

REDUCING CONFLICT AND RISK: WHY PARTIES BENEFIT FROM USING ENUMERATED ADJUSTMENT CLAUSES IN ENERGY CONSTRUCTION AND SERVICES AGREEMENTS

*S. Scott Gaille**

Synopsis: As the United States transitions to more renewable energy sources, spending under energy construction and services agreements is expected to double over the next decade. Each of these agreements contains an adjustment clause, which determines under what circumstances contractors are entitled to be paid more or receive additional time to complete their work. There are two principal types of adjustment clauses: (a) discretionary adjustment clauses, which do not allocate specific risks at the time of contract execution, largely leaving the determination to the parties (after a risk materializes) and (b) enumerated adjustment clauses, which expressly list certain risks and establish rules regarding when the contractor is entitled (or not) to adjustments for each such risk. Types of enumerated adjustments include: (i) owner changes; (ii) differing site conditions; (iii) owner-caused delay; (iv) owner’s suspension of work; (v) force majeure; (vi) adverse weather; (vii) protester-caused delays; and (viii) effects of widespread disease. While contractors generally prefer discretionary clauses (and owners, enumerated clauses), this article concludes that the perceived benefits for contractors of discretionary clauses are outweighed by their uncertainties, inefficiencies, and other costs. It is better to agree *ex ante* on the rules for adjustments in enumerated clauses, which results in more complete agreements.

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* S. Scott Gaille is Managing Partner of GAILLE PLLC, a Houston-based law firm practicing in the area of energy construction and services agreements. During 2020, GAILLE PLLC drafted and negotiated energy construction and services contracts with a combined expenditure value of approximately \$2 billion. Scott also is a Lecturer in Law at The University of Chicago Law School and an Adjunct Professor of Management at Rice University’s Graduate School of Business. He wishes to thank Tanner Harris for his assistance with this article. Tanner is a third-year law student at The University of Chicago and has served as Scott’s research assistant during the 2020-21 academic year.

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I. INTRODUCTION

Construction and services agreements are living, dynamic documents. The price and completion date agreed at signing are just the starting points. Both may be adjusted dozens of times over the course of the work. What the owner ends up paying for a project can be substantially higher, and the completion deadline much later, than initially agreed.

As such, negotiating a construction or services agreement entails considering when the contractor should be paid more (or less) compensation and/or should have its schedule to complete the work lengthened (or shortened). Such variances are referred to as price and time adjustments, and collectively as adjustment clauses. The adjustment clause is arguably the most important term in a construction or services agreement. It can make or break an owner's budget. It can enrich or bankrupt a contractor.

This means that the first question every owner or contractor should ask is:

What kind of adjustment clause is in my contract?

Adjustment clauses generally fall into one of two categories:

- *Discretionary Adjustment Clauses.* Discretionary adjustment clauses set forth a general, often vague standard, such as “changed circumstances.” The contractor may seek an adjustment for virtually any type of change it can think of, but the owner has considerable discretion to accept or reject the adjustment request.
- *Enumerated Adjustment Clauses.* Enumerated adjustment clauses list each and every circumstance for which the contractor is entitled to an adjustment (and the contractor is not entitled to an adjustment for any circumstance that is not listed). While the contractor may only seek an adjustment for the listed circumstances, the owner has little discretion to reject valid claims.¹

While contractors tend to prefer the discretionary adjustment clause, owners prefer the enumerated approach. This article takes a third position, maintaining

1. Parties also can negotiate hybrid adjustment clauses. For example, the overall contract could provide that adjustments are only allowed for an enumerated list of circumstances, but then, allow for more discretion within the definition(s) of one or more of the enumerated grounds.

that the certainty provided by an enumerated adjustment clause creates efficiencies that are beneficial to both owners and contractors. A properly drafted enumerated adjustment clause should be a win-win.

How important are adjustment clauses to the energy industry? North American oil and gas infrastructure construction is forecasted to continue at a pace of more than \$44 billion per year as new pipelines are built and aging lines and related facilities are maintained or replaced.² Additional layers of construction and services spending also will be required by renewable energy sources.

The electricity generated by wind turbines in the United States is expected to nearly double by 2030,³ from 113 GW to 224 GW (there are currently around 65,548 turbines operating today⁴). If the average installed cost for wind power is \$1,400 per kW,⁵ that equates to over \$15 billion annually over the next decade.⁶ Once constructed, wind projects require an average of \$70,000 per turbine per year in operating and maintenance (O&M) costs⁷—a further \$4.5 billion per year at present levels⁸ and approximately \$9 billion per year by 2030.⁹ A wind turbine lasts approximately twenty years,¹⁰ which means that one-twentieth of them will need to be replaced annually, likely requiring another \$20 billion per year by 2030 just to maintain existing capacity.¹¹

Construction of solar electric generating facilities also continues to rapidly increase. In 2019, “solar electric generating systems accounted for 40% of all new electric generating capacity in the United States . . . its highest share ever.”¹² Solar

2. INTERSTATE NAT. GAS ASS’N OF AM. FOUND., NORTH AMERICAN MIDSTREAM INFRASTRUCTURE THROUGH 2035 2 (June 18, 2018), <https://www.ingaa.org/File.aspx?id=34703>. These projections were published prior to the global COVID-19 pandemic and may be adversely impacted by the economic fallout resulting from that event.

3. U.S. DEP’T OF ENERGY, MAP: PROJECTED GROWTH OF THE WIND INDUSTRY FROM NOW UNTIL 2050, <https://www.energy.gov/maps/map-projected-growth-wind-industry-now-until-2050> (last visited Apr. 1, 2021).

4. U.S. GEOLOGICAL SURVEY, THE U.S. WIND TURBINE DATABASE, <https://eerscmap.usgs.gov/uswtodb/> (last visited Apr. 1, 2021).

5. The average rated capacity of newly installed wind turbines in the United States was 2.43 MW in 2018. U.S. DEP’T OF ENERGY, 2018 WIND TECHNOLOGIES MARKET REPORT at viii, <https://www.energy.gov/sites/prod/files/2019/08/f65/2018> [hereinafter 2018 WIND TECHNOLOGIES MARKET REPORT]. The capacity weighted average installed wind project cost in 2018 was \$1.470/kW. *Id.* at x. This translates to an average installed project cost of \$3,572,100 (\$1,470 per kW * 2,430 kW).

6. $(\$1,400 \text{ per kW}) * (111,000,000 \text{ kW of additional generation by 2030}) / (10 \text{ years}) = \$15,540,000,000$ per year.

7. The average O&M cost of wind projects built since 2010 was \$29/kW of rated capacity per year, or \$70,470 per year for the average wind turbine with a rating of 2.43 MW. 2018 WIND TECHNOLOGIES MARKET REPORT, *supra* note 5, at 55.

8. $65,548 \text{ wind turbines} * \$70,470 \text{ per year}$.

9. $131,096 \text{ wind turbines} * \$70,470 \text{ per year}$.

10. Christian Schumacher & Florian Weber, *How to Extend the Lifetime of Wind Turbines*, RENEWABLE ENERGY WORLD (Sept. 20, 2019), <https://www.renewableenergyworld.com/2019/09/20/how-to-extend-the-lifetime-of-wind-turbines>.

11. If there are 131,096 turbines, with 5% being replaced annually at a cost of \$3,572,100 a piece, that equates to \$23,414,401,080 billion in replacement expenditures per year.

12. Georgina Owino-Trice and Shabad Puri, *The Eye of the Beholder: An Introduction to Key Clauses in Solar Engineering, Procurement and Construction Contracts*, 44 SECTION REPORT OF THE OIL, GAS & ENERGY

power generation is expected to approximately double by 2030, with additions of about 10 gigawatts, costing approximately \$1 billion per year.¹³

All of these expenditures will be made pursuant to construction and services agreements containing adjustment clauses.

II. THE VALUE OF CONTRACT COMPLETENESS

Contractual uncertainty is inefficient and expensive.¹⁴ What happens when the contract is unclear about whether the contractor receives an adjustment for a given event? The contractor usually will increase its prices in the original contract by adding contingency dollars. Contingency dollars are amounts added to the price of construction (or services) to cover the possibility that the contractor may not receive additional payments for a potential event.

At the bidding stage, such contingency creates problems for both contractors and owners. Contractors may struggle to quantify this risk of uncertainty. Owners may have difficulty unbundling and understanding how different bidders' pricing was impacted. The contract may be won or lost on the basis of different contractors' (more subjective) perceptions of the risk that an adjustment will be denied—instead of the (more objective) estimated cost of construction.

The inefficacies of adjustment uncertainty also affect the overall economics of a project. The owner effectively pays insurance dollars to cover the uncertainty faced by the contractor (i.e., being uncompensated for occurrence of a risk). If the risk never materializes, the owner has effectively paid (for a portion of something) that never happened—which results in a windfall for the contractor. If the risk does materialize, the amount of the contingency may be less than the actual costs incurred by the contractor, potentially leading to a claim for the difference.

While no contract is perfect, each should be reasonably “complete.” By complete, I mean that the contract has expressly and clearly allocated the risk for known unknowns. “Known unknown” risks are those that the parties are aware of because they occur regularly in construction and services projects. However, the parties do not know whether a given risk will materialize for a particular project—and if it does, what the cost and schedule impact will be. As one commentator observed, “construction projects, by their nature, are plagued by unforeseen circumstances. Construction contract documents generally reflect a conscious effort

RESOURCES SECTION OF THE STATE BAR OF TEXAS 54 (Sept. 2020) (citing *Solar Accounts for 40% of U.S. Electric Generating Capacity Additions in 2019, Adds 13.3 GW*, SOLAR ENERGY INDUS. ASS'N (Mar. 17, 2020), <https://www.seia.org/news/solar-accounts-40-us-electric-generating-capacity-additions-2019-adds-133-gw>).

13. U.S. DEP'T OF ENERGY, WIND AND SOLAR DATA AND PROJECTIONS FROM THE U.S. ENERGY INFORMATION ADMINISTRATION: PAST PERFORMANCE AND ONGOING ENHANCEMENTS 20 (Mar. 2016), <https://www.eia.gov/outlooks/aeo/supplement/renewable/pdf/projections.pdf>.

14. Walter J. Andrews et. al., *A “Flood of Uncertainty”: Contractual Erosion in the Wake of Hurricane Katrina and the Eastern District of Louisiana’s Ruling in In re Katrina Canal Breaches Consolidated Litigation*, 81 TUL. L. REV. 1277, 1301 (2007) (“Above all, the written contract has allowed contracting parties to know, well after the date of their agreement, precisely what they agreed to do . . . The *Canal Breaches Litigation* decision . . . will alter commerce as we know it today, making life more expensive, less efficient, and considerably less predictable.”).

to anticipate the unexpected and to allocate the risk so the project can go forward.”¹⁵ Express and clear allocation of such risks—not mere mention of or haphazard reference to the risk—is critical because “recovery is dependent upon the precise terminology used” in the contract.¹⁶

By addressing the known unknowns, contract completeness affords a number of benefits to both parties, including:

- *Meeting of the Minds.* Negotiation of detailed agreements prevents issues from being swept under the rug, thereby ensuring that the parties have a meeting of the minds regarding who bears which risk.
- *Predictability.* When a risk does occur, the parties know who is responsible for it. This means that only one party is required to take financial steps to mitigate the risk. When the allocation of risk is uncertain, mitigation costs may be duplicated by both parties—thereby increasing overall project costs.
- *Better Relationships.* When an issue arises that the agreement failed to address, feelings of surprise and unfairness may follow. The energy industry is one in which companies often engage in long-term relationships—whether manifested by a single, long-term contract or a series of repetitive, short-term contracts. Clarity on the front end pays ongoing dividends to the relationship.
- *Ease of Renegotiation.* Detailed contracts clearly allocate rights and obligations among the parties. This means that each party to the contract knows what it owes and what it is entitled to. Where contracts have not allocated all possible rights and obligations, there are fewer possible trade combinations, making renegotiation harder.
- *Less Litigation.* The greater the number of risks that are clearly allocated by an agreement, the less likely it becomes that litigation will later ensue. Litigators cannot do much with a clear contract because courts are very likely to enforce it according to the plain meaning of its terms.

While contract lawyers have long believed that more complete contracts were more efficient, we had no empirical proof to back up this supposition. We were

15. Hazel Glenn Beh, *Allocating the Risk of the Unforeseen, Subsurface and Latent Conditions in Construction Contracts: Is There Room for the Common Law?*, 46 U. KAN. L. REV. 115, 116 (1997).

16. STANLEY A. MARTIN AND LEAH A. ROCHWARG, *CONSTRUCTION LAW HANDBOOK 21-5* (3d ed. 2018) (“Since the right to assert a changed conditions claim must exist, if at all, by contract, recovery is dependent upon the precise terminology used in the differing site conditions clause . . . As a consequence, a successful differing site conditions claim under one contract may not be successful under a differently worded contract, even if the same conditions are encountered . . . the eventual outcome of each such claim is dependent upon the terms contained in the contract documents.”).

finally proven right when two professors compared more than 3,000 loan agreements filed with the United States Securities & Exchange Commission.¹⁷ The professors used “several measures of contractual detail” to compare the financial performance of the banks based on the level of detail in certain loan agreements:

Consistent with the idea that more complete contracts create less holdup and therefore allow for greater investment efficiency, we find that subsequent annual return on assets and sales growth are higher for firms which sign more detailed loan contracts, conditional on other contractual features such as loan size and covenant makeup. The overall evidence suggests that firms which are able to sign more complete loan contracts are better able to exercise their growth opportunities.¹⁸

While the context of the University of Texas and University of Georgia study was loan agreements, similar benefits should exist for construction and services agreements. From an owner’s perspective, increased certainty regarding when adjustments are owed will result in owners paying less to contractors for unenumerated claims. From a contractor’s perspective, more complete clauses better ensure the contractor will be paid for its enumerated claims. The result should be that both parties receive more or less what they expected when they signed the contract, leading to more predictable investments for both.

III. THE PURPOSE OF ADJUSTMENTS IN CONSTRUCTION/SERVICES AGREEMENTS

At the time that a construction or services agreement is signed, there are many risks lurking in the future. Final designs from engineers may be different from those that existed when a construction contract was signed.¹⁹ The route of a pipeline or the location of a facility could be modified to mitigate environmental risks or to avoid historical sites or cultural resources.²⁰ The site conditions where the work will take place could be another known unknown. While the contractor may have been provided with geological assessment data regarding the site, what happens if the actual conditions differ from such data? In all of these cases, both the owner and contractor are fully committed. The transaction between them cannot be undone. The work must go on.

Perhaps the easiest way to appreciate the value of adjustment clauses is to consider what would happen if a construction or services contract lacked one. Posit an agreement under which the contractor bore all risks. The lump sum it agreed to could never be increased. The schedule could never be extended. What

17. See Bernhard Ganglmair & Malcolm Wardlaw, *Measuring Contract Completeness: A Text Based Analysis of Loan Agreements 2* (Dec. 27, 2015), <https://www.acaweb.org/conference/2016/retrieve.php?pdfid=1166>.

18. *Id.* at 4.

19. John W. Gaskins, *Delays, Suspensions, and Available Remedies Under Government Contracts*, 44 MINN. L. REV. 75, 75 (1959) (“Few . . . contracts which involve substantial sums of money are ever completed in strict accordance with their original technical requirements and drawings. Instead, changes and revisions in the work are usually ordered by the [owner] during performance of the contract.”).

20. See, e.g., *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*, 205 F. Supp. 3d 4, 14 (D.D.C. 2016) (“By the time the company finally settled on a construction path . . . the pipeline route had been modified 140 times in North Dakota alone to avoid potential cultural resources.”).

would this contract look like? The agreement would be a very expensive one because the contractor will have “insulated [itself] against both foreseeable and unforeseeable contingencies . . . through contingency factors in [its] price.”²¹ It also would show a very late completion date because the contractor would have added many weeks of contingency time to its schedule.²²

What adjustment clauses ultimately do is reduce the need for contingency by promising the contractor more money and/or time if certain reasonably anticipated risks occur.²³ Good adjustment clauses make the prices in agreements more closely reflect the cost of the work in the absence of known unknowns. Good adjustment clauses make the schedules in agreements more closely reflect how long the work will take in the absence of known unknowns. Should one of these risks occur, the adjustment clause then will modify the price and schedule based on what has actually happened, instead of what people might have feared could have happened.

IV. DISCRETIONARY VERSUS ENUMERATED APPROACHES TO ADJUSTMENTS

A critical question for construction and services contracts is *which risks* should entitle the contractor to an adjustment. That question can either be addressed *post hoc*, after the contract has been signed and a risk has come to fruition, or *ex ante*, at the time a contract is being negotiated. In one camp are those (typically contractors) who want to postpone determinations, leaving considerable ambiguity in the contract about which risks get adjustments and which do not. In the other camp are those (typically owners) who want to identify and expressly address each of the known unknowns.

These divergent approaches have led to two general types of adjustment clauses:

- *Discretionary Adjustment Clauses.* Discretionary adjustment clauses set forth a general, often vague standard (e.g., “changed circumstances”), thereby leaving both parties with considerable discretion to make, accept, or reject claims.

21. Gerritt W. Wesselink, *Prime Contractor's Responsibilities to the Government as Affected by the Subcontractor's Default*, 16 FED. B.J. 211, 211 (1956) (“The number of contingency charges contained in a price depends upon the number of risks and the nature of the risks which a prospective contractor believes he will incur during the course of performance. The [owner] is well aware of the fact that even in a firm fixed-price contract, a contractor has usually insulated himself against both foreseeable and unforeseeable contingencies, if not through a specific contract provision, then through contingency factors in his price.”).

22. See Deane D. Nelson, *Contractor's Rights*, 34 J. ST. B. OF CAL. 352, 355 (1959) (“In that the contractor is assured of a remedy for [owner]-caused delays, there is less likelihood of the contractor including a contingency in his original bid or proposal for accomplishing the construction project.”).

23. See MARTIN & ROCHWARG, *supra* note 16, at 20-7 (“Many courts and now legal commentators have permitted recovery of additional compensation for work already required by an existing contract if ‘unanticipated and burdensome circumstances have been encountered in the performance of existing contracts . . . Such circumstance must, however, be of such a magnitude that to enforce the contract in accordance with its original terms would be unconscionable.’”) (citing Gregory G. Sarno, *Enforceability of Voluntary Promise of Additional Compensation Because of Unforeseen Difficulties in Performance of Existing Contract*, 85 A.L.R. 3d 259, 274, 292-294 (1978)).

- *Enumerated Adjustment Clauses.* Enumerated adjustment clauses limit adjustment claims to a list of well-defined circumstances.

Needless to say, the length (in number of words or pages) of a construction or services contract is largely a function of which of these two approaches it takes. Enumerated adjustment clauses typically provide standards for each of the grounds on which adjustments are to be granted and detailed procedures for applying them. This can easily increase the number of words in a contract by one-third or more. Discretionary adjustment clauses do not need as many words because it is up to the owner's project manager to balance all of the facts and circumstances (and perhaps consider the contractor's rights under common law) and then use his or her discretion in making a determination.

A. *Discretionary Adjustment Clauses*

Over the course of my career, I have observed that contractors tend to favor discretionary adjustment clauses. A typical mark-up of an enumerated adjustment clause by a contractor's counsel attempts to make it more discretionary. Arguments made in favor of discretionary adjustment clauses include the following:

- *Fear of Missing Something.* Contractors (or at least contractors' lawyers) fear the possibility that some event will occur that was unlisted (forgotten about or not thought of) in the enumerated adjustment clause. Discretionary adjustment clauses tend to leave the door open for a contractor to bring a greater variety of claims:

Many courts . . . have permitted recovery of additional compensation for work already required by an existing contract if "unanticipated and burdensome circumstances [have been] encountered in the performance of existing contracts. . . ." [S]uch a change must relate either to the actual ability to perform the work as contemplated by the contract documents because of problems inherent in the work itself or to the existence of external factors that affect the work. Examples of the former include encountering subsurface conditions that substantially affect the contractor's ability to excavate, whereas examples of external conditions include labor strikes and the inability to secure necessary raw materials or equipment.²⁴

When contractors express concern about leaving something out of the enumerated list, my response is, "What is missing from the list?" Typical answers to this question include far-fetched circumstances that almost always qualify as force majeure—which is, as described below, already an item on everyone's enumerated list.

- *Ambiguity Favors the Contractor.* Contractors tend to believe that ambiguity works in their favor, on the assumption that a tie (i.e., contractual silence) goes to the contractor (like the widely, if incorrectly, held belief in baseball that a tie goes to the runner).²⁵ The

24. MARTIN & ROCHWARG, *supra* note 16, at 20-7 to 20-9.

25. It is often assumed that under baseball's rules, the tie goes to the runner. But in fact, there is no such rule in baseball or softball. The runner is either out or safe. *See, e.g.*, College Softball Umpires Locker Room, available at: <https://collegesoftballumpires.org/tie-goes-to-a-runner/>. *See also* MLB rules, 7.01, 6.05(j) and

premise for this thinking is that courts or arbitration panels are more likely to side with the contractor (typically the smaller company) than the owner (typically the larger company).²⁶ However, contractors should be wary of such beliefs because courts have held that “[w]here one agrees to do, for a fixed sum, a thing possible to be performed, he will not be excused or become entitled to additional compensation because unforeseen difficulties are encountered.”²⁷ Treatises on construction law have explained that “[t]his principle, which has withstood the test of time, is based on the notion that owners should not be responsible for the costs associated with bids from careless contractors who fail to realistically anticipate the site conditions to be encountered when pricing their work.”²⁸ Even assuming that a contractor has a better chance of prevailing, there are other costs of pursuing litigation. When a contractor sues an owner, the contractor may no longer be considered for future projects by that owner—and other owners also may be less likely to select a litigious contractor. The owner may withhold final payments during a dispute, thereby requiring the contractor to borrow money to pay its subcontractors while it pursues litigation. Such considerations may render litigation impractical.

- *Trusting Each Other.* Contractors may believe that their longstanding, good relationships with the owners’ project managers will result in them being treated fairly (and receiving adjustments). This is a variation of the “who needs a contract at all” argument. Unfortunately, not every project manager can be a King Solomon.²⁹ Different project managers may have varying perspectives as to what circumstances should give rise to an adjustment. Another project manager could be substituted, or the contractor might face a less permissive one on the next project. I personally have witnessed widely different treatment of contractor claims between projects because of the idiosyncrasies of project managers. Similar claims may be denied on one project and accepted on another one. Claims

7.09(e), each of which provide that the runner is out unless the runner reaches the bag *before* being tagged or in the case of a force out, before the bag is tagged, discussed at <https://bleacherreport.com/articles/225160-come-on-blue-tie-goes-to-the-runner-no-it-does-not>.

26. While many construction agreements require mandatory arbitration of disputes, contractors may be unwise to place their faith in an arbitration panel. As Asselin and Harris explain, “[a]rbitrators’ expertise is not necessarily as advantageous as may be assumed. Although arbitrators generally have more construction expertise than the average judge or juror, the supply of qualified arbitrators and methods of selecting arbitrators can result in less expertise than might be expected.” Thomas H. Asselin and M. Catherine Harris, *How to Recognize, Preserve, Present, and Prosecute Construction Contractors’ Delay Claims*, 40 S.C.L. REV. 943, 974 (1989).

27. U.S. v. Spearin, 248 U.S. 132, 135-36 (1918).

28. MARTIN & ROCHWARG, *supra* note 16, at 21-3 to 21-4.

29. Solomon is known for the case of two women who laid claim to the same child. When Solomon pronounced his judgment that the child be cut in half and shared between the women, one of the women quickly renounced her claim (thereby proving to Solomon that she was the rightful mother, because the rightful mother would never want to harm her own child). 1 *Kings* 3:5-12, 16-28.

made early in a project may be accepted (because there is still room in the budget) and denied later in a project (because the budget is dwindling). Is it really in the best interest of a contractor to have its adjustments subject to the vagaries of individuals whose perspectives and levels of experience may vary?³⁰ If trust was enough, we wouldn't need a contract at all,³¹ or as movie mogul Samuel Goldwyn once quipped, "A verbal contract isn't worth the paper it is written on."³²

- *Ability to Change the Rules.* Under a discretionary adjustment clause, lawyers are generally absent from the adjustment process—until someone threatens a lawsuit. This means that the parties' respective project managers are more in "control" of the adjustment process. They can largely do whatever they want, and no lawyer or auditor will question their compliance with the contract. They can make the rules up as they go along. In contrast, the enumerated adjustment clause will substantially determine (in advance) when the contractor is entitled to adjustments and when it is not. The owner's project manager generally must follow these rules (in the absence of an amendment to the agreement), even if he or she would like to grant the contractor an adjustment to help out the "relationship."
- *Extracontractual Assumptions.* Prices and schedules are based on a large number of assumptions—including about the contractor's own productivity. Most of these assumptions never make it into the scope of work or any other part of the contract. The owner may have no idea what the contractor's assumptions are, and there may be no record of what they were. Under a discretionary adjustment clause, a contractor preserves an option to seek price and time adjustments for variances between its own assumptions (which were never stated in the contract) and what actually happened.³³

One of the deficiencies with discretionary adjustment clauses is uncertainty regarding the outcome of specific claims. Clauses that provide for the contractor

30. See John W. Gaskins, *Suspensions and Available Remedies Under Government Contracts*, 44 MINN. L. REV. 75, 76 (1959) ("... [I]nconsiderate action by the [owner] ... may make an otherwise satisfactory contractual arrangement unprofitable, or even disastrous, for the contractor.").

31. See Wendy Netter Epstein, *Facilitating Incomplete Contracts*, 65 CASE W. RES. L. REV. 297, 299 (2014) ("Certainty is the reason parties formally contract rather than informally agree ... [I]ncomplete contracts that fail to give adequate guidance to the parties about their duties and obligations are more likely to result in opportunistic behavior and litigation and make litigation more time consuming and costly if it does result.").

32. ALVA JOHNSTON, *THE GREAT GOLDWYN* 16 (1937).

33. For example, in *John A. Johnson Contracting Corp. v. United States*, "recovery was allowed for increased costs sustained as a result of defective roads which were constructed by the [owner] and used by the contractor in building a hospital project. The court held that both parties ... assumed that [the contractor] would use the roads furnished by the [owner] as haul roads in connection with its building operations." *Gaines V. Palmes, Damages in Government Construction Contracts*, 25 FORDHAM L. REV. 621, 622 (1956) (explaining the decision in *John A. Johnson Contracting Corp. v. United States*, 132 F. Supp. 698 (1955)) (emphasis added).

to receive additional compensation for “changed circumstances” tend to generate fact-intensive disputes over what the circumstances were assumed to have been when the contract was signed. There may be emails and drafts supporting both sides of the claim, thereby leading to expensive disputes that are difficult to compromise.

Petrochem Services, Inc. v. United States exemplifies what can happen when a contract fails to expressly allocate a known risk. In that case, the US Navy solicited bids from contractors to clean up and remove oil that spilled from a storage tank.³⁴ The winning contractor, Petrochem, undertook an independent investigation of the facility to determine how much oil had spilled but found standing water was obscuring the containment area.³⁵ This made the quantity of the spill a known unknown for the contractor.

Petrochem submitted its pricing based on the assumption that only 6,000 gallons of oil had spilled. Petrochem ultimately removed 21,401 gallons of oil from the tank. It sought an equitable price adjustment, but was denied.³⁶ The government claimed that Petrochem had been verbally informed that the quantity of spilled oil was approximately 21,000 gallons while Petrochem claimed that it had not been so informed.³⁷

The *Petrochem* case illustrates the risk of discretionary adjustment clauses for both contractors and owners. Instead of addressing the risk that quantities could be higher or lower and providing price adjustments for variances, the contract itself was silent. This silence led to a messy dispute over who said what to whom.³⁸

Construction and services agreements with discretionary adjustment clauses also can lead to uncertainty regarding the amount of the adjustment. One example of this is the common law remedy of *quantum meruit*—that is, payment of a reasonable sum when none is provided in the contract. The remedy of *quantum meruit* has been pursued by contractors “in the case of changes and extras.”³⁹ In *Sam Macri & Sons, Inc. v. United States*, a subcontractor entered into a unit price agreement to complete paving work on behalf of a prime contractor.⁴⁰ While the prime contractor argued that the amount of compensation (if any) should be at the unit prices set forth in the contract, the court disagreed, holding that because the additional work was outside the scope of the original contract and no price had been expressly agreed for the additional work, the subcontractor was entitled to recover on a quantum meruit basis for the extra work. Had the *Sam Macri & Sons* contract contained a clear enumerated adjustment clause, it would have specified both the circumstances and the amount of compensation owed (thereby likely precluding the *quantum meruit* claim).

34. *Petrochem Servs., Inc. v. United States*, 837 F.2d 1076 (Fed. Cir. 1988).

35. *Id.* at 1078.

36. *Id.*

37. *Id.*

38. *Petrochem* was remanded for additional factual findings concerning the conversations. *Id.* at 1801.

39. MARTIN & ROCHWARG, *supra* note 16, at 20-19.

40. *Sam Macri & Sons, Inc. v. United States*, 313 F.2d 119, 122 (9th Cir. 1963).

Discretionary adjustment clauses are akin to the story of ostriches sticking their head in the sand, “foolishly ignoring their problem, while hoping it will magically vanish.”⁴¹ When the project goes well, the discretionary adjustment approach appears to be a good one.⁴² The parties saved a few hours of their time by avoiding the negotiation of various risks.⁴³ However, if claims grow in number or magnitude, the hours required to resolve them using a discretionary approach can be many times that required under an enumerated approach.⁴⁴ These hours also take place in the midst of the project, potentially distracting project teams from the job at hand.⁴⁵ Anthony Battelle, chief legal counsel to the Central Artery/Tunnel Project in Boston described his experience as follows:

The potential for disputes is great because losses are real, and the assessment of cost impact resulting from delay is an imprecise science. Not only is the dispute potential high, but such disputes are factually and sometimes legally complicated, and typically they are time consuming to resolve—particularly through litigation. Given [the] circumstances, the CA/T project anticipated . . . an estimated ten to twenty thousand [disputes] by project completion.⁴⁶

B. Enumerated Adjustment Clauses

It is no surprise that owners tend to prefer enumerated adjustment clauses. When something goes wrong on a project, enumerated adjustment clauses act as an important control on contractor price and time adjustments. But many of the advantages of enumerated adjustment clauses are also beneficial to contractors, including:

- *Meeting of the Minds.* When a contractor knows that its adjustments are limited to enumerated categories, the contractor is more likely to raise during negotiations all of the known unknowns that it is relying upon for its pricing. This serves an “information forcing”

41. Karl S. Kruszelnicki, *Ostrich Head in Sand*, ABC SCIENCE, (Nov. 2, 2006), <http://www.abc.net.au/science/articles/2006/11/02/1777947.htm>. This myth seems to have had its origins in Roman times, when Pliny wrote in his *Natural Histories* (circa AD 77) that ostriches “imagine, when they have thrust their head and neck into a bush, that the whole of their body is concealed.”

42. See Avery W. Katz, *Contractual Incompleteness: A Transactional Perspective*, 56 CASE W. RES. L. REV. 169, 178 (2005) (“Writing and negotiating an additional term incurs a certain and immediate cost that may not be justified if the contingency it covers is sufficiently remote.”).

43. Epstein, *supra* note 31, at 305 (“For law and economics scholars, the question of contract drafting strategy turns on costs: drafting costs, performance costs, and litigation costs, to be specific. Parties will draft contracts that minimize the sum of the costs likely to be incurred at these three stages.”).

44. *Id.* at 306 (“[Richard Posner] suggests that pre-performance specification generally decreases the chance that a party will act opportunistically during contract performance and that the deal will result in litigation. In his view, parties are more likely to work out disputes before litigation if a contract is detailed and specific . . . [t]his makes detailed drafting efficient despite the transaction costs inherent in its undertaking.”) (citing Richard A. Posner, *The Law and Economics of Contract Interpretation*, 83 TEX. L. REV. 1581, 1583, 1584, 1614 (2005)).

45. See Gilbert J. Ginsburg, *The Measure of Equitable Adjustments for Change Orders Under Fixed-Price Contracts*, 14 MIL. L. REV. 123, 135-136 (1961) (“Without the changes clause, normal contract administration would bog down, as it is not at all unusual to find tens and often hundreds of change orders issued under a single contract.”).

46. Anthony E. Battelle, *The Growing Impact of AD on the Construction Industry: “Real Time” Dispute Processing on the Boston Central Artery/Tunnel Project*, THE CONSTR. LAWYER 13 (Nov. 1995).

function and ensures that the parties have an open conversation about what risks are present and which party will bear them.⁴⁷

- *More Certainty.* The parties mutually agree in advance to a set of rules, which establish the circumstances under which a contractor is entitled to price and/or time adjustments. So long as the factual circumstances satisfy one of the enumerated categories, the contractor will receive an adjustment. Owners cannot use their subjective judgment to deny claims.⁴⁸
- *Less Contingency.* Under a discretionary adjustment clause, the contractor is likely to include more contingency in its pricing to address the possibility that the owner's project manager will deny claims. In this respect, the owner effectively pays for some portion of known unknowns whether they come to pass or not.⁴⁹ In contrast, under an enumerated adjustment clause, the price paid by owners should be lower (because such contingency is unnecessary due to the express contractual assurance of an adjustment).⁵⁰
- *Fewer Claims.* Since the grounds on which claims can brought are more limited, there should be fewer claims for price and time adjustments. This decreases the distraction and administrative resources that are consumed during a project.
- *Better Relationships.* Discretionary adjustment clauses can place considerable pressure on the project manager, as he or she takes on the added role of judge and jury. When the project manager decides against the contractor, it can cause strain in the business relationship, often leaving the contractor believing that it has not been treated fairly. In contrast, when a claim is denied under an enumerated adjustment clause, it is usually done by lawyers who are relying on express language in the contract (and the project manager is

47. See Ruben Kraiem, *Leaving Money on the Table: Contract Practice in a Low-Trust Environment*, 42 COLUM. J. TRANSNAT'L L. 715, 738 (2004) ("Contracts are often, if not always, negotiated under non-ideal conditions, where there is real and unavoidable uncertainty, and at least some opposition of interests between the parties . . . There may be relevant information that is concealed or unknown, often for strategic reasons.").

48. In contrast, under the discretionary approach, contractors may assume they will be granted price adjustments for certain circumstances and not include any contingency for them. If the owner denies one of these categories, the contractor could find itself in a net loss position on the project.

49. See *J.J. Kelly Co. v. United States*, 69 F. Supp. 117, 120 (1947) (" . . . [R]etention of Article 9 in its present form in the government contracts would probably cost the Government more in the way of increased prices on such contracts hereinafter entered into than any possible savings that could be attained by retaining the article in its present form."). At the time of *J.J. Kelly Co.*, Article 9 in government contracts provided only an extension of time to a contractor during a delay that was not the contractor's fault.

50. Allocating Project Risk, POWER MAGAZINE (July 1, 2012), <https://www.powermag.com/allocating-project-risk/> ("The data collected showed that if risk is inappropriately allocated, resulting financial consequences can be significant. Nearly 20% of the overall impact resulted from contractors increasing their contingencies in response to inappropriate risk-shifting by the owner. This indicates that if risk is inappropriately allocated to contractors, increased contingencies will often be passed to the owner. It may be more cost-efficient to retain the risk and use mitigation and management techniques to lower the costs in-house.") (citing CII Implementation Resource 210-3, *Equitable Risk Allocation: A Legal Perspective*).

not “responsible” for the denial). After all, the contractor agreed to the language in the contract and must live with it.

- *Decreased Volatility of Contractor’s Profit.* Under the enumerated approach, the contractor should receive prompt payment for all of the known unknowns, as and when the risks materialize. While the contractor will no longer receive occasional windfalls from unspent contingency, it will avoid unexpected losses arising from insufficient contingency. This reduces the volatility (or range) of contractor’s profit over projects, likely leading to greater financial stability.
- *Less Litigation.* The use of precise contract terms (and fewer vague ones) entails a tradeoff between up-front (negotiation costs) and back-end enforcement (litigation) costs: “When the parties agree to precise terms (or rules), they invest more at the front end to specify proxies in their contract, thereby leaving a smaller task for the enforcing court.”⁵¹ Enumerated adjustment clauses resolve (at the front-end) many questions that would otherwise be left to judges, juries, or arbitrators—thereby avoiding some disputes altogether and limiting the scope of others.

The enumerated adjustment clause makes contractors carefully think about the risks they face on a given project. As described below, lawyers can easily draft enumerated lists that capture the universe of categories. This leads to valuable commercial discussions and better awareness of risks by both parties. Contractors will be compensated for what actually happened and will not be left with potentially large windfalls or shortfalls. This more efficient outcome is beneficial to both parties.

V. ENUMERATED ADJUSTMENT CLAUSE CATEGORIES

Negotiating enumerated adjustment clauses consumes more time because the parties need to agree on (i) the categories comprising the enumerated list and (ii) the standards for each category. Fortunately, these categories do not change much whether the energy project is a natural gas pipeline, natural gas compressor station, oil pipeline, oil pipeline pump station, wind turbine, solar farm, or electricity plant. Most energy projects encounter a similar set of risks.

A. *Written Change Orders/Directives (Changes to Scope of Work/Specifications)*

Construction and services contracts typically contain several technical exhibits that describe the work required (scope of work) and the specifications for how such work should be completed (specifications). These exhibits can be modified by a written change order or change directive:⁵²

51. Robert E. Scott & George G. Triantis, *Anticipating Litigation in Contract Design*, 115 YALE L.J. 814 (2005).

52. MARTIN & ROCHWARG, *supra* note 16, at 20-5 (“When the contract documents require changes and extras to be in writing, courts generally hold that a contractor who fails to obtain a written change order prior to

- *Change Orders.* A change order is “a written agreement between an owner [and contractor] that memorializes a change in the work, including an adjustment in the contract sum or time impact on the project schedule.”⁵³ Because change orders modifying the scope of work or specifications must be mutually agreed, any resulting price or time adjustments should be resolved by the change order as well.
- *Change Directives.* If the parties cannot reach agreement on the adjustments, then the owner may be required to implement revisions via a change directive—and the contractor would then have the right to seek adjustments based on the change directive. A change directive is “a document that directs the contractor to proceed with changed work without a final agreement on price and time adjustments for the changed work.”⁵⁴ Owners issue change directives “to allow the parties to proceed with changed work without final pricing in an attempt to keep the project moving forward toward timely completion.”⁵⁵

Thus, the first category for an enumerated adjustment clause is the issuance of a change directive by the owner. The contractor’s burden is then to show how the modifications effected by the change directive increased its cost of performance or caused the work to take longer. If the parties have difficulty reaching agreement on the estimated impact of a change directive (at the time it is first issued), the final determination of the adjustments can be postponed until the work required by the change directive has been completed. At such time, the parties can more easily evaluate the actual costs and schedule impact.

Note that verbal change directives should be prohibited. The scope of work cannot be unilaterally modified by the owner unless a written change directive is issued, and the contractor cannot file a claim based on the scope of work being modified unless a written change directive has been issued. The requirement of a written change directive ensures that both parties know when the scope of work was modified and how it was modified.⁵⁶

B. Differing Site Conditions

The cost of construction and services work is substantially affected by the “natural or man-made physical, surface, subsurface, and other conditions at the

performing changes or extras will not be paid for that work.”) (citing *United States ex rel. McDonald v. Barney Wilkerson Constr. Co.*, 321 F. Supp. 1294 (D.N.M. 1971)).

53. William B. Westcott, *Change Orders vs. Construction Change Directives: The Devil Is in the Details*, THE CONST. LAWYER 34 (Winter 2016).

54. *Id.* (italics omitted).

55. *Id.* at 39.

56. Terry Dougherty, *Getting the Deal Done Right: Keys to the Effective Construction Contract*, THE NEBRASKA LAWYER 9 (Apr. 2006) (“Disputes over the scope of the contractor’s work are one of the most common construction conflicts . . .” because “. . . [s]everal factors can make the definition of the contractor’s work unclear. The description of the work itself could be vague. Perhaps the definition of the contract documents is unclear, making the work required by those documents also uncertain.”).

site and the surrounding area as a whole.”⁵⁷ While contractors may have an opportunity to visit the site, they rarely have the opportunity to undertake any extensive analysis of the subsurface conditions. As such, they must rely on geological assessments provided by the owner and other publicly available information about the location.

This means that certain site conditions may remain undetected—and thus cannot be priced into a contractor’s bid. A differing site conditions clause establishes which unanticipated site conditions are the responsibility of the owner—versus the contractor. Martin and Rochwarg explain that the rationale for including a differing site conditions clause is to protect both the owner and the contractor from unnecessary, inefficient payments to one another:

The rationale for differing site conditions clauses is to equitably manage the risk of unanticipated site conditions between the owner and contractor. The clause is a means by which both the owner and the contractor can eliminate unreasonable risks and contingencies. With such a clause, the contractor does not need to include large contingencies in its bid to cover the increased costs of performance in the event an unanticipated latent physical condition is encountered, and the owner is protected against windfall profits to the contractor if no such condition is encountered. Conversely, if such a contingency is not included in the contractor’s price, but an unexpected physical condition is encountered, the owner obtains a benefit for which payment has not been made, while the contractor incurs unanticipated costs, and may be forced into an adverse financial position that could jeopardize the completion of the project. A changed site condition clause removes this risk[.]⁵⁸

Differing site conditions clauses create a more accurate and orderly bidding process that benefits both contractors and owners. “The primary purpose of differing site conditions clauses within construction contracts is to encourage contract bidders to submit their lowest bids rather than build cushions into their bids for contingencies that may never occur.”⁵⁹ A differing site conditions clause provides contractors with a straightforward contractual remedy (of compensation) if differing site conditions are encountered.⁶⁰

By bearing the risk for differing site conditions, owners receive bids closer to the true cost of the work. Owners can then engage the most efficient contractor rather than the contractor who may have been a poor estimator of the risk of encountering differing site conditions and thus submitted the lowest bid.⁶¹ Efficient

57. S. Scott Gaille, *Unanticipated Site Conditions & Energy Construction Agreements*, GAILLE ENERGY BLOG, ISSUE 78 (June 28, 2019), <https://gaillelaw.com/2019/06/28/unanticipated-site-conditions-energy-construction-agreements-gaille-energy-blog-issue-78/>.

58. MARTIN & ROCHWARG, *supra* note 16, at 21-7 to 21-8.

59. Beh, *supra* note 15, at 132.

60. MARTIN & ROCHWARG, *supra* note 16, at 21-5 (“Unless a changed conditions clause exists in the underlying contract, the contractor must find a different theory for recovery or assume the unforeseen conditions and bear all attendant additional costs.”) (citing *Eastern Tunneling Corp v. Southgate Sanitation*, 487 F. Supp. 109 (D. Colo. 1979)).

61. See Justin Sweet, *Standard Construction Contracts: Some Advice to Construction Lawyers*, 40 S.C.L. REV. 823, 829 (1989) (“The fiercely competitive construction industry or particular market conditions may generate a “gambler”—a contractor who will *not* build risks into the contract price. A gambler wants to win out over the others at all costs and may plan to “beat” the fixed price by claims.”) (emphasis in original).

contractors avoid losing bids to less efficient contractors who either underestimated the risk of differing site conditions or intended to seek claims after entering the contract.

Large, well-capitalized owners may also have an interest in absorbing costs for differing site conditions, even if it increases the owner's costs:

One very costly job may drive a contractor out of business, eventually hurting the large owner who requires specialized services in multiple contracts. Absorbing the cost of unforeseen conditions protects the industries upon which the large owner depends. Moreover, contractors may elect not to bid on high-risk projects, finding the risks unacceptably high.⁶²

Several commentators and court cases have sought to distinguish between two "types" of changed condition claims.⁶³

At least in terms of who will foot the bill for a truly unforeseen site condition (which we all care about) . . . the analysis will always be the same. . . . "Type 1" differing site condition claims involve site conditions that differ materially from the conditions planned for the construction contract. "Type 1" claims rely on the legal doctrines of misrepresentation and implied warranty to provide relief to a contractor unfortunate enough to encounter a site condition not envisioned in the parties' contract. In contrast, "Type 2" claims involve site conditions that differ materially from those conditions that are "normally encountered." "Type 2" claims rely on the equitable doctrine of mutual mistake to provide relief to a contractor for site conditions that were "unknown" or were of an "unusual nature." . . . [W]hen reviewing a differing site conditions claim, courts will always ask the same question: were the conditions the contractor experienced on-site "reasonably foreseeable?"⁶⁴

Such common law distinctions among misrepresentations, implied warranties, and mutual mistakes may increase the probability of a dispute—and also its costs. Instead of parties knowing what they will pay or receive at the front end, the outcome may require a judge or arbitrator to apply the precedents of many cases involving other parties. The enumerated adjustment clause does away with this complexity. Instead, the parties mutually agree on an express standard. If a site condition satisfies the contract's standard, then an adjustment is required; if not, then no adjustment is allowed.

Consider the following definition of "Differing Site Condition" from a contract following an enumerated adjustment approach:

"Differing Site Condition" means, as of the effective date, a site condition that the existence of (or risk of encountering it): (a) was not identified in any written documents (including geological reports) received by contractor; (b) would not have been recognized by a contractor specializing in the performance of similar work (assuming good industry practices); and (c) was not actually known by any member of contractor group.

The preceding prongs of the test capture three ways in which a site condition becomes reasonably foreseeable. Subpart (a) addresses the situation in which owners provide geological assessment reports prior to the signing of a construction

62. Beh, *supra* note 15, at 136.

63. See, e.g., AIA Document A201, Sec. 3.7.4.

64. Don Gregory, "Type 1" vs. "Type 2" Differing Site Condition Claims: Distinction Without Difference, OHIO CONST. LAW (Feb. 16, 2015), <https://ohioconstructionlaw.keglerbrown.com/2015/02/type-1-vs-type-2-differing-site-condition-claims-distinction-without-difference/>.

contract. These geological assessments can be helpful in resolving these disputes because they establish a third-party baseline against which to compare the actual site conditions. Every site condition identified in the geological assessment report is reasonably foreseeable. Subpart (b) captures those items that may not have been disclosed but would ordinarily have been identified by a typical contractor, and subpart (c) captures actual knowledge, such as might be obtained by a contractor who has previously worked at the same location.⁶⁵

The “risk of encountering” language also is important because geological assessments are typically samples taken over a large area. For example, posit a geological report comprised of ten bore holes, each taken every 100 yards. Two of these bore holes encountered boulders. The contractor designed its excavations to avoid the two boulders identified, but then encountered a third boulder at a location between two of the bore holes. Is the third boulder a differing site condition? If the language “risk of encountering it” is present, then the answer is obviously no—because the report clearly showed the presence of boulders in the area (if there were two, there are likely more). If such language is missing, the contractor might argue that the new boulder was a differing site condition because that specific boulder was not identified or otherwise capable of being known about prior to excavation.

In all cases, the contract should provide that the contractor should only be entitled to receive adjustments for site conditions that qualify as “differing site conditions.” All other site conditions are at the risk and expense of the contractor.

C. Owner-Caused Delay

Typical claims for owner-caused delay include the owner’s failure to timely deliver materials that the contractor needs for its work—or government permits or private right-of-way agreements that the owner has committed to timely obtain. Delays caused by the owner can be financially devastating. As the Court of Claims explained:

When a contractor has scores of employees, who must be paid for semi or total idleness during a period of delay through no fault of his own, but which is due to the wrongful acts or omissions of the other party to the contract, and at the same time his bonds, his interest, his capital investment, his overhead, his employees’ wages, and his rental or use of machinery must go on, there is brought home to him in a very real and sometimes in a bankrupting way the heartbreaking realization that no mere extension of time will compensate him for the additional outlay of these expensive items.⁶⁶

It is in the interest of both owners and contractors to contractually determine *ex ante* if and when additional compensation will be provided for owner-caused delay, as this will serve to reduce contingency from contractor bids by reducing

65. The parties also could create lists of deemed differing site conditions, which give rise to adjustments whether or not they were disclosed in advance. This might be necessary to avoid excessive contingency based on the low risk of an expensive site condition.

66. *J.J. Kelly Co.*, 69 F. Supp. at 120.

financial risk to contractors.⁶⁷ Contracts have traditionally defined owner-caused delay as “an act or omission of owner that prevented the contractor from performing its planned work.” However, such language is too broad and can lead to misunderstandings about what the owner is required to provide, and when. A better approach for handling owner-caused delay is to list the deliverables that the contractor is relying upon in an exhibit to the contract. A definition of owner-caused delay along the following lines accomplishes this:

“Owner-Caused Delay” means the owner’s failure to achieve a precursor to contractor’s work (that is expressly identified in the exhibits to this agreement) on or before the date required for such precursor (that is expressly set forth in the exhibits to this agreement) and such failure is the sole cause for contractor being unable to commence scheduled work.

The preceding definition ensures that the parties mutually agree on the required deliverables and the dates they are due, and then list them in an exhibit. It also ensures that the contractor cannot seek an adjustment for cases of concurrent delay—for example, if the owner’s materials were late but the contractor’s crew also was late and could not yet use them.⁶⁸

D. Owner Suspension

Suspensions of the work can happen for a variety of reasons. The standard for owner suspension should make clear that contractor is only entitled to adjustments to the extent that the suspension was for the *owner’s* own convenience—and not, for example, because of the acts or omissions of the contractor (e.g., if the contractor’s safety violation results in the owner issuing a work stoppage, that should not constitute an unrestricted suspension).⁶⁹ The second important component of an owner suspension standard is that it must be in writing. This ensures that all parties know that such a suspension has occurred and when it occurred, thereby avoiding confusion about verbal statements.

67. *Id.* (“If [they remain responsible for owner-caused delays], contractors in making their bids will necessarily make allowances for these possibilities and conditions which might result in delay through no fault of the contractor and which might greatly increase the cost of construction. As a matter of practical necessity their bids will be greater.”).

68. Asselin & Harris, *supra* note 26, at 945 (“Delays are deemed to be concurrent when both the owner and contractor are partially responsible. Generally, this occurs when both parties are responsible for delays to the overall completion of the project as a result of simultaneous delays to work activities in their respective control.”).

69. See Richard J. Wittbrodt and Lynsey M. Eaton, *Understanding Contractual Suspension Terms: A Risk Management Tool for Owners and Contractors*, REAL PROP. L. REPORTER 2-3 (Sept. 2010), <https://www.gibbsgiden.com/wp-content/uploads/2018/07/Understanding-Contractual-Suspension-Terms.pdf> (citing Associated General Contractors of America Document No. 200 §11.1.1) (“11.1.1 Owner Suspension. Should the Owner order the Contractor in writing to suspend, delay, or interrupt the performance of the Work for such period of time as may be determined to be appropriate for the convenience of the Owner and not due to any act or omission of the Contractor . . . [t]he Contract Price and Contract Time shall be equitably adjusted by Change Order for the cost and delay resulting from any such suspension.”) (emphasis added).

E. Force Majeure

Force majeure definitions typically are comprised of three parts: (a) a general standard, such as “any circumstance that is not within the reasonable control, directly or indirectly, of the party affected, but only if and to the extent that such circumstance cannot be prevented, avoided, or removed by such party”; (b) a non-exclusive list of examples of force majeure (wars, disasters, strikes, fires, government actions, etc.); and (c) a list of events that *do not* constitute force majeure.⁷⁰ Most of the variance between force majeure clauses in construction and services agreements takes place with respect to (c)—the exclusions from force majeure.

In addition to typical exclusions such as economic hardship, late payment of money, and changes in market conditions, other carve-outs are becoming more common. These carve-outs typically coincide with specific circumstances (that would ordinarily qualify as force majeure) that the parties wish to treat differently. For example, the owner may wish to grant price adjustments for most force majeure events, but not for weather—or alternatively, the owner may wish to grant price adjustments for weather, but not for most force majeure events. Such carve-outs provide flexibility to handle different types of force majeure under varying standards.

1. Adverse Weather

Weather is the most common example of a force majeure carve-out. The force majeure clause may exclude all weather except for named tropical storms and declared disasters. The excluded “regular” weather events are then handled under a new definition, such as the following:

“Adverse Weather” means an hour during which weather (other than Force Majeure) occurring at the work site prevents a majority of contractor’s full-time personnel from working, in each case, assuming the use of good industry practices by contractor to mitigate the effects of such weather.

Note that in the above definition, relief for adverse weather requires that a majority of the personnel be prevented from working during an hour—thereby excluding certain lesser weather impacts. The agreement also can introduce the concept of deductibles, whereby adverse weather would not give rise to an adjustment until a certain number of adverse weather hours had occurred (e.g. seventy-two hours of adverse weather). In such a case, the presumption would be that the contractor’s pricing already included contingency for seventy-two hours of weather.

70. See generally Jay D. Kelley, So What’s Your Excuse? An Analysis of Force Majeure Claims, 2 TEX. J. OIL AND ENERGY L. 91, 114 (2007).

2. Protester-Caused Delay

Because “[c]limate change has become a divisive political issue in the United States, and it appears likely to remain so for the foreseeable future,” on-site protesting has become a greater threat to American energy projects.⁷¹ Protestors generally turn up at pipeline right-of-ways and other energy project locations because of their view that oil and natural gas energy development “. . . contribut[es] to the nation’s continued reliance on fossil fuels.”⁷² Wind turbines also have become targets for protesters who are concerned about damage to view corridors and bird life. Such developments have led some owners and contractors to expressly address the risk of protester-caused delays. A suggested definition of Protester-Caused Delay might read as follows:

”Protester-Caused Delay” means: (a) the presence at the site of third-party protesters (other than contractor’s personnel) who are demonstrating against the construction of the facility or the actions of owner (and not, by way of example, demonstrating against actions of contractor or a government instrumentality); (b) such protesters’ actions are the sole cause for contractor being unable to commence scheduled work; and (c) contractor was unable to avoid the impact of such protesters.

Note that protest activity must be directed at the owner or its facility and not at the contractor or the government, more generally. For example, if protesters target the owner of a construction company due to a controversial social media post made by him or her, then no adjustment would be owed. Similar to the definition of owner-caused delay above, this definition also ensures that the contractor cannot seek compensation in instances of concurrent delay (e.g., protesters are blocking the right-of-way, but the contractor’s crew is not otherwise ready to commence work).

3. Effects of Widespread Disease (COVID-19)

As a result of COVID-19, construction and services agreements now typically address those risks associated with pandemics, epidemics, and diseases. The negotiation of such COVID-19 clauses initially reflected considerable tension between parties, with contractors “attempt[ing] to negotiate a broad definition of a COVID-19 event to include any delays or disruptions to labor, materials, supplies, or manufacturing arising out of or relating to the pandemic, including on account of quarantines, shelter-in-place orders, and similar restrictions”⁷³ and owners “expect[ing] that contractors . . . will have accounted for any known and reasonably foreseeable COVID-19 restrictions or requirements and . . . seek[ing] to limit the contractor’s relief only to new or unforeseeable events.”⁷⁴

My preference is to leverage the applicable law and COVID-19 guidelines into the standard as illustrated in the definition of “Effects of Widespread Disease” below:

71. S. Scott Gaille, *How Political Risk Associated With Climate Change Is Impacting Pipeline Construction Agreements*, 40 ENERGY L.J. 111, 128 (2019).

72. *Id.*

73. Owino-Trice & Puri, *supra* note 12, at 62.

74. *Id.*

”Effects of Widespread Disease” means that applicable law requires that some or all of the contractor’s work be suspended due to a disease, epidemic, or pandemic (including COVID-19).

If the binding COVID-19 requirements for essential workers require a quarantine for personnel who come into close contact with an infected co-worker, the suspension of work resulting from such government-mandated quarantine would give rise to adjustments. In contrast, if the contractor’s personnel refused to work due to fear of contracting COVID-19, no adjustments would be granted. Thus, the standard proposed above is more objective because it allows the government to determine when a work stoppage is compensable. As with the prior carve-outs, the definition of force majeure also would need to exclude any effects from diseases, epidemics, or pandemics (as they would instead be treated under the definition “Effects of Widespread Disease”).

VI. WHICH CATEGORIES SHOULD RECEIVE BOTH PRICE AND TIME ADJUSTMENTS AND WHICH CATEGORIES SHOULD RECEIVE ONLY TIME ADJUSTMENTS?

Once the parties reach agreement on the list of enumerated grounds for adjustments, the next question is:

Which categories give rise to both price and time adjustments and which give rise to time adjustments only?

As a general rule, any category within the owner’s control should give rise to both price and time adjustments. These categories include change directives issued by the owner, owner-caused delays, and owner suspensions. Differing site conditions usually also are thought to be “within the owner’s control” because the owner has selected the location and bears some responsibility for geological testing. In all of the preceding four cases, the owner is typically responsible for both price and time adjustments.

In contrast, categories outside of both the owner’s and contractor’s control generally result in the contractor receiving only additional time to complete the work—these categories do not give rise to price adjustments. Practitioners often refer to such events as “time-no-money.”⁷⁵ The “time-no-money” approach allocates the risk and cost of dealing with force majeure and all of its sub-categories to the contractor (bad weather, protester-caused delays, and COVID-19).⁷⁶ The principal costs incurred by the contractor when a “time-no-money” event occurs are those associated with delay.⁷⁷ Though personnel and equipment are unable to

75. Asselin & Harris, *supra* note 26, at 944.

76. *Id.*

77. Costs associated with delay are not a trivial matter. As one scholar put it, “[I] would hazard the guess that more contractors have been bankrupted by delays in performance than all other causes combined. Anyone with a modicum of experience in construction work knows that time costs money and that the normal effect of any delay – whether due to changes, bad weather, or other causes – is to increase the cost of the job.” Joel P. Shedd, Jr., *The Rice Doctrine and the Ripple Effects of Changes*, 32 GEO. WASH. L. REV. 62, 69 (1963).

work, the contractor must still maintain personnel and equipment in a state of readiness to resume work the moment circumstances allow. Thus, “although the direct labor hours required to perform the work may remain unchanged, the contractor’s labor costs increase because the period of time necessary to complete the work increases.”⁷⁸ In addition to increased labor costs, contractors also incur delay costs from idle equipment, additional bond and insurance premiums, extended field office expenses (e.g. job site overhead), and extended home office overhead.⁷⁹

Reasons why the “time-no-money” approach became industry practice for events outside the control of both the owner and contractor include:

- *Sharing of Costs – Each Party Bears Its Own Costs.* In the event of a work stoppage caused by neither party, both parties are incurring costs. While the contractor may be absorbing the costs of idle people and equipment, so too is the owner absorbing the costs of its idle project team—and presumably also lost revenues from an energy facility that will come on line later than originally scheduled. Time-no-money results in each party bearing its own losses.
- *Owner Should Not Become Contractor’s Insurance Company.* The owner is paying the contractor for project results and does not intend to insure the contractor against business interruptions. Thus, the owner does not guarantee that weather and other circumstances will allow the contractor to work every single day between commencement and completion. The owner should not have to insure the contractor for its own inability to work.
- *Moral Hazard.* Contracts should seek to avoid moral hazards—that is, diminishing a party’s incentive to mitigate risks by making someone else responsible for its consequences. Price adjustments for force majeure and similar circumstances raise the specter of a moral hazard because contractor is best positioned to take precautions (in advance) to protect its work against such risks and also can reduce costs by promptly demobilizing personnel and equipment.⁸⁰

At the end of the day, the practical effect of “time-no-money” is that the contractor is self-insuring against the risk of force majeure and similar events. It does so by including some contingency in its pricing. For example, a contractor that bears the risk for weather-related interruptions will usually be paid higher rates than a contractor that has the right to receive price adjustments during weather

78. Asselin & Harris, *supra* note 26, at 944.

79. Thomas J. Kelleher, Jr., Eric L. Nelson & Garrett E. Miller, *The Resurrection of Rice? The Evolution (and De-Evolution) of the Ability of Contractors to Recover Delay Damages on Federal Government Construction Contracts*, 39 PUB. CONTRACT L.J. 305, 306 (2010).

80. See Beatrice A. Beltran, *Posner and Tort Law As Insurance*, 7 CONN. INS. L.J. 153, 172-73 (2001) (summarizing the logic motivating Judge Richard Posner’s decision in *Pomer v. Schoolman*, 875 F.2d 1262 (7th Cir. 1989)) (“[the farmhand] knew that the accident was caused only by his momentary lapse of judgment . . . Thus in terms of deterrence, [the farmhand] was in the best possible position to prevent this accident. It would be in error to shift the responsibility for this gruesome accident onto other parties who were in no position to prevent the accident.”).

standby.⁸¹ When such higher rates exceed the actual costs incurred for weather, the contractor makes excess profit—which can be used as a rainy-day fund (for those future projects in which weather costs may exceed the contractor's contingency).

The alternative to “time-no-money”—that is, price adjustments for circumstances beyond the owner's control—means that the owner is insuring the contractor for these costs (typically through payment of standby time). In such cases, the contractor's rates should be lower because it will have no contingency built into them. The principal reason that categories such as adverse weather, protestor delay, and widespread disease have been separated from force majeure is to allow the owner flexibility to insure the contractor for only certain types of force majeure events. This separation allows the owner to balance the contingency required by the contractor (*i.e.*, the contractor's cost of self-insurance) versus the owner providing insurance for such an event.

When does it make sense for an agreement to offer a price adjustment for a circumstance that is beyond both parties' control? The short answer is when the *known unknown* events are subject to *highly variable costs*. High variability can drive up contractor contingencies (for self-insurance), potentially leading to contractor windfalls if the risk comes in on the lower side of the predicted range. For example, consider a project in the Gulf of Mexico during hurricane season. The contractor has a 2-in-3 chance of paying nothing (because no hurricane occurs) and a 1-in-3 chance of incurring a storm and paying \$1,000,000. The contractor proposes a contingency of \$500,000 (and therefore agrees to bear the full \$1,000,000 cost if a storm strikes). In such a case, the owner is faced with paying \$500,000 whether a storm comes or not. Rather than lose a certain \$500,000 as a contingency payment to the contractor, the owner may opt to keep the \$500,000 and instead provide a price adjustment for named storms on the basis that the expected value of a hurricane payout (1/3 chance of paying \$1,000,000 = \$333,333) is less than the contingency proposed by contractor.

Another factor that can influence price adjustments is the duration of the work. The longer the project, the easier it is for a contractor to bear the risk of several days of delay and spread those costs across the overall project. For example, if a vessel is laying a pipeline over twenty-five weeks, even if a storm shuts down work for a week, that is only ~4% of additional cost; if a vessel is undertaking a two-week repair operation, and a storm shuts down work for one week, that is ~50% of additional cost.

Regardless of which party bears the risk, both must be mindful of mitigation. Neither the owner nor the contractor should be responsible for indefinite standby. When costs of demobilization (and remobilization) are less than paying for personnel and equipment to standby, the contractor should (absent contrary

81. Robert B. Clark, *Government-Caused Delays in the Performance of Federal Contracts: The Impact of the Contract Clauses*, 22 MIL. L. REV. 1, 69 (1963) (“[A] fallacy . . . lies in the assumption that contractors are willing to run risks at no cost . . . by and large the idea of running a risk without compensation is repugnant to a businessman. He has a minimum below which he will not go. This will . . . vary from contractor to contractor because the hope of an award is a powerful incentive. However, it is not so powerful as to completely eliminate contingency reserves. If the contrary were true, the insuring of weather risks would not have attained universal acceptance.”).

directions from the owner) furlough personnel and demobilize equipment to mitigate standby costs.

Even if a price adjustment is granted for a circumstance beyond both parties' control, the parties should consider placing additional controls on the amount of such price adjustments, including:

- *Cap on Duration.* If the owner is responsible for actual standby or delay costs, consider placing a cap on the maximum duration of any individual standby period (or standby time cumulatively over the course of the contract). This ensures that the contractor is covered for finite periods of time when demobilization would not make sense—but minimizes the probability of a dispute over a longer shutdown.
- *Declining Payments.* The price adjustments also could be calibrated to include anticipated furloughs and demobilizations. For example, the first two days of an event might assume full standby, but thereafter, the amounts of standby might decline (90% on day three, 80% on day four, etc.).
- *Owner Elections.* If the owner is paying for standby time, then the owner should have the right to elect which personnel and equipment are placed on standby and which are demobilized and furloughed. This helps mitigate the moral hazard risk.

COVID-19 quarantines have presented a particularly challenging case for whether price adjustments should be granted or not. The moral hazard issues presented by COVID-19 are greater than those of other categories because of the level of control that contractors have in either mitigating or exacerbating this risk, including:

- the nature of work force housing (individual or shared hotel rooms);
- how people are transported to and from the work site (individually, car pools, or buses);
- the manner in which personnel take their meals (individually or communally; take-out or dine-in);
- whether or not curfews are in place for personnel (e.g. no after-hours visits to bars);
- social distancing, mask wearing, and air purification at contractor's own offices;
- the timing and frequency of COVID-19 testing; and
- vaccination requirements.

If the owner pays price adjustments for a contractor's COVID-19 standby costs, then the contractor will be less incentivized to take precautions that would mitigate the risk, but might be somewhat costly to implement. The counter argument is that uncompensated contractors may have an incentive to send asymptomatic (but exposed or recovering) workers back to the site too early, thereby potentially leading to more COVID-19 cases (than if workers were quarantined for longer periods).

In all of the above cases, the question of whether or not price adjustments should be allowed for different circumstances is a discussion that should be had at

the outset. Doing so ensures that the contractor's pricing reflects the risks it is bearing under the construction or services agreement—and that no contingency is included in the pricing for any circumstances for which a price adjustment is available (and that no extra days are built into the schedule for circumstances for which a time adjustment is available). Enumerated adjustments also enable the company to make efficient decisions about the tradeoffs between contingency (paying the contractor to bear a risk) and price adjustments (lower pricing plus paying the actual costs when the risks occur).

VII. CONCLUSION

While contractors continue to favor discretionary approaches to adjustment clauses, there are many reasons to believe that discretionary adjustment clauses lead to inefficiencies detrimental to both owners and contractors. The discretionary adjustment clause sets up a contractor for a potential catastrophe in which it has included insufficient contingency but yet is faced with an owner's denial of a claim—a claim that is not expressly allowed under the contract and therefore is difficult to enforce in the courts. Enumerated adjustment clauses offer a contractor greater assurance of its claim being granted by the owner, and even if it is not, a higher probability of enforcing the claim in the courts. While owners already tend to support enumerated adjustment clauses for purposes of curtailing excessive or unjustified contractor claims, enumerated clauses make construction and services agreements more complete, thereby reducing inefficiencies such as contingencies and litigation costs.