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Risk Taking in Design Contracts, Supply of Goods and Drilling of Exploratory Wells and How to Manage Them

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ABSTRACT

Design, supply and drilling (EPD) contracts, referred to in the downstream industry as turnkey contracts, are new contracts in the drilling industry that can be attractive to both employer and contractor. In this type of contracts, the design, supply of equipment and goods, as well as drilling wells are the responsibility of the drilling contractor. Therefore, all risks in all three stages are the responsibility of the contractor and in this regard, these contracts are attractive to employers. Therefore, by managing and taking new risk through placing conditions and clauses, these contracts can be replaced by the format of previous contracts. Studies and researches in the field of EPD contracts in the world and Iran in the field of production wells have been done, also projects in this field have been done in South Pars field. However, a comprehensive and complete research on this issue has not been done yet. In the exploration of exploratory wells, in the world and in Iran, research on the contractual risks of this type of contract and how to allocate these risks has not been done yet.

Introduction

Risk attribution and compensation

Through the inclusion of damages clauses and conditions, the employer and the drilling contractor attribute the risk of losses to each other. It usually refers to the terms of protection and the damages clauses included in the contracts. Historically, compensation agreements have been invalidated by the courts in the face of public policy, which has encouraged negligence on the part of the person for whom compensation is to be paid. This argument has been discarded. Today, such agreements are generally binding, and where the agreement on damages in the face of negligence is clearly stated.

However, several oil and gas producing states have enacted laws prohibiting certain types of compensation clauses in drilling contracts. These anti-damages laws generally invalidate damages clauses if they invalidate a claim for damages in the face of bodily injury, death, or financial damages resulting from damages.

Due to the high potential cost of contamination liability, the party with the most bargaining power in contract negotiations limits itself from being exposed to such risk.

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Finally, to mitigate this risk in the EPD model and sample forms, they provide conditions for the employer to sue his contractor for litigation that causes damage to property directly from oil, gas, water or other underground minerals.

The employer is also responsible for any claim that involves damage to the construction, basement layer or reservoir. Such compensation is necessary because contractors are not normally able to provide such insurance against underground damage. However, employers can often obtain such coverage.

Compensation of the Employer by the Contractor

The drilling contractor usually agrees on bodily injury, death, or financial loss to protect, defend, compensate, and protect the employer from litigation by contractor employees, subcontractors, or their employees. These damages clauses in the face of such claims impose unlimited liability without regard to the cause or omission of either party. If the limits of the indemnification clauses assumed in the EPD contracts exceed the permitted applicable rules, these clauses will be automatically amended to comply with these rules.

An important point in this regard is the need to obtain environmental permits, which in itself is a big risk according to environmental laws, so in EPD contracts and in special cases, exploration wells should be explicitly responsible for obtaining these permits, and it is the party that takes the risk that is most capable of taking it. As we know, exploration wells are often drilled in pristine environmental environments, so the person in charge of these permits will face more difficulty and cost to obtain them.

Specific Clauses and Materials Related to Risk Allocation

In the case of well eruptions, since it can take a lot of time and money from the parties, given that most of the formation pressure in exploration wells is unpredictable, the parties in contract negotiations should pay special attention and risk attribution in this particular case. 2.2.3 Control wells and waste classic examples of well control include extinguishing wells and well fires. However, well control also includes well cementing where the pressure of gas, oil and liquid flowing out of it can certainly be uncontrollable.

While the costs of the latter case are lower than those of the former, in each case the parties must fully and comprehensively assess the responsibilities and potential costs resulting from the loss and re-establishment of well control. Under the IADC and API contract model forms, the responsibility for controlling a well depends largely on the type of contract, whether daily, deep or turnkey (EPD).

Re-drilling Costs

Both the employer under the terms of the day-to-day contracts and the contractor under the terms of the in-depth contracts and the EPD may provide insurance coverage for the risk of re-drilling the well where the problems occurred.

However, due to the high cost of these insurance coverages, many employers and contractors do not provide these coverages. Potential problems include excessive deviation of the well angle from the vertical, drilling problems such as abnormal pressures or high-risk formations, eruptions, fires and neglect. In general, the operation is under daily contracts, all responsibilities and costs are borne by the employer.

If all operations are under in-depth contracts and the problems and damages are attributable to the contractor, all costs and responsibilities for re-drilling will be borne by the contractor. If the damages and problems caused by the employer's equipment, such as the wall, are the failure of the cementing operation, the employer is obliged to pay the entire costs of the contractor to the said depth, as well as the total costs of lowering and moving the rig to a new well.

And then drilling the new well will be subject to the terms and conditions of the initial contract. In EPD contracts in exploration wells, if the problems are related to the contractor's activity, all costs and risks are borne by them, but if these problems are due to abnormal pressures or high-risk formations, when

writing the contract, that negotiation and risk should be allocated rationally.

Damage to Equipment

Employer Equipment

The employer naturally has equipment at the well site, including the wall, core pipe, and wellhead equipment. In most drilling contracts, including the API and IADC forms, the employer will be responsible for all damages to the client's equipment, and the contractor will have no liability or payment for such damages to the contractor.

Under API and IADC forms, the drilling contractor agrees to a visual inspection of all materials and equipment provided by the employer and to alert and inform the employer in the event of an apparent defect. These forms also provide the contractor with a condition that the contractor is not liable for damages resulting from materials provided or equipped by the employer, and is also not liable if the employer fails to notify the defect of the goods. In the case of EPD contracts in exploration wells, since the contractor is responsible for the supply of goods, he bears the risk of equipment defects or failure to provide quality equipment. Also, failure to deliver the goods on time carries a huge risk for the contractor. Of course, in new EPD contracts, in order to take and manage risk, each party assumes the supply and equipment of the goods, and consequently, the responsibility and risk is borne by the supplier in the contract.

The Power of Cairo

A complete draft contract contains the terms of the Cairo exemption performance by the employer and the contractor in the event of unforeseen and unavoidable events and circumstances arising that prevent part-time or full-time operation. These terms and conditions do not hold any employer or contractor liable to each other for any delay or damage that is beyond the control of the parties under this agreement.

The daily, in-depth and EPD forms of the IADC sample model provide the conditions for any party claiming the terms of the Cairo Force to warn the other side of the Cairo Force during a detailed notice. As might be expected, especially in the phrase "causes which according to this document are beyond the control of the parties", it is widely subject to interpretation and is therefore very difficult to decide and legislate.

In general, therefore, the terms of the Cairo jurisdiction are strictly imposed, as the courts are reluctant to release the parties from their obligations under the contract. 6.3 Confidentiality of information Employers spend a lot of money and money on their potential exploration and development goals. In this industry, due to close competition, employers try to protect the information obtained.

Therefore, many drilling contracts include terms related to the confidentiality of information. Under API forms, the contractor must not disclose or disclose employer information to third parties. The contractor also promises that its employees will not disclose employer information to third parties. In EPD contracts in exploration wells, due to the great importance and cost of obtaining this information, the confidentiality of this information is very important for the employer. Therefore, conditions and clauses for the protection and confidentiality of information should be included in the contract, and even penalties or, in more severe cases, termination of the contract should be written at the time of signing the contract. This minimizes the risk of disclosure of information to the employer.

Choice of Governing Law

While API forms do not include governing law selection clauses, IADC forms include clauses for determining contract law. None of these forms sets a specific format for resolving disputes by a particular jurisdiction. When the parties fail to choose the governing law and disputes arise, the actual laws of that state govern the contract. In various cases, the federal court must enforce the dispute resolution laws of the state in which the court is located.

The parties to a drilling contract may specifically agree on the law of a particular

state for the law governing the contract. With such a design, in the absence of dissenting intent, it means that the state's local laws have been selected for the governing law, which does not include state dispute resolution laws. As this type of design will naturally be binding between the parties, it logically meets the expectations of the parties. Due to the high cost of drilling exploration wells in choosing the law governing the contract in the form of contract design, supply of goods and drilling should be very careful, choosing the law of a country for the law should examine its risks and then with full knowledge and set clear eyes on that law as the law governing the contract. Because from now on, the contract will be guided and managed according to this law. For example, if the law governs the contract of Iranian law and the company is a contractor of a foreign company, according to Article 139 of the Constitution: "Peace of litigation over public and state property or its referral to arbitration in any case, subject to "It must be approved by the cabinet and must be notified to the parliament. In cases where it is a party to a foreign lawsuit, and in important domestic cases, it must also be approved by the parliament. Important matters are determined by law."

Therefore, this carries a very high risk for the contractor to resolve disputes through arbitration. Because the arbitration approval process is very difficult, time consuming and may not even be approved by one of the competent authorities, given that oil and gas are public property and the other party to the contract is foreign, this issue has a high risk for the parties.

Conclusion

As we have seen, the drilling industry is one of the most important and risky industries in oil and gas. Drilling a well is very costly and exploratory wells due to the fact that no information or little information is available in drilling this type of well, so the risks and costs in wells are much higher. Therefore, the parties involved in drilling these wells during the contracting should in the first stage and according to the characteristics of the well, select the best contract format and then form a professional working group consisting of legal and technical experts. Try to write a contract that carries the most reasonable risk for their company. Choice of contract type (daily, deep or EPD), risk attribution/ compensation clause is considered.

Of these, risk attribution / compensation conditions are very important and necessary. There are many changes and costs from these terms and conditions. In the 1980s, employers took on more risks for contractors. Under these terms and conditions, compensation was less reciprocal except as required by law. This trend only changed when demand for rigs increased dramatically. On the other hand, in accordance with article 44 of the Constitution and the outsourcing of activities, the National Oil Company has recently followed this approach and has moved from a daily payment contract to design, supply and drilling (EPD) contracts, and contracts in this field. It has concluded with local companies to dig production wells. The exploration management, as the representative of the National Oil Company in the field of exploration activities and drilling of these wells, is also examining the contractual risks of this type of contracts so that by including the drilling of exploration wells in this format, it can take an effective and positive step towards this overall goal. Here we summarize the contractual risks of drilling exploratory wells in the form of EPD contracts:

1. When writing a contract, in the first stage, one should pay attention to the design of that exploratory well. From now on, the whole operation will proceed according to this engineering design. Therefore, the contractor should try to collect the most information from the wells around the contracted well and also oblige the employer to exchange information. Now, if there is a problem in the design phase and the employer realizes it after approval, the employer can intervene depending on the terms of the contract and at the same time share the risk of that part between himself and the contractor.
2. The second stage is the supply of goods by the contractor and the contractor assumes the risk of this stage. The risks of this stage have

been higher for the contractor in countries that are under sanctions. According to the third chapter and risk allocation, the employer can take over the supply of part of the equipment or goods to mitigate the risk at this stage. If the employer assumes the supply of part of the equipment, then the risk of defects and defects of the product is also on them and in case of problems in the well, the responsibility is on the employer and the contractor is responsible for the cost until the problem is resolved.

3. The third and final stage of this type of contract is drilling. In drilling exploratory wells, due to the unknown nature of fields and formations, we always face many problems such as waste, well eruption, pipe blockage in complex formations. The risk of these problems and how to allocate them when contracting should be specified. Because any of these problems can lead to the loss of that well and make each party face unlimited liability.

4. In addition, other issues should be considered when negotiating and contracting. These include liability and risk of fluid contamination in the well and the law governing the contract. How the risk and responsibility for the contamination is assigned depends on the bargaining power of the parties during the negotiation. As mentioned above, the choice of the law governing the contract is very important. Because this in itself can determine the type of dispute resolution. (Article 139 of the Iranian Constitution)

5. One of the most important conditions that should be included in this type of contract to prevent the transfer of all risks to one of the parties is the terms of compensation and how to compensate. These conditions are one of the most important tools and tools of risk allocation. Therefore, the parties must provide the necessary insurance coverage to compensate the other party. The employer must oblige its contractor to provide the necessary insurance coverage, especially in high-risk exploration areas. The employer is responsible for allocating the excess risk of these insurance coverages.

6. Another important risk for this type of contract, which in exploration wells can contain surprising costs for the parties, is the loss of benefits. At first glance, it should be seen what place this issue has in the law governing the contract and under what conditions can this risk be mitigated?

7. As we know, the purpose of a contract is to achieve the goals of the parties. Therefore, drilling contracts and in its special type, EPD molds are not separate from this principle. So, the traditional view of shifting all risks downstream and weaker should be abandoned. Because in a chain, this attitude transfers risk to the lowest part of the set, which may not be able to deal with that risk. The inability of the downstream chain to manage risk disrupts the entire operation and contract. The modern view of risk allocation and management is such that each assumed risk is left to the party that has the greatest ability to deal with that risk. Therefore, the parties involved in EPD contracts when signing and negotiating should always be aware that risk allocation and management does not mean the transfer of all risks to one party, and such an attitude diverts the parties from their goals. Modern risk management and allocation induces the mindset that each risk party has the ability to manage and manage it.

In EPD contracts, whether in the design, supply and drilling of exploration wells, given the numerous risks that the contractor may face or be unable to manage, the employer must intervene and manage that risk with mutual cooperation. So that both the employer and the contractor achieve their contractual goals.

Recommendation

1- Since the contract is known as the main source of risk, so the parties should be most careful when writing a contract to write a contract that is generally understandable and according to the experiences of experts in this profession, in the first stage to prevent differences and conflicts in operations and contracts, it is the observers of the parties who must read the contract and act on it. Therefore, understanding the contract will eliminate the initial risk of observers' misconception of the contract. clear, and when writing in the simplest and most understandable way possible, because

2- Considering the modern methods of contracting and the importance and novelty of

EPD contracts in exploration wells, it is recommended that the parties employ a team consisting of legal, technical, financial and accounting experts to conduct the negotiation and contracting process. This in itself avoids a number of risks, including the creation of a purely legal, technical or economic contract. After forming this team, in order to enter the field of EPD contracts in exploration wells with the attitude of recognizing, allocating and managing risk should be considered to hold the necessary courses in this regard for the mentioned team.

3- In formulating technical and legal conditions, the parties must have an attitude arising from the new method of contracting. That is, their view of the contract is a view of mutual benefit. This means that in order to achieve mutual goals, the parties constantly allocate and manage risk and refrain from transferring all risks to one side. Due to the unknown nature of the exploration wells and the occurrence of abnormal problems, it is recommended that terms and conditions be included in the EPD contracts, which in case of such abnormal problems, if not attributable to the contractor's operations, lead to daily payment contracts.

4- Considering that exploratory wells are usually located in pristine areas of environmental health, the contract should include, if possible, conditions for obtaining the necessary environmental permits and other permits. Drilling offshore wells requires a series of special permits that are often easier and less time consuming for the employer to obtain. Therefore, it is suggested that these conditions be written in such a way that in cases where reputable employers, especially the government, are parties to EPD contracts in exploration wells, they are responsible for obtaining at least these special permits.

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