

APPENDIX A
SHARED SAVINGS AGREEMENT

CALL FOR TENDER FOR A

(First/Second Stage Tender)

**SHARED SAVINGS ENERGY
CONTRACT**

PARTS 1 TO 9 BOUND IN THIS DOCUMENT

PART 1
CONDITIONS OF CONTRACT FOR A SHARED SAVINGS ENERGY
CONTRACT IN RESPECT OF THE CANDIDATE BUILDINGS
PRETORIA REGION

MADE AND ENTERED INTO BY AND BETWEEN

- **GOVERNMENT OF THE REPUBLIC OF SOUTH AFRICA**

herein represented by the Director-General of the Department of Public Works and Land Affairs (hereinafter referred to as the Owner) Private Bag X65, PRETORIA, 0001

- **CONTRACTOR**

(hereinafter referred to as the contractor)

AND WHEREAS THE CONTRACTOR carries on business as an Energy Management Company;

AND WHEREAS THE CONTRACTOR has proposed the implementation of energy management, the installation of certain energy saving equipment and the provision of certain services to THE OWNER and modifications of the existing plant with a view to achieving better efficiency and savings in respect of the consumption of electricity, coal and other energy carriers, without adversely influencing the performance of the existing plant;

AND WHEREAS THE OWNER has agreed to THE CONTRACT installing and providing energy saving measures and apparatus into the system at THE CANDIDATE BUILDINGS in Pretoria subject to certain terms and conditions hereinafter more fully set forth;

1. EFFECTIVE DATE

The effective date for the coming into operation of this Agreement shall be on the first day of **January 1999**.

2. PERIOD OF AGREEMENT

This Agreement shall terminate 10 years after signing this Contract.

3. BASIS UPON WHICH THIS AGREEMENT IS FOUNDED

3.1 THE OWNER warrants that as at the effective date, the number of hours of use of THE CANDIDATE BUILDINGS, as set out in paragraph 14 of this agreement and the equipment therein and the use to which THE CANDIDATE BUILDINGS are put shall be as detailed in Part 4 of this document hereunto annexed, which information THE OWNER warrants as being true and correct.

3.2 THE OWNER and CONTRACTOR shall mutually agree upon Parts 6, 7, 8 and 9 of this document and THE OWNER shall warrant the information as being correct.

4. INSTALLATION OF EQUIPMENT, PROVISION OF SERVICES AND OWNERSHIP

4.1 THE CONTRACTOR hereby undertakes as soon as is practical after the signing of this agreement to implement energy management, to install equipment [which shall include energy management equipment and new equipment replacing old equipment] and to make adjustments to the systems in THE CANDIDATE BUILDINGS with a view to achieving a saving in the maximum demand for electricity (kVA), the consumption of electricity (kWh), coal, oil and other energy carriers (MJ).

- 4.2 Such services and equipment shall be supplied and installed by THE CONTRACTOR free of charge to THE OWNER. Such services and equipment shall remain the sole and exclusive property of the Contractor for the duration of the Contract.
- 4.3 Such services and equipment shall become the sole and exclusive property of the OWNER after termination of this contract. The nature and extent of the services and equipment to be provided shall be at the sole discretion of THE CONTRACTOR.

5. PAYMENT TO CONTRACTOR

- 5.1 The savings achieved on the electricity, coal, oil and other energy carriers by THE OWNER with effect from the effective date shall be shared between THE OWNER and THE CONTRACTOR as indicated in the Tender Form throughout the whole period of this contract and shall be the only remuneration and payment to THE CONTRACTOR. The parties agree that as soon as possible after the end of each month, the maximum demand for electricity (kVA), the consumption of electricity (kWh) and other energy carriers (MJ) as measured by the City Council of Pretoria, shall be compiled and the savings achieved in respect thereof shall be calculated in accordance with Part 9 of this document.
- 5.2 The same shall be applicable to the coal consumption of any other energy carriers. The savings so achieved shall be calculated on the actual cost of electricity, coal and other energy carriers consumed during the period applicable to such saving. The parties record that Part 9 hereof is merely an example for the guidance of the parties, does not reflect any factual position and is to be utilised only as the formula in terms whereof the calculation of such savings is to be made.
- 5.3 The amount due to THE CONTRACTOR in terms of the provisions hereof shall be paid in accordance with an Invoice to be prepared by THE CONTRACTOR and forwarded to THE OWNER at the end of each month and shall be payable within TWENTY ONE (21) days thereafter. In the event of payment not being made within TWENTY ONE (21) days, the amount outstanding shall bear interest at a rate as determined by Treasury.

6. REIMBURSEMENT: BASELINE ENERGY CONSUMPTION

- 6.1 The baseline energy consumption for comparative purposes is based on the average consumption of electricity, coal, oil and other energy carriers over the period 1995-09-01 to 1998-09-01 as set out in Part 7 of this document.
- 6.2 The gross energy cost savings for each building resulting from the installation of new equipment and other actions by the contractor under the contract will be calculated as the difference between updated baseline energy consumptions at current prices and the actual monthly energy costs.

7. CHANGE IN USE OF THE CANDIDATE BUILDINGS, UPDATING OF BASELINE ENERGY CONSUMPTION

- 7.1 In the event of THE OWNER changing the use to which THE CANDIDATE BUILDINGS are put in terms of Part 5 of this document or performing any other act which changes the connected load, floor area, hours of operation and to operation and to cater for a purpose difference to that intended as at the date of commencement of this agreement as described herein, then the parties shall by mutual agreement updated the baseline energy consumption of electricity, coal and other energy carriers as set out in paragraph 6 hereof.

- 7.2 Changes in the use of the candidate buildings from the period 1995 – 09 – 01 to 1998 – 08 – 01 shall similarly be taken into account to determine the baseline energy consumption.
- 7.3 THE OWNER shall inform THE CONTRACTOR if he intends to install additional equipment in THE CANDIDATE BUILDINGS, in which event such additional consumption of the equipment shall be metered separately or the additional electricity, coal and other energy carriers consumption shall be incorporated into the Contract and the baseline energy consumption applicable in paragraph 6 hereof shall be changed to cater for such additional equipment.
- 7.4 Buildings may be added or omitted from the list of CANDIDATE BUILDINGS by mutual agreement of the parties.
- 7.5 In the event that Departments take over the payments of energy accounts of any of the CANDIDATE BUILDINGS from the Owner, the Contractor shall continue that part of the Contract directly with the User Departments.

8. WARRANTY BY OWNER

- 8.1 THE OWNER warrants not to interfere with the equipment installed by THE CONTRACTOR or to interfere with the adjustments to the systems made by THE CONTRACTOR.
- 8.2 During the currency of this Agreement, the equipment installed by THE CONTRACTOR shall be serviced by THE CONTRACTOR only unless otherwise provided for in this agreement.

9. WARRANTY BY CONTRACTOR

- 9.1 THE CONTRACTOR undertakes not to affect the existing installations detrimentally.
- 9.2 If any installations are detrimentally affected by the Contractor's operation he shall immediately take the necessary remedial steps on receipt of a written instruction of THE OWNER to do so. If THE CONTRACTOR fails to take the necessary remedial action THE OWNER will be entitled to:
- (a) Cancel this agreement on 90 days.
 - (b) Undertake or instruct another person to undertake the necessary remedial steps and to set the costs thereof off against payments due to the contractor.

10. COST OF SERVICING AND REPAIRING OF EQUIPMENT

- 10.1 THE CONTRACTOR's energy management equipment to be installed carries a TWELVE (12) months free service period and for the period thereafter the parties agree that the cost of servicing and repairing will be for the account of the CONTRACTOR. The CONTRACTOR will recover all maintenance costs from his portion of the savings achieved.
- 10.2 The cost of servicing and repairing new equipment installed and financed by the Owner will be for the Owner's account, e.g. replacement of diesel fired boilers with a more efficient heating system such as heat pumps.

11. MAINTENANCE OF THE INSTALLATIONS

- 11.1 Maintenance of existing equipment in the Candidate Buildings is by contract.
- 11.2 THE OWNER undertakes to maintain the existing installations to ensure that performance of the plant is kept to a standard, which is acceptable to the parties.
- 11.3 Should any dispute between the CONTRACTOR and the Maintenance Contractor ensue, such dispute shall in the first instance be referred to the OWNER for

mediation. Should this not be successful the matter shall be referred to an arbitrator to be appointed by the President of The South African Council of Consulting Engineers. The decision of the arbitrator shall be final and binding on the Contractor and the Maintenance Contractor.

- 11.4 All instructions to the Maintenance Contractor with a view to modifying equipment, etc. shall always be referred to the OWNER who will issue all instructions to the Maintenance Contractor.

12. GUARANTEE

- 12.1 THE CONTRACTOR hereby guarantees the equipment installed by him and workmanship to be free of defects for a period of TWELVE (12) months with effect from the date of operation of such equipment.

13. SALE OF THE CANDIDATE BUILDING/S

In the event of THE CANDIDATE BUILDING/S being sold during the currency of this Agreement, the parties agree that:

- 13.1 The agreement shall be taken over by the new owner.

Alternatively, if the new Owner is not interested in taking over this agreement:

- 13.2 This agreement shall be terminated by the Owner and THE CONTRACTOR shall be compensated for the unexpired portion of this Agreement which shall be based upon the savings achieved for the year immediately preceding such event, shall be calculated in accordance with Part 9 and shall be escalated by the percentage as stated in section 13.3 per annum for the unexpired portion of the said contract. Payment of such amount shall be made to THE CONTRACTOR within THIRTY (30) DAYS of the transfer of the immovable property and if not so paid shall bear interest as aforesaid. THE OWNER shall in any event be liable to effect payment in terms hereof to THE CONTRACTOR up until the date of transfer of the immovable property or date of discontinuation of the plant, payment in respect of such savings to be made to THE CONTRACTOR within THIRTY (30) days of the date of transfer aforesaid or the date of discontinuation of the plant.

- 13.3 The energy tariff escalation rate will be the average annual percentage increase of the energy charges since the commencement of the contract.

14. HOURS OF OPERATION OF THE PLANT

The parties record that the normal number of working hours during which PLANT is used and operated as well as the system description and specification of the plant are indicated in Part 4 of this document.

15. CHANGES IN CLIMATIC CONDITIONS

- 15.1 Changes in the relevant climatic conditions will be taken into account to alter the basis of calculations of consumption of electricity, coal, oil and other energy carriers as set out in Clause 6 hereof if the CSIR changes its ambient design conditions as indicated in its Design Weather Data Handbook.

16. VAT

- 16.1 The parties record that there is no VAT applicable to this transaction but that in the event that VAT or any legislative fee or tax is levied at any stage in the future, the cost shall be for the Owner's account.

17. PROTECTION OF EXISTING FACILITIES

17.1 The Contractor will be held responsible for any damage by him to existing facilities on the sites during the period of this agreement and shall make good such damage at his own expense.

18. SECURITY CHECK ON PERSONNEL

18.1 THE CONTRACTOR should note that it is a specific condition of the Contract that the Owner, or the Chief of the SA Defence Force, or the Commissioner of the SA Police will require the Contractor to have some or all of his personnel security classified

18.2 Should instructions be given for the removal of a person or persons from the CANDIDATE BUILDINGS for security reasons, THE CONTRACTOR shall effect such removal forthwith and THE CONTRACTOR shall thereafter ensure that such person or persons is/are denied access to THE CANDIDATE BUILDINGS and the Site and/or to any documents or information relating to the Works.

19. PROHIBITION OF TAKING PHOTOGRAPHS

19.1 In terms of the Defence Act it is prohibited to take photographs of any military camp, barracks, dockyard, installation of any other premises or ground or water surface being used for Defence purposes or under military control, or of any part thereof or any object therein; or in or upon such camp, barracks, dockyard, installation, premises, ground or area, be in possession of a camera or other apparatus used for taking of photographs except when authorised thereto by or on behalf of the Minister of Defence.

20. USE OF EXISTING TOILET FACILITIES

20.1 THE CONTRACTOR will only be allowed to make use of existing toilet facilities for his employees if such facilities are not reserved for specific persons.

21. HOISTING FACILITIES

21.1 THE CONTRACTOR shall provide any hoisting facilities that may be required to place equipment in its final position.

22. USE AND REMOVAL OF FURNITURE

22.1 Furniture shall not be used to stand on, nor to remove items from walls, or for any other purpose.

22.2 All furniture shall where necessary be moved out of the rooms where work is carried out and covered with dust sheets, if so directed. On completion, all items or peaces of furniture shall be cleaned and placed back in their original positions.

23. COMPLIANCE WITH REGULATIONS

23.1 Where applicable, any additions or changes to the installation shall comply in all respects with:

- (a) the latest issue of SABS 0412; "Code of Practice for the Wiring of Premises".
- (b) the Machinery and Occupational Safety Act No. 6 of 1983 as amended;
- (c) the municipal by-laws and any special requirements of the Local Supply Authority;
- (d) the local fire regulations, and
- (e) the National Building Regulations and Building Standards Act 1977 (Act 103 of 1977) as amended.

- (F) the SABS Code of Practice for the Application of the National Building Regulations SABS 0400 – 1990.

24. DISPUTES BETWEEN OWNER AND CONTRACTOR

- 24.1 Should the parties fail to reach agreement, in which event a dispute between them shall arise, such dispute may be referred to an Arbitrator to be appointed by the President of the South African Council of Consulting Engineers.
- 24.2 Such arbitration shall be informal and shall be conducted in accordance with the directions laid down by such arbitrator whose decision in the matter shall be final and binding on the parties.

25. DEFAULT BY CONTRACTOR

- 25.1 The Contractor shall be in default if he:
- (a) fails to commence with the Energy Management Systems as submitted in Clause 10.2 of Part 3 and accepted by the Owner.
 - (b) fails to proceed with the Energy Management Systems with due diligence or to complete the Energy Management Systems as submitted in Clause 10.2 or Part 3 and acceptable by the Owner.
 - (c) stops, abandons or suspends the Energy management systems before completion; or
 - (d) refuses or neglects to comply strictly with any of the conditions of this Contract or any instructions and/or Orders in Wiring given in terms of the Contract.
 - (e) fails to achieve the estimated percentage savings target as submitted in the tender form over the duration of the contract term.
- 25.2 Should the Contractor be in default as provided for in 25[1] hereof the Owner shall have the following rights:
- (a) To instruct the Contractor in writing to discontinue the Energy Management Systems on a date stated and to withdraw himself from the Site. The Contractor shall not be entitled to refuse to withdraw from the Energy Management Systems on the grounds of any lien or right of retention or on the grounds of any other right whatsoever.
 - (b) To cancel the Contract and enter into a further contract or contracts by calling for tenders or otherwise with any other contractor or contractors for the completion of the Energy Management Systems or any part thereof, at such times and upon such terms as the Owner shall deem fit.

26. FORCE MAJEURE

- 26.1 The expression “force majeure” shall mean any cause or conditions beyond the reasonable control of the Contractor which is or are not due to the Contractor’s default or negligence, including without limitation, sanctions, embargos, confiscation, acts of God, strikes, lockouts, fire, flood, storm, riots, civil or military insurrection or disturbance, sabotage, acts of war or public enemy.
- 26.2 The performance of all obligations undertaken by the Contractor shall be excused and suspended to the extent hindered or prevented by force majeure.
- 26.3 The Contractor shall give the Owner written notice of any occurrence of force majeure within 30 days after the beginning of such occurrence and written notice of the conclusion of such occurrence within 15 days after such conclusion.

- 26.4 So long as force majeure continues the Owner shall be at liberty to take such actions or enter into such arrangements as it in its sole and absolute discretion may deem necessary in order to protect its assets.
- 26.5 If force majeure affects any material performance by the Contractor and continues for a period of 30 (thirty) days after written notice has been given in terms of Clause 26.3, the Owner shall thereafter, on 30 (thirty) days written notice to the Contractor, be entitled to cancel this agreement.
- 26.6 If the Owner decides to retain the equipment, the Owner shall pay to the Contractor the original cost of the equipment and energy audits, less that proportion of it already recovered through fees paid plus interest on the figure since the contract started.
- 26.7 If the Owner decides not to retain the equipment, the contractor will be entitled to remove the equipment installed and there will be no obligation on the owner to compensate the contractor for the equipment.

27. WAIVER

No failure, delay, relaxation or indulgence on the part of either party in exercising any power or right conferred upon such party in terms of this Agreement shall operate as a waiver of any such power or right, nor shall any single or partial exercise of any such power or right preclude any other or future exercise thereof or the exercise of any other power or right under this Agreement.

28. VARIATION

No variation, modification or waiver of any provision of this agreement, nor consent to any departure by any party there from, shall in any event be of any force or effect unless the same shall be confirmed in writing signed by the other party, and then such variation, modification, waiver or consent shall be effective only in the specific instance, and for the purpose for which, and to the extent to which, it is made or given.

29. GENERAL

The parties undertake to do all such things, perform all such acts and take all such steps, and procure the doing of all such things, the performance of all such acts and the taking of all such steps as may be necessary, incidental or conducive to giving effect to the terms, conditions and import of this Agreement.

SIGNED AT.....on this.....day of.....

AS WITNESSES

1.

2.

.....

OWNER

SIGNED AT.....on this.....day of.....

AS WITNESSES

1.

2.

.....

CONTRACTOR

PART 2

TENDER FORM: BUILDING AND RELATED SERVICES

*This tender shall remain binding and valid for a period of 44 days
calculated from the closing date of the tender.*

Tender No.
Closing Date.

The Director-General
Department of Public Works
and Land Affairs
PRIVATE BAG X65
PRETORIA
0001

Post tender timeously to this address so as to reach the Department not later than 11:00 on the abovementioned closing date, or deposit the tender in the tender box outside Room in the Central Government Offices, Pretoria, before the said hour and date.

Second Stage of Two Stage Tender for A Shared Savings Energy Performance Contract In Respect of The Candidate Buildings.

1. I/We the undersigned [Full name of Tenderer].....
.....

confirm that I/We have carried out Preliminary Energy Audits on the Candidate Buildings and that the proposals to implement energy management systems in order to obtain ongoing cost and energy savings were indicated in the covering letter attached to the first stage tender.

2. I/We the undersigned [Full Name of Tenderer].....
.....

hereby offer to the Department of Public Works and Land Affairs of the Government of the Republic of South Africa, herein represented by the Director-General of Public Works and Land Affairs [hereinafter referred to as the "Director-General"] to provide all materials, plants, implements, finance, labour trade and professional opportunities for cost effective investment in new measures and equipment for cost and energy savings, the design, financing, installation and commissioning of such new energy management systems and equipment and their operation, maintenance and monitoring for 10 years after signing the contract below all in conformity with the requirements set out in the Second Stage Call for Tenders.

Address of tenderer:

Telephone No.:

Fax No.:

Telegraphic address:

Banker:

Branch:

Registration number of tenderer at Department of Manpower

-
3. I/We acknowledge that I/We am/are fully acquainted with the contents of the conditions of tender and that I/We accept the conditions in all respects.
 4. I/We understand that the information furnished herein by me/us is of vital importance to the Director/General and that should its appear after the acceptance of my/our tender not to be correct the Director-General shall have the right to cancel the contract.
 5. I/We agree that the laws of the Republic of South Africa shall be applicable to the contract resulting from the acceptance of my/our tender and that I/We elect domicilium citandi et executandi in the Republic at

-
6. The Energy management aspects as indicated in Part 6 are accepted by the tenderer.
 7. Additional proposals must be submitted by the tenderer in a covering letter.
 8. The distribution of cost savings between the Owner/Contractor will be ...%/.....% [To be submitted at second stage tender]
 9. The estimated percentage cost savings target (cost saving/baseline cost) per year, starting from the effective date, over the contract term will be%: [To be submitted at second stage tender]

DATE

SIGNATURE[S] OF TENDERER[S]

NB: If one person is authorised to sign the tender on behalf of a company or a partnership, a written authority to do so must accompany the tender.

PART 3

PROJECT SPECIFICATION

1. INTRODUCTION AND BACKGROUND

1.1 Basis

1.1.1 The two stage tender procedure will be followed, ie:

- This being the first stage tender consisting of a Walkthrough of the Candidate Buildings with proposals to implement energy management in order to obtain ongoing cost and energy savings;
- the second stage tender consisting of Preliminary Energy Audits on the Candidate Buildings based on a combination of the acceptable proposals upon which a percentage of the savings to the Department and an estimated annual energy cost saving percentage are tendered.

1.2 The Owner's Objectives in the Project

1.2.1 The Owner wishes to reduce its annual running costs whilst still maintaining or improving the level of services, which it provides. It is therefore amongst other measures, seeking to accelerate the rate of introduction of energy management and new equipment designed to improve the energy efficiency of the owners building stock. The owner is, however, constrained by a need to avoid staff increases and capital investment and it has therefore decided to explore the prospect of energy performance contracting.

1.2.2 The Owner has already invested in energy efficiency of its buildings and hopes that the effect of the proposed contract will be to complete, in respect of the buildings concerned, all the feasible improvements.

1.2.3 Being concerned with the energy-and-cost-effectiveness of the new systems and equipment to be installed, the Owner does not wish to influence the contractor's judgement as to the types of equipment which should be fitted, although the Owner will ensure that the components finally specified are of good and durable quality and are not needlessly incompatible with the owners existing equipment.

1.2.4 All practical possibilities should be considered by the tenderers though not expensively and at great length if the tenderer's experience leads them to doubt their viability.

1.2.5 Energy savings by changes in procedures should also be considered, though building users should not be expected voluntarily to subordinate their principal concerns to the needs of energy conservations.

1.3 Administrative details of the tendering procedure and the procedure for the appointment of the contractor

1.3.1 The tenderers are invited to make their response to this first stage call for tenders by completing and returning the attached Tender Form (1st or 2nd) and cover letter with proposals to The Director-General, Public Works and Land Affairs, Private Bag X65, Pretoria, 0001.

1.3.2 The required date for completion and return of the Tender Form (1st or 2nd) is not later than 11:00 on (will be specified).

1.3.3 Mr G Ragazzoni of the Department of Public Works and Land Affairs is dealing with this contract and will be available to answer questions concerning the projects and the owners requirements. Answers given to each tenderer will be copied to the other tenderers to ensure equality of opportunity between the tenderers.

1.3.4 The Owner will be willing to consider modifications requested by the tenderers being incorporated in the eventual contract.

Tenderers are requested to give notice of modifications which they would recommend for consideration in the second stage tendering procedure and give reasons for these recommendations.

2. SUMMARY OF SERVICES SOUGHT

2.1 First Stage Tender

Conduct a walkthrough of the candidate buildings in terms of DME CaBEERE Volume 1: Auditing Document. Provide proposals to implement energy management in order to obtain ongoing cost and energy savings.

2.2 Second Stage Tender

Conduct preliminary energy audits of the candidate buildings in terms of the DME CaBEERE Volume 1: Auditing Document. Tender on a percentage savings split and an estimated percentage energy cost savings target (% of baseline cost) per year.

2.3 Installation and commissioning of the new equipment.

2.4 Maintenance of the newly installed energy equipment.

2.5 Operating of the energy management system and new equipment.

2.6 Monitoring of energy consumption.

2.7 Provision of project finance and project financial management.

2.8 Project management and programme.

3. SUMMARY DESCRIPTION OF THE CANDIDATE BUILDINGS

{Short description of facilities}

4. SERVICES UNDER THE CONTRACT

4.1 First Stage Tender: Walkthrough and Proposals

As part of the contractor selection process, the tenderers are each invited to conduct a walk through of the candidate buildings in terms of the DME CaBEERE Volume 1: Auditing Document with proposals to implement energy management in order to obtain ongoing cost – and energy savings.

4.2 The Owner will provide facilities for the tenderers to undertake a walkthrough of the candidate buildings in order to assemble in a systematic manner the necessary data on which the decision can be made as to whether the buildings provide good opportunities for cost effective improvements. A possible standard form of a walkthrough energy audit report is indicated in Part 6.1.

The tenderers will be required to satisfy themselves whether the buildings provide good opportunities for cost effective improvements.

4.3 If the decision on the building is favourable, the tenderers should notify the Owner in the first stage call for tenders. The cost of walkthroughs will in this case be recovered by the contractor from the energy costs savings from the building.

- 4.4 If the decision on the building is unfavourable, the tenderers should explain their reasons in the first stage call for tenders. The Owner will then consider whether it is possible to substitute a replacement candidate building which is more likely to meet the tenderer's investment criteria. The costs of the abortive walkthrough resulting from this procedure shall be for the account of the CONTRACTOR.
- 4.5 To enable the tenderers to conduct the walkthrough energy audits, the Owner will supply copies of appropriate records and allow access to its own records, visits to the buildings concerned and interviews with relevant staff in regard to:
- hours of operation
 - energy consumption and costs
 - service levels
 - building descriptions and
 - building usage, existing equipment, etc.

5. SECOND STAGE TENDER: PRELIMINARY ENERGY AUDIT AND TENDER ON SAVING SPLIT AND SAVINGS TARGET

- 5.1 The Owner will require the successful first stage tenderers' proposals to conduct preliminary energy audits based on a combination of the acceptable proposals in regard to all the buildings, which they accept as providing good opportunities for cost effective improvements.
- 5.2 The Owner will provide facilities for the tenderers to undertake preliminary energy audits of candidate buildings in order to measure and assemble, in a systematic manner, all the necessary data on which to base their tender.
- 5.3 The second stage tender is based on a percentage saving split and the estimated percentage savings target in accordance with the Tender Form.

6. INSTALLATION AND COMMISSIONING OF THE NEW EQUIPMENT

- 6.1 The Owner will require the contractor to undertake the supply, installation and commissioning of the new equipment and energy management system in accordance with the Owner's standard documentation as indicated in Part 4. Refer to Part 4. The Owner reserves the right to carry out regular inspections to ensure that the specifications are being complied with. This right of inspection by the Owner does not absolve the contractor from his duty to ensure that the work being undertaken under his control is in compliance with the specifications.
- 6.2 Upon the completion of commissioning of all the new equipment in a building or major systems within a building, the contractor will be required to notify the Owner of such completion and to supply operating instructions, spare part lists, manufacturers specifications, names and addresses of suppliers.
- 6.3 If at a later stage the contractor wishes to install new equipment additional to that originally agreed, this should be done with the approval of the Owner.

7. OPERATION OF THE ENERGY MANAGEMENT SYSTEM AND NEW EQUIPMENT

- 7.1 Since a proportion of the expected energy cost savings is expected to come from the closer matching of energy outputs to user needs, it is appropriate that the energy performance contractor should assume a measure of responsibility for the actual

operation of the energy consuming equipment in liaison with the users or their representatives, such as heads of establishment.

The degree of involvement should be limited by the criterion of minimising the sum of the costs of operations management and energy costs. The contractor will, however, need to maintain user goodwill.

8. MONITORING OF ENERGY CONSUMPTION

8.1 The Owner anticipates that the installation of the new equipment will provide means of improving its monitoring of energy consumption and costs and invites the tenderer to describe these new monitoring capabilities.

8.2 The Owner does not wish to be provided with information which it cannot put to practical use.

9. PROVISION OF PROJECT FINANCING AND PROJECT FINANCIAL MANAGEMENT

9.1 The Owner wishes to take advantage of the fundamental principle of energy shared savings contracting, namely, that the energy contractor invests his own money [or money which he has borrowed] in new equipment in order to achieve energy savings sufficient to repay the investment, reward the contractor for his risk-taking and the use of his facilities and allow the Owner a significant energy cost reduction right from the time of installation of the new equipment.

9.2 The Owner will therefore look to the Contractor for the necessary financial planning and financial management, including negotiating the necessary loan.

10. PROJECT MANAGEMENT AND PROGRAMME

10.1 The Contractor will be required to undertake the overall energy management of the project.

10.2 The tenderers will be required during the second stage to submit a programme to implement the proposed energy management systems.

11. THE SUPPLY, INSTALLATION AND COMMISSIONING OF ENERGY MANAGEMENT SYSTEMS IN ORDER TO OBTAIN ONGOING COST AND ENERGY SAVINGS

The following energy savings measures and equipment are proposed in order to obtain ongoing cost and energy savings.

The proposals are the result of the First Stage Tenders. Tenders may add or omit proposals from the list below, but only after prior consultation and agreement with the Department of Public Works.

{Supply list of proposed strategies}

12. GENERAL

Inform the Owner in terms of Clause 11.4 of Part 1 regarding the following:

12.1 Improvements of general housekeeping.

12.2 Dirty light diffusers.

12.3 Dirty filters.

12.4 Leaks -

(a) Stuffing boxes

- (b) Steam traps
 - (c) Pipes
 - (d) Taps
 - (e) Toilets and urinals.
- 12.5 Cooling Tower overflow.
- 12.6 Wastage in general.

PART 4

TECHNICAL INFORMATION OF FACILITIES

The following will be supplied by the Owner, if available, after appointment and mutually agreed upon between the Owner and the Contractor:

1. Hours of operation of each system/installation.
2. Detailed description of the building, system, installations and occupancy patterns.
3. Operating/Maintenance manuals and shop drawings.
4. Any other information deemed necessary and required by contractor.

PART 5
METERING POINTS AND ENERGY COSTS
PRETORIA

METERING POINT			COST
NO.	ACCOUNT NO.	DESCRIPTION	RAND/MONTH

NOTES:

- * To be supplied by Regional Representative
- ** Further buildings in Pretoria to be supplied by Regional Representative
- *** Buildings in following towns to be supplied by Regional Representatives

PART 6
ENERGY MANAGEMENT ASPECTS AND VIABILITY
PRETORIA

- .. YES
- X NO
- # INVESTIGATE

Metering point	Buildings	Equipment	Energy management	Viability
			PF correction	
			MD control	
			Lights time control	
			Economy Cycle	
			Return air ducting	
			Night cooling	
			Insulation	
			Control	
			Temperature reset	
			Load shedding	
			Heat pumps	
			Replace light fittings	
			Dirty filters	
			Boiler efficiency	
			Steam leaks	
			HVAC optimum control	

See DME CaBEERE Volume 1: Auditing Document for more energy savings options.

PART 7

BASELINE ENERGY CONSUMPTION

The Baseline energy consumption for calculation purposes is based on the average consumption over the period – to – as indicated in Part 8. The base month consumption is as follows:

Metering point no 1:

Tariff:

Month	Units kWh	MD kVA	Other MJ
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

PART 8

ENERGY CONSUMPTION OF PAST 3 YEARS

The energy consumption for the period -- to -- is as follows:

Metering point no 1:

Tariff:

Date	Units kWh	MD kVA	Other MJ

PART 9

RE-IMBURSEMENT CALCULATION EXAMPLE

Note: All values used in this example are fictitious and have no connection to the actual consumption of electricity and other energy carriers of any of the facilities:

1. BASELINE CONSUMPTION FIGURES

Electricity consumption for base month June	85 000 kWh
Maximum demand for base month June	460 kVA

2. ACTUAL CONSUMPTION FIGURES

Actual consumption figures after implementation of energy savings measures:

Electricity consumption for base month June 1996	65 000 kWh
Maximum demand for base month June 1996	350 kVA

3. RATES

Rates applicable for June 1996:

Electricity consumption	R 0.104/kWh
Maximum Demand	R 30.96/kVA

4. CALCULATION OF COSTS

The comparative base month costs are calculated as follows:

Energy cost:	85 000kWh x R 0.104/kWh	R 8,840.00
MD cost:	460kVA x R 30.96/kVA	R 14,241.60
Total cost:		R 23,081.60

The actual costs for June 1996 are calculated as follows:

Energy cost:	65 000kWh x R 0.104/kWh	R 6,760.00
MD cost:	350kVA x R 30.96/kVA	R 10,836.00
Total cost:		R 17,596.00

5. SHARING OF SAVINGS

Base month cost June:	R 23,081.60
Current cost June 1996:	R 17,596.00
Savings:	R 5,485.00

Assuming sharing of savings tendered as:

50% for client

50% for contractor

Then the savings are shared as follows:

For client: 50% x R 5,485.00	R 2,742.50
For contractor 50% x R 5,485.00	R 2,742.50

The contractor is entitled to invoice R 2,742.50 to the Client in terms of the Contract.

6. THE METHOD OF COMPENSATION WHEN CLAUSE 12.2 OF PART 1 IS APPLIED, WILL BE AS FOLLOWS:

The contractor shall be entitled to claim for the unexpired portion of the Agreement, which shall be based upon the savings achieved for the year immediately preceding such event. This shall be calculated in accordance with Part 9 incorporating escalation of ten percent per annum for the unexpired portion of the Agreement.

Any expenses for manpower and administration occurred in the year preceding, including escalation as above, shall be deducted from the amounts so calculated as future savings. A dispute in accordance with Clause 24 of Part 1 will be declared if agreement by both parties cannot be reached.