

DEVELOPMENT FORUM

BUSINESS EDITION



Surety bonding Cornerstone for risks

Owner risks on large construction projects have been a topic of major interest and discussion both prior to and following the conference of the International Federation of Consulting Engineers (FIDIC) in London in 1978 and the subsequent report, *Insurance of Large Civil Engineering Projects* (see "Who pays when things go wrong?", *Development Forum Business Edition*, No. 102, 16 May 1982.)

by Steven C. Hall

There is no doubt that as resources become more scarce, as financing becomes more difficult and expensive, better ways must be found to protect owners from unbearable financial risk, especially in the developing world where countries already short of money can ill afford additional demands. It is an unfortunate fact that problems of cost and schedule overruns most often occur in those countries that are least equipped to deal with them. The World Bank reported in its 1980 audit: "As many as 65 per cent of the projects were changed during implementation and experienced time and cost increases."

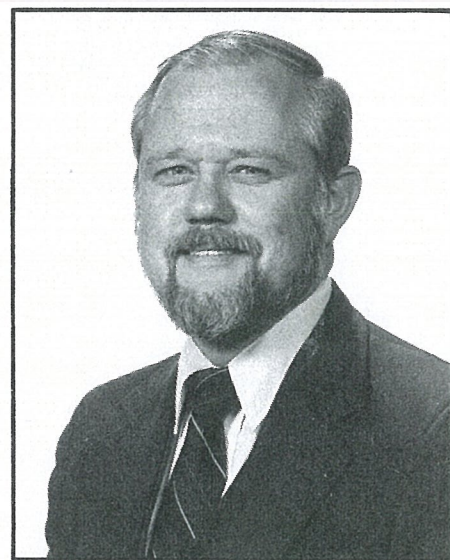
The problem is compounded when these projects are essential to the general development and public good of the nation, as most of them are. Delays in themselves not only can be costly in terms of money, but also can cause incalculable damage to the social and political fabric. Owners and financing institutions increasingly need assurances that projects will be completed within budget and on time. Previous discussions have failed to men-

tion a form of protection which, in North America, has proven to be a major positive factor in the continent's development over the past 80 years: 100 per cent payment and performance bonding.

Assessing the risks

Risks, while unavoidable and at times extremely complicated, are manageable when systematically addressed in advance and monitored properly throughout the life of a project. Each project will have its own peculiarities relating to type, size, technical requirements and geographic area. An insurance programme will have to address these factors in all their ramifications, as well as the capabilities of all the parties to the contracts. Risks also vary dramatically in respect to time and the various stages of project development. A good insurance programme should consider and reflect the dynamic factors of risk.

Risks can be divided into those which are controllable and those which are not. Uncontrollable events such as fire, flood, earthquake (acts of God, force majeure, as they are known in contract terms), usually will have a substantial base for quantitative evaluation, and the traditional insurance practice based on actuarial data is able to provide adequate protection without much difficulty. Political risk insurance and its subvariants are able to cover other areas of uncontrollable risks. Some risks may be best self-insured, covered by contingency funding, or simply borne as the risk of doing business. Controllable risks that deal with human factors of performance, however, seem to present today's greatest problems.



Editor's note: In this article, the author, the international managing director of a large US surety consulting firm, points out the advantages of surety bonding. It must be noted, however, that some countries do not allow such bonds issued by insurance companies — they insist on bank guarantees. Other governments allow surety bonds only if they are issued to a specified bank rather than to the owner.

Financial guarantees

The punitive theory of penalty to the offender and just compensation to the owner seems to be the operative principle in the issuance and use of financial guarantees. The latter have many forms and names: letters of credit, on-demand bonds, contract guarantees. All, however, generally state that the beneficiary/obligee (the owner) has the right without any contingent performance conditions to demand and receive payment for the specified amount when he feels that the contractor has violated his contract. The consequences of this system can be costly to the owner.

CONTINUED-

Financial guarantees are commonly written for 10 per cent of the contract amount, although they may range from 2 per cent to (in an unusual case) 200 per cent. The cost of the guarantee may include not only the fee charged by the bank but other, greater, hidden costs as well. The risk of the bond's being called unconditionally must be calculated and costed into the system in one of several ways. In a typical situation for a smaller or midsize contractor entering the market, the bank may require him to pledge assets equal to the guarantee amount. The prudent contractor will make several calculations and adjust the price accordingly.

Indirect costs

The loss of the opportunity factor for pledged assets will be recognized, as well as the impact on the credit line. An additional factor in case the guarantee is called may also be included. There will certainly be the temptation to front-end load costs to minimize the time exposure of the financial risk. Thus, if the guarantee is called early in the project (an unlikely event), a contractor may have already regained the amount through the first few progress payments and will suffer little, if any, financial damage and, in fact, may even profit. If the guarantee is called in later stages of completion, say, 30 per cent or greater, then the contractor is unlikely to suffer any out-of-pocket damage.

However, on some projects in competitive times either the bank or the contractor may choose to ignore these costs as the price of doing business, in much the same way as a contractor may bid work at cost to stay in, or enter, a market. Ultimately the system will adjust itself, perhaps in other ways through defaults which, in turn, trigger higher operating costs, fees, or interest rates to offset losses.

The net result to the owners if all true costs are recognized and included is inflated contract prices which merely pass the indirect costs of risk back to the market.

The greatest real cost to the owner comes from non-performance which results in termination. The owners will immediately call and receive the guarantee, say 10 per cent, which, however, may already have been indirectly paid to the terminated contractor. The owner now has a project which has stopped. Difficult and expensive procedures must be faced in order to restart the project. A completing contractor must first be found (if it is

possible) who will probably only take the job on a cost-plus-profit basis if only to assume the consequential liability of work already, and perhaps inadequately, completed by the terminated contractor. The subcontractors and suppliers may demand additional monies for delay and other reasons, and the owner may have to pay the bill to have the project completed.

Alternatively, with a much greater time lag, the owner may choose to re-bid the project at grossly inflated prices. In the United States, an owner can expect to pay as much as a 30 per cent premium to restart a stalled project in its early stages, more at later stages. The cost in the international arena is much higher. The 10 per cent compensation from the financial guarantee in this light would be grossly inadequate and ineffective, as well as costly.

System not understood

Because of the problems of termination, the owner may reluctantly allow the contractor to continue, even though the performance is unsatisfactory and the guarantee has been called. Even with the promise of eventually having the guarantee amount returned, the incentive for performance in most cases is reduced and the owner is likely to have recurrent problems.

One hundred per cent as practised in North America seems not to be widely understood elsewhere. The payment and performance bond as used in the United States and Canada and by several US agencies overseas, is a straightforward, one-page agreement between the owner and the surety. It is ancillary to the contract between the owner and contractor and is inactive until a notice of default by the owner.

It simply states that when a contractor defaults, a third party, the surety, will either assure that the project is completed regardless of costs or will forfeit 100 per cent of the total contract value. The surety must consider action within a very short period of time. The obligation for 100 per cent exists until acceptance by the owner, no matter the stage of project completion. It means that although the terminated contractor has finished 95 per cent of the job, the obligation of surety still remains the full 100 per cent not the 5 per cent. It is a stiff obligation.

When problems occur, as they always do, the first recourse for the owner is always the contractor and his organization and asset base.

A straightforward remedial function

In contrast to financial guarantees which rely upon penalties and compensation, the keystone of this type of bonding is proven performance underwritten by a 100 per cent surety guarantee. The bonding company may also require personal or corporate indemnities which provide further incentive for performance. An additional benefit is that there are no hidden costs indirectly passed to the owner. The contractor is not required to pledge assets, and the cost of a bond is known in advance and carried as a line item in the bid price. Also, the cost of the bond is calculated as a small percentage of the total contract value over the life of the project and is not annualized. The contractor also assumes performance, and is unlikely to factor his price against the risk of the bond's being called.

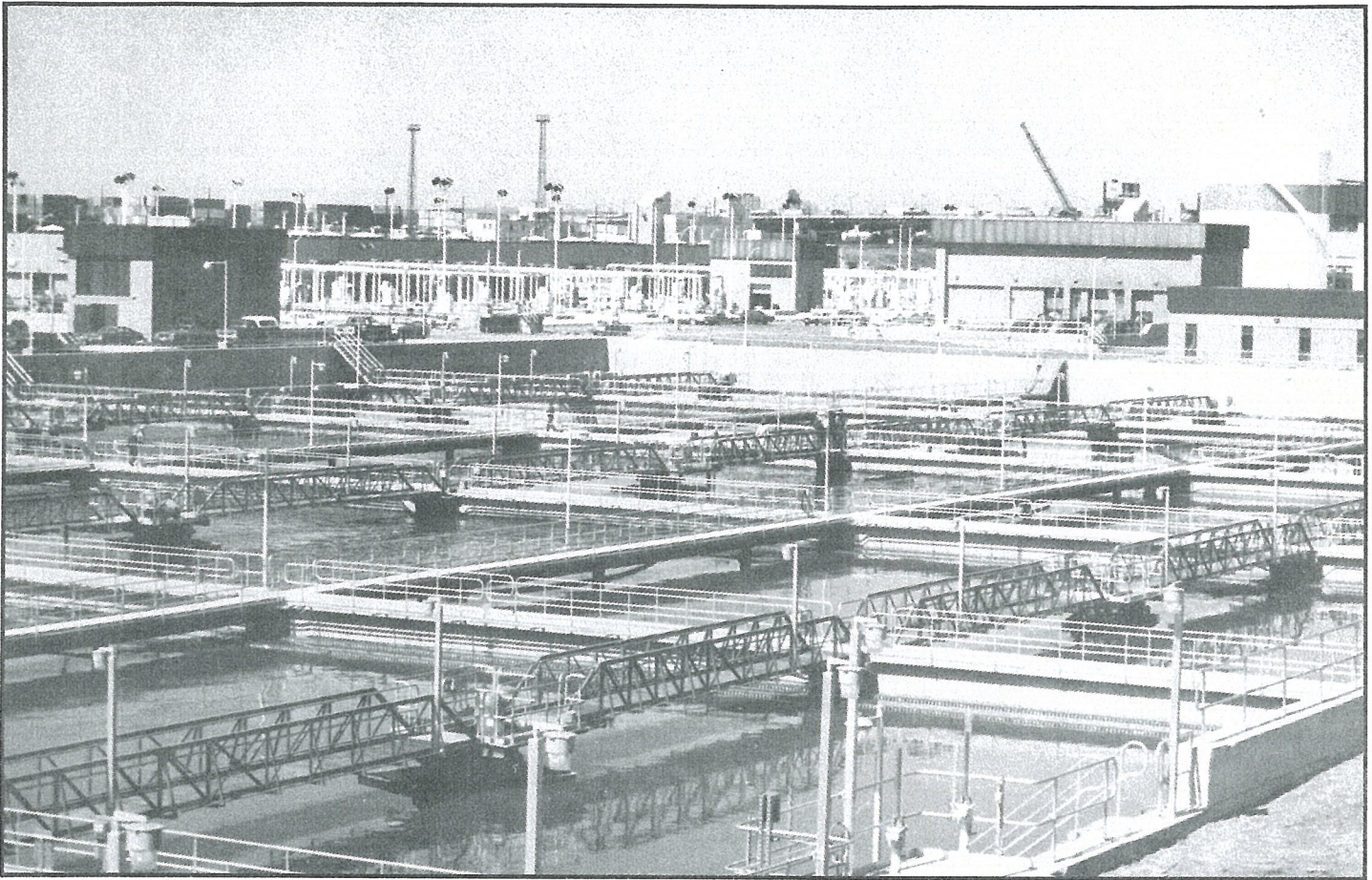
The remedial function of the bond is straightforward. Upon default, the surety, not the owner, has the task of assuring the completion of the work. All the incumbent problems of finding another contractor or reletting the work are handled under the surety's obligation at no additional cost to the owner.

It seems clear that surety bonding should form the cornerstone of a comprehensive risk management programme to protect the owner. Other types of complementary bonding should also be considered for incorporation into a risk management programme.

However, the owner derives great comfort and benefit in having a large multi-billion-dollar company standing, as it were, in the financial footprints of the contractor.

Difficult to obtain

This type of bond is both preventive and, at the same time, remedial in nature. In the first sense, a contractor must pass strict underwriting criteria and judgement to be bondable. The granting of bonds is not given lightly and the surety will require an in-depth analysis by skilled staff and will generally have a long, ongoing relationship with the contractor. The overall operations of the company are examined in detail. The operational systems, management and prior work record must pass close scrutiny. For instance, it is unlikely that a mechanical



contractor, no matter how good, will be successful in completing a manufacturing plant as a prime contractor and it is unlikely that a bond would be given.

Last, but not least, the contractor must be demonstrably solvent. This, as underwriters and their accounting staffs will attest, is not always easy to determine, as vast sums of money are handled monthly by the contractor and this can easily create the illusion that mountains of cash are available. Financial statements, even if certified, represent data that may be one or more years old. Determination of up-to-date fiscal status is a difficult task. Thus, the owner benefits from competent third party review even before a contract is awarded.

Other forms available

There are, of course, the more commonly used instruments such as bid bonds, advance payment bonds and maintenance bonds. Others which may be considered, depending upon the circumstances, are

working capital replenishment bonds, retention money bonds and completion guarantees in the case of turn-key operational-type contracts. Also available to the owner for protection from loss of revenue from delay are liquidated damages which can also be bonded. Each has its place in reducing risks for the owner. An effective bonding and insurance programme will offer the owner much greater protection than is currently available, at less real cost, not to mention the savings realized when problems do occur.

The clear objective of an insurance programme should be to help the owner override problems in completing the project. An effective programme should be able to bridge financial shortfalls or gaps resulting from problems, regardless of cause. Disputes between parties should not stop or even slow a project. Investigation or litigation may be concurrent but should not distract from the on-going work in progress. Remedial work, if required, should be immediate. If necessary, disputes should be deferred until project completion. Risk managers should recommend coverage with this objective in mind.

Active role for risk managers

In conclusion, it would seem that the trend to the use of a risk management service by owners is a positive step in the right direction but that payment and performance bonds should be strongly considered for the protection they offer. In addition to providing only a front-end service, a risk manager should also have an active role throughout the life of the project. In this capacity he can offer an invaluable service as an "early warning system", alerting all parties to potential problems that may affect project completion and the insurance coverage. After all, the best answer to any problem is prevention. □

Steven C. Hall is international managing director of the CMA Consulting Group, Morristown, New Jersey, USA.

CMA Consulting Group
*Technical and Management Services to the
Insurance and Financial Professions*



**CMA Corporate Headquarters
CMA International**

Steven C. Hall, International Managing Director

170 East Hanover Avenue, Box 2287R, Morristown, New Jersey 07960 USA
(201) 267-7171 TWX: 710-986-7400 CABLE: CMAI MWN

SOUTHWEST REGION

William G. Sarver

Regional Vice President

5001 LBJ Freeway, Suite 864
Dallas, TX 75234
(214) 980-4718

MIDWEST REGION

John A. Mercogliano

Regional Vice President

2340 S. Arlington Heights Rd.
Box 66210
Chicago, IL 60666
(312) 952-1188

NORTHEAST REGION

Robert S. Sleece

Regional Vice President

170 East Hanover Ave.
Box 2287R
Morristown, NJ 07960
(201) 267-7171

WESTERN REGION

Richard L. Rau

Regional Vice President

70 Lansing Street
San Francisco, CA 94105
(415) 543-9656

SOUTHEAST REGION

Roy Adams, Jr.

Regional Vice President

406 Reo Street, Suite 239
Tampa, FL 33609
(813) 879-2320