

**Benefits of Unit Rate Contracting  
in the Petrochemical Industry**

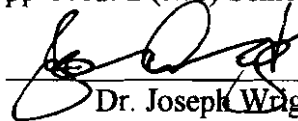
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**ABSTRACT**

The purpose of this study is to increase the unit rate utilization as a contracting strategy and to improve the efficiency of contractor expenses and performance by reducing the qualitative issues that directly affect the daily working relationship between XYZ and the contractor workforce and through the implementation of a unit rate management system at the refinery XYZ. In order to evaluate refinery XYZ's current contracting strategy, it is necessary to analyze it by examining historical data as well as industry averages. This study also examined the potential cost benefit on current time and material spends per year. It was concluded that unit rate contracting is a better style to use at the refinery XYZ because the supplier is drawn into driving productivity to achieve or improve his profitability and in the process, the owner gains too. However, for the owner to reduce his risk there is a lot of early work to agree; such as, schedule of rates, and situations where T&M rates apply.

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## Chapter I: Introduction

The petrochemical industry, which fabricates chemicals utilizing oil and natural gas as major raw materials, resides in a significant position in United States' manufacturing and consuming sectors. Oil and natural gas are composed mainly of hydrocarbons. The largest part of petrochemicals contains hydrogen or carbon or both. Petrochemicals can be transformed into thousands of industrial and consumer products, including plastics, paints, rubber, fertilizers, detergents, dyes, textiles and solvents. The industry consists of two major divisions. The principal petrochemical industry produces basic chemicals, such as ethylene, from oil or gas. The secondary industries convert the basic petrochemicals into materials that may be directly used by other industries. United States' standard of living is dependent to a considerable degree on domestic petrochemical production. The availability of economic petrochemicals allows the domestic production of numerous items that could be more expensive if imported.

This paper presents general information about five main contract styles (time & materials, management fee, target cost plus incentive, unit rate, and lump sum) and how one of them, specifically unit rate, benefits the petrochemical industry by using it as a contracting strategy and by improving the efficiency of contractor expenses and performance at the XYZ refinery. It also provides recommendations that can improve the contracting strategy in multiple ways. Finally, conclusions are given at the end of the report.

### *Statement of the Problem*

Lack of unit rate utilization as a contracting strategy in refinery XYZ.

### *Purpose of the Study*

The purpose of this study is to increase the unit rate utilization as a contracting strategy and to improve the efficiency of contractor expenses and performance by reducing the qualitative issues that directly affect the daily working relationship between XYZ and the contractor workforce and through the implementation of a unit rate management system at the refinery XYZ.

### *Assumptions of the Study*

Issues related with unit rate management system can be manipulated in order to improve contractor's efficiency and performance.

### *Limitations of the Study*

The results and conclusions of this study are limited to the company where the study has been conducted. This paper will evaluate five main contract styles, and how they impact contractor's efficiency and performance at the XYZ refinery, this analysis does not cover other issues. This paper analyses the petrochemical industry as a whole, without dividing it into its respective types (separation, conversion, and purification).



## Chapter II: Literature Review

Contracts are an integral part of the petrochemical industry. Every day we deal in contracts with owners both private and public, with vendors and subcontractors, and sometimes with architects and engineers. Although these contracts often exceed tens of millions of dollars and we sign our names to them, agreeing to abide by all of their terms and conditions, how often do we actually read them and understand fully our rights and obligations? Let's take a look at some of the more common forms of contracts and review some of their onerous provisions as well as some of their helpful ones (Levy, 2002).

### *Time and Material*

The basics of the time and material contract are quite simple (in construction slang it is known as "T & M"). The contractor charges the owner for the actual time that all workers spend on the owner's project plus all the cost of materials. The contractor's profit is built into the hourly rate charged to the owner by the contractor for all of his workers. Sometimes a wily contractor will have the audacity to add a percentage as their fee or extra profit to the contract (Docstoc, 2008).

The time and material contract has been around for decades. It became very popular in the late 1970's and 1980's on industrial construction projects around the globe. The time and material contract was used on large scale industrial projects where it was thought that the teaming of the owners and the owner's contractor would result in a win-win situation for both the contractor and the owner. The contractor would have limited risk and the owner would have a project built for about the estimated price (Docstoc, 2008).

The time and material contract on these industrial projects took the form of the cost plus fixed fee contract. The contractor was paid for all the hours of all their workers plus the cost of all the materials. The two were added up to give the total construction cost. Then the fixed fee percentage was multiplied times the total construction cost and then added to the whole. The typical fixed fee was in the 2% to 10% range. The catch was whether or not the owner had hired a contractor willing to take a reasonable profit on a project rather than a huge profit at the owner's expense. It turned out that there were not too many industrial contractors that could resist the lure of easy money at the expense of the owner (Docstoc, 2008).

What actually happened is that the contractors used every means at their disposal to drive the hours of labor and material up as high as they possibly could so that the fee would also be higher. As it turned out the construction costs grew much higher. So high that owner's around the world were almost bankrupted by this form of the T & M contract. The time and material contract destroyed the work ethic in hard working construction workers by rewarding slowness and laziness. This behavior was condoned and even encouraged by the managers of the construction companies. The reason for this was because the contractor made more money the longer the project took to complete (Docstoc, 2008).

The T & M contract also encouraged the use of unnecessarily expensive materials in an effort to drive up the cost. When two equally qualified materials could be used for the construction the most expensive alternative would always be selected because it drove up the construction cost and thereby increased the contractor's fee (profit). The time and material contract has largely disappeared from the Industrial Construction world because of its terribly abusive practices and its inherent ability to destroy any construction budget (Docstoc, 2008).

### *Advantages*

- Set a contract early with little negotiation.
- Work definition is unimportant to contract.
- Selection of supplier is based on rates.

### *Disadvantages*

- Owner assumes all of the risk.
- Owner usually has to drive productivity.
- Owner has to manage all coordination issues.
- Owner carries cost of poor quality.
- Supplier can take longer and use more people.
- Final cost certainty can be low.

### *Summary*

- T&M is not the most desirable style because the initiative is always with the owner to drive: worklist quality, planning standard, schedule, materials management, productivity, cost, and quality.
- In this contract style the supplier or owner plans work based on a provided worklist, and the supplier is reimbursed for all supplied services based on signed timesheets against agreed rates and mark up's.

### *Lump Sum*

The term lump sum or fixed price contract refers specifically to a type or variety of fixed price contract where the buyer or purchaser pays the seller or provider a fixed total amount for a very well-defined product, however there is the allowance within these for a variance in the event there are incentives attained through project incentives achieved or targets met. There are

benefits of this type of contract to both the buyer and the seller, and these are similar to those for the fixed price incentive fee contract. To the seller, it is beneficial because it typically allows for the seller or provider to charge a reasonable base fee, yet also allows for exceptional performance to be rewarded further. However, for the buyer that also provides a very tangible benefit. The buyer typically will be paying a very reasonable base fee up front, but there is of course the chance that the price will go up in the future if certain conditions are met (Project Management Knowledge, 2004).

A stipulated or lump-sum contract is most frequently used in competitively bid work, in either the public or private sector, where a complete set of plans and specifications have been prepared by the owner's design consultants. Contractors are expected to estimate the cost of the work in a specific set of bid documents, no more and no less. Any deviation from the scope of work detailed in the bid documents, except if amended later by other contract provisions, will result in a change order, once a contract has been awarded (Levy, 2002).

Although this may appear to be a rather straightforward approach, it is not as simple as it seems. The "intent" of the plans and specifications can often be interpreted in many ways by each participant in the construction process, the owner, the architect/engineer team, other design consultants, the general contractor, and subcontractors. The perfect set of plans and specifications, based on the author's experience, has yet to be produced, and changes are almost always inevitable, not only to include items inadvertently omitted from the scope of work but also items added by the owner to include additional amenities. Since the architect is, by contract, generally designated as the "interpreter" of the plans and specifications he or she created, the final decision on what constitutes the obligation of all parties to the contract rests with that

authority; unless challenged and resolved by either negotiation, arbitration, or litigation (Levy, 2002).

#### *Advantages*

- Contract can be set fairly quickly
- Good for discrete accurate packages of work
- Increased possibility of known cost
- Contract is based on agreed rates

#### *Disadvantages*

- Work definition must be very good to maintain expected cost
- Owner must manage delays to avoid additional cost
- Owner pays for 'risk' up front
- Owner probably pay's for all coordination issues
- Owner pays for any work management issues
- Significant likelihood of extra's if scope definition is weak

#### *Summary*

Lump sum is then only really good for small, discrete, and well defined packages. The owners pay for risk anyway and to maintain the fixed price they still have to own:

- Worklist Quality
- Planning standard
- Schedule
- Materials Management
- Productivity
- Cost

- Quality

### *Target Cost plus Incentive*

What could be less complicated than a contract whereby the contractor charges or invoices the owner for all expenses or costs linked to the work, plus a fee for overhead and profit? Well, the cost plus-a-fee contract involves a huge arrangement of thought and effort to work successfully.

First of all, a definition of what constitutes “cost” is often a point of contention between owner and contractor, and this need to be clearly defined. A cost-plus-fee contract is exactly what the name implies: the contractor will perform a certain scope of work identified by contract documents or a narrative description, and the associated costs will be reimbursed by the owner inclusive of the contractor’s fee, generally calculated as a percentage of the work. Cost-plus contracts are used infrequently, but when they are employed they require a high level of communication between contractor and owner to avoid misunderstandings and potential disputes (Levy, 2002).

The target cost plus incentive or cost-plus-fee is also referred to by the abbreviation of CPF, and represents a variant of a cost reimbursable contract in which the buyer provides reimbursement to the selling party for the allowable costs that have been accrued by the seller in the commission of the service, the creation, manufacture, delivery of the product, or in any other performance of the contracted work. In addition to this reimbursement, the seller also receives a fee that has been previously determined and calculated as a percentage measure of the total costs. The fee in these situations will tend to vary with the actual costs. Cost-plus-fee is advantageous to the seller because it allows for some baseline costs and expenditures to be reimbursed in a more guaranteed way, but also allows for the opportunity to modify fees based on percentages.

As such, as budgets swell the percentage remains fixed, however the resulting fee grows accordingly (Project Management Knowledge, 2004).

Target Cost Contracts are an alternative to conventional contracts in construction projects. The conventional procedure goes along a path that requires development of sufficient information for Contractors to tender in competition against each other in respect to the whole scope of works that is the subject of the contract. Provisional sums for certain undefined items may also be included together with escalation for certain agreed items. There is a brief statement on advantages and disadvantages of conventional contract seen in the context of a single contract. Further the conventional and customary approach has, because it is the norm, been found to be acceptable for Public Sector business but there is no doubt that when time is not available and/or where flexibility is needed then the advantages of adherence to all the usual normal processes are outweighed by the disadvantages of this procedure. Two major weaknesses of simple cost-reimbursable contracts are the lack of knowledge of financial commitment by the Employer and lack of incentive for the Contractor to control costs. Both may make it difficult for publicly accountable Employers to demonstrate that they are able to control their financial commitment. In addition, in state organizations, there is an attitude that cost-reimbursable contracts are a last resort (Bnet, 2007).

The cost-plus form of contract is often used when severe time restraints are imposed on the owner and it becomes necessary to begin construction as quickly as possible, and often without the benefit of well-defined plans and specifications. For instance, the owner of an office building may have an opportunity to lease the space in its building to a tenant requiring occupancy in short order, and therefore demolition of previously occupied space must begin immediately in order to facilitate the start of the new construction. The owner may also wish to

commence some limited amount of new work as the tenant fit-up drawings are being developed. The scope of demolition work can be easily defined, and partition layout and even partition work may be authorized on a cost-plus-fee basis (Levy, 2002).

It is also to the benefit of all parties to convert this cost-plus agreement into a lump-sum or guaranteed maximum price (GMP) contract when the drawings have reached a stage of completion that will allow for a more defined contract sum. This will eliminate many misunderstandings and potential disputes. The owner can either pay for the cost-plus work on a separate invoice or incorporate these costs into the lump-sum or GMP contract (Levy, 2002).

#### *Unit Rate or Value Based Contract*

In unit price contracts the contractor is paid a price or rate for each unit element of work carried out and identified at the time of contracting. The item descriptions for each element of work are normally prepared following sophisticated Standard Methods of Measurement, in a Bill of Quantities. The quantities for each element are estimated by the Owner at the time of tendering. The contractor however is paid the unit price for the quantities actually constructed, usually on a monthly basis based on a monthly valuation. The Unit Price payment mechanism thus places the risk with the Owner, for estimating the extent of the Works at the time of tender. The unit price mechanism is most appropriate where the design responsibility lies with the Owner and the design is to be completed during construction. The advantages for the Owner are that by adopting overlapping phases of design and construction, construction can commence early. The flow of information must be carefully monitored if claims for delay are to be avoided. The overlap of design and construction means that variations to the original outline scheme are likely, but the Unit Price mechanism provides a ready means of pricing the variations (Atkinson, 2001).



Unit Price contracts can give rise to two types of measurement claims which are unique to this form of contract. First, if the as-built quantities differ from the estimated quantities given at tender, then it may be argued by the contractor that the balance of plant, labour and materials has changed so that this of itself makes the unit prices inapplicable or inappropriate, so that they need to be adjusted. Secondly if there are omissions of item descriptions from the original Bill of Quantities, then the contractor will be entitled to a new appropriate rate for the item description. Such claims depend upon the interpretation of the Standard Method of Measurement. The Owner may reduce the incidence of the second type of claim by amending the Standard method of Measurement. The Owner may for instance define the Extent of the Works by reference to the Drawings and Specifications. He may then state that the Item Descriptions included in the original Bill of Quantities are to be taken as to be conclusive and require the contractor to satisfy himself that he has priced for all tasks required to construct the Extent of Works so defined. Careful drafting is required if claims based on Measurement arguments are to be omitted (Atkinson, 2001).

One further method of reducing arguments about the make-up of unit prices for variations for instance or quantity claims, is to require the contractor to provide a full make-up of prices before the contract is awarded including major lump sum items such as preliminaries. It is arguable however whether such estimates are relevant to any re-rating exercise (Atkinson, 2001).

The Unit Price contract is inappropriate where the Owner has completed all the design before a construction contract has been concluded. In that situation the Owner should consider having the contractor take over responsibility for the design and the contract then being a design and construct contract on a lump sum. The contractor will need certain safeguards if this

approach is to be successful, such as the opportunity to check the design and to have agreed changes to the design before accepting responsibility (Atkinson, 2001).

#### *Unit price vs. Fixed Price contracts*

In the ideal situation of a project with reliable specifications and precise estimation, the final payment should be about the same regardless of whether the payment was set at a unit price per hour or a fixed price for the entire project. If the project encounters unexpected technical problems, the unit price contract entails higher costs on the customer's part and, of course, an unexpectedly easy project (which is rare in practice) implies paying a lower price (Rost, 2006).

In many situations customers prefer a fixed price to a unit price contract because the customer knows beforehand the price to be paid and can compare the costs to the expected benefits. In addition, the risk of technological problems and mistaken estimates is on the side of the vendor (Rost, 2006).

Ideal situations, however, are rare in practice, an ideal fixed price projects are no exception. One of most important reasons is that the customers change their requirements as the project is being carried through, which leads to re-estimation of schedules and budgets (Rost, 2006).

Scenarios where unit price contracts have considerable advantages over fixed price contracts include projects with high technological risks. The vendor has to protect its own company and includes some risk reserves in the contingency budget. In such cases the provider might come up with a surprisingly high estimate because it has to be prepared for the worst to avoid losses on its side. Thus, a unit price contract might be to the advantage of both sides; it

limits the risk for the vendor, and the customer will probably get the project at a cheaper price (Rost, 2006).

Fixed price contracts require quite mature specifications. For this reason, projects without precise written specifications are frequently carried through based on a unit price contract. There might be a number of reasons for weak specifications (Rost, 2006):

- The project team is not experienced enough to write reliable specifications in advance. This is frequently the case when the software had until then been developed by an in-house team because this scenario does not require specifications on a very high level of quality.
- Some projects have inherently unclear requirements – for example, innovative products. In the course of the project all participants will learn a great deal about the new product. For this reason the requirements are expected to undergo substantial changes.
- In some small projects, detailed requirements are not written in advance. In such cases the vendor has an excellent understanding of the background of the project, and there is a strong feeling of trust between customer and vendor. The customer outlines what its expectations are regarding the final product, and the vendor does its best – perhaps occasionally requiring that further decisions be made as the project is developed.

In all these cases where no detailed requirements exist in advance, a fixed price contract is almost impossible because the fixed price is based on an estimate that relies on detailed specification. A fixed price contract without detailed specification is prone to disputes at the time of acceptance (Rost, 2006).

### *Advantages*

- Good work definition up front is not essential
- Owner pays for only measured work
- Supplier must drive productivity
- Greater cost certainty

### *Disadvantages*

- Availability of suppliers who are willing to use 'unit rates' may be a problem
- Negotiation of 'unit' rates can be very time consuming
- Usually requires a reimbursable element and the supplier can abuse it if allowed to
- Coordination delays can be expensive
- Owner administration time is high and could cost more than T&M

### *Summary*

Unit rate contract types are an agreed to rate for the performance of specified work. Monetary exchange takes place when work is performed and is directly proportional to the volume and range of work. These types of contract are most prevalent in the building industry. An example of a unit rate contract would be the supply of timber where the monetary amount would be defined by the volume of units supplied. The terms of this type of contract often accommodates flexibility for price adjustment. The agreed to value may be subject to amendment if the volume is reduced or exceeds the original negotiated terms and price.

- Owner and supplier agree a set of rates for 'units' of work
- Owner identifies what work is required
- Supplier measures the number of units and these are sometimes agreed to by the owner

- Supplier drives productivity
- Supplier is reimbursed based on the number of agreed executed 'units'

A better style to use because the supplier is drawn into driving productivity to achieve or improve his profitability and in the process, the owner gains too. However, for the owner to reduce his risk, there is a lot of early work to agree;

- Schedule of rates.
- Situations where T&M rates apply.

### Chapter III: Methodology

The purpose of this study was to increase the unit rate utilization as a contracting strategy and to improve the efficiency of contractor expenses and performance by reducing the qualitative issues that directly affect the daily working relationship between XYZ and the contractor workforce and through the implementation of a unit rate management system at the refinery XYZ.

This chapter was based on the issues identified in the literature review from the last chapter. The review of literature provides support for the impact that unit rate as a contracting strategy can have over the petrochemical industry by managing risk, promoting best performance, optimizing value throughout the supply chain and reducing waste at the XYZ refinery. In order to achieve this purpose, various goals were developed as follows:

1. Streamline XYZ field supervision
2. Reduce Cost
3. Identify and solve barriers
4. Constantly improve contractor productivity by field measurements
5. Provide a fixed cost structure for a predetermined work scope
6. Increase unit rate utilization for capital and routine maintenance

#### *Data Collection Procedures*

Data collected for this study came from two different areas. Firstly, generalized information was taken from scholarly texts and professional publications, both in print and online. The second area of information was data collected from the company that is the focus of this study.

### *Data Analysis*

Using the historical data collected from refinery XYZ, simple mathematical calculations will be used to develop a cost-benefit analysis to evaluate the financial feasibility of a unit rate management implementation system.

### *Summary*

This chapter covered the purpose of the methodology, how data was collected and analyzed. The information covered here were overflows from the two previous chapters as well. That information was needed in order to structure data collection.

## Chapter IV: Results

The purpose of this study was to increase the unit rate utilization as a contracting strategy and to improve the efficiency of contractor expenses and performance by reducing the qualitative issues that directly affect the daily working relationship between XYZ and the contractor workforce and through the implementation of a unit rate management system at the refinery XYZ.

### *Item Analysis*

After an intensive research, the unit rate management group produced a list that indicates all of the contractors that already include unit rate as a contract style, and the percentage of unit rate utilized during year 2005, and the specific costs associated to each trade. The following table summarizes the research done by the group.

Table 1

### *Unit rate utilization in 2005*

Trade	Utilization Target	Total Cost
Electrical	0%	\$7,776,884.36
Insulation	66%	\$3,980,555.12
Civil	2%	\$12,034,289.07
Tanks	29%	\$5,120,344.67
Mechanical	17%	\$19,256,998.58
Painting	29%	\$311,450.33
Scaffolding	98%	\$8,744,808.20
Total	26%	\$50,225,330.33



During 2006 the unit rate management group was committed to improve the efficiency of contractor expenses and performance by reducing the qualitative issues that directly affect the daily working relationship between XYZ and the contractor workforce and through the implementation of a Unit Rate Management System. The following list of goals describes what was necessary to execute in order to increase the unit rate utilization as a contract style:

- Streamline XYZ field supervision.
- Reduce Cost.
- Identify and solve barriers.
- Constantly improve contractor productivity by field measurements.
- Provide a fixed cost structure for a predetermined work scope.
- Increase unit rate utilization for capital and routine maintenance.

In order to meet the objectives or goals mentioned above the unit rate management group had the necessity to establish their responsibilities.

#### 1. Contract Management

- Assure contract compliance (mandatory checks).
- Look for ways to improve contract (benchmarking contracts / working with procurement).

#### 2. Reporting

- Give XYZ personnel helpful tools to make easier decision making process (i.e. OPEX, Matrix).
- Mandatory reports (i.e. CIP).
- Capture savings.

### **3. Invoicing Process Monitoring / SOFA**

- Resolve issues within alliance contractors invoicing process.
- Obtain release of liens from alliance contractors.

### **4. Unit Rate Management**

- Collect data for future contract amendments.
- Work with contractor and XYZ to maximize unit rate utilization (i.e. RF's review).

### **5. Efficiency Improvements**

- Maximize efficiency of contractor expenses through new initiatives (i.e.: Overhead Sliding Scale).

### **6. Rentals Management**

- Coordinate equipment rental management program.

Table 2 represents data collected by the unit rate management group by the end of year 2006; a significant 30% increment of unit rate utilization is appreciated by the end of the year, and demonstrates total cost 15% lower if compared to previous year (2005) as well.

**Table 2**

***Unit rate utilization in 2006***

<b>Trade</b>	<b>Utilization Target</b>	<b>Total Cost</b>
Electrical	65%	\$4,156,993.12
Insulation	42%	\$3,111,776.80
Civil	47%	\$9,639,009.07
Tanks	72%	\$3,220,833.01
Mechanical	61%	\$14,159,163.58
Painting	52%	\$193,767.00
Scaffolding	94%	\$8,110,123.20
<b>Total</b>	<b>56%</b>	<b>\$42,791,665.78</b>

During 2007, the unit rate management group has implemented an action plan. This plan was designed due to the necessity of achieve the goals stated earlier. The following actions were taken by the unit rate management group in 2007.

- Constant communication among all sectors. Communicate results to all people involved in the process on a regular basis.
- Provide the contractor all the necessary tools to comply with ExxonMobil unit rate requirements.
- Survey jobs to track productivity norms and benchmark collected data.
- Develop star rates in conjunction with contractor when applicable.
- Provide a tracking mechanism for all the systems that are behind the unit rate utilization percentage.

- Provide training to people involved in process to clarify expectations and benefits.

Daily, weekly, and monthly tasks were also developed and performed by the group during 2007 in order to insure the accomplishment of their objectives.

#### Daily Tasks

- Work directly with contractor and planners to facilitate Unit Rate work.
- Spend required time at the field to complete weekly surveys.
- Communicate any found inconvenience or good practice either at the field or during office time.
- Maintain the surveys book / Unit rate database updated.
- Review submitted RF's by respective alliance contractors.

#### Weekly Tasks

- Review the unit rate KPI's form.
- Perform weekly surveys workshop to discuss weekly findings and targets compliance.

#### Monthly Tasks

- Complete the unit rate utilization report and update CSAM board.
- Discuss results with contractors to know the root causes of reported results.
- Complete stewardship report.

The following table summarizes the results obtained by refinery XYZ after the implementation of a unit rate management system as a contracting strategy over the past three years.

Table 3

*Unit rate utilization in 2007*

Trade	Utilization Target	Total Cost
Electrical	75%	\$3,312,001.00
Insulation	76%	\$2,101,771.80
Civil	57%	\$8,539,009.07
Tanks	82%	\$2,571,965.13
Mechanical	71%	\$12,579,578.03
Painting	62%	\$109,716.67
Scaffolding	98%	\$7,450,449.20
<b>Total</b>	<b>72%</b>	<b>\$36,664,490.90</b>

## Chapter V: Discussion

The purpose of this study was to increase the unit rate utilization as a contracting strategy and to improve the efficiency of contractor expenses and performance by reducing the qualitative issues that directly affect the daily working relationship between XYZ and the contractor workforce and through the implementation of a unit rate management system at the refinery XYZ.

### *Conclusions*

- Unit rate contracting is a better style to use at the refinery XYZ because the supplier is drawn into driving productivity to achieve or improve his profitability and in the process, the owner gains too. However, for the owner to reduce his risk there is a lot of early work to agree; such as, schedule of rates, and situations where T&M rates apply.
- Potential cost benefits should range between 15 and 27% on current T&M spends per year.
- Unit rates not only benefit the owner because when the contractor beats his productivity targets he increases his profit.
- Contractors can justify paying his productive employees higher wages; therefore, the best workers will seek out and be retained by unit price contractors.
- Risk of inefficiencies / delays due to client operations remain with the owner.
- The best suppliers can increase profitability and eventually market share through proficiency at unit rate contracts.
- Increasing unit rate utilization by solving barriers, enrolling new companies or contractors, and reducing productivity norms are the three essential key ways to increase long term unit rate savings.

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