

*Public Enterprise Reform and
The Use of Performance Contracts*

Arthur J. Mann

Serie de Ensayos y Monografías

Número 72

marzo de 1995

Public Enterprise Reform and The Use of Performance Contracts

Arthur J. Mann*

Abstract

There are multiple ways of improving the management efficiency of public enterprises, one of which is the mechanism of performance contracting. Performance contracts represent negotiated agreements between governments as “owners” of public enterprises and the management of the enterprise itself. This paper presents an example of a hypothetical performance contract between a central government and an electric power generating/transmitting public enterprise.

Introduction

Improving the productive and management efficiency of public enterprises is a goal on which there is universal agreement. The approach which has been increasingly adopted worldwide has been some form of privatization in all its permutations and combinations, with the spectrum running the gamut from simple liquidation, outright sale to the private sector, and/or management contracts to administer one phase of the operations of the enterprise. Various forms of privatization have been carried out or are in the process of being implemented in the case of Puerto Rico. Recent examples are the sale of the public shipping line (Navieras) and the management contract with the Aqueduct and Sewers Authority (Autoridad de Acueductos y Alcantarillados) which went into effect at end-1994.

This paper will begin with an introductory section briefly summarizing the concept of performance contracts and country experiences with their application. Section II then offers an example of a performance contract (hereafter PC) using the case of an electric

*. Professor, Department of Economics, University of Puerto Rico, Río Piedras Campus. I would like to thank two anonymous referees for useful comments. Responsibility for the views expressed remains entirely with the author. This paper is based on the author's experiences in Bahrain and Bolivia.

power generator/distributor. In Section III alternative performance indicators for other types of enterprises are defined, and in the concluding Section IV some general guidelines for drafting a PC are presented.

I. The Setting

Performance contracts are “negotiated agreements between governments, acting as owners of a public enterprise (hereafter PE), and the enterprise itself” in which the “intentions, obligations, and responsibilities of the two parties are freely negotiated and then clearly set out” (Nellis, 1989). The contractual clauses include both the financial and physical indicators which will be used to measure performance, and may even establish a “carrot and stick” bonus and penalty system applicable to management. The contracts were first implemented in France in the early 1970s, and eventually spread to eight of France’s most important public corporations; in the early 1980s 13 additional contracts were signed between the pertinent ministries and industrial state enterprises. The mechanism began to be used in francophone Africa in the 1980s, and was utilized in some Latin American and Asian countries during the same decade. However, the decade of the 1990s has witnessed an overriding preference for outright divestiture via sales to the private sector in lieu of the PC alternative.

Inefficiencies especially within commercially-oriented public enterprises (e.g., electricity, water, telephones) have clear national financial and fiscal implications, for their activities impact directly on overall public sector expenditures and revenues, thereby affecting a country's fiscal/economic health. Around the world a diversity of approaches has

been used in attempts to inject enhanced standards of efficiency into these often bureaucratic and poorly-administered enterprises, which even more often have become the repositories, for political and social reasons, of redundant personnel. These approaches have encompassed measures ranging from the outright liquidation of non-viable enterprises, to divestiture (partial or complete), and/or to restructuring.

What will be taken up in this paper is the restructuring option in the form of performance contracting between the central government and the PE. A concrete example regarding the provision of electric power will be provided. To be clarified is that performance contracts can be eventually developed between other central government ministries/entities and the respective PEs. Each contract will vary in detail according to the nature of the PE, and provides a method of PE restructuring without having to resort to complete privatization. Of course, this in no way precludes the liquidation and privatization alternatives, for the restructuring generated by the PC can certainly be used to facilitate eventual divestiture.

Enterprise efficiency is greatest when the principal goal of the firm is profit maximization under competitive market conditions and managerial autonomy. Due to public ownership, the PEs rarely confront such a situation. Thus, the goal of performance contracting is to generate a more efficiency-inducive operative framework. The managers in PEs often adopt objectives that greatly vary from maximization objectives: price setting and/or employment-creation for social or political reasons, unwillingness to “rock-the-boat” for personal reasons, a procedural as opposed to an outcome orientation, operations in

sheltered (monopolistic) markets, government reluctance to liquidate or force changes in behavior, access to preferential credits, etc.

Therefore, the overriding objective of performance contracting is to force management in the PEs to better respond to market signals and to be subject to greater competitive pressures and financial discipline. This is done via a contract which specifically delineates the obligations of both signatory parties to it: the central government and the management of the PE. The purpose of the contract is to clarify objectives and reconcile priorities *ex-ante* so that managers can be held unambiguously accountable *ex-post* for achieving results. Ideally, commercial PEs should be profit-maximizers, and non-commercial objectives should be pursued by other transparent means (e.g., direct taxation or explicit subsidies). Specifically defined performance indicators form part and parcel of the contract, and management is given the autonomy to respond to market signals. Most importantly of all, management is *held accountable for outcomes and is rewarded or penalized accordingly*. These outcomes are measured by using the performance indicators which are developed during the process of contract negotiation, and it is therefore of utmost significance to pay very close attention to the content of the indicators.

No matter what indicators are incorporated and what their content may be, it is customarily argued that the bottom line should be that *there is no alternative to profitability as the basis of a performance evaluation system for public enterprises* (Jones, 1991). However, this dictum assumes that the PE is free of all political and social constraints to be a profit-maximizer (e.g., all input and final product prices are market-determined) and, as stated above, that its non-commercial goals are transparently pursued and it operates under

competitive market conditions. Such ideals often do not exist in the real world in many developing countries. In such a policy context it becomes necessary to incorporate quantitative indicators into the PC, since the standard financial income (profit and loss) statement will poorly reflect profitability.

The role of government is supervisory, not controlling. It sets objectives, appoints (and fires) managers, evaluates performance, approves investment decisions, rewards and penalizes management, and does sectoral planning and coordination. It stays completely out of day-to-day operations. If feasible and pertinent, this regulatory role should be assigned to a government agency different from the one that has the ownership function.

The contracts are necessarily incomplete in that they cannot specify in detail what each side is supposed to do under all conceivable circumstances. From here arises a trade-off. The more completely a contract attempts to specify reciprocal commitments, the higher will be the transaction costs of negotiating, monitoring, and enforcing.

Nellis (1989) provides an evaluation of inter-country experiences with performance contracting, concluding that the mechanism “is of value but its benefits have been a bit oversold”. The agreements themselves have been well designed, but have run into difficulties in the implementation phase. They represent no panacea. An ailing public enterprise must first undergo a rehabilitation process *prior to* submitting to a PC agreement; the PC process “requires a strong, well-placed supervisory agency to assist in the preparation of the agreement, review implementation, and especially push for the proper fulfillment of the contract”; they have not proven to be legally enforceable, as persistent non-compliance from both sides has arisen. Nevertheless, where divestiture or the contracting out of

management functions is not politically viable, the device can be useful by merely holding management up to pre-established criteria.

II. An Example of a Performance Contract

In the subsequent performance contract example, it will be assumed that the contractual agreement is negotiated between the Puerto Rico Treasury Department and the Electric Energy Authority (EEA, or Autoridad de Energía Eléctrica). The general form of and main ideas contained in such a contract will be laid out, but what follows does not pretend to fill in all the necessary details. This point must be recognized at the outset, for the contract which is presented here is in *generic* form; i.e., the clauses of a PC applicable to a specific electric enterprise have to be worked out on a case-by-case basis. This caveat applies to the performance indicators subsequently delineated as well as to the quantification provided in Annex II of the contract. Moreover, both explicitly and implicitly the assumption is incorporated that the best way to ration electric power consumption and to influence rational demand patterns is via the use of marginal cost pricing.

A. A Draft Performance Contract

PERFORMANCE CONTRACT BETWEEN THE GOVERNMENT OF PUERTO RICO
AND THE ELECTRIC ENERGY AUTHORITY

The Treasury Department, in the name of the government of Puerto Rico, hereafter the Government, and the Administrator of the Electric Energy Authority, hereafter the Enterprise, subscribe to the present Performance Contract, hereafter the Contract. (This contract should be signed by both the General Manager/Administrator of the EEA and the President of its Board of Directors).

Background. A brief historical background of the EEA is presented here, including its establishment date, laws under which it operates, and its principal objectives (administration, operation, generation, transmission, distribution, etc.).

Contract Objectives. Efficiency in terms of generation, transmission, and distribution at the lowest possible cost consistent with insular economic and social policies.

Contract Duration. The first contract might be for one year in order to make adjustments to the various clauses and performance indicators; subsequent contracts might be of longer duration.

Electric Tariff Principles. Rate structures will be set at levels which ration consumption according to economic costs and equal treatment for equal consumption. For large volumes of consumption (above a given maximum), the Enterprise will be able to enter into long-term differential pricing contracts. Billing will be on the basis of the maximum

monthly demand registered by the user and of the total amount of electricity consumed during the month.

Electric Tariff Levels. Rates will be specified for transmission, subtransmission, and distribution under the dual billing system described above.

Capital Projects. The dollar value of those capital project investments to be made during the contract period are estimated here. These estimates are made taking into account consumption projections and the government's macroeconomic policies and projections; ideally, they should be tied into capital expenditures of the public sector's budget and into the EEA's own control and physical/financial monitoring system in order to quantify the economic effects of any deviations.

Capital Project Financing. The means of financing the projects (new and expansions) should be specified. These will normally be partially out of current revenues and partly via long-term credits.

Enterprise Responsibilities:

1. Faithfully carry out the goals cited in Clause X.
2. Formulate an operative plan for the period 1995-99, taking into account administrative, financial, commercial, and technical elements.
3. Send the data specified in Annex II of the Contract on a quarterly basis to the pertinent division of the Treasury Department to permit it to monitor and evaluate the agreed upon performance indicators.
4. For purposes of final contract evaluation, generate all financial accounts (balance sheet and income statement) to be certified by an external auditor.
5. Carry out an effective policy of information dissemination among all consumers so that they are well aware of tariff levels and may act accordingly to regulate their demand.

6. Apply a Personnel Office (OCAP)-type system of job and personnel descriptions and grading in order to reduce any inefficiencies.
7. Others to be specified.

Government Responsibilities:

- 1 Do not modify electric rates during the Contract period.
2. Make payments on bills due the Enterprise within 30 days of receipt.
3. Facilitate credit disbursements allocated to finance the Enterprises's capital projects.
4. For future periods provide the values of such variables as GNP growth rates, fuel prices, discount rates, price deflators, inflation rates; these are needed inputs to the capital investment plan.
5. Do not interfere in the day-to-day administration and operations of the Enterprise; this includes personnel policy.
6. Do not use the electric rate structure to grant subsidies. If a subsidy policy is decided upon by the Government, such subsidies should be transparent, explicit, and quantifiable.
7. If the Government decides to impose a policy on the Enterprise which involves a revenue decrease or an expenditure increase, the cost of this policy should be previously determined and the Enterprise should be compensated for it.
8. Others to be specified.

Goals. The goals to be achieved and the performance indicators that will be employed to evaluate them are described in this section of the Contract. The terms utilized are more precisely defined in Annex II. These goals and their quantification are meant to be suggestive, not inflexible.

1. The average electricity tariff (rate) must cover operational costs (current expenditures) plus a residual which will cover debt service and part of future capital needs. This goal is quantified in the following manner:

Average Total Operational Costs (ATOC) = (fixed and variable costs - depreciation) ÷ recurrent revenues.

This is subject to a reduction in real operating and maintenance costs per kWh for generation, transmission, and distribution.

(a) Operational and Maintenance Cost of Generation = (direct and indirect costs net of interest and depreciation) ÷ energy produced;

(b) Operational and Maintenance Cost of Transmission = (direct and indirect costs net of interest and depreciation) ÷ energy produced;

(c) Operational and Maintenance Cost of Distribution = (direct and indirect costs net of interest and depreciation) ÷ energy produced.

2. The Enterprise's income must maintain an adequate relationship to its assets. This is given operational content via:

Use of Installed Capacity (UIC) = (recurrent revenue - fixed and variable costs net of depreciation) ÷ present value of fixed assets.

3. The system's reliability must maintain an adequate relationship to the economic value that users attach to electric energy. This is quantified as:

Energy not Delivered (END) = length of interruption x average capacity.

4. Operating liquidity will be increased due to a reduction in consumer payment periods. Quantification is made via:

Reduction in Payment Time (RPT) = accounts receivable ÷ income from customer sales.

5. Inventory costs will decreased. Quantification is achieved via:

Reduction in Funds Tied up in Inventories (RFI) = $[(S_i - S_f) \div S_i] \times 100$
where S_i = inventory value at beginning of period, S_f = inventory value at end of period.

6. Long-run debt costs will remain within limits set by the Government. Quantification is achieved via:

Average Rate of Interest (ARI) = Accrued Interest ÷ Average Debt.

Information System. The information system defined in Annex II and in Tables 1 and 2 will identify the needed data and quantify the required performance indicators that will permit both the Government and the Enterprise to measure the degree to which goals are reached.

Evaluation System. This system is designed to measure management performance, and will be applied quarterly and at the end of the Contract. It is based on the contents of Tables 1 and 2 according to the following formula:

$$\text{Performance} = uA + vB + wC + xD + yE + zF, \text{ where}$$

A, B, C, D, E, and F correspond to the goal criteria values summarized above under Goals and expanded in more detail in Annex II; u, v, w, x, y, and z represent weighted coefficients attached to the respective goals. Interpolation is used to assign values that fall between whole numbers.

Incentive System. This system is put in place to reward or sanction the Enterprise's management team. It is described in Annex III. The rewards will be paid on or before 60 calendar days subsequent to the final evaluation report.

Annex I Values of Exogenous Variables

These are values that the Government will provide to the Enterprise so that the latter can carry out its economic and financial planning; they will be in effect during the duration of the Contract. If these values do vary during the period in which the Contract is in force, goals will have to be accordingly adjusted.

- a. GDP/GNP changes, rates and absolutes;
- b. Price of natural gas;
- c. Price of diesel oil;
- d. Discount rate;
- e. Pertinent exchange rates;
- f. Rate of expected inflation;
- g. Deflators for Enterprise expenditures;

Annex II Sources and Definitions of Terms Employed in the Derivation of the Performance Indicators

Sources: Electric Energy Authority, income statements, balance sheets, operational reports, etc.

Definitions:

1. Average Total Operational Costs (ATOC) =

(Operational costs + Maintenance costs + Administrative and general costs + Fuel costs + Energy purchases + Taxes and fees) ÷ Recurrent revenues

This result is subject to the following boundaries: $\leq (0.20 + (X1 * 0.40) + (X2 * 0.29))$

where $X1 = \text{energy generated} \div \text{energy sold}$; $X2 = \text{energy purchased} \div \text{energy sold}$

1(a) Average Operational and Maintenance Cost of Generation =

$$\frac{[\text{Direct operational and maintenance costs} - (\text{Interest} + \text{depreciation on operational and maintenance costs}) + \text{Indirect costs (services and materials on indirect costs)} - (\text{Interest} + \text{depreciation})]}{\text{Total energy generated}}$$

This result is subject to the following limit: $\leq \text{BDx/MWh.}$

1(b) Average Operational and Maintenance Cost of Transmission =

$$\frac{[\text{Direct operational and maintenance costs} - (\text{Interest} + \text{depreciation}) + \text{Indirect costs (services and materials)} - (\text{Interest} + \text{depreciation})]}{(\text{Total energy generated} + \text{Energy received from other sources} - \text{Energy sold to other generating sources})}$$

This result is subject to the following limit: $\leq \text{BDx/MWh.}$

2. Use of Installed Capacity (UIC) =

$$\frac{(\text{Recurrent revenues} - \text{Recurrent costs} + \text{Depreciation})}{\text{Present value of fixed assets}}$$

3. Energy Not Delivered (END) =

$$\frac{\sum [\text{Length of interruption} \times \text{Energy sold in day of interruption}]}{(24 - \text{length of interruption})}$$

This result is subject to the following boundaries:

$$5/10,000 \text{ energy sold} \leq \text{END} \leq 1/1,000 \text{ energy sold}$$

4. Reduction in Payment Time (RPT) =

$$\frac{\text{Accounts payable (at end of period)}}{\text{Revenues from energy sales (monthly average)}}$$

This result is subject to the limit $\leq 1.60.$

5. Reduction in Funds Tied up in Inventories (RFI) =

$$[(S_i - S_f) \div S_i] \times 100$$

where S_i = inventory value at beginning of period; S_f = inventory value at end of period.

This result is subject to an annual 3% reduction.

6. Average Rate of Interest (ARI) =

$$\Sigma \text{Accrued interest} \div [(\text{Debt at beginning of period} + \text{debt at end of period}) \div 2]$$

This result is subject to comparison with average market rates at the end of the period.

Annex III Management Incentive System

Composite Performance

Score (from Table 2)	Reward/Sanction
≥ 4.500	\$ 50,000
3.700 - 4.499	\$ 15,000
3.000 - 3.699	\$ 0
2.200 - 2.999	Analysis of causes
≤ 2.200	Probation or dismissal

Monetary rewards will be distributed according to internal management decisions;
see Jones (1991) for an alternative example.

III. Alternative Performance Indicators

For reasons stated in Section I, it may be preferable to measure management performance with non-financial indicators as opposed to purely accounting ones. While it is tempting to reduce the issue of indicator development to accounting indicators (since they are readily available and understood), this should be avoided to a large extent, although it is certainly acceptable to employ a limited number of accounting criteria. Indicators will vary depending on the nature of the output of the public enterprise, which means that different indicators must be developed for each separate case. This development must be done in conjunction with teams from each side (management and government), and each team would minimally include an economist, an accountant, and specialists; in the example presented in this paper the specialists would be engineers trained in electric power generation, transmission, and distribution.

Several types of indicators might be considered in the development of performance criteria. They are:

A. Static indicators (affect results during a given year)

1. Profitability
2. Efficiency and productivity
 - a. Manpower
 - b. Inputs
 - c. Inventories
 - d. Use of installed capacity
 - e. Administrative costs
 - f. Sales and marketing

3. Liquidity and cash flow:

- a. Short-term assets and liabilities
- b. Financial arrears

4. Customer/client satisfaction

B. Dynamic indicators (affect longer-term results)

1. Improvement in information systems and managerial control.
2. Training programs.
3. Research and development.
4. Preventive maintenance.
5. Capital project progress.

Some operational examples of these aspects are provided below.

C. Static Indicators

1. Profitability.

Net income \div tangible assets, where net income = operating revenues - input costs - wages/salaries - rents - cost of working capital.
tangible assets = fixed assets (market prices) - depreciation.

Operating revenues exclude financial revenues; net income includes interest payments, depreciation charges, and amortization payments.

2. Efficiency and productivity.

a. Total output \div employment.

This can be expressed in volume (physical output and number of workers) as well as monetary (constant dollar) terms.

b. Input costs (excluding manpower) \div output.

Costs should be expressed in constant dollars for the sake of inter-temporal comparability.

c. Actual output \div installed capacity.

This should be expressed in volume terms; the definition of installed capacity can be somewhat flexible.

d. Sales \div output.

This may be expressed in volume and monetary terms.

3. Liquidity and cash flow.

- a. Current assets ÷ current liabilities.
- b. (Current assets - inventories) ÷ current liabilities.
- c. Net interest and amortization payments ÷ operating revenues.
- d. Accounts receivable from government agencies ÷ accounts payable to government agencies.

4. Customer satisfaction.

- a. Number of complaints and claims this year ÷ number of complaints and claims previous year(s).

D. Dynamic Indicators

1. Progress reports on plans and programs to improve information systems and managerial control.
2. Training expenditures on employees ÷ number of employees
3. Expenditures on research and development ÷ sales, output, or administrative costs.
4. Expenditures on preventive maintenance ÷ operating expenditures.
5. Equipment/machine downtime this year ÷ equipment/machine downtime previous year(s).

IV. Guidelines for Drafting Performance Contracts

It is apparent from the discussion in the previous sections that a performance contract contains several key elements: a performance information system, a performance evaluation system, and a performance incentive system. The performance evaluation system enables the government to know the “what” of the performance criteria, but it is via the information system that it receives timely and relevant data on these criteria. Moreover, to insure that the contract is taken seriously by management, there must exist a link between managerial

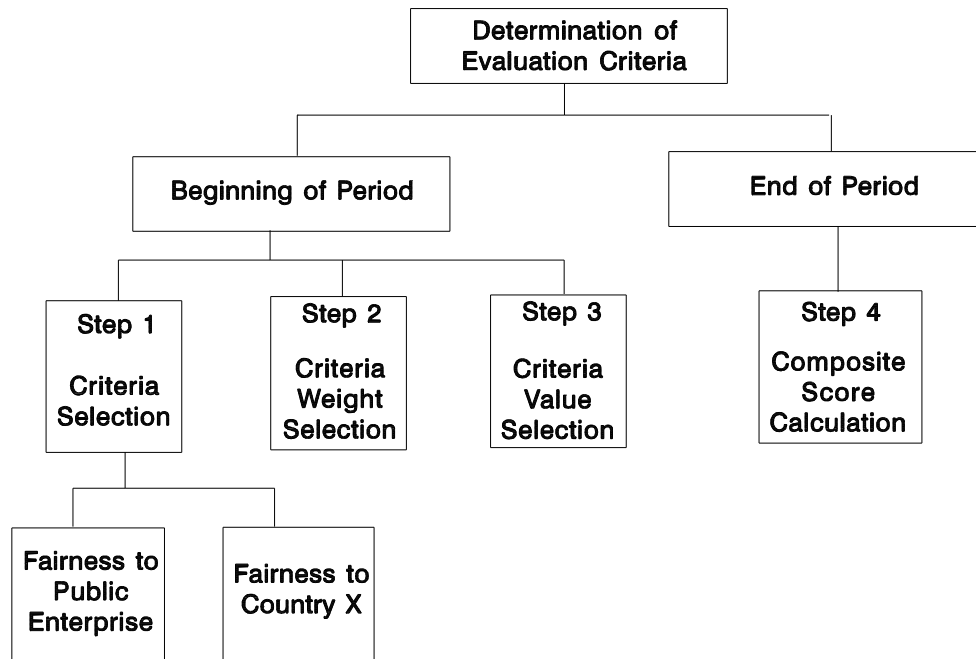
performance and rewards and punishments; this is the role of the performance incentive system.

There are four basic steps involved in creating a performance evaluation system, several of which have already been described without having actually been identified and located as part of an overall system. Figure 1 summarizes these steps:

- Step 1. Criteria selection.
- Step 2. Criteria weight selection.
- Step 3. Criteria value selection.
- Step 4. Composite score calculation.

FIGURE 1

Steps in the Development of a Performance Evaluation System
Determination of Evaluation Criteria



Steps 1-3 should be completed at the beginning of the contract period (e.g., one year), while Step 4 is initiated just before the contract period terminates, with its final values being calculated when all data become available.

Step 1, criteria selection, consists of selecting a set of criteria which reflect economically, financially, and socially important dimensions of PE behavior. This is what was done in the example presented in Section II.A, although as pointed out in Section III there are numerous appropriate indicators of PE performance which must be adjusted and adopted to each particular case. The criteria must be fair to management in that they evaluate management performance only on those items (variables) which fall within its control. The Electric Energy Authority may face a classic example of this if it were to confront administered (mandated by the central government) electricity rate prices. If these prices were beyond management control, fairness to management would require adjusting the performance indicators to reflect this constraint. One way of dealing with this is to measure performance at constant instead of nominal prices. Another way is to draw a distinction between “enterprise performance” and “management performance”, adjusting the former for all elements over which management has no control. But this would complicate matters, and, if possible, it would be best to avoid having to make this distinction in the first place.

The “fairness criterion” is also important. As an example, assume that management has full control over capacity utilization. Hence, the use of some indicator of capacity usage would be considered a fair criterion for evaluating management performance. However, if management operates facilities at or near the capacity rate without adequately taking into account the downtime required for proper maintenance, “national fairness” is violated by

sacrificing the present for the future. Thus, a corollary indicator should be developed to take maintenance into account.

All criteria finally included as performance indicators must be negotiated between management and the government, preferably with the mediation of an expert third party. Both national and management interest is in the balance, and the mediating effect of a disinterested third party is very valuable in striking this final balance.

The number of criteria should be limited. The ideal is to take into account every real benefit and cost associated with the PE's operations, but this would produce a very long list, which is clearly undesirable. Therefore, only the principal benefits and costs should be initially included (as in Section II.A). With experience the list might be extended and refined. Depending on the nature of the enterprise, enterprise performance in the following areas should be covered:

1. Static operational efficiency, which measures how well the PE is making use of its existing resources (see Sections III.A and C for examples).
2. Dynamic effects. Some activities impose immediate costs but only generate benefits in the future; e.g., maintenance, research and development (see examples in Sections III.B and D).
3. Project implementation. The lack of timely project execution has hidden costs which are not reflected in current financial statements, but do adversely impact a country's welfare.

4. Non-commercial (social) activities. If the PE is required to perform overtly social functions (e.g., subsidize lower income groups), the indicators must be properly adjusted.

The contract might include both quantitative and qualitative performance criteria, although it is more difficult to agree upon the operational definition of the latter. Overlapping (partial duplication) should be avoided, although this is more easily said than done. For example, suppose that an oil company performance contract specifies the performance indicators of cycle speed (meters per rig month) and efficiency of exploratory/development drilling. If the performance of the latter improves, that of the former automatically improves; thus, the PE would be given multiple credit for the same action. Similarly, the output of crude oil is highly correlated with that of natural gas, meaning that efforts to increase crude production will automatically generate an increase in the other. These cross-effects must be taken into account in the design of the performance indicators. It must be recognized that overlapping is not limited to physical criteria, for it may also arise between physical and financial indicators. Increased output of crude oil can be automatically accompanied by total revenue and net profit rises (with prices unchanged).

Step 2, criteria weight selection, is a normative exercise (see the third column of Table 1). There is no totally objective method of choosing these relative weights, which must add up to 100% (or 1.00). It is a judgment that the negotiating parties have to make and agree upon. This is an important decision, because management will make its (management) decisions emphasizing those indicators with the greatest relative weight. These weights do not have to be constant over time, and the government can change them

to achieve given objectives. For example, the government may initially decide to reduce the slack in a given PE's static operational efficiency and not worry about planning. As the PE reaches higher levels of operational efficiency, it might want to reorient management toward corporate planning and research and development.

With respect to criteria value selection, for each criterion it is essential to incorporate the notion of criterion ranges that distinguish several different levels of performance. Table 1 provides an example of this, where a five point scale is illustrated (from a high-excellent-of five to a low-very poor-of one). These criterion values (and the boundary/limit values which are specified in Section II.A, Annex II) are determined on the basis of past trend values. In addition to using the past (say) five years of performance experience of the PE with which the contract is to be negotiated, other information sources to establish criteria values can be used; e.g., comparisons with similar firms in the public or private sector, standards achieved by similar enterprises in other countries, expert third-party judgments.

TABLE 1

Performance Evaluation System Public Enterprise: Electric Power Company
Time Period: First Quarter, 1996

Indicators	Unit	Weights	Criteria Values				
			5 (High)	4	3	2	1 (Low)
A. ATOC	%	0.35	34.3	38.6	42.9	47.2	51.5
B. UIC	%	0.15	5.4	5.0	4.6	4.2	3.8
C. END	%	0.20	1.1	1.7	2.3	3.1	4.1
D. RPT	%	0.10	4.9	5.4	6.1	6.7	7.2
E. RFI	%	0.10	7.1	7.7	8.2	8.8	9.1
F. ARI	%	0.10	5.2	5.5	5.8	6.1	6.4
TOTAL		1.00					

TABLE 2

Performance Evaluation System Public Enterprise: Electric Power Company
Time Period: First Quarter, 1996

(1)	(2)	(3)	Statistical Results	
			(4)	(5)=(2)x(4)
Indicators	Weights	Achievement	Raw	Weighted
A. ATOC	0.35	42.2	3.0	1.050
B. UIC	0.15	4.4	2.5	0.375
C. END	0.20	2.0	3.5	0.700
D. RPT	0.10	5.9	3.3	0.330
E. RFI	0.10	7.3	4.7	0.470
F. ARI	0.10	6.1	2.0	0.200
COMPOSITE SCORE				3.125

The different aspects of arriving at the composite score calculation at the end of the evaluation period may be appreciated from Table 2. The first two columns are taken from Table 1, while the third column titled “Achievement” represents what really happened during the period in terms of the selected indicators. The fourth column, titled “Raw Statistical Results”, converts the actual performance into the standard 1 to 5 scale; interpolation is used if the actual result falls between value boundaries. The fifth and last column titled “Weighted Statistical Results” is simply the weight multiplied by the raw item score. Summing up each weighted result produces the composite score upon which management performance is evaluated. In the hypothetical case found in Table 2, the composite score of 3.125 means that management performance during the period was very slightly above average.

This composite score may be used to evaluate and rank very different PEs, thereby introducing an element of competition which is normally missing. Since the score judges the ability of management to achieve its commitments, it is, in a very real sense, the counterpart of profits in the private sector. The final step is to make the link between this composite score and the management incentive system presented in Annex III of Section II.A. In the example presented here, the score of 3.125 implies no penalty or reward to management. Strict adherence to the reward/penalty system must be a requisite. Otherwise, motivation toward improving PE performance will be diluted.

In those countries where a performance contracting system has had a large measure of success, several lessons emerge:

1. Political leaders and ministries/departments must demonstrate a strong and consistent commitment to the system.
2. Initially, the system should be simple with limited indicators and data requirements. Refinement can come with experience. What is important is to push the PEs toward enhanced efficiency.
3. Top priority must be given to the training of personnel in the PEs and government who will have responsibility for administering the system.
4. Devising adequate incentive and career development structures that are founded on performance evaluation is a requisite.
5. Care must be taken to avoid overwhelming the PE with excessive data requirements.

References

- Jones, Leroy P. (1991). Performance Evaluation for Public Enterprises, World Bank Discussion Paper 122 (Washington: The World Bank).
- Nellis, John R. (1989). Contract Plans and Public Enterprise Performance, World Bank Discussion Paper 48 (Washington: The World Bank).

Selected Bibliography

- Gillis, Malcolm, Glenn Jenkins and Donald Lessard (1983). "Public Enterprise Finance in Developing Countries: Toward a Synthesis", in Leroy Jones et al (eds.) Public Enterprise in Developing Countries (New York: Cambridge University Press).
- Hartmann, Arntraud and Syed Ali Nawab (1985). "Evaluating Public Manufacturing Enterprises in Pakistan: An Experimental Monitoring System", Finance and Development, V.22 (September), pp. 27-30.
- Jenkins, Glenn P. (1978). Performance Evaluation and Public Sector Enterprises, Discussion Paper No. 46, Harvard Institute for International Development (Cambridge).
- Mallon, Richard D. (1983). Performance Contracts with State-Owned Enterprises, Discussion Paper No. 143, Harvard Institute for International Development (Cambridge).
- Nellis, John R. (1991). Improving the Performance of Soviet Enterprises, World Bank Discussion Paper 118 (Washington: The World Bank).
- Park, Young C. (1986). "A System for Evaluating the Performance of Government-Invested Enterprises in the Republic of Korea", World Bank Discussion Paper 3 (Washington: The World Bank).
- Trivedi, Prajapati (1988). "Performance Evaluation System for Memoranda of Understanding (MOUs)", Paper prepared for the session Economics of the Public Sector at the Allied Social Science Annual Meeting (New York).