, it is important for an attorney to review such clauses closely at the contracting stage. Termination and default rights and remedies fall into three categories: (1) termination for convenience; (2) termination for default; and (3) other remedies such as acceleration, supplementation, or deductive change orders. In the EPC context, consideration of these issues and negotiating for remedies in addition to contract termination is especially important, given that contract termination is a last resort and rarely accomplishes the owner or EPC contractor's goals for the project.

1. Termination for convenience

Construction contracts regularly contain termination for convenience provisions, which allow the owner to terminate the contract at any time for any reason. From the

32. See Carson, *supra* note 26, at 9.

33. See *id.* at 8.

34. *Id.* A sample EPC warranty clause is provided at Section II.A.3 of this article.

35. *Pelto Oil Corp. v. CSX Oil & Gas Corp.*, 804 S.W.2d 583, 586 (Tex. App.—Houston [1st Dist.] 1991, writ denied).

36. *E.g., Myriad Development, Inc. v. Alltech, Inc.*, 817 F.Supp.2d 946, 964 (W.D. Tex. 2011).

37. *Id.* at 966–67.

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owner's perspective, these clauses are more necessary for EPC contracts because the stakes are higher, and they give the owner additional options if the EPC contractor is not meeting expectations. While termination for convenience provisions commonly allow for immediate contract termination for any reason upon written notice, they also require the owner to pay the EPC contractor for all costs incurred prior to and possibly as a result of termination (such as the EPC contractor's costs to demobilize from the site). Owners should be careful to make sure that the EPC contractor's rights are limited to payment for work performed and to exclude profit on unperformed work. In this regard, the following is an example of an owner-friendly clause that details specific owner obligations for what to pay the EPC contractor upon termination for convenience:

Owner may terminate Contractor for convenience on written notice at any time for any reason. Upon a convenience termination by Owner, Contractor will be paid only (i) the reasonable value of the Work performed (the basis of payment being based on the terms of this Agreement, less any down payments, if any, made under this Agreement) prior to termination, less that portion of the Contract Price previously paid to Contractor; plus (ii) any cost expressly identified for a convenience termination in [Reference to Contract Price or Schedule of Values]. In no event will Contractor be entitled to receive any amount for unabsorbed overhead, contingency, risk, or anticipatory profit. Contractor will submit all reasonable direct recoverable costs to Owner for verification and audit within 30 Days following the effective date of termination.

From the contractor's perspective, consider negotiating a termination or demobilization payment. Subcontracts should also include termination for convenience clauses if the prime EPC agreement includes such a clause. Also, make sure that the owner agrees to compensate the

contractor for any liability the contractor might incur to subcontractors or suppliers.

2. Termination for default

Termination for default tends to be the nuclear option in EPC contracts. The core termination for default clauses routinely provide that an owner can terminate the contractor for any material default and then include a laundry list of specific bases for termination. The clause also normally includes a cure period. Contractors often seek to narrow the list of reasons for the default and negotiate lengthy cure periods with no clear delineation of when the time period may end (*i.e.*, contractor must "commence" a cure by a certain date). Owners should resist such provisions.

While it is certainly common to see termination for default provisions in EPC agreements, on large EPC projects, termination for default and replacement of the EPC contractor probably will not achieve the owner's goals of completing the project timely, with good workmanship, and with enforceable performance guarantees.³⁸ Finding a replacement contractor will take time, almost certainly cost the owner more than the contract balance, and replacement contractors typically balk at offering warranties on work they did not perform. This tends to invite disputes with the replacement contractor over whether an asserted warranty item, particularly those relating to performance guarantees, was the responsibility of the former EPC contractor.

Moreover, on many EPC projects, the owner is dependent upon the contractor for documentation needed to commission, test, and operate the work. Owners should consider whether such documentation can be provided prior to termination.

Further, terminating an EPC contractor for default carries risk for the owner, as to prevail in the imminent dispute resolution proceedings the owner will carry the burden of proving that the contractor's default was material. Under Texas law, the owner will need to establish it did not materially breach the agreement first, as a material breach of contract excuses future performance by the counterparty.³⁹ If the EPC contractor prevails in showing the termination for default was unjustified, the owner

38. For an in-depth discussion of the risks and considerations of termination for default on large construction projects; see Timothy C. Ross et al., *Termination! Will it really get you what you want? (Maybe we'd better talk first)*, Presented before The Basic Course in Texas Construction Law (Dec. 11, 2020).

39. *Mustang Pipeline*, 134 S.W.3d at 196.

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can be held liable for damages, which can include expectation damages (*i.e.*, all actual damages necessary to put the contractor in the same economic position it would have been in had the contract not been breached), and in egregious cases, exemplary damages.⁴⁰ To mitigate these risks, owners will want to include language in the termination for convenience provision providing that if the owner terminates the contractor for default and such termination is ultimately determined to be unjustified (in court or arbitration), the termination for default is automatically converted to a termination for convenience. Such clauses are generally enforceable, bar wrongful termination claims when enforced, and serve to limit the contractor's damage to those recoverable under the termination for convenience provision.⁴¹ However, the exceptions applied by Texas courts preclude converting termination for default into a termination for convenience if the terminating party acted in bad faith or if the contractor relied on the termination and changed its position as a result.⁴²

3. Other remedies for default

Given the risk associated with termination for cause, other options may better accomplish the owner's goals when faced with a struggling EPC contractor. One option is to negotiate for a provision requiring the EPC contractor to accelerate the work in the event of delays in achieving certain contract milestones, including providing a recovery plan to bring the project back on schedule. Another option that can be negotiated and included in the EPC contract upfront is the owner's right to self-perform or supplement the EPC contractor with other contractors in the event of deficient work or delays on the project.

Finally, an alternative that can be employed during the project when the EPC contractor is falling behind or where there are concerns about the quality of the EPC contractor's work is for the owner to issue a deductive change order to reduce the EPC contractor's scope, which can then be given to another contractor. If, however, the EPC contractor does not agree to the deductive change order or its pricing, the owner can still usually proceed (if allowed by the contract) by issuing a construction change directive. This allows the EPC contractor to reserve its

rights to later dispute the change directive while allowing the owner to proceed with de-scoping the work and having it performed by another contractor. While this process invites disputes over the value of the de-scoped work and consequent decrease in the contract price, it is a relatively flexible approach that allows the owner to mitigate the damage of delays on a project without all of the risks and costs of a complete termination of the EPC contractor for default or convenience. Contractors must be aware that change order clauses that include rights to a deductive change order may need to be negotiated in the same manner as a termination for convenience to avoid the ability to skirt such clauses.

H. Environmental Risks

EPC contracts also ordinarily contain provisions that allocate environmental risks between the owner and the EPC contractor. The most common environmental risk allocation found in EPC contracts is to place responsibility on the owner for all environmental risk that existed at the site as of the date of the contract and for the EPC contractor to bear the risk for anything it (or its subcontractors and suppliers) brings to the site. However, sometimes owners go further and seek to require the EPC contractor to assume responsibility for all environmental risks or other risks associated with delays when they do not immediately bring an environmental issue to the owner's attention. EPC contractors should be aware of and consider pushing back against such provisions on the grounds that they should not be held liable for environmental issues at the project site that were not caused by the EPC contractor but only discovered in the process of performing the work. Of course, there may be some projects where the allocation of all environmental risks to the contractor is appropriate.

Depending on the type of project (for instance, redevelopment of a brownfield site for a defunct chemical plant), environmental risks can get complicated and involve multiple state and federal statutes, authorities, and regulatory schemes. In many such cases, it is necessary and advisable to involve a specialized environmental lawyer to make sure that the EPC contract adequately addresses the site-specific environmental risks.

40. See *Tacon Mech. Contractors, Inc. v. Grant Sheet Metal, Inc.*, 889 S.W.2d 666, 670 (Tex. App.—Houston [14th Dist.] 1994, writ denied) (affirming award of expectation damages and exemplary damages for subcontractor's wrongful termination, wrongful interference, and misapplication of trust funds, where contractor received payment for subcontractor's work, but frequently withheld payment from subcontractor without justification) *Lafarge Corp. v. Wolff, Inc.*, 977 S.W.2d 181, 187–88 (Tex. App.—Austin 1998, pet. denied) (affirming lost profits on the contract measure of damages for wrongful termination, measured by probable payments for remainder of contract less avoided costs of performance due to the breach).

41. *Gulf Liquids New River Project, LLC v. Gulsby Eng'g, Inc.*, 356 S.W.3d 54, 67–68 (Tex. App.—Houston [1st Dist.] 2011, no pet.).

42. *Roof Sys. Inc. v. Johns Manville Corp.*, 130 S.W.3d 430, 442–43 (Tex. App.—Houston [14th Dist.] 2004, no pet.); *Accent Builders Co., Inc. v. Su. Concrete Sys., Inc.*, 679 S.W.2d 106, 110 (Tex. App.—Dallas 1984, writ ref'd n.r.e.).

ENGINEERING, PROCUREMENT, AND CONSTRUCTION CONTRACTS IN TEXAS: KEY...**I. Indemnity Issues**

In construction contracts, a one-sided indemnity in favor of the owner is commonplace, subject to the limits of Texas's Construction Anti-Indemnity Act.⁴³ The Construction Anti-Indemnity Act applies to "construction contracts" or agreements "collateral to or affecting a construction contract,"⁴⁴ such as EPC contracts. The Act provides that indemnity provisions are void and unenforceable "to the extent" they require the Indemnitor to indemnify the Indemnitee for the Indemnitee's own negligence or fault.⁴⁵ However, the Act carves out an exception to this rule for bodily injury or death claims for employees of the Indemnitor, its agents, or its subcontractors of any tier, and permits indemnity for the sole or partial negligence or fault of the indemnitee for those claims only.⁴⁶ As a result, indemnity clauses in construction contracts often contain two-tiered indemnity with one provision providing a full one-sided indemnity in favor of the owner for bodily injury claims, and a second indemnity provision applying to all other claims, requiring indemnity by the contractor except to the extent claims are caused by the negligence or fault of the owner. The following is a simple example of such a two-tiered indemnity in favor of the Owner:⁴⁷

INDEMNITY FOR CERTAIN BODILY INJURY OR DEATH CLAIMS. TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE COMPANY GROUP FROM AND AGAINST ALL CLAIMS, LOSSES, EXPENSES, COSTS, DEMANDS, SUITS, CAUSES OF ACTION, AND DAMAGES, INCLUDING WITHOUT LIMITATION, ATTORNEYS' FEES AND EXPENSES, FOR BODILY INJURY OR DEATH OF ANY EMPLOYEE OF CONTRACTOR, ITS AGENTS, OR ITS SUBCONTRACTORS OF EVERY TIER, EVEN IF THE BODILY INJURY OR DEATH IS CAUSED BY OR ALLEGED TO HAVE BEEN

CAUSED BY THE SOLE OR PARTIAL NEGLIGENCE, FAULT OR STRICT LIABILITY OF ANY INDEMNITEE.

INDEMNITY FOR ALL OTHER CLAIMS. FOR ALL CLAIMS NOT ADDRESSED IN THE PRECEDING SECTION, INCLUDING, WITHOUT LIMITATION, CLAIMS FOR DAMAGE TO OR LOSS OF USE OF PROPERTY AND CLAIMS FOR BODILY INJURY TO OR DEATH OF ANY PERSON OTHER THAN THAT ADDRESSED IN THE IMMEDIATELY PRECEDING SECTION, TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS COMPANY GROUP FROM AND AGAINST ALL CLAIMS, LOSSES, EXPENSES, COSTS, DEMANDS, SUITS, CAUSES OF ACTION, AND DAMAGES, INCLUDING WITHOUT LIMITATION, ATTORNEYS' FEES AND EXPENSES, OF ANY NATURE WHATSOEVER ARISING OUT OF OR RELATED TO THIS CONTRACT OR THE WORK TO BE PERFORMED UNDER THIS CONTRACT, BUT ONLY TO THE EXTENT OF THE NEGLIGENCE OR OTHER FAULT OF THE CONTRACTOR, ITS AGENTS, REPRESENTATIVES, EMPLOYEES OR SUBCONTRACTORS OF ANY TIER.

When EPC contracts relate to oil and gas infrastructure projects, there sometimes is confusion over whether the Texas Construction Anti-Indemnity Act or the Texas Oilfield Anti-Indemnity Act ("TOAIA")⁴⁸ applies and consequently how the indemnity provisions should be drafted to comply with the statutes. These anti-indemnity acts are mutually exclusive, as, by its terms,

43. Tex. Ins. Code §§ 151.101–.105.

44. *Id.* §§ 151.101–.102.

45. *Id.* § 151.102.

46. *Id.* § 151.103.

47. In addition to a carve-out for bodily injury, the statute also allows a carve-out for claims based on copyright infringement. See *id.* § 151.105(9). This can be addressed in a three-paragraph indemnity schedule with the final paragraph used as a catch-all

48. Tex. Civ. Pra c. & Rem. Code §§ 127.001–.007.

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the Construction Anti-Indemnity Act does not apply to agreements that are subject to TOAIA.⁴⁹ TOAIA applies to contracts for “well or mine service,” which includes

- (i) drilling, deepening, reworking, repairing, improving, testing, treating, perforating, acidizing, logging, conditioning, purchasing, gathering, storing, or transporting oil, brine water, fresh water, produced water, condensate, petroleum products, or other liquid commodities, or otherwise rendering services in connection with a well drilled to produce or dispose of oil, gas, other minerals or water; and
- (ii) designing, excavating, constructing, improving, or otherwise rendering services in connection with a mine shaft, drift, or other structure intended for use in exploring for or producing a mineral[.]⁵⁰

TOAIA defines “well or mine” service to exclude the following, and thus TOAIA does not apply to contracts for the following items:

- (i) purchasing, selling, gathering, storing, or transporting gas or natural gas liquids by pipeline or fixed associated facilities; or
- (ii) construction, maintenance, or repair of oil, natural gas liquids, or gas pipelines or fixed associated facilities.⁵¹

Cases applying TOAIA have affirmed that it is intended to apply to contracts regarding the drilling or servicing of wells and that it was not intended to apply to refining, supply, and transportation of oil and gas products.⁵² When it applies, TOAIA provides that indemnity provisions requiring one party to indemnify for the other party’s own negligence are void as against public policy.⁵³ The TOAIA exception to this general rule is that indemnity for another party’s negligence is permitted if the indemnity is (1) mutual and (2) supported by certain insurance.⁵⁴ This type of mutual indemnity is commonly referred to as “knock-for-knock” indemnity, and the idea behind it is that each party should take responsibility for claims regarding its own property or employees. Notably, “knock-for-knock” indemnities are at least partially unenforceable under the Construction Anti-Indemnity Act because there is no

ability to transfer risk for a parties’ negligence relating to property damage.

More often than on commercial projects, EPC contractors on oil and gas projects ask for knock-for-knock indemnity, and knock-for-knock indemnity clauses are somewhat more common than one-sided clauses in the owner’s favor on oil and gas EPC projects. This trend appears to stem from apparent confusion regarding TOAIA’s application because even where EPC projects deal with oil and gas, TOAIA frequently does not apply to the project. As discussed above, TOAIA does not apply to pipelines and related midstream facilities (such as processing plants and storage terminals) as well as downstream facilities (refineries, chemical plants).⁵⁵ And as noted above, when TOAIA does not apply to a construction project, the Construction Anti-Indemnity Act applies and would render a TOAIA knock-for-knock indemnity provision at least partially unenforceable. Instead, a better approach for owners of EPC projects would be to negotiate for a traditional two-tiered indemnity provision found in commercial construction contracts, with a provision for indemnity of employee injury claims and a separate provision for all other claims limited by the extent of the owner’s negligence or fault. If knock-for-knock type indemnity is desired, the reciprocal indemnity for bodily injury is an acceptable middle ground.

J. Mutual Waiver of Consequential Damages

EPC contracts regularly contain broad mutual waivers of consequential damages. While mutual waivers of consequential damages have a benefit to the owner, the owner usually has more to lose from a general, mutual waiver of consequential damages without any qualifications. As a result, when negotiating a waiver of consequential damages, owners should attempt to negotiate carve-outs favoring the owner, for example, owner damages arising from the contractor’s indemnity obligations and warranties. Another problem that arises is the ambiguity in whether damages are direct or consequential. Somewhat recently, the Texas Supreme Court may have indicated that delay damages are categorically consequential.⁵⁶ If a contract provides for delay damages, this may raise

49. Tex. Ins. Code § 151.005.

50. Tex. Civ. Pra c. & Rem. Code § 127.001(4)(A).

51. *Id.* § 127.001(4)(B).

52. See *Coastal Transp. Co. v. Crown Cent. Petroleum Corp.*, 20 S.W.3d 119, 127–28 (Tex. App.—Houston [14th Dist.] 2000, pet. denied) (“[TOAIA] applies to contracts for services involved in the drilling or servicing of wells. Crown is involved in the refining, supply, and transportation of petroleum products. The Agreement only granted ‘key-stop privileges,’ [at Crown’s gasoline loading terminal,] it did not involve the drilling or servicing of a well. Therefore, we find [TOAIA] does not encompass this activity and is not applicable to the Agreement and, therefore, does not render the indemnity agreement void and unenforceable.”) (internal citations omitted).

53. Tex. Civ. Pra c. & Rem. Code §§ 127.002–.003.

54. *Id.* § 127.005.

55. See *id.* § 127.001(4).

56. See *Zachry Constr.*, 449 S.W.3d at 112.

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a conflict that could potentially be resolved by carving delay damages recoverable under the agreement from the waiver. If delay damages are not addressed, this provision could accidentally waive delay damages.

K. Overall Limitation of Liability

While less common in commercial construction contracts, given the dollars involved, EPC contracts frequently contain provisions placing an overall limit on the EPC contractor's liability. In many instances, the contractor agrees to accept liability up to the amount of the contract price. In other instances, the contractor's liability is expressed as a percentage of the contract price or a specific dollar amount. Liability limiting provisions or caps are generally enforceable between sophisticated parties in Texas,⁵⁷ and EPC contractors often negotiate them as a way to limit their sometimes-substantial overall risk. In response, owners often negotiate for exceptions to the liability limit, such as for claims covered by insurance, indemnity claims, or liens. For example, the clause below is a limited liability provision with specific carve-outs.

Excluding Contractor's liability for warranty, indemnity obligations, and claims covered by insurance, the Contractor's total aggregate liability to the Owner will in no event exceed fifty percent of the Contract Price, adjusted for Change Order(s).

It is recommended that the owner never include such a limitation unless it is specifically requested. If a limitation is essential to the project from the contractor's perspective, countervailing carve-outs are essential and important to the owner.

IV. EPC AGREEMENTS OFTEN RAISE THE QUESTION OF WHETHER CHAPTER 53 OR 56 OF THE TEXAS PROPERTY CODE APPLIES, WHICH AFFECTS RETAINAGE, BONDS, AND LIEN WAIVERS

Provisions required to address lien law must be reviewed for compliance with statutory requirements if the work is in Texas⁵⁸ or if Texas law applies. EPC agreements uniquely implicate multiple different statutory schemes due to the frequency with which they are used for energy-related projects. The legal obligations of owners are different depending on whether the agreement falls under Chapter 53 or 56 of the Texas Property Code. Most of the work performed under EPC agreements will fall under Chapter 53, to which mechanic's liens apply. However, certain projects involve work categorized as "mineral activities." Projects involving contractors that provide labor or services relating to "mineral activities" are subject to Chapter 56 of the Texas Property Code, to which mineral liens apply. "Mineral activities" are defined as digging, drilling, torpedoing, operating, completing, maintaining, or repairing an oil, gas, or water well, an oil or gas pipeline, or a mine or quarry.⁵⁹ According to this narrow definition of "mineral activities," not all work performed on oil and gas-related projects are subject to Chapter 56 and thus would likely be subject to Chapter 53. Given that Chapter 56 is narrower than Chapter 53, to determine which statute applies, examine Chapter 56 first. If the project falls under Chapter 56, it does not fall under Chapter 53.⁶⁰

Sometimes it may be difficult to determine if the work falls under Chapter 53 or Chapter 56. For example, projects related to crude oil storage, gas processing, and refineries likely do not involve "mineral activities" as

57. *E.g., Vallance & Co. v. De Anda*, 595 S.W.2d 587, 589–90 (Tex. Civ. App.—San Antonio 1980, no writ) (enforcing limited liability provision in burglary alarm contract to limit liability by alarm company to six months of service charges); *Glob. Octanes Tex., L.P. v. BP Expl. & Oil, Inc.*, 154 F.3d 518, 523 (5th Cir. 1998) (applying Texas law and enforcing \$500,000 damages cap in chemical supply agreement).

58. Under Texas law, for construction projects located in Texas, choice of law provisions that require the application of another state's law are voidable by the contractor. *See* Tex. Bus. & Com. Code § 272.001 (“(a) This section applies only to a construction contract concerning real property located in this state [Texas]. (b) If a construction contract or an agreement collateral to or affecting the construction contract contains a provision making the contract or agreement or any conflict arising under the contract or agreement subject to another state's law, litigation in the courts of another state, or arbitration in another state, that provision is voidable by a party obligated by the contract or agreement to perform the work that is the subject of the construction contract.”).

59. Tex. Prop. Code § 56.001(a).

60. “Chapter 56 is the exclusive statute governing liens against mineral property to secure payment for labor or services related to mineral activities. Persons entitled to liens under this statute are not entitled to liens provided by other statutes.” *Noble Expl., Inc. v. Nixon Drilling Co., Inc.*, 794 S.W.2d 589, 597 (Tex. App.—Austin 1990, no writ). In other words, a mechanic's lien secured under Chapter 53 is ineffective to secure a contractor's lien rights for work that should have been liened under Chapter 56.

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defined by statute. Oil and gas pipelines, however, are sometimes constructed through EPC agreements and are clearly governed by Chapter 56.⁶¹ Moreover, certain types of wells are constructed through EPC agreements.

A. Retainage

1. Does Chapter 53 or Chapter 56 of the Texas Property Code Apply?

A frequently negotiated provision in high dollar EPC contracts involves the percentage of retainage that the owner withholds and the timeline for release to the EPC contractor. In particular, 10% retainage must be withheld until the final completion of the work under Tex. Prop. Code § 53.101. No such requirement exists under Chapter 56.⁶²

If it is unclear whether the work is a “mineral activity” or not, comply with retainage requirements for Chapter 53. However, if a contractor is heavily resistant to retainage, it is not a requirement under Chapter 56.

2. Does Chapter 53’s 10% retainage requirement apply to engineering services? Maybe not

Assuming Chapter 53 of the Texas Property Code is applicable to the work, it is typically advisable to set out in the EPC agreement that retainage in the amount of 10% will be withheld from all payments to the EPC contractor. This helps to ensure compliance with applicable statutes and removes surprise when attempting to implement withholding after the contract work commences. More EPC contractors, however, resist an owner’s efforts to withhold retainage despite the statutory mandate the retainage “must” be withheld because of the higher value of agreements and the large cash outlays often necessary to timely secure appropriate skilled craft labor.

As a possible middle ground, consider whether retainage is required on engineering services. Under Texas Property Code § 53.101,

[d]uring the progress of work under an original contract for which a mechanic’s lien may be claimed and for 30 days after the work is completed, the owner shall retain: (1) 10 percent of the contract price of the work to the owner; or (2) 10 percent of the value of the work; measured by the proportion that the

work done bears to the work to be done, using the contract price or, if there is no contract price, using the reasonable value of the completed work.⁶³

“‘Contract price’ means the cost to the owner for any part of construction or repair performed under an original contract.”⁶⁴

Pursuant to Texas Property Code § 53.101(a), retainage may be withheld “[d]uring the progress of work under an original contract for which a mechanic’s lien may be claimed and for 30 days after the work is completed.”⁶⁵ There are three elements to address regarding the specific statutory language used to describe an owner’s obligation to withhold retainage: (1) the definition of “work”; (2) the definition of an “original contract” qualified by the term “work”; and (3) the potential implications of the phrase “for which a mechanic’s lien may be claimed.” Applying these definitions below, both parties would have a reasonable argument that the owner is not required to withhold retainage on the engineering services provided by the EPC contractor.

a) The definition of Work

Texas Property Code § 53.001(14) defines “work” as “any part of construction or repair performed under an original contract.” Focusing on the verbs used to define “work,” the Texas Legislature chose “construction” and “repair.” While these two terms are not further defined by the Texas Property Code, a plain interpretation of the term “construction” does not encompass design services. Importantly, the Texas Legislature also included the phrase “any part of.” “Any part of” signifies that the Legislature contemplated that an original contract could be for more than only construction or repair. The original contract could include types of services that do fall under the Texas Property Code’s definition of “work” and therefore do not require the owner to withhold retainage.

b) “Original Contract”

Texas Property Code § 53.001(6) defines “original contract” as “an agreement to which an owner is a party either directly or by implication of law.” EPC contracts would fall under the definition of “original contract” as the project owner is a party. However, in conjunction with the definition of “work,” the parts of the original contract for which the owner is required to withhold retainage may

61. Tex. Prop. Code § 56.001(a).

62. See generally Tex. Prop. Code Ch. 56.

63. Tex. Prop. Code § 53.101(a).

64. *Id.* § 53.001(1).

65. *Id.* § 53.101(a).

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be limited to the procurement and construction services provided by the EPC contractor, and not the engineering services.

c) “for which a mechanic’s lien may be claimed”

Under Texas Property Code § 53.021(c), “an architect, engineer, or surveyor who prepares a plan or plat under or by virtue of a written contract with the owner or the owner’s agent, trustee, or receiver in connection with the actual or proposed design, construction, or repair of improvements on real property . . . has a lien on the property.” The efore, an EPC contractor who provides engineering services is entitled to claim a mechanic’s lien on the property. The efore, on its face, there is an argument that engineering services are work for which a mechanic’s lien may be claimed.

However, the phrase “for which a mechanic’s lien may be claimed” is qualified by the term “work.” The efore, if “work” is limited to “construction” or “repair,” then a strict reading of § 53.101(a) provides that the owner would only be required to withhold retainage for construction or repair services for which a mechanic’s lien may be claimed—not design services. In addition, Texas Property Code § 53.021(c) separates the term “design” from “construction” or “repair.” This further suggests “design” services are not encompassed within the terms “construction” or “repair,” and thus that retainage would not need to be withheld for design services. Given that there are many reasons for withholding other than subcontractor lien liability, an owner should negotiate 10% retainage, and the issue relating to engineering should also be considered as a last resort.

B. Lien Waivers

Additionally, if a project falls under Chapter 53, statutory lien releases are required.⁶⁶ Such releases are very favorable to contractors and fall far short of language that may be desirable for an owner to have in connection with a complex EPC agreement. For example, an owner may desire for such a release to have interim claim waivers when that type of language is not allowed in the statutory lien releases. Under Chapter 56, given there are no requirements to use statutory lien waivers, a different, stronger lien waiver form could be used.

C. Bonds on EPC Contracts

Given the overlap between Chapter 53 and 56, bonding EPC projects can also be more challenging. A statutory payment bond under Texas Property Code § 53.202 is one of the most favorable bonds an owner can require on any project.⁶⁷ If the owner obtains a bond that is consistent with these requirements and records it in the applicable real property records, the owner is relieved of the requirement to withhold retainage and cannot be held liable for failing to trap funds.⁶⁸ Subcontractor liens no longer attach to the owner’s property and, as a result, the subcontractor has no lien foreclosure action against the owner. In other words, the subcontractor’s remedy is provided by the bond and is not against the owner. This is a win-win for owners and subcontractors because a subcontractor’s remedy is not limited to its proportionate share of retainage plus any trapped funds. From the owner’s perspective, the owner is not subjected to a multiplicity of often conflicting subcontractor claims if bankruptcy, termination, or abandonment occurs at the prime contractor level.

However, it is unclear whether the statutory payment bond is available at all for mineral liens. While certain provisions under Chapter 56 are expressly enforced through Chapter 53,⁶⁹ there is no similar provision which would indicate that bonds for the two schemes are interchangeable. Nor have any Texas cases addressed whether Chapter 53 statutory payment bonds serve the same purpose for mineral lien claims. Thus, if the EPC agreement relates to something for which Chapter 56 would apply, then an attorney could unwittingly recommend a bond that may not offer the intended protection to the owner.

V. ALTERNATIVE SECURITY FOR EPC AGREEMENTS

Letters of credit are used with more frequency in EPC agreements to secure a portion of the contractor’s obligations. Letters of credit are almost never used to secure all the contractor’s obligations because, unlike bonds, an issuing bank may require the contractor to post cash or similar security in connection with a letter of credit.

For the owner, a letter of credit may be preferable security to a performance bond because it is typically drawn

66. See Chapter 53, subchapter L of the Texas Property Code.

67. Tex. Prop. Code § 53.203.

68. *Id.* § 53.201.

69. See *id.* § 56.041.

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upon demand for stated reasons. Performance bonds can be trouble given the ease with which one can lose a performance bond⁷⁰ and the propensity for sureties to deny claims. Given this, even though a letter of credit may only provide partial security, it may be preferable to the limited protection a surety is actually willing to provide short of a long, drawn-out fight

An owner should seek a letter of credit that may be drawn on demand for broad reasons (*i.e.*, any material breach). Contractors should limit the reasons for which an owner can draw on the letter of credit and require notice and an opportunity to cure prior to the owner having the right to draw on the letter of credit. Contractors should also attempt to limit the time period for which the letter of credit can be drawn. Owners must negotiate a time period sufficient for the intended purpose of the letter of credit. For example, if a letter of credit will be used to secure

performance guarantees, the letter of credit must allow sufficient time for a performance test.

VI. CONCLUSION

EPC contracts provide a means for parties to develop large infrastructure and energy projects and allocate the correspondingly large risks that come with developing such projects. By vesting responsibility for the project in a single EPC contractor, EPC contracts shift most cost and performance risks to the EPC contractor in exchange for a risk premium. This allows owners to quantify project risks and results more easily in a contract that helps the owner obtain project financing from lenders and investors. Because of the many ways EPC contracts differ in their scope and risk allocation provisions from ordinary construction contracts, attorneys drafting or negotiating EPC contracts need to be aware of those differences to avoid pitfalls and unexpected outcomes.

70. See Thomas R. Barber & Mason P. Hester, *Where Did My Performance Bond Go and How Did I Lose It?*, Presented before the 31st Annual Construction Law Conference, San Antonio, Texas (2018).