ALLIANCING CONTRACTING: A POTPOURRI OF PROVEN TECHNIQUES FOR SUCCESSFUL CONTRACTING

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INTRODUCTION

Many people in the construction industry are hailing alliancing as a revolutionary new method of contracting to share risks and achieve successful results on large projects. While the alliancing concept has gained popularity with major energy projects in the United States and in many other countries, alliancing contracts are not yet common or routinely used in the United States and results are mixed from their limited use to date.

Imaginative owners embrace alliancing because they believe they can achieve savings by giving great latitude in the design and construction to the alliance team. The process focuses on collective objectives and incentivising the team members through risk and reward mechanisms. It is a flexible process and differs significantly in its applications to individual projects. It combines leading edge risk sharing incentives with the popular "partnering" techniques, through co-operative attitude building among project participants.

While alliancing certainly is a new contracting technique that has been successfully used, it should be recognised that it has evolved from a number of existing contracting techniques that have been developed over the past decade. Owners, disturbed at the escalating prices of large construction projects, have sought new techniques to permit all the major contractors and designers to become stakeholders in projects and share in the gain or loss measured by identified goals. The contracting team is rewarded for better than average performance and penalised for less than average performance.

Conceptually, the owner, contractor and service contractors form a virtual corporation in which everyone involved shares equal representation, authority and risk. A single goal of successful completion of the project at an acceptable standard forms a criterion and benchmark for measurement of project performance. This goal is established by all members of the alliance. Success or failure is usually measured by an independent third party.

When the alliance process works as planned, its intent is to generate an environment of innovation and continuous improvement, rather than adversarial confrontation. It promotes extraordinary performance and enhances the business outcome for all companies involved in the project.

Alliancing has grown out of several recently developed techniques in the construction industry. Alliancing contracts are often "design-build" contracts. They draw on some aspects of construction management, lean heavily on methods developed primarily in the US on "partnering", and often utilise ADR techniques to resolve larger unresolved disputes.

The purpose of this paper is to explain how this new alliancing contracting technique works, how it has borrowed from existing contracting techniques and why it has enjoyed some success in its limited use in the US and greater apparent success throughout the world.¹

AN OVERVIEW OF THE ALLIANCING CONTRACT

An alliancing contract is one in which the owner selects a contractor and/or designer for the design and construction of its project. While the owner's requirements are identified at the inception of the contract, there is no definite design. In addition to those contract provisions with which we are all familiar in the standard construction contract, the alliancing contract has some rather extraordinary provisions. The owner, the designer, the builder and major subcontractors form a committee, which will manage the project. All matters having to do with the project, including disputes, will be referred to and decided by the committee.²

Members of the committee discuss how they will approach the project, what is a reasonable target price for the project (usually broken down into design and construction components) and what is a reasonable time for completion of the project, with due regard for the owner's requirements. Alliance members agree to set benchmarks for important project criteria, such as time, cost, safety, environment and community relations. Independent third-party auditors audit the performance of each party against these criteria. All alliance partners agree that it if they fail to achieve success on any one of the criteria they would lose, say, half of their potential profit. If the contractor under-runs the project for less than the agreed target price, or completes the project in less than the agreed target time, then the contractor is rewarded by sharing a large part of the savings. If the contractor over-runs the target price and/or completes the project later than the target time, then the contractor must pay to the owner a penalty on a pre-negotiated basis, usually with a maximum limit. The members of the committee agree that they will have no claims against each other, or that they will have no claims against each other, except for certain types of extraordinarily large

¹ Alliancing contracts are lengthy complex contracts, which differ widely in each application and must be examined as a whole to understand the full integration of the contract provisions. An effort is made here merely to demonstrate some of the unique features by reference to specific provisions from an alliancing contract involving the installation of a natural gas pipeline.

² The deciding vote is given to the Owner, but when the deciding vote is exercised by the Owner, those decisions are subject to dispute resolution. For typical alliancing provisions on formation of the Alliancing Committee and for the Owner's deciding vote, see Endnote No 1, page 9 below.

claims, or claims in which the owner exercised its deciding vote, and that otherwise their fate will be decided by the performance of the design and construction team, each team member benefiting or suffering if other team members perform extraordinarily well, or fail to perform.

Alliancing is called "an open book" process. This means that all members of the alliance team, including the owner, have access to all of the books concerning the cost and performance of the alliancing project. Furthermore, the alliancing committee and its members are responsible for the accounting, administration, commissioning and closeout of the project.

The contractor receives progress payments based on the cost of the work and the percentage of completion, and a portion of is base fee with each monthly requisition. When the project is, say, two-thirds complete, the contractor is entitled to begin receiving a percentage of the incentive amount if the contract is ahead of schedule or budget, or conversely, begins to be penalised by removing from the base fee the amount it is overrunning budget or schedule. See Endnote No 2, page 71 below, for sample contract provisions for Base Cost, Base Fee and Gainshare Adjustments.

In many ways alliancing represents a best practices approach in which all options are considered and the best chosen. It encourages innovation. Instead of debating and arguing about claims and extras, the discussion of the management team focuses on how to improve the project.

TEAM BUILDING

The entire concept of alliancing is built on team building and the "partnering spirit". An alliancing contract will not work effectively unless the members of the alliancing committee are willing to co-operate with each other in achieving commonly identified project goals and are willing to share in the financial benefits of the project as a whole on the basis set forth in the alliancing contract. The team-building concept is an important part of the negotiations for the contract and of the ethic that will drive the team of designers and builders to complete the project successfully for the benefit of the owner and for the benefit of the team members. Compare Endnote No 3, page 80 below, Statement of Alliance Principles and Common Objectives with Partnering Charter Principles.

The objective is to have all project participants focused on working together to produce a facility that meets the owner's performance criteria, rather than a contractor working in isolation responding to demanding contract terms and conditions and performance specifications. Risk assessment and the negotiating process provide opportunities for alliancing participants to examine the appropriateness of proposed pricing compromises and implement a reasonable sharing formula tied to cost savings and sometimes the performance of the installed facility.

Fully co-operative team attitudes are essential to the alliancing approach.

What is necessary is a high level of confidence, commitment, disclosure and willingness to substantiate information among project participants.

Alliancing has achieved considerable success in cost reduction. It is premised on risk sharing, on a scale that constitutes a major departure from traditional private sector contracting. Contractors and owners share risks that would otherwise be traditionally borne solely by contractors. The primary benefit to owners should result in price reduction. If contractors can eliminate certain risks from their pricing analysis, pricing reductions can be effected by eliminating such risks as *force majeure*, environmental risks, schedule risks, cost overruns and any assumption of risks of long-term change of the law and post completion liability risks.

The whole notion of team building, of everyone working on a project as a member of a team, using their best efforts to achieve common goals, and sharing in the monetary and other successes of the project as a whole and not only their individual contract, is a concept that has been successfully developed and executed in the United States under a procedure known as "partnering".

The partnering concept, developed in the United States, is designed to develop positive attitudes among the participants so that construction projects are completed within an environment of mutual trust, commitment and honest communication between the owner, the general contractor, the designer, the subcontractors and suppliers. The partnering process seeks to establish a positive working relationship among the parties, based upon a mutually developed plan of co-operation, individual responsibility and teamwork. When all key players in the construction process agree to the partnering concept, they effectively agree to work jointly to create a more harmonious, less confrontational project with the aim of avoiding posturing with each other, reducing paperwork, increasing quality, and ultimately avoiding claims and litigation.

Partnering is aimed at preventing disputes before they surface. The key management and operating people make a long-term commitment to achieve specific business objectives by maximising the effectiveness of each participant's resources. All participants are encouraged to work as a team towards mutually developed common goals. The process encourages participants to understand each other's individual problems, expectations and values. Representatives of the different parties—the owner, the designer, the contractor—who will interface with each other in the construction process, get together in advance, and discuss possible problem areas and how to overcome them.

Benefits of partnering include vastly improved relations among people, greater efficiency and cost effectiveness, increased opportunity for innovation, continuous improvement of quality products and services, and reduction, if not elimination, of disputes.

The ultimate goal of partnering is to eliminate the "us vs them" attitude in favor of the "we" mentality. Partnering is the process that the industry has

devised to eliminate the adversarial attitude that pervades the industry, and substitute a trusting co-operative partnership between the parties.

Similarly, the alliancing technique gets all members of the team to play together and focuses on solutions to problems, without fixing blame. Thus, alliancing keeps people focused on doing the best job possible, not fixing blame.

From the outset of the project the parties demonstrate an intention to proceed on a co-operative basis to achieve shared project objectives. Alliancing eliminates the feeling that a contractor is working alongside the enemy. Business and personal private relationships merge. A trusting personal relationship can drive the business a long way. Relationships established between companies during an alliancing project often change the way companies do business and continue their alliance relationship into the future.

RELATIONSHIP OF THE PARTIES

The parties view alliancing as a form of co-operation to produce a successful project. They do not view themselves as becoming partners with other contractors in any legal sense. In an effort to be certain that they have no responsibility, other than their contractual responsibility to their members, alliance contracts typically contain a provision along the following lines:

"The parties agree that nothing contained in this Agreement shall create a contractual relationship between any of the parties outside of the terms of this Agreement. Nothing in this Agreement shall be construed so as to establish any agency, partnership, or joint venture among or between any of the parties. None of the parties may use, suffer or permit to be used, whether directly or indirectly, the name of another party for the purpose of obtaining financing or the promotion of any corporate enterprise, syndicate, partnership or other association designed, intended or purporting to control, direct or finance the operations hereunder. No action by any party shall bind the others without the express prior written consent of the others, except as expressly provided in this Agreement. The Owner shall not owe to the contractor and the contractor shall not owe to the Owner, any fiduciary duty with respect to the project or the work."

Whether this provision will be enforced by courts if other partnership criteria are present in alliancing contracts, remains to be seen. See for example *Wartski* v. *Bedford* 926 F 2d 11 (1st Cir 1991) in which it was held that the fiduciary duty of partners is an integral part of the partnership relationship whether or not expressly set forth in the partnership agreement, and that duty cannot be negated by exculpatory words in the partnership agreement.

SELECTING THE ALLIANCING TEAM

The most common way of selecting the contractor in alliancing projects in the United States is for the owner to issue a Request for Proposals (RFP), describing the project and particularly the organisation of the project through the alliancing arrangements in which the contractors become stakeholders and must be willing to share risks, as well as the profit or loss of the project.

Under the RFP, the owner's goals are outlined and evaluation criteria are developed to compare not only the technical skills of responding bidders, but particularly their understanding of the alliance culture and the alliance team approach. A short-listing is based largely on the ability of the short-listed companies to work in an alliance relationship. Money is not a consideration at this point.

The RFP does not always contain a request for a price proposal. Rather, the RFP seeks information on the contractors, their qualifications, their ideas for successfully executing the project, their staffing proposals, recommendations on project approach, and like matters. The owner's representative will then normally meet with the proposers, narrow the preferred proposers down to two or three, and then will conduct a final round of discussions, perhaps in workshop format, after which the successful proposer will be selected. Given the fact that all of the finalists were previously determined to be qualified to perform the job, the most important factor in selecting the contractor is usually the owner's assessment of the experience and willingness of the contractor to share risks and to operate as a member of a team, to achieve the common goals identified in the project, such as time, cost, safety, environmental factors and community relations.

The reactions and the responses of the short-listed teams are what usually make the ultimate decision in selection of the contractor. How will they achieve each of these five objectives? What is their approach?

At a risk/reward meeting with the short-listed bidders, an agreement is often reached in principle on corporate overhead and profit figures. Failure to reach consensus on these items causes the owner to return to another bidder to negotiate satisfactory terms.

After selection of the successful contractor of design-build team, it is necessary for the owner and the team to negotiate the specific provisions of the contract, such as the gainshare, the painshare, the scope change (change order) provisions, whether any claims will be permitted, and the like.

PROJECT DESIGN AND CONSTRUCTIBILITY REVIEWS

The alliance team as a whole takes the initiative to improve the design as they go along and at the same time to sustain the original intention of the design.

This strengthens the quality of the project, the overall design and the economics of the project.

As the designer develops the design in an alliancing project, the contractors involved in various aspects of the project work with the designer in order to determine its constructibility and cost effectiveness, and make recommendations for changes for savings, and revisions to assure that the project will be constructed within the required time.

This process of constructibility reviews of a designer's evolving design was developed in the United States as a part of a process whereby a general contractor acts as construction manager and reviews the existing design to make recommendations to achieve savings through constructibility reviews, and sometimes shares in the savings achieved. It is a process that is a very important aspect of an alliancing contract. To the extent that either time or money are saved by constructibility reviews and design modifications, the savings are shared on an overall basis by all of the members of the alliancing team.

ESTABLISHING THE TARGET PRICE AND SHARING SAVINGS AND/OR LOSSES

The alliancing committee must agree on the overall contract price for meeting the project requirements of the owner. This is usually an intense process with the contractor pricing the design and the contractor pricing the cost of construction with separate pricing submitted by all of the subcontractors and suppliers. Ultimately the owner must be satisfied with the overall price, and a good deal of negotiation takes place in adjusting or reducing the overall price, in exchange for larger shares in the savings and the losses, and assumption or rejection of certain risks. This is definitely a very heavily negotiated aspect of the alliancing contract, and the aspect that gives the contractor the greatest incentive to perform at least in accordance with the minimum goals for time and price set forth in the contract, and usually far exceeding those goals to substantially increase its profit on the project.

CHANGES IN THE WORK

We are all familiar with the traditional change order process, whereby the owner issues a change order for changes in the work, the price for which is usually agreed upon by the contractor, which adds the necessary time and cost to the contract price. In an alliancing contract, while the owner retains its traditional right to make scope changes, the concept of changes is fundamentally different.

From the outset, the project is managed by the Alliance Committee, which determines whether proposed changes increase or decrease the target price. Alliance members, including the owner, solve problems collectively and make decisions collectively. There are no change orders unless the owner elects to change scope. There are no extras to individual contractors, except to the extent that individual contractors performing additional work get paid their cost and fee adjusted for incentives.

DISPUTE RESOLUTION

One of the fundamental pillars of an alliancing contract is that the contract provides, and the parties intend, that any and all disputes that may arise will be resolved by the Alliance Committee and all parties will be bound by that resolution.

One of the reasons why there is a "no claims" environment is that all decisions are made through the Committee whereby the owner and the major contractors make all decisions together and are therefore collectively responsible if those decisions are incorrect. If changes in the work result, they are everybody's responsibility and no individual member of the Committee can claim against the other.

In earlier alliancing contracts, and in some current contracts, the parties agree that none of them will have any claims against the other under any circumstances. Contractors and designers will have no claims against the owner; contractors will have no claims against designers; designers will have no claims against contractors; and none of them will have any claims against the other. If an alliancing member fails to perform adequately then all of the other members suffer but will have no claims against the non-performing member. In the United States, perhaps reflecting a somewhat cautious attitude as familiarity with the alliancing procedure progresses, the "no claims" provision has been somewht modified, so that certain categories of large claims may be pursued by the claimant through a separate dispute resolution process that usually ends in a final determination by arbitration. Claims subject to dispute resolution outside the Alliancing Committee are typically appeals from decisions in which the owner cast its deciding vote relating to gainshare payments, performance incentives, and target cost changes. See Endnote No 1.

Alternate dispute resolution (ADR) has made enormous inroads in the construction industry in the United States. Disputes are much more frequently avoided or resolved through ADR processes that have been proven successful in all types of construction contracts. Alliancing contracts that permit alliancing committee members to pursue certain types of claims often provide for structured negotiation, mediation and binding arbitration. See Endnote No 4 for typical alliance contract dispute resolution provisions.

TERMINATION

Alliancing contracts typically contain provisions for both termination for convenience (without cause) of the owner, and for termination for cause. In the event of a termination for convenience by the owner, or termination by the contractor for cause against the owner, the contractor is entitled to payment for the cost of the work it performs with profit and a termination fee and pro rated gainshares, depending on the percentage of completion at the time of termination. In the event of a termination by the owner for cause, the contractor forfeits any gainshare amount he has received, and receives no termination fee.

CONCLUSION

While alliancing is the current buzzword in the construction industry, it is not fully proven and is certainly not the next saviour of the world. It is all about how to achieve characteristics that make alliancing work—trust, commitment and respect—and may develop as a way to get these characteristics back into more traditional contracting strategies.

It takes a lot of management, time and effort to make alliancing work. It is not suitable for all projects, many of which should still be structured under the traditional project arrangements. It is only appropriate for large-scale projects. The jury is still out on how successful alliancing projects have been on the whole in the United States. If the parties don't commit the time and effort, the alliancing process doesn't work. Nevertheless, if all the parties are competent, heavily engaged, focused and team oriented, alliancing will succeed and may gain favor as a promising new contracting technique in the construction industry.

ENDNOTE NO 1

ALLIANCE STEERING COMMITTEE

Committee Members

Each of the Owner and the Contractor may appoint two representatives to the Committee. The initial members of the Committee are:

(a)	Owner	
(b)	Contractor	

Each of the Owner and the Contractor may appoint two alternative

members who may attend meetings of the Committee in the place and stead of the regular members. The initial alternative members are as follows:

(a)	Owner	
(b)	Contractor	

The Committee shall appoint from its members a Chair who shall chair all meetings of the Committee.

Role of Committee

The role of the Committee shall be to implement a simplified owner-contractor liaison structure and to address all business issues affecting the Project as detailed in this Agreement including, without limitation, the following:

- (a) the resolution of all Disputes and Scope Changes involving amounts in excess of \$250,000 and Disputes and Scope Changes involving amounts of less than \$250,000 which have not been resolved by the AMT;
- (b) the identification of suitable Other Contractors and Subcontractors to perform any item of Work having a value in excess of \$1,000,000; and
- (c) monitor the activities of the Team and the Project Leaders.

Committee Meetings and Quorum

Meetings of the Committee shall be generally held monthly and at such other times as required in order to address issues arising in the prosecution of the Project. Meetings shall be called by notice of the Chair or by notice of any two other Committee members. All notices of meetings and an agenda containing a description of the items to be discussed at the meeting and the text of all resolutions to be voted upon at the meeting shall be delivered in writing at least two Business Days prior to the meeting by the member(s) calling the meeting and, unless otherwise agreed by all members, meetings shall be held in _______. With the consent of all of the members, meetings can be held by telephone conference call. As an alternative to decision making at meetings, the Committee may deal with any matter by way of a written resolution signed in counterpart by each of the members.

All Committee members are entitled to be present at each Committee meeting. The quorum for a Committee meeting shall be three. In the absence of such quorum at the stated time for a Committee meeting, the meeting shall be delayed for 24 hours and thereupon recommenced without any quorum requirement. If a Committee Member or alternate member does not participate in a meeting, such member loses his right to vote at such meeting and the meeting may continue in his absence.

Committee Decisions

Notwithstanding attendance and discussion at meetings, all Committee decisions shall be by way of a resolution in writing, signed either at the meeting by all meeting attendees or by counterpart signature of all Committee members if the decision is not taken at a meeting. Decisions made by deciding vote may be by way of written resolution signed by one or more members representing the Owner. Copies of all decisions will be distributed to each of the members of the Committee no later than seven Business Days after such decision was made.

The Owner and Contractor will instruct its members to endeavor to make decisions of the Committee by consensus, and the following provisions shall apply in the event it is necessary for the Committee to vote on a particular matter:

- (a) each Committee member shall, subject to the Committee quorum provisions below, be entitled to one vote;
- (b) the Owner shall have a deciding vote on any decision; provided that the Contractor shall be entitled to submit to arbitration certain compensation matters referenced in Sections 4.4 and 4.6(e) of the Agreement which arise out of any decision made by the deciding vote (unless otherwise agreed by the Committee without the exercise of the deciding vote);
- (c) a unanimous decision of the Committee is final and binding on the Parties; and
- (d) the Parties are bound by and must act in accordance with the resolution of the Dispute as provided above.

ALLIANCE MANAGEMENT TEAM

(a)	The following members of the AMT are appointe	d by the Owner:
	(i) Project Manager	<u> </u>
	(ii) Owner's Manager, Construction	
	(iii) Manager, Pipeline Design	
	(iv) Manager, Lands & Community Relations	***
	(v) Manager, Environment	NAME OF THE OWNER, WHICH THE OWNER, WHITE OF THE OWNER, WHITE OWNER, W
	and the following members of the ATM are	appointed by the
	Contractor	,
	(i) Contractor's Construction Manager	
(b)	The AMT reports to the Committee through the	Project Manager.
(c)	The roles and responsibilities of each member of	the AMT on behalf
	of their respective principals (being the Owner or	the Contractor) are
	as follows:	
	(i) Role of the Project Manager in respect of th	e Work:

- Direct the activities of the Owner's managers.
- Direct and control the development of effective strategies, policies, schedules and practices.
- Ensure that costs are on budget and the Project Schedule is maintained.
- Ultimately responsible for the successful construction and commissioning of the Facilities.
- Responsible to implement decisions made by the Committee on behalf of the Owner.
- Responsible to exercise the day-to-day activities of the Owner in respect to construction of the mainline pipeline in accordance with the applicable provisions of this Agreement.
- Report to Committee all Scope Changes decisions made by the AMT respecting matters less than \$250,000.
- Responsible to bring forward to the Committee for review the AMT's recommendation respecting, all proposed Scope Changes greater than \$250,000, and any unresolved Disputes.
- Responsible to ensure best efforts of the AMT in resolving Disputes less than \$250,000.
- Co-ordinate interaction of all AMT members to facilitate the best solutions with respect to the overall Project in order to meet the Common Objectives.
- (ii) Role of the Contractor's Construction Manager in respect of the Work:

Pre-Construction Phase:

- Co-ordinate the provision of Contractor assistance to the owner as required, with landowner, environmental and regulatory issues.
- Co-ordinate the provision of Contractor assistance to the Owner with the establishment of an overall logistic plan to accommodate efficiently prosecuting the Work (e.g. winter work, pipe transportation/stockpiling, clearing/access roads, etc.).
- Assist the Owner in co-ordinating the fieldwork to identify construction techniques and establish an overall plan of construction.
- Co-ordinate providing the Contractor assistance to the Owner with the prequalification of clearing contractors, pipe transportation contractors, etc.
- Supervise and co-ordinate administrative functions including labor relations, training commitments, etc. in respect of Contractor's Work.
- Solicit prices from qualified Subcontractors for various portions of the Contractor Work and analyse, review, and recommend the award of Subcontracts (directional drilling,

drilling and blasting, haul and string, road bores, air dry, etc.) to the Committee.

- Optimise construction plan including schedule, resource planning and location of marshaling yards.
- Provide value added engineering and constructability expertise.
- Develop and recommend to the AMT a Quality Assurance Program.

Construction Phase:

- Co-ordinate, supervise, and manage the Contractor's Work through to completion including:
- Resource allocation between Spread 1 and Spread 2.
- Manage Contractor costs.
- Identify potential Scope Changes, assist in the assessment and verification of each potential Scope Change and determine a recommended resultant Scope Change and Target Cost Change, if any, for review by the Committee.
- Maintain and issue weekly a listing of Changes which may become approved Scope Changes, including for each Change a description thereof, date of origin, name of originator, estimated costs and schedule impact and resolution status.
- Make recommendations to the Committee on the resolution of Disputes involving amounts greater than \$250,000 and attempt to resolve Disputes involving amounts less than \$250,000.
- Manage logistics and optimise scheduling.
- Ensure quality performance.
- Ensure safety performance.
- Ensure environmental commitment compliance.
- Ensure landowner commitment compliance.
- Maximise local benefits.
- Co-ordinate and supervise administration functions including payroll, accounts payable, equipment charges, cost reporting.
- Interact with all AMT members to facilitate the best solutions with respect to the overall Project in order to meet the Common Objectives.
- Co-ordinate and supervise trending and progress reporting for the Work.
- (iii) Role of the Owner's Manager, Construction in respect of the Work:
 - Manage a construction engineering staff to develop construction contracts, complete with specifications, drawings and logistics.
 - Acquire and direct Other Contractors and inspection services.

- Support acquisition of land rights, environmental, utility, road and rail crossing permits.
- Assist in the development of effective strategies, standards, policies and budgets for the pipeline construction component of the Project.
- Develop and implement local benefits and business opportunities, including a tracking system and government liaison.
- Create/manage cost and progress tracking for this Agreement.
- Review and approve Contractor's Base Costs for payment.
- Interact with all AMT members to facilitate the best solutions with respect to the overall Project in order to meet the Common Objectives.
- Identify potential Scope Changes and assist in the assessment and verification of each potential Scope Change and determine a recommended resultant Scope Change and Target Cost Change, if any, for review by the Committee.
- Make recommendations to the Committee on resolution of Disputes involving amounts greater than \$250,000 and attempt to resolve Disputes involving amounts less than \$250,000.
- (iv) Role of the Manager, Pipeline Design in respect of the Work:
 - Manage the design/engineering functions of the Project.
 - Establish and manage engineering activities required to the Target Completion Date.
 - Monitor pipeline design costs to achieve the Target Cost.
 - Co-ordinate scheduling the construction of the facilities upstream and downstream of the Facilities.
 - Monitor and ensure regulatory compliance.
 - Support environment, lands, construction and public consultation efforts.
 - Develop Project engineering policies.
 - Develop construction materials and operations specifications.
 - Produce drawings, contract and tenders.
 - Manage pipeline material acquisition.
 - Interact with AMT members to facilitate the best solutions with respect to the overall Project to meet the Common Objectives.
- (v) Role of the Manager, Lands & Community Relations in respect of the Work:
 - Oversee the development of effective strategies, appropriate standards, policies, budgets, schedules and practices for the lands and permits program which support Project Schedules/ budgets and meet Applicable Laws and regulations.

- Oversee the management of right-of-way managers/ supervisors, right-of-way agents and support staff to acquire land rights and permits required to install and operate the pipeline, including appropriate environmental screening, regulatory compliance, real estate closing, valuation appraisals, dealing with land use planning issues, curing title defects and negotiating acceptable terms and conditions for land rights and damages.
- Manage the activities to complete regulatory filings related to the detailed route approval and right-of-entry, land-related permit application and for applicable land-use approvals.
- Approve documents and payments for land rights and damage settlements.
- Support environment, design, construction and public consultation efforts.
- Interact with all AMT members to facilitate best solutions with respect to overall Project to meet Common Objectives.
- (vi) Role of the Manager, Environment in respect of the Work:
 - Administer and manage consultants including contract administration, task co-ordination and budget control related to the environment.
 - Manage and oversee the environment portion of the detailed route approval.
 - Meet and discuss the environmental aspects of the Project with various groups including senior government officials, interest group representatives and the general public.
 - Manage and oversee the implementation of the environmental protection plan including all regulatory compliance.
 - Manage environmental monitoring and restoration during construction.
 - Support lands, design, construction and public consultation efforts.
 - Interact with all AMT members to facilitate the best solutions with respect to the overall Project in order to meet the Common Objectives.
- (d) Decisions of the AMT with respect to a Dispute shall be made as follows:
 - (i) unanimous decision of the AMT will resolve a Dispute;
 - (ii) if no unanimous decision is reached in respect of a Dispute, the Dispute shall be referred to the Committee with a recommendation for resolution from both the Contractor's Construction Manager and the Owner's Manager Construction; and
 - (iii) if a Dispute is outside the AMTs monetary authority, the AMT

shall make a recommendation to the Committee for resolution of the Dispute.

PROJECT LEADERS

(a)	The	following are the titles and names of the	Project Leaders	as
	appr	oved by the Committee:	•	
	(i)	Superintendents		
	(ii)	Chief Inspector		
	(iii) Senior Pipeline Engineer (Construction)			
	(iv)	Senior Pipeline Engineer (Pipeline Design)	· · · · · · · · · · · · · · · · · · ·	
	(v)	Right-of-Way Manager		
	(vi)	Supervisor, Environmental Planning		

Owner's Deciding Vote

To ensure that the Project is not subject to any unintended, but nevertheless adverse consequences from the Alliance (for example and without limitation delays in decision making or through references of matters to arbitration which delay the Project Schedule), all Committee decisions are subject to the Owner having a deciding vote. Notwithstanding any Committee decisions made by the Owner's use of the deciding vote, if any such decision:

- (a) could reasonably necessitate a Target Cost Change or amendments of Performance Incentive Targets; or
- (b) relates to a decision of the Committee respecting a matter set forth in the Sections referring to Gainshare Payments and Performance Incentives;

then, even though such Committee decision is not subject to the dispute resolution provisions set forth in Article 18, Contractor may submit to dispute resolution as provided in Article 18 (unless otherwise agreed by the Committee without the exercise of the deciding vote) a decision of the Committee respecting the matters referred to in (a) or (b) above.

ENDNOTE NO 2

COMPENSATION

Base Costs

(a) Except as provided in Section _____ or otherwise provided in this Agreement, the Owner shall reimburse the Contractor for all costs and expenses incurred by Contractor from and after the Execution Date up to and including the Total Performance Date, in the execution of the

Contractor's Work (the "Base Cost"). The Base Cost shall include, without duplication, but not limited to:

- (i) wages, benefits and bonuses paid for foremen and unionised labor in the direct employ of Contractor in the performance of Contractor's Work;
- (ii) salaries, wages, benefits and bonuses of Contractor's personnel and consultants while engaged in Contractor's Work;
- (iii) contributions, assessments or taxes incurred during the performance of Contractor's Work for such items as unemployment insurance, workers' compensation and _______ Pension Plan or _______ Pension Plan, in so far as such costs are based on wages, salaries, or other remuneration paid to the Persons described in Sections 9.1(a) (i) and 9.1(a) (ii);
- (iv) the portion of the actual travel and subsistence expenses of Contractor's labor and personnel incurred while traveling for the purpose of the discharge of duties connected with the performance of the Contractor's Work;
- (v) the actual cost of all materials, products, supplies and equipment and consumables incorporated into or consumed in the course of the performance of the Contractor's Work, including customs duties and costs of transportation thereof;
- (vi) the actual cost of fuel, oil, lubricants, filters, parts and minor repairs consumed in the operation of both Contractor-owned and third-party-owned equipment, to the extent same is used in the performance of Contractor's Work;
- (vii) the actual rental costs of all tools, machinery and equipment used in performance of the Contractor's Work, and
 - (A) if owned or supplied by Contractor or an Affiliate of Contractor, such tools, machinery and equipment shall be charged at the rates and operated on the terms set out in Schedule II.3, and
 - (B) if owned or supplied by other Persons, at the actual cost to Contractor,
 - including customs duties and transportation costs thereof;
- (viii) the amounts of all Subcontracts;
- (ix) the costs of quality assurance such as independent inspection and testing services as required hereunder;
- (x) charges, such as those for permits and inspections, levied by authorities having jurisdiction at the sites at which Contractor's Work is performed;
- (xi) royalties, patent and license fees;
- (xii) the cost of removal and disposal of waste products and debris;
- (xiii) the premiums and other costs payable by Contractor for the policies of insurance and the performance bonds which Contractor is required to obtain and maintain hereunder;

- (xiv) the actual amounts of any losses and expenses sustained by Contractor for matters which are the subject of insurance under the policies prescribed in Section 15.1 and 15.2 if such losses and expenses are either within the deductible limits of such policies or, subject to Section 9.1(b) (vii), not recoverable because the amounts are in excess of collectible amounts under such policies;
- (xv) costs of the nature and type described in this Section 9.1(a) if incurred by Contractor for the correction of defects or deficiencies in the Contractor's Work, which includes re-work and warranty work;
- (xvi) except in respect of environmental matters provided for in Section 9.1(a) (xvii), the actual amounts of any losses and expenses related to third party claims, suits, damages, fines and settlements arising out of or attributable to the performance of, or failure to perform, the Contractor's Work if any such amounts relate to claims by Subcontractors, landowners with whom the Owner has easements, rights-of-way or other interests in land for the Project, governments in respect of job site access roads between material marshaling yards and the Project job sites, or persons representing Contractor's labor force working on the Project, provided that, such losses, expenses and damages were incurred and amounts payable under such claims, suits, fines or settlements have become due prior to the Total Performance Date;
- (xvii) in respect of environmental matters, the actual amounts of any losses and expenses related to third party claims, suits, damages, fines and settlements arising out of or attributable to the performance of, or failure to perform, the Contractor's Work; provided that Contractor, the applicable Subcontractors (or such Subcontractors' agents, representatives or personnel) or other Persons acting on its or their behalf exercised all due diligence and reasonable care in the performance of, or failure to perform, the Contractor's Work; provided that, such losses, expenses and damages were incurred and amounts payable under such claims, suits, fines or settlements have become due prior to the Total Performance Date; and
- (xviii) amounts of claims, damages, losses and expenses not otherwise excluded from Base Cost, referred to in Section 14.1(a) and which are excluded from the indemnity provisions of Section 14.1(a) by virtue of such claim, damages, loss or expense arising from or attributable to a single event or occurrence for which the amount of such claim, damages, loss or expense is less than \$300,000.00.
- (b) Notwithstanding Section 9.1(a), Base Costs shall be net of all credits and rebates and shall not include:

- (i) any amounts paid or payable to an Affiliate of Contractor unless previously authorised in writing by the Owner;
- (ii) profit to Contractor;
- (iii) home office overheads;
- (iv) any amounts payable by Contractor to the Owner in respect of any indemnity provided hereunder;
- (v) any costs or expenses, including the amounts of settlement costs and amounts of any judgments, fines or penalties incurred in connection with any litigation, arbitration, mediation or other dispute resolution process relating to a Dispute arising in connection with this Agreement, the Work, or the performance of, or the failure to perform, the Contractor's Work;
- (vi) any costs or expenses incurred by Contractor or the members of the Committee appointed by Contractor in connection with discharge of such individuals' duties and obligations as members of the Committee;
- (vii) any cost, claims, losses, expenses, penalties or fines directly or indirectly related to third party claims, suits, damages, or settlements involving Contractor or any Subcontractor other than those expressly set forth in Section 9.1(a) (xvi), 9.1(a) (xvii) or 9.1(a) (xviii); and
- (viii) any amounts incurred after the Total Performance Date.

Base Fee

Contractor shall be entitled to earn and be paid a fee (the "Base Fee") to cover all profit and home office overheads in an amount equal to \$30,000,000.00, as increased or decreased as provided in Schedule 1.2, provided that, the Base Fee cannot be reduced as provided in Schedule 1.2 to an amount less than \$15,000,000.00. Until paid in full or the end of the month in which the Final Completion Date occurs, whichever is earlier, the Base Fee shall be invoiced by Contractor and be payable in monthly instalments as follows:

(a) Up to 66-2/3% Percentage Completion

For each month from and including the month in which the Execution Date occurs and prior to the month in which the Percentage Completion is first determined to be greater than 66–2/3%, Contractor shall earn a portion of the Base Fee equal to the product of:

- (i) the Base Fee, and
- (ii) 0.0075,

for each 1%, or fraction thereof, that the Percentage Completion determined at the end of such month is greater than the Percentage Completion which had been determined at the end of the month

immediately preceding such month, and such amount shall be invoiced by Contractor and paid by the Owner as provided in Section 9.6.

(b) Transition Month

For the month during which it is first determined that the Percentage Completion exceeded 66–2/3%, Contractor shall earn a portion of the Base Fee equal to the product of:

- (i) the Base Fee, and
- (ii) 0.0075,

for each 1%, or fraction thereof, that 66–2/3% is greater than the Percentage Completion which had been determined at the end of the month immediately preceding such month, and a portion of the Base Fee equal to the product of:

- (i) the Base Fee, and
- (ii) 0.015,

for each 1%, or fraction thereof, that the Percentage Completion determined at the end of such month is greater than 66-2/3%, and such amounts shall be invoiced by Contractor and be payable by the Owner as provided in Section 9.6.

(c) Over 66-2/3% Percentage Completion

Following the month in which the Percentage Completion is first determined to be greater than 66-2/3%, the Committee shall determine the Actual Cost incurred to the end of such month and estimate the additional amounts required to be expended for Actual Cost after such month in order to achieve Final Completion (the aggregate of such amounts shall be the "Projected Actual Cost"), and

(i) Positive Gainshare

if the Target Cost is greater than the Projected Actual Cost, then for each month after the month in which the Percentage Completion is first determined to be greater than 66-2/3% Contractor shall earn a portion of the Base Fee equal to the product of:

- (A) the Base Fee, and
- (B) 0.015,

for each 1%, or fraction thereof, that the Percentage Completion determined at the end of such month is greater than the Percentage Completion which had been determined at the end of the month immediately preceding such month; or

(ii) Negative Gainshare

if the Projected Actual Cost is greater than the Target Cost, then in each month following the month in which the Percentage Completion is first

determined to be greater than 66–2/3% Contractor shall be considered to have earned the portion of the Base Fee equal to the amount as calculated in accordance with Section 9.2(c)(i), but shall be paid its estimated earned Base Fee net of the estimated Gainshare Amount which will be payable by Contractor to the Owner, being an amount equal to the amount by which:

(A) the Base Fee, less all amounts paid by the Owner to Contractor in respect of the Base Fee earned by Contractor during the period from the Execution Date to the end of the month in which the Percentage Completion is first determined to be greater than 66–2/3%,

exceeds:

(B) 50% of the amount by which the Projected Actual Cost exceeds the Target Cost,

multiplied by a fraction the numerator of which is the amount by which the Percentage Completion determined at the end of such month is greater than the Percentage Completion which had been determined at the end of the month immediately preceding such month, and the denominator of which is the difference between 100% and the Percentage Completion determined at the end of the month in which the Percentage completion is first determined to be greater than 66-2/3%:

and such amounts shall be invoiced by Contractor and be payable by the Owner as provided in Section 9.6.

Base Cost Segregated Account

- (a) Contractor shall establish, in its own name, an account (the "Base Cost Segregated Account") at a branch of a ______ chartered bank located in ______ from which it shall make payment of all amounts for which it is entitled to reimbursement by the Owner as Base Cost and shall provide the Owner with the particulars of such account in writing as soon as practicable after such account is established. The Base Cost Segregated Account shall not be used to receive or disburse any funds, or be used for any other purposes whatsoever, other than as expressly provided for in this Agreement, and no amounts other than as provided herein shall be commingled with the funds in the Base Cost Segregated Account.
- (b) All interest which may accrue from time to time on any balance in the Base Cost Segregated Account shall be used only for the payment of amounts for which Contractor is entitled to reimbursement by the Owner as Base Cost.
- (c) From and after the Total Performance Date, Contractor shall not issue any cheques or make any withdrawals or transfers from the Base Cost

Segregated Account, except in respect of amounts payable for costs incurred prior to the Total Performance Date for which it is entitled to reimbursement by the Owner as Base Cost, and on or before the forty-fifth day after the Total Completion Date, Contractor shall close the Base Cost Segregated Account and immediately pay any balance therein to the Owner.

- (d) Contractor shall include with its Base Cost Report copies of statements relating to the Base Cost Segregated Account which it may receive from the bank at which the Base Cost Segregated Account is maintained.
- (e) Contractor shall not amend any of its banking arrangements with respect to the Base Cost Segregated Account without the prior consent of the Owner, such consent not to be unreasonably withheld.

Application for Funds

- (a) On the first and fifteenth day of each month, Contractor shall issue to the Owner, for the Owner's review and approval, an application for funds (an "AFF") setting forth Contractor's estimate of the Base Cost which will become payable by Contractor during the Advance Period relating to such AFF, provided that, if the first or fifteenth day of a month is not a Business Day, Contractor may issue the AFF for such day on the last preceding Business Day.
- (b) On the last Business Day prior to the commencement of an Advance Period, the Owner shall deposit into the Base Cost Segregated Account all amounts set forth in the AFF for that Advance Period in respect of which the Owner has not objected in writing to Contractor within five Business Days of receipt of the AFF.
- (c) If Contractor determines that, following the end of an Advance Period, there is a difference between the amounts advanced to it on account of Base Cost and amounts paid by it for Base Cost during such Advance Period or any prior Advance Periods, it shall, as a line item debit or credit in the next AFF issued by it, adjust the amount of such AFF in order to eliminate such difference and shall make reference to such adjustment in its Base Cost Report for the period in which such AFF is given.
- (d) If Contractor's obligations to make payment of amounts in respect of Base Cost during any Advance Period exceed the funds available in the Base Cost Segregated Account for payment of such amounts, Contractor may issue an emergency AFF to the Owner, providing therewith a description, in reasonable detail, of the amounts required and the reasons why such amounts were not included in the regular AFF for such Advance Period, and, no later than five days after receipt of such an emergency AFF and related information, the Owner shall deposit into the Base Cost Segregated Account the amount requested in such emergency AFF.

Base Cost Reporting and Reconciliation

- (a) Within 10 days following the end of each month, Contractor shall provide the Owner with a written report (a "Base Cost Report") showing a reconciliation of all amounts advanced to Contractor on account of amounts of Base Cost which were to be payable by Contractor in that month with all amounts actually paid by Contractor as Base Cost in that month and providing, as part of the Base Cost Report, copies of all invoices, statements, manpower reports, time sheets, receipts or other similar documentation relating to such amounts paid by Contractor as the Owner may reasonably require in order to verify the amount and propriety of such payments which the Owner has specified in writing to Contractor that it wishes to be provided.
- (b) If:
 - (i) the Owner reasonably cannot reconcile the description of the Contractor's Work for which amounts have been advanced for payment as Base Cost with the Contractor Work actually performed; or
 - (ii) Contractor fails to provide any necessary documentation in support of a Base Cost Report,

then the Owner may, without interest payable to Contractor, withhold all or such portion of an AFF as the Owner may determine appropriate until such time as Contractor provides reasonable evidence to the Owner that the cause for or the matter entitling the Owner to such withholding has been remedied and, following provision of such evidence, the Owner shall pay such withheld amount to Contractor within two Business Days.

Base Fee Installments

- (a) Contractor shall establish, in its own name, an account (the "Base Fee Account"), which shall be a different account than the Base Cost Segregated Account, at a branch of a ______ chartered bank in _____ to which it wishes the Owner to make payments of amounts on account of the Base Fee as provided herein and shall provide the Owner with the particulars of such account in writing as soon as practicable after such account is established, but in any event at least five Business Days prior to the date that the Owner is required to first make payment to Contractor of any amount on account of the Base Fee.
- (b) On the tenth day after the end of each month, Contractor shall invoice the Owner for the amount payable by the Owner in respect to the Base Fee earned for that month, as calculated in accordance with the applicable provisions of Section 9.2, and the Owner shall deposit such amount into the Base Fee Account on or before the fifteenth day after the receipt of such invoice.

Accounting and Audit

- (a) Contractor shall keep in _______ full and detailed books, accounts and records necessary for the documentation of Actual Cost, Base Cost and the Contractor's Work in accordance with _____ generally accepted accounting, principles.
- (b) The Owner or its designated representative shall be afforded access and shall be entitled to conduct any inquiry, investigation or audit in respect of any of Contractor's books, records, correspondence, instructions, Drawings and Specifications, receipts, vouchers and memoranda relating to this Agreement, Actual Cost, Base Cost and the performance of the Contractor's Work and, for this purpose, Contractor shall preserve or cause to be preserved all such records for a period of six years from the Total Performance Date.

Taxes and Duties

- (a) Actual Cost, Base Cost, Owner's Work Cost and the Target Cost shall not include for all purposes of this Agreement, including any calculation of the Gainshare Amount, any credit, rebate, refund, reimbursement, contribution or allowance or assistance (whether by way of subsidy, forgivable loan or otherwise) in respect of any cost incurred to achieve Total Performance (other than income tax deductions available in respect of such cost) and any federal or state sales, use, value added, goods and services, harmonised sales, property or similar taxes payable in respect of costs incurred to achieve Total Performance to the extent that such taxes are recoverable by Contractor, in the case of Base Cost, or the Owner, in case of Owner's Work Cost.
- (b) The calculation of all amounts payable by the Owner to Contractor under the terms of this Agreement shall be exclusive of any federal and state sales, value added, goods and services, harmonised sales and other similar taxes payable by the Owner in respect of such amounts and Contractor shall provide the Owner with such documentation as may be required from time to time under any federal or state legislation to enable the Owner to support its claim for an input tax credit or other similar credit in respect of any goods and services, harmonised sales tax or other similar tax payable by the Owner.
- (c) To the extent Contractor is required to make payment to the Owner in accordance with any of Section 5.4(b), (d) or (f), Contractor and the Owner agree that such payment is an adjustment to the consideration payable by the Owner to Contractor pursuant to this Agreement, and Contractor agrees to comply with the provisions of the tax law, as amended from time to time or other similar legislation in respect of such adjustment.
- (d) The Target Cost includes any customs duties.

ENDNOTE NO 3

ALLIANCE PRINCIPLES AND ORGANISATION COMMON OBJECTIVES

- 1. To work together to maximise integration, management skills and full operating life value to the Owner (full operating life value being achieved by reducing capital costs or by the Owner investing additional capital in the Project as long as such change increase the value of the Facilities to the Owner, but does not decrease profitability of the Project to Contractor.
- 2. To deal honestly and fairly and on a timely basis with each other and to work together in a spirit of openness, integrity and co-operation. This principle shall be applicable to all Parties, Subcontractors and Other Contractors.
- 3. To use creative and innovative methods to bring the Project to completion on schedule and in the manner set forth in this Agreement, provided that if any Party or its representatives or agents believe there to be a real possibility that the Work will not meet design requirement, or the Target Completion Date is materially at risk of not being met, such Party shall give notice to the AMT.
- 4. To bring full commitment to achieve effective interfacing between the Parties, Subcontractors and Other Contractors and to eliminate sources of inefficiency whenever they exist.
- 5. To strive constantly for continuous improvement in all areas, through the application and integration of effective management.
- 6. To engage the best personnel available for particular jobs from the Owner and Contractor.
- 7. To focus on accountability.
- 8. To demonstrate leadership in a proactive, consistent, consultative and decisive manner.
- 9. To establish and maintain effective relationships and communications with all persons and governments involved.
- 10. To implement effective environment, health and safety management systems.
- 11. To develop a single project culture with shared vision dedicated to achieve each of the above objectives.

ENDNOTE NO 4

DISPUTE RESOLUTION

General

The Parties shall make all reasonable efforts to resolve all disputes, controversies, questions or claims (a "Dispute") arising out of this Agreement

through amicable discussion among the members of the Committee as well as through mediation as provided under the Mediation Agreement and this Agreement and through arbitration as provided under Section ______, and agree to provide, open and timely disclosure of relevant facts, information and documents to facilitate the resolution of each Dispute, subject to the claims of privilege that the Parties would have if the matter was dealt with through the Courts.

Committee and Mediation

The Parties agree that they will attempt to resolve each Dispute amicably through discussions among members of the Committee. In the event that a Dispute is not resolved by the Committee within 15 days of a Party giving a notice of a Dispute to each of the members of the Committee, or such longer period as agreed to by all of the Parties, any Party may by notice to all the other Parties within an additional 15 day period, and not thereafter, initiate the resolution of the Dispute by the structured negotiation with the assistance of a mediator as provided in the Mediation Agreement.

Arbitration

If:

- (a) the Dispute cannot be settled within a period of 15 days after the mediator has commenced the structured negotiation of the Dispute or such longer period as agreed to by all of the Parties,
- (b) no Party initiates the mediation process within the time permitted under Section 18.2, or
- (c) the mediator is not agreed to by all of the Parties within 15 days after any Party notifies all the other Parties it wishes to initiate the mediation process described under Section 18.2,

the Dispute will be referred to and resolved by submission to arbitration _____ and subject to the procedures set forth in Schedule III.2.

Dispute Resolution re: Subcontractors

Contractor shall include in all Subcontracts the provisions of this Article ____, including the provisions of the Mediation Agreement and the procedures set forth in Schedule _____ Arbitration.

Disputes with Subcontractors

Contractor shall, at the request of the Owner, assign all rights Contractor has under Subcontracts, including if necessary assignment of the Subcontracts

themselves in whole or in part, so as to allow the Owner to take over conduct of any dispute Contractor might have with its Subcontractors, but in requesting or accepting any such assignment, the Owner shall not take over or be responsible for any obligations of Contractor under the Subcontracts.

[Note: Not included are copies of the prescribed Mediation Agreement, nor the provisions relative to commencing and conducting arbitration.]