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## CAR ELECTRICITY CONTRACTING AND PRICING REFORM

### MEETING OF THE ELECTRICITY WORKING GROUP

Ashgabat, Turkmenistan  
12-14 ~~May~~ 1998  
*June*

*Prepared by*

U S AGENCY FOR INTERNATIONAL DEVELOPMENT  
Bureau for Europe  
Office of Development Resources  
Energy and Infrastructure Division  
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**MEETING OF THE CENTRAL ASIA ELECTRICITY WORKING GROUP**

*SPONSORED BY*

**USAID PROJECT  
ON  
ELECTRICITY CONTRACTING AND PRICING REFORM**

12-14 JUNE, 1998  
ASHGABAT, TURKMENISTAN

**AGENDA**

**12 June, Friday**

09 00 - 09 30

Registration of the participants

**Session 1**

09 30 - 09 40

Welcome and opening remarks by Barry Primm, USAID  
Mission for Central Asia

09 40 - 09 50

Welcoming remarks by The Honorable Michael Cotter, US  
Ambassador to Turkmenistan

09 50 - 10 00

Opening remarks by Mr I Ametov, Chairman of the  
Electricity Working Group

10 00 - 10 15

Introduction of the participants, Review of the agenda

10 15 - 10 30

Report on the April meetings of the Sub-Groups, by Joellyn  
Murphy, Hagler Bailly Consulting

10 30 - 11 00

Break

11 00 - 13 00

A discussion of problems in the electricity sector of Central  
Asia, led by Mr Ametov with discussion and input from  
each of the five countries

13 00 - 14 30

Lunch

**Session 2**

- 14 30 - 15 30 A presentation on governance structure models for the Central Asia Power Pool, by Joellyn Murphy, Hagler Bailly Consulting
- 15 30 - 16 30 The process of forming the Southern African Power Pool, a presentation by Ramier Locke, Attorney
- 16 30 - 17 00 Break
- 17 00 - 17 30 A presentation on recent developments in the formation of a wholesale electricity market in Russia, by Michael Bekker, Hagler Bailly Consulting
- 17 30 - 18 00 Establishment an Independent System Operator for Central Asia, a discussion led by Hagler Bailly Consulting
- 19 00 Reception, hosted by USAID

**13 June, Saturday**

**Session 3**

- 09 00 - 09 10 Opening of the second day of the meeting by Chairman Ametov, and introduction of guest(s)
- 09 10 - 09 40 Presentation by Mr Dimitri Kulbatsky, Chairman of the Board of Directors of Energosetproekt of Central Asia
- 09 40 - 10 30 Presentation and discussion of a Draft Model Contract for the Sale and Purchase of Energy in Central Asia, led by David Thornton, Hagler Bailly Consulting
- 10 30 - 11 00 Break
- 11 30 - 13 00 Presentation and discussion of a Draft Model Contract (continued)
- 13 00 - 14 30 Lunch

**Session 4**

14 30 - 16 00	Presentation and discussion of a Draft Bilateral Wheeling Agreement
16 00 - 16 30	Break
16 30 - 17 00	Draft Bilateral Wheeling Agreement (continued)
17 00 - 18 00	Preparation of the Memorandum recording the accomplishments of the meeting
18 00 - 18 30	Signing the Memorandum
18 30	Adjournment of the meeting
19 00	Dinner

**14 June, Sunday**

**Session 5**

14 30 - 1700	(if necessary)
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## **ELECTRICITY CONTRACTING AND PRICING REFORM**

### **A List of the Participants for the CAR Working Group Meeting**

**Ashgabat, Turkmenistan  
June 12-14, 1998**

#### **NATIONAL PARTICIPANTS**

##### **KAZAKHSTAN**

1 Barsukov Vladimir M                      Head of Dispatch Center of Kazakhstan

##### **KYRGYZSTAN**

2 Janybekov Bapa R                      Leading Engineer for electricity sales department of  
JSC "Kyrgyzenergo"  
3 Pedan Boris I                              Head of Dispatch Center of JSC "Kyrgyzenergo"  
4 Tyumenbaev Akylbek R                  Deputy Director of State Energy Agency

##### **UZBEKISTAN**

5 Rakhmanov Nariman A                  Deputy Minister, Ministry for Power Industry and  
Electrification  
6 Khidoyatov Anvar A                      Head of Central Dispatch Service, Ministry for Power  
Industry and Electrification  
7 Abdullaev Khamidulla A                  Head of Economic and Planning Department,  
Ministry for Power Industry and Electrification

##### **TURKMENISTAN**

8 Niyazov Suyun K                          First Deputy Minister of Energy and Industry  
9 Kochetov Victor D                        Head of Dispatch Center under the State Corporation  
"Kuvvat"  
10 Arazmuradov Matmurad A              Head of Marketing Department under the State  
Corporation "Kuvvat"  
11 Ilyasova Mayagozel S                    Head of Economy Department under the State  
Corporation "Kuvvat"

## TAJIKISTAN

- 12 Kalandarov Surojdin A Chief Specialist of the Department for Fuel and Power Complex under the President of the Republic of Tajikistan
- 13 Silantiev Alexey N Vice-President of the "Barki Tojik" Company

## REGIONAL PARTICIPANTS

- 14 Mambetov Bazarbay E Deputy Chairman of the ICKKUT Executive Committee
- 15 Kasymova Valentina M Expert of the ICKKUT
- 16 Ametov Iskander J Chief Dispatcher of the UDC "Energiya"
- 17 Smolyakov Vladimir K Deputy Head of the Department of the UDC "Energiya"

## USAID

- 18 Dr Barry Primm Energy and Environment Officer, USAID Mission for Central Asia
- 19 Backus Russell Energy and Environment Specialist, USAID Mission for Central Asia
- 20 Seitkazin Talgat Energy Project Specialist, USAID Mission for Central Asia
- 21 Kalashnikov Alexander Project Management Specialist, USAID CAR/Tashkent

## HAGLER BAILLY

- 22 Joellyn Murphy Program Manager
- 23 David Thornton Electricity Pooling Consultant
- 24 Terentieva Olga Interpreter/Legal Specialist
- 25 Semyonova Galina Project Analyst
- 26 Kalmambetov Avtandil Project Manager
- 27 Ramier Locke Lawyer
- 28 Michael Bekker Senior Advisor

**GUESTS - PRESENTERS**

29 Kay Heilig

30 Kulbatsky Dmitry I

Regional Director, CH2MHILL

Chairman of Board of Directors of JSC  
Sredazenergoset'proekt

## [Model Contract]

### CONTRACT FOR THE SALE AND PURCHASE OF ENERGY IN CENTRAL ASIA

This Contract for the sale and purchase of energy is signed on the \_\_\_\_\_ day of \_\_\_\_\_, 199\_, between \_\_\_\_\_, hereinafter called the Buyer, and \_\_\_\_\_, hereinafter called the Seller, collectively called the Parties

#### Preamble

Whereas the Buyer and Seller are licensed to conduct wholesale trading of electricity within the United Power System of Central Asia, and

Whereas the Buyer desires to import electric energy to meet customer's requirements for electricity at certain times of the year, and

Whereas the Seller is able to provide energy to the Buyer during the periods of the year when imports are needed

Now therefore the Parties agree as follows

#### 1 Effective Date and Term of Contract

This contract shall be effective from [day, month, year], and shall terminate on [day, month, year] This contract may be renewed if the Parties sign an amendment to this contract stating the renewal term and revisions, if any, to the contract amounts of energy described in Attachment A

#### 2 Definitions of Terms

2.1 **Dispatch Center** means the system operations organization which is authorized to perform such duties as are described in this Contract

2.2 **Cold reserves** equal the amount of unloaded generating capability that can be made available to carry load within \_\_\_ minutes, but not within ten minutes

2.3 **Hot Reserves** equal the amount of unloaded generating capability that can be made available to carry load within ten minutes

2 4 **Spinning Reserves** means the amount of synchronized, unloaded generating capability that can carry load within \_\_\_ minutes

2 5 **Operating Reserves** of a power system equal the sum of spinning reserves, hot reserves, and cold reserves

2 6 **Delivery Point** is the physical location where ownership of the electrical energy conveyed according to the terms of this contract is transferred from the Seller to the Buyer

2 7 **Metering Points** are the physical location(s) where energy meters are installed to measure the flow of electrical energy conveyed according to the terms of this contract. The metering point(s) may be at a different location than the Delivery Point

2 8 **Buyer** of wholesale electrical energy is a power system, distribution company, large industrial customer, or power broker who is licensed to conduct wholesale electricity transactions by the appropriate competent body in the Central Asia country of operation

2 9 **Seller** of wholesale electrical energy is any organization which generates electrical energy and is licensed to conduct wholesale electricity transactions by the appropriate competent body in the Central Asia country of operation

2 10 **Contract Executors** means the designated individuals from the Buyer and the Seller who are responsible to do all things necessary to provide for delivery of energy and payment for such energy in accordance with the provisions and the intent of this Contract

2 11 **CA UPS Council** shall mean the Central Asia United Power System Council

2 12 **Inadvertent Energy** is the net sum of the hourly differences between scheduled energy and actual energy flows over a particular period of time

2 13 **Wheeling** shall mean transmitting a contractual amount of electrical energy over specified time periods through the transmission system of a company which is neither the Seller nor the Buyer of this energy

### 3 Status of Previous Agreements between the Parties

3 1 The governments of the Parties are each signatories of the Energy Charter Treaty dated 17 December 1994. Therefore this contract is subject to the terms and conditions of the Energy Charter Treaty and the Parties agree to abide by its terms

3 2 Any Party that buys or sells electrical energy in a country of Central Asia agrees to act in accord with all international agreements on the management and protection of fuel resources, rivers, and the environment that have been concluded by that country

#### 4 Contract Amounts of Energy

4 1 The Seller shall deliver scheduled energy to the Buyer's Delivery Point according to the schedule included as Attachment A to this contract

4 2 The Buyer may submit requests to the Seller for additional, unscheduled amounts of energy from time to time Unlike scheduled deliveries of energy, Seller has no obligation to deliver unscheduled energy under this contract unless he so wishes

4 3 If Seller inadvertently supplies energy which is not requested by the Buyer, such flows shall be paid for in cash or shall be returned in kWh according to a schedule agreed to by the Contract Executors

4 4 Parties shall submit proposed contracts to Dispatch Center for coordination prior to signing by the Parties Dispatch Center's decision on whether or not to certify such proposed contracts shall be based solely on the proposed transaction's effect on established reliability criteria Parties must ensure that Dispatch Center is informed of all quantities of energy to be transferred under this contract To deliver the target quantities of scheduled energy, as well as any unscheduled energy which the Seller agrees to provide, the Seller will follow dispatch instructions received from Dispatch Center Dispatch Center will base its dispatch instructions on established reliability criteria and will require that applicable ancillary services (frequency regulation, reserves, and transit agreements), in quantities as determined by Dispatch Center, be purchased by the Parties to support this energy transaction

4 5 If the Seller is unable to deliver the full amount of scheduled energy due to conditions in the Buyer's country that are not Force Majeure, the Seller has no obligation to make up for the deficiency The Buyer shall pay the Seller for the actual number of kWh delivered If the Seller is unable to find another customer for the amount of energy undeliverable to the Buyer, the Buyer shall pay the Seller for the undelivered amount at a rate of \_\_\_ percent of the contract price

4 6 If the Seller is unable to deliver the full amount of scheduled energy in a particular quarter due to conditions in the Seller's country that are not Force Majeure, the Seller must deliver the deficiency during the following \_\_\_\_\_ For each billing period the Buyer shall pay for the number of kWh actually delivered

## 5 Characteristics of Energy

All electric energy bought and sold according to this Contract shall be in the form of 50 Hz, three-phase alternating current at standardized operating voltages

## 6 Supporting Contracts

6.1 Parties agree to arrange and show evidence of such arrangements to Dispatch Center for the following ancillary services

6.1.1 Frequency Regulation Service in such quantities as are required by Dispatch Center. Such service may be purchased by the Buyer from the Seller, from a third-party generator, or as arranged by Dispatch Center.

6.1.2 Hot Reserve Capacity Service in such quantities as are required by Dispatch Center. Such service may be purchased by the Buyer from the Seller, from a third-party generator, or as arranged by Dispatch Center.

6.1.3 Cold Reserve Capacity Service in such quantities as are required by Dispatch Center. Such service may be purchased by the Buyer from the Seller, from a third-party generator, or as arranged by Dispatch Center.

6.1.4 Transmission Transit Service for third-party transport of electrical energy between Seller and Buyer (if such transit is required)

6.2 Dispatch Center shall not provide the coordination of this Contract if such supporting services are not in place

## 7 Delivery, Metering, and Losses

7.1 Scheduled energy and agreed-to unscheduled energy will be delivered and received at the Delivery Points as defined in Attachment A.

7.2 Appropriate metering devices shall be installed as required to provide readings at least hourly of the energy flows. The measuring equipment for the Metering Points will be to accuracy standards set by the CA UPS Council. The kilowatt-hour meters used for billing will be sealed by both Parties. Such seals shall not be removed without the concurrence of both parties. Authorized representatives of either of the parties shall have access to the billing meters for the purpose of reading the same.

7.3 When the billing meters are out of service for testing or repairs or because of malfunction or failure, energy flow during the period of outage or malfunction shall be determined from other meter readings, if available, or, if not available, shall be estimated and agreed to by the Parties.

7 4 The measurement of energy flow obtained at the Metering Points will be corrected by taking into account losses between the Metering Points and the Delivery Points to determine the amounts of energy delivered to the Delivery Points. The correction factor for losses shall be as agreed upon by the Parties and must be certified as reasonable by Dispatch Center.

## 8 Rates and Charges

8 1 The price for scheduled energy delivered under this contract is shown in Attachment B.

8 2 The price for unscheduled energy delivered under this contract is shown in Attachment B.

8 3 Any tax imposed by the government or any other authority of the country of a Party (the first Party) and levied upon or measured by capacity or energy exported to or imported from the other Party's country shall be borne and paid for by the first Party in such a way that transactions are settled by the other Party as if there had been no such tax. The first Party indemnifies the other Party against any loss or damage which such other Party may suffer if the first Party fails to pay such tax in a timely manner or at all.

8 4 Neither Party has the right to unilaterally change the prices for energy under this contract. A change in prices may be proposed by either Party, but it shall not take effect until both Parties have signed an amendment to this contract.

## 9 Billings and Payment

9 1 An up-to-date record of deliveries and of all other data required for billing purposes shall be kept in accordance with existing procedures established by the Parties and Dispatch Center. No later than five working days after receiving Dispatch Center's Commercial Report, the Seller shall prepare an itemized statement for the Buyer with a precise itemization of current charges and past-due amounts, if any, for electrical energy delivered during the prior month to the Delivery Point. The billing shall incorporate all information as may be reasonable to determine the payments due. Payment becomes overdue if not received by the Seller within 15 calendar days of delivering the statement to the Buyer.

9 2 In exchange for providing electric energy, the Seller may accept energy commodities as payment to the extent allowed by law. The Buyer must pay in the currency agreed to by the Parties unless the Seller's invoice lists specific energy commodities that may be delivered in lieu of currency payment, specifying the

quantities to be delivered and the delivery points or storage locations. The comparable value of various energy commodities shall be as published by the Central Asia United Power System Council, as revised by them from time to time.

9.3 A failure of the Buyer to pay the Seller within the time for payment shall result in interest accruing on such unpaid amounts at a rate equal to \_\_\_% per day.

9.4 If the Buyer fails to pay the Seller the amount required under this Contract, the Seller shall provide notice to the Buyer of the overdue amounts. If, by the due date for payments in the next billing cycle, the Buyer has not cured the non-payment, including interest, the Seller may, by its unilateral decision, withhold further deliveries of electrical energy to the Buyer.

9.5 In the event that the Buyer reasonably disputes the amount of any bill, whether in whole or in part, it shall notify the Seller of such dispute no later than thirty (30) days from receipt of the bill, indicating the amount of such bill subject to dispute and briefly describing the nature of such dispute. In such event, the Parties shall use their best efforts to resolve such dispute within a reasonable amount of time, not to exceed sixty (60) days from the date of such notice. The Buyer will still be required to make timely payment of any disputed amount. If it is ultimately determined that the disputed amount, in whole or in part, was not properly payable to the Seller, interest shall be due to the Buyer on the refunded amount from the date of payment at the rate of \_\_\_% per day.

## 10 Contract Executors

10.1 The Parties shall designate Contract Executors, consisting of four members, two appointed by the Seller and two by the Buyer, and four alternate members, two appointed by each Party. Should a member of the Contract Executors be unable to attend a meeting, he shall be represented at the meeting by an alternate member. Prompt notice in writing shall be given for all appointments and replacements to the Contract Executors.

10.2 The Contract Executors are authorized on behalf of both Parties to do all things necessary to provide for delivery of energy and payment for such energy in accordance with the provisions and intent of this contract. The Contract Executors shall ensure that the proper technical and/or commercial specialists from their companies are used to examine issues and provide expert analysis so that the Contract Executors may arrive at fully-informed positions on such issues.

10.3 All decisions of the Contract Executors shall be unanimous.

10.4 Each Party shall pay the expenses of its own members of the Contract Executors. Any expenses jointly incurred by the Committee for activities pertaining

to this contract shall be shared equally by the Parties or shared according to a procedure determined by the Contract Executors

10 5 The Contract Executors shall have access at all reasonable times to the pertinent and relevant records of the Buyer and of the Seller that are required to substantiate any fact pertaining to this contract

10 6 Any agreement of the Contract Executors made pursuant to this contract shall be confirmed in writing and signed by the members of the Contract Executors

### 11 Settlement of Disputes

Any dispute among the Parties to this contract arising out of or related to this contract and which cannot be resolved within the Contract Executors shall be referred to the Central Asia United Power System Council, which shall form a three-member arbitration panel. The decision of the arbitration panel shall be considered a final decision and the matter should not be referred to any other panel or court except in accordance with the Energy Charter Treaty

### 12 Force Majeure

12 1 Both Parties shall exercise due diligence to perform their obligations under this contract, but conditions may arise which prevent or delay performance by one or the other because of causes beyond a party's reasonable control, including flood, drought, earthquake, storm, lightning, fire, explosion, epidemic, war, riot, civil disturbance, and sabotage. A political situation within a Party's country does not constitute a Force Majeure event. A Party's obligations under this Contract shall be excused (except for its obligation to pay for kWh received) to the extent and for the period that the Party's inability to perform is caused by an event of Force Majeure affecting the Party, and only to the extent of the duration of the same, provided that the Party claiming Force Majeure shall make all reasonable efforts to cure, mitigate or remedy the effects of the Force Majeure event

12 2 The Party claiming a Force Majeure event shall give notice in writing to the other Party as soon as is practicable, but not later than two days after the date on which such Party knew or should have known of the commencement of the Force Majeure event

### 13 Liabilities

In no event shall either Party to this Contract be liable to the other Party for any incidental, consequential, multiple or punitive damages, loss of revenues or profits,

attorneys fees or costs arising out of, or connected in any way with the performance or non-performance of this Contract, unless otherwise specified in this Contract

#### 14 Governing Law

The terms of this Contract shall be construed and enforced in accordance with the laws of the [Buyer's][Seller's] country. The Energy Charter Treaty shall be used as a guide to international law pertaining to dispute resolution.

#### 15 Notices

15.1 Except as otherwise expressly provided herein, any notice required hereunder shall be in writing and may be given by any of the following means: Overnight courier, hand delivery, facsimile or other reliable electronic means.

Notice shall be given to the Seller at

\_\_\_\_\_

Notice shall be given to the Buyer at

\_\_\_\_\_

15.2 Any notice shall be deemed to have been given (i) upon delivery if given by overnight courier or hand delivery or (ii) upon confirmation if given by facsimile or other reliable electronic means. A Party may change its address for receiving notices contemplated by this Contract by delivering notice of its new address to the other Parties.

#### 16 Successors and Assigns

The rights and obligations created by this Contract shall inure to and bind the successors and assigns of any of the Parties, provided, however, that such Party shall not assign such rights and obligations without the written consent of the other Parties and by any applicable regulatory agencies.

#### 17 Waiver

Delay by any Party in enforcing its rights under this Contract shall not be deemed a waiver of such rights. Any waiver of rights by a Party with respect to any default or other matter arising under this Contract shall not be deemed a waiver with respect to any default or other matter arising under this Contract.

**18 Severability**

If any term, condition, covenant, restriction or other provision of this Contract is held by a court or regulatory agency of competent jurisdiction or by legislative enactment to be invalid, void or otherwise unenforceable, the remainder of the terms, conditions, covenants, restrictions and other provisions of this Contract shall remain in full force and effect unless such an interpretation would materially alter the rights and privileges of any Party hereto. If any term, condition, covenant, restriction or other provision of this Contract is held by a court or regulatory agency of competent jurisdiction or by legislative enactment to be invalid, void or otherwise unenforceable, the Parties shall attempt to negotiate an appropriate replacement provision or other revisions to this Contract to restore the rights and obligations conferred under the original Contract.

**19 Amendment**

This Contract may be amended only in writing and as agreed to by and signed by authorized representatives of the Parties.

**20 Signatures**

The Parties have caused this Contract to be executed by the duly authorized representatives as of the date first set forth above.

**The SELLER**

**The BUYER**

By \_\_\_\_\_  
Organization  
Name  
Title

By \_\_\_\_\_  
Organization  
Name  
Title

**Certification of Dispatch Center**

By \_\_\_\_\_  
Name  
Title

## BILATERAL WHEELING AGREEMENT

This Bilateral Capacity and Energy Wheeling Agreement (this "Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 199\_, by and among \_\_\_\_\_ (the "Seller"), \_\_\_\_\_ (the "Buyer"), and \_\_\_\_\_ (the "Wheeler") (each a "Party" and, altogether, the "Parties")

### Preamble

**Whereas**, the Seller owns or operates facilities for the generation of electrical capacity and energy and desires to sell electrical capacity and energy to the Buyer, and

**Whereas**, the Buyer desires to import electric energy to meet customer's requirements for electricity at certain times of the year, and

**Whereas**, the Wheeler owns or operates transmission facilities which provide a path for the flow of electrical energy between the Seller and the Buyer and is willing to provide the use of its transmission systems to transport said electrical energy,

**Now, therefore**, the Seller, the Buyer, and the Wheeler, each in consideration of the mutual agreements set forth herein, agree as follows

### 1 Definitions

1.1 **Agreement** The agreement identified in the first paragraph of this document as the same may be amended or supplemented from time to time

1.2 **Dispatch Center** shall mean the system operator having jurisdiction over the Parties to this Agreement

1.3 **Effective Date** [\_\_\_\_\_, 199\_], shall mean the date upon which this Agreement takes effect

1.4 **Wheeling** Wheeling shall mean transmitting a contractual amount of power over specified time periods through the transmission system of an electric utility company which is neither the Seller nor the Buyer of this power

1.5 **Control Area** shall mean the electric power system or combination of electric power systems bounded by interconnection metering and telemetry to which a common generation control scheme is applied. The Central Asia Control Area includes the electrical energy

systems of Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, and the southern part of Kazakhstan

## 2 Purpose

The purpose of this agreement is to provide the detailed terms and conditions under which the Wheeler shall transport electrical capacity and energy from the Seller to the Buyer

## 3 Status of Previous Agreements among the Parties

3 1 This Agreement is written in accordance with "Parallel Operation Agreement" among the Governments of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan dated [\_\_\_\_\_, 19\_\_], hereinafter known as the "Parallel Operation Agreement" This Agreement is bound by the terms of the Parallel Operation Agreement, which is still in effect

3 2 The Governments of the Buyer's country, the Seller's country, and the Wheeler's country are each signatories of the Energy Charter Treaty dated December 17, 1994 Therefore this Agreement is subject to the terms and conditions of the Energy Charter Treaty

3 3 The Seller and the Buyer have executed a "Contract for the Sale of Capacity and Energy", dated [\_\_\_\_\_] which defines certain obligations that each has to the other relative to the transaction described by this Agreement, but which adds no further obligations upon the Wheeler

## 4 Term of Agreement

The term of this Agreement shall begin on the Effective Date and continue until \_\_\_\_\_ This Agreement may be renewed for an additional \_\_\_ (years)(months) upon mutual agreement among the Parties

## 5 Terms of Service

5 1 **Metering** Metering equipment shall be installed and maintained according to the requirements of the Contract for the Sale of Capacity and Energy executed between the Seller and the Buyer

5 2 **Losses** Unless otherwise agreed among the Parties, the extra transmission losses (either positive or negative) in the wheeler's system shall be compensated by a percentage

reduction in the amount of energy delivered to the Buyer, relative to the amount received from the Seller. The amount of the reduction, applied as a percentage of the kWh delivered under the Contract for the Sale of Capacity and Energy, shall be estimated by load flow studies and agreed upon by the Parties.

**5.3 Connection Requirements** The Wheeler shall accept the electrical energy from the Seller at the following location \_\_\_\_\_ The Wheeler shall deliver electrical energy to the Buyer at the following location(s) \_\_\_\_\_

**5.4 Characteristics of Power and Energy** All electric energy bought and sold according to this Contract shall be in the form of 50 Hz, three-phase alternating current at standardized operating voltages.

#### Interruptibility of Service

The Wheeler shall transport the Seller's energy to the Buyer in all instances except under situations of Force Majeure.

#### 7 Rates and Charges

**7.1 Rates** The rates for wheeling shall be \$\_\_\_\_\_ per kW, based upon the annual operating and maintenance cost of the Wheeling Party's transmission/substation facilities divided by his peak annual load. The calculation for this rate is contained in Attachment 1 to this Agreement.

**7.2 Additional Charges** If the wheeling transaction forces the Wheeler to install special equipment such as monitoring, metering and telemetering equipment, or equipment to control transmission voltages within limits set by the Dispatch Center, the Wheeler will purchase and install such equipment and will be reimbursed by the Buyer prior to the commencement of the wheeling transaction. Any costs incurred by the Wheeler for special studies necessary to determine the feasibility of a proposed wheeling transaction shall also be charged to the Buyer.

#### 8 Billing and Payment

**8.1 Obligation to Pay** For the furnishing of wheeling service by the Wheeler, the Buyer agrees to pay the wheeling charge for the highest amount of kilowatt-hours delivered during any individual hour of the month.

**8 2 Period Billing and Payment** An up-to-date record of transactions and of all other data required for billing purposes shall be kept in accordance with existing procedures established by the Parties and Dispatch Center. No later than five working days after receiving Dispatch Center's Commercial Report, the Wheeler shall prepare an itemized statement for the Buyer with a precise itemization of current charges and past-due amounts, if any, for wheeling services provided during the prior month. Payment becomes overdue if not received by the Wheeler within 30 calendar days of delivering the statement to the Buyer.

**8 3 Failure to Pay**

**8 3 1** A failure of the Buyer to pay the invoiced charges within the time for payment shall result in interest accruing on such unpaid amounts at a rate equal to \_\_\_% per day.

**8 3 2** If the Buyer fails to pay any amount required under this Agreement, the Wheeler shall provide notice to the Buyer of the overdue amounts. If, by the due date for payments in the next billing cycle, the Buyer has not cured the non-payment, including interest, the Dispatch Center may, upon request from the Wheeler, withhold the furnishing of wheeling services to the Buyer.

**8 3 3** In the event that the Buyer reasonably disputes the amount of any bill, whether in whole or in part, it shall notify the Wheeler of such dispute no later than thirty (30) days from receipt of the bill, indicating the amount of such bill subject to dispute and briefly describing the nature of such dispute. In such event, the Parties shall use their best efforts to resolve such dispute within a reasonable amount of time, not to exceed sixty (60) days from the date of such notice. The Buyer will still be required to make timely payment of any disputed amount. If it is ultimately determined that the disputed amount, in whole or in part, was not properly payable to the Wheeler, interest shall be due to the Wheeler on the refunded amount from the date of payment at the rate of \_\_\_% per day.

**9 LIABILITIES**

In no event shall any of the Parties to this Agreement be liable to the other Parties for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance of this Agreement.

**10 FORCE MAJEURE**

**10 1 Obligations Excused** Parties shall exercise due diligence to perform their obligations under this Agreement, but conditions may arise which prevent or delay performance by a

Party because of causes beyond that Party's reasonable control, including flood, drought, earthquake, storm, lightning, fire, explosion, epidemic, war, riot, civil disturbance, and sabotage. A political situation within a Party's country does not constitute a Force Majeure event. A Party's obligations under this Agreement shall be excused (except for its obligation to pay for wheeling services received) to the extent and for the period that the Member's inability to perform is caused by an event of Force Majeure affecting the Member, and only to the extent of the duration of the same, provided that the Party claiming Force Majeure shall make all reasonable efforts to cure, mitigate or remedy the effects of the Force Majeure event.

**11.2 Notice of Event** The Party claiming a Force Majeure event shall give notice in writing to the other Parties as soon as is practicable, but not later than two days after the date on which such Party knew or should have known of the commencement of the Force Majeure event.

## 11 DISPUTE RESOLUTION

Any dispute among the Parties to this Agreement arising out of or related to this Agreement and which cannot be resolved by informal means among the Parties shall be referred to the Central Asia Energy Council, which shall form a three-member arbitration panel. The decision of the arbitration panel shall be considered a final decision and the matter should not be referred to any other panel or court except in accordance with the Energy Charter Treaty.

## 12 GOVERNING LAW

The terms of this Agreement shall be construed and enforced in accordance with the laws of the (Buyer, Seller, or Wheeler's) country. The Energy Charter Treaty shall be used as a guide to international law pertaining to dispute resolution.

## 13 NOTICES

Except as otherwise expressly provided herein, any notice required hereunder shall be in writing and may be given by any of the following means: Overnight courier, hand delivery, facsimile or other reliable electronic means.

Notice shall be given to the Seller at

Notice shall be given to the Buyer at

Notice shall be given to the Wheeler at

Any notice shall be deemed to have been given (i) upon delivery if given by overnight courier or hand delivery or (ii) upon confirmation if given by facsimile or other reliable electronic means. A Party may change its address for receiving notices contemplated by this Agreement by delivering notice of its new address to the other Parties.

#### **14 Successors and Assigns**

The rights and obligations created by this Agreement shall inure to and bind the successors and assigns of any of the Parties, provided, however, that such Party shall not assign such rights and obligations without the written consent of the other Parties and by any applicable regulatory agencies.

#### **15 Waiver**

Delay by any Party in enforcing its rights under this Agreement shall not be deemed a waiver of such rights. Any waiver of rights by a Party with respect to any default or other matter arising under this Agreement shall not be deemed a waiver with respect to any default or other matter arising under this Agreement.

#### **16 Severability**

If any term, condition, covenant, restriction or other provision of this Agreement is held by a court or regulatory agency of competent jurisdiction or by legislative enactment to be invalid, void or otherwise unenforceable, the remainder of the terms, conditions, covenants, restrictions and other provisions of this Agreement shall remain in full force and effect unless such an interpretation would materially alter the rights and privileges of any Party hereto. If any term, condition, covenant, restriction or other provision of this Agreement is held by a court or regulatory agency of competent jurisdiction or by legislative enactment to be invalid, void or otherwise unenforceable, the Parties shall attempt to negotiate an appropriate replacement provision or other revisions to this Agreement to restore the rights and obligations conferred under the original Agreement.

#### **17 Entire Agreement**

This Agreement, including all schedules, appendices and other attachments hereto and made part hereof, is the Parties' complete and exclusive statement of the terms of the Agreement and the matters contemplated herein. All prior written and oral understandings, offers or other communications of every kind pertaining to the subject matter of this Agreement are hereby superseded.

**18 Amendment**

This Agreement may be amended only in writing and as agreed to by and signed by authorized representatives of the Parties

**19 Signatures**

The Parties have caused this Agreement to be executed by the duly authorized representatives as of the date first set forth above

**The WHEELER**

**The BUYER**

By \_\_\_\_\_ By \_\_\_\_\_  
Organization Name  
Name  
Title Title

**The SELLER**

By \_\_\_\_\_  
Organization  
Name  
Title

25

**ATTACHMENT 1**

**CALCULATION OF ENERGY WHEELING RATE**

1	Scheduled electricity amount to be wheeled	_____ kW
2	Annual Operation and Maintenance cost of Wheeling Party's transmission system	_____ \$
3	Peak annual load of Wheeling Party	_____ kW
4	Annual Wheeling Charge (#2 / #3)	_____ \$/kW
5	Monthly Wheeling Charge (annual charge/12)	_____ \$/kW

**EXAMPLE**

Buyer needs wheeling service for 100,000 kW

Annual Operating/Maintenance cost = \$10,000,000

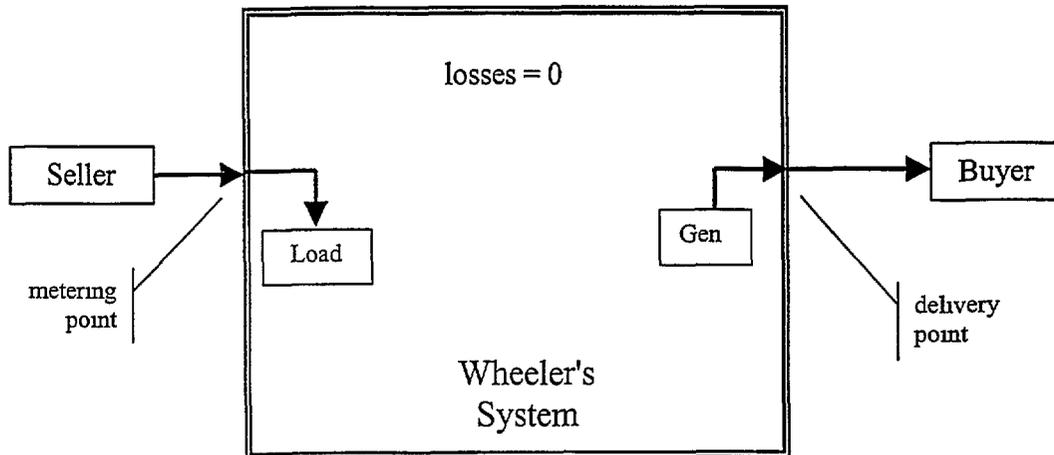
Peak annual load (including the wheeling) = 1,000,000 kW

Annual Wheeling Charge = \$10 per kW (\$10,000,000 / 1,000,000 kW)

Monthly Wheeling Charge = \$0 83 per kW, billed against the highest hourly usage

Monthly charge for wheeling 100,000 kW = 0 83 x 100,000 = \$83,000

## REPLACEMENT WHEELING EXAMPLE



### Assumptions

- Buyer contracts for delivery of 100,000 kWh/hr for 30 days at \$0.05/kWh
- Wheeling tariff = \$2/kW(peak)/month
- Buyer's self-generation cost = \$0.07/kWh

Buyer pays Seller for the month  $100,000 \times 720 \times 0.05 = \$3,600,000$

Buyer pays Wheeler  $100,000 \times 2 = \$200,000$

Total cost to Buyer  $\$3,600,000 + \$200,000 = \$3,800,000$

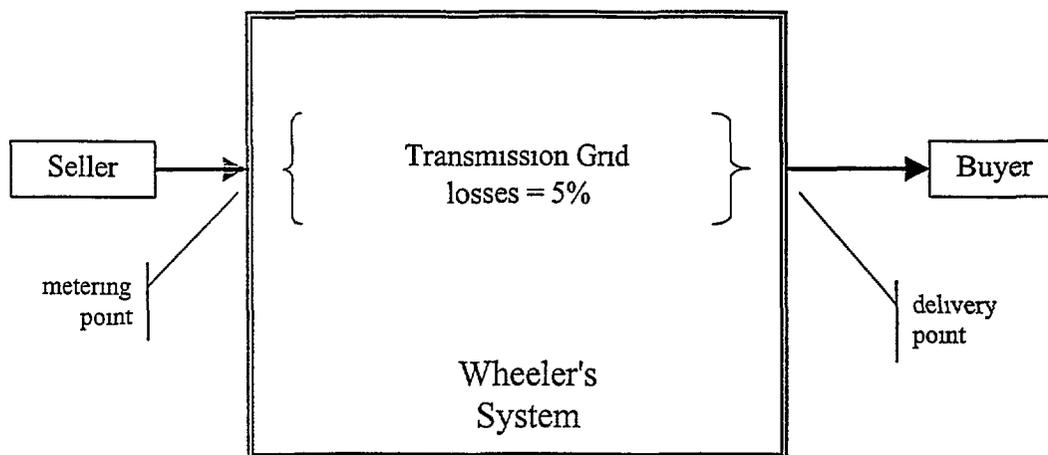
If Buyer were to self-generate, its cost would be  
 $100,000 \times 720 \times 0.07 = \$5,040,000$

Therefore, Buyer's savings are  $\$5,040,000 - \$3,800,000 = \$1,240,000$  for the month

If the Wheeler saves \$0.005/kWh from this re-dispatch, it saves \$360,000/month in addition to the \$200,000 it receives for wheeling the energy

Compared to the conventional wheeling transaction, the Buyer has saved \$180,000 (\$3,800,000 vs \$3,980,000), the Wheeler saved \$360,000, and the Seller has lost the opportunity to earn a profit on the five percent that had gone to losses. In the negotiations for the Purchase and Sale Contract and for the Wheeling Contract, an attempt should be made to share the savings more evenly among the three parties

## CONVENTIONAL WHEELING EXAMPLE



### Assumptions

- Buyer contracts for delivery of 100,000 kWh/hr for 30 days at \$0.05/kWh
- Wheeling tariff = \$2/kW(peak)/month
- Buyer's self-generation cost = \$0.07/kWh

Buyer pays Seller for the month  $100,000 \times 720 \times 0.05 = \$3,600,000$   
 PLUS 5% for energy that was lost in Wheeler's system = \$3,780,000

Buyer pays Wheeler  $100,000 \times 2 = \$200,000$

Total cost to Buyer  $\$3,780,000 + \$200,000 = \$3,980,000$

If Buyer were to self-generate, its cost would be  
 $100,000 \times 720 \times 0.07 = \$5,040,000$

Therefore, Buyer's savings are  $\$5,040,000 - \$3,980,000 = \$1,060,000$  for the month

SOUTHERN AFRICA  
DEVELOPMENT COMMUNITY  
SADC

INTER - GOVERNMENTAL MEMORANDUM OF  
UNDERSTANDING

THE SOUTHERN AFRICAN  
POWER POOL,  
SAPP

## MEMORANDUM OF UNDERSTANDING

In respect of the formation of the Southern African Power Pool

### 1.0 PREAMBLE

WHEREAS, the adoption of the Declaration and Treaty of the Southern African Development Community (SADC) in August 1992, was a major step towards a higher level of cooperation between the Member States, and

WHEREAS, the title of the 1992 Theme Document, "SADC Towards Economic Integration", symbolises the strong desire for close and fruitful regional cooperation, upon which the Treaty is based, and

WHEREAS, a closer regional power cooperation through a Power Pool for Southern Africa has for many years been a priority task for the electricity sub-sector and in the nineteenth SADC Energy Ministers' meeting, held to Lusaka in June 1994, the Ministers approved the principles for the establishment of the Southern African Power Pool as being in conformity with the objectives of regional cooperation set forth in the Treaty. It was further recommended that all SADC Governments who wish that their national Power Utilities participate in the Southern African Power Pool sign an Inter-Governmental Memorandum of Understanding, and

WHEREAS, the national power utilities of the Southern African Development Community (SADC) are engaged in the electricity supply business in their own countries, and

WHEREAS, the said utilities wish to continue with the development of interconnections between their respective networks and expand capacity and energy trade among themselves, and

WHEREAS, the said utilities desire to participate in a regional power pool under the name of the Southern African Power Pool (SAPP) to reduce investments and operating costs, enhance reliability of supply and share in the other benefits resulting from the interconnected operation of their systems, and

WHEREAS, the said utilities wish to provide further opportunities to coordinate the installation and operation of generation and transmission facilities, and

WHEREAS, the said utilities' participation in the SAPP shall in no way change the existing relationship between the utility and the Government of the country in which the utility operates

NOW THEREFORE the Governments who are signatories of this Memorandum of Understanding agree as follows

## ARTICLE 1 DEFINITIONS

In this Memorandum of Understanding, unless inconsistent with or otherwise indicated by the context

“SADC” means the Southern African Development Community,

“Treaty” means the Treaty establishing SADC,

“Member State” means a member of SADC,

“Non-Member State” means a country which is not a member of SADC,

“SAPP” means Southern African Power Pool, and

“Party” means a Government which is signatory of this Memorandum of Understanding,

“Secretariat” means the Secretariat of SADC established by Article 9 of the SADC Treaty

## ARTICLE 2 PURPOSE OF THIS MEMORANDUM OF UNDERSTANDING

The purpose of this Memorandum of Understanding is to establish a framework under which the signatories pronounce their clear intention to enhance regional power cooperation through the establishment and operation of the Southern African Power Pool

The basis for this power pool is the need for all participants

- (a) to coordinate and cooperate in the planning and operation of their systems to minimize costs while maintaining reliability, autonomy and self-sufficiency to the degree they desire, and
- (b) to fully recover their costs and share equitably in the resulting benefits, including reductions in required generating capacity, reductions in fuel costs and improved use of hydro-electric energy

## ARTICLE 3 DEPOSITORY OF THE MEMORANDUM OF UNDERSTANDING

- 3 1 The original of this Memorandum of Understanding shall be deposited with the SADC Secretariat of the Southern African Development Community, which shall act as Depository
- 3 2 The Depository shall transmit certified copies to all Parties and shall notify all Parties of further Signatories of this Memorandum of Understanding
- 3 3 Any notification or communication in terms of, or in regard to this Memorandum of Understanding shall be made through the Depository

**ARTICLE 4: AUTHORITIES RESPONSIBLE FOR IMPLEMENTATION**

- 4 1 Each Party shall designate a person responsible for the implementation of its obligations under this Memorandum of Understanding and shall notify the Depository in writing of such a designation
- 4 2 If necessitated by circumstances, the persons designated under Article 4 1 by the Parties may consult with each other in regard to any problem arising from the implementation of this Memorandum of Understanding or the performance of a Party's obligations in terms of this Memorandum of Understanding

**ARTICLE 5 AUTHORITY FOR PARTICIPATION**

- 5 1 The intention of each Party is to authorize its national power utility, created in terms of its own legislation, to enter into the necessary agreements that regulate the establishment and operation of the SAPP, under the condition that these Agreements are subject to approvals in accordance with the national administrative and legislative mechanisms that regulate the relations between each Government and its respective national power utility
- 5 2 Each party should endeavor to refrain from passing legislative or administrative measures which can prevent its national power utility from fulfilling its obligations as determined by the SAPP
- 5 3 The Parties intend to cooperate with and assist their respective national power utilities in the performance and execution of their obligations in terms of any agreement entered into between the respective utilities pursuant to this Memorandum of Understanding

**ARTICLE 6 IMPLEMENTATION**

- 6 1 This Memorandum of Understanding is open to signature by all Member States
- 6 2 This Memorandum of Understanding shall enter into force thirty (30) days after the signing by two-thirds of the Members States
- 6 3 The inclusion of non-member States in the SAPP, shall be subject to the approval of the Parties. The terms for such inclusion shall be set forth in separate Agreements, which shall form part of this Memorandum of Understanding

**ARTICLE 7 SETTLEMENT OF DISPUTES**

- 7 1 Any dispute arising between two or more Parties from the interpretation or application of this Memorandum of Understanding which cannot be settled amicably, shall be referred to the Tribunal for adjudication under Article 16 of the Treaty
- 7 2 The ruling given by the Tribunal shall be accepted by the parties as final and binding

ARTICLE 8 CONSISTENCY WITH THE TREATY

- 8.1 Nothing contained in this Memorandum of Understanding shall be construed inconsistently with the provisions of the Treaty

This Memorandum of Understanding constitutes the entire understanding between the Parties

ARTICLE 9 WITHDRAWAL

- 9.1 Any Member State may withdraw from this Memorandum of Understanding upon expiration of twelve (12) months from the date of giving written notice to that effect to the Executive Secretary of SADC
- 9.2 Such Member State shall cease to enjoy all rights and benefits under this Memorandum of Understanding upon its withdrawal becoming effective, but shall remain bound by the obligations hereto for a period of twelve (12) months from the date of withdrawal

IN WITNESS HEREOF, the undersigned, being duly authorized thereto, have in the names of their respective Governments signed this Memorandum of Understanding in two (2) originals in the English and Portuguese languages, both texts being equally authentic

Done at Johannesburg, this \_\_\_\_\_ day of \_\_\_\_\_ 19\_\_\_\_

\_\_\_\_\_  
FOR THE GOVERNMENT OF THE REPUBLIC OF ANGOLA

\_\_\_\_\_  
FOR THE GOVERNMENT OF THE REPUBLIC OF BOTSWANA

\_\_\_\_\_  
FOR THE GOVERNMENT OF THE KINGDOM OF LESOTHO

\_\_\_\_\_  
FOR THE GOVERNMENT OF THE REPUBLIC OF MALAWI

\_\_\_\_\_  
FOR THE GOVERNMENT OF THE REPUBLIC OF MOZAMBIQUE

\_\_\_\_\_  
FOR THE GOVERNMENT OF THE REPUBLIC OF NAMIBIA

\_\_\_\_\_  
FOR THE GOVERNMENT OF THE REPUBLIC OF SOUTH AFRICA

\_\_\_\_\_  
FOR THE GOVERNMENT OF THE KINGDOM OF SWAZILAND

\_\_\_\_\_  
FOR THE GOVERNMENT OF THE UNITED REPUBLIC OF TANZANIA

\_\_\_\_\_  
FOR THE GOVERNMENT OF THE REPUBLIC OF ZAMBIA

\_\_\_\_\_  
FOR THE GOVERNMENT OF THE REPUBLIC OF ZIMBABWE

**INTER UTILITY  
MEMORANDUM OF  
UNDERSTANDING**

**SOUTHERN AFRICAN POWER POOL  
INTER-UTILITY MEMORANDUM OF UNDERSTANDING**

**PREAMBLE**

This Memorandum of Understanding (MOU) is made and entered into by the signatories Those signatories which are also Electricity Supply Enterprises are referred to as "Members"

**RECITALS**

WHEREAS, the Southern African Development Community (SADC) power Utilities and other non-SADC utilities are engaged in the electricity supply business in their own countries, and

WHEREAS, the "Members" wish to continue with the development of interconnections between their respective networks and expand capacity and energy trade among themselves, and

WHEREAS, the "Members" desire to participate in a regional power pool under the name of the Southern African Power Pool (SAPP) to reduce investments and operating costs, enhance reliability of supply and share in the other benefits resulting from the interconnected operation of their systems, and

WHEREAS, the "Members" wish to provide further opportunities to co-ordinate the installation and operation of generation and transmission facilities in their respective networks, and

WHEREAS, the "Members" wish to cooperate and seek mutually beneficial arrangements wherever possible and to refrain from arrangements that would be detrimental to any "Member or "Members", and

WHEREAS, the "Members" accept that their relationship be based on the following principles

- a) That issues related to interconnections be handled in a spirit of co-operation and in a friendly, open and trusting manner,
- b) That Members have equal rights and equal obligations, act in solidarity and refrain from taking advantage of each other

NOW THEREFORE, the "Members" agree to enter into this MOU for the formation of the "Southern African Power Pool" hereinafter called the "SAPP" or the Pool"

**ARTICLE 1. OBJECTIVES AND PURPOSE**

The objective of this "Memorandum of Understanding" is to facilitate the establishment of the Southern African Power Pool (SAPP) which in turn has the objective to provide reliable and economical electric supply to the consumers of each of the SAPP Members consistent with reasonable utilization of natural resources and effect on the environment

The purpose is to establish the basic principles under which the SAPP will operate, inter alia

- a) the coordination of and the cooperation in the planning and operation of the various systems to minimize costs while maintaining reliability and,
- b) the full recovery of costs and the equitable sharing of the resulting benefits

Among the benefits that will be achieved, are reductions in required generating capacity, reductions in fuel costs and improved use of hydroelectric energy

Each Member has the right and obligation, regardless of size or type of organization, to own or otherwise provide the facilities required to provide its electric service requirements

Each and all of the provisions of this "Memorandum of Understanding", are considered necessary to enable the signatories to this Memorandum to accomplish the objectives

**ARTICLE 2. HIERARCHY OF THE DOCUMENTS GOVERNING THE SAPP**

The following documents shall govern the establishment and administration of the SAPP. In case of inconsistency, the first document shall have precedence over the second document, the second document over the third document and the third document over the fourth document

- (i) The Inter - Government "Memorandum of Understanding"
- (ii) The Inter - Utility "Memorandum of Understanding"
- (iii) The "Agreement between Operating Members"
- (iv) The "Operating Guidelines"

No other document can be construed as governing the establishment and the administration of the SAPP

**ARTICLE 3. DEFINITIONS**

In addition to the definitions given below, definitions of terms directly related to the operation of the SAPP are given in the Agreement between Operating Members. Those definitions shall apply if the need arises to obtain the meaning of a term which is defined in the Agreement between Operating Members, but not in this MOU

### **3 1 ELECTRICITY SUPPLY ENTERPRISE**

An Electricity Supply Enterprise shall mean an entity which operates a Control Center around the clock which owns - or controls through other means - the operation of several generating units and regularly operates such units to meet a portion or all of its load obligations which owns a transmission system already interconnected internationally with neighboring Electricity Supply Enterprise (s) or which may be interconnected with such Electricity Supply Enterprise (s) some time in the future (see also independent Power Producers, Article 3 2)

### **3 2 INDEPENDENT POWER PRODUCER**

Independent Power Producer shall mean the operator of a generating facility connected to the SAPP grid Independent Power Producers may participate in the Operating and Planning Sub-committees, but not in the Management or Executive Committees of the SAPP

### **3 3 AGREEMENT BETWEEN OPERATING MEMBERS**

Agreement between Operating Members shall mean an Agreement entered between the Members which have their systems interconnected and which are part of the Operating Sub-committee Such Members shall be referred to as Operating Members

### **3 4 OPERATING MEMBER**

Operating Member shall mean a Member which has its system interconnected internationally with at least one other Member and which is a signatory of the Agreement between Operating Members

### **3 5 POOL PLAN**

Pool Plan shall mean an overall expansion programme of the Member's systems which takes into account possible synergy between these systems The Pool Plan shall be prepared by the Planning Sub-Committee in accordance with Article 13 2 2 The Pool Plan shall be purely indicative and shall not create an obligation upon the Members to comply

### **3 6 SADC**

SADC shall mean the Southern African Development Community Its objective is to promote the development of the countries situated in the Southern part of Africa in a coordinated manner at the political, social, economic and technical levels

## **ARTICLE 4 MANAGEMENT STRUCTURE OF THE SAPP.**

The Management Structure of the SAPP is given in Figure 1

#### **4 1 SADC ENERGY MINISTERS AND OFFICIALS**

The Southern African Development Community (SADC) Government Ministers and Officials shall be responsible for policy matters which are normally under their control in terms of the national administrative and legislative mechanisms that regulate the relations between the Government and its respective power utility

The Executive Committee shall refer matter such as requests for membership by non - SADC countries and major policy issues that may arise to the SADC Energy Ministries

#### **4 2 EXECUTIVE COMMITTEE**

The Executive Committee shall be composed of the Chief Executives of only those Member Electricity Supply Enterprises who generate, wholesale and retail power to end-use customers Independent Power Producers shall not be eligible to participate in the Executive Committee The Committee shall act as the Board of the Pool and its duties are described in Article 10 Every Chief Executive shall continue to report to his own Controlling Body and the creation of the SAPP shall in no way alter or modify this relationship A country having more than one utility meeting these requirements should designate one utility to represent it on the Executive Committee

#### **4 3 MANAGEMENT COMMITTEE**

The Management Committee shall oversee the administration of the Pool and shall ensure that the objectives of the Pool, as specified in this MOU, are met Its duties are described in Article 11 5 in those areas which exceed its authority, the Management Committee shall make recommendations to the Executive Committee, independent Power Producers shall not be eligible to participate in the Management Committee

#### **4 4 PLANNING SUB - COMMITTEE**

The Planning Sub-Committee shall report to the Management Committee and shall be responsible for planning and other duties described in Article 13

#### **4 5 OPERATING SUB - COMMITTEE**

The Operating Sub - Committee shall report to the Management Committee and shall be responsible for operating and other duties referred to in Article 14

#### **4 6 ENVIRONMENTAL SUB - COMMITTEE**

The Environmental Sub-Committee shall report to the Management Committee and shall be responsible for alerting and advising the Management Committee about environmental and other matters, as described in Article 15

#### **4 7 CO - ORDINATION CENTER**

The Coordination Center shall report to the Chairperson of the Operating Sub-Committee Its duties are defined in the Agreement between Operating Members

#### **4 8 TAU**

TAU is the Technical and Administrative Unit of the Energy Sector of SADC It shall provide secretarial and other services to the Executive Committee as defined In Article 12

### **ARTICLE 5 COMMENCEMENT AND TERMINATION OF THIS MOU**

#### **5 1 COMMENCEMENT DATE**

An Electricity Supply Enterprise may become party to this MOU upon signature of the Inter-Government MOU by the relevant Head of State or Minister Membership of an Electricity Supply Enterprise in the SAPP shall start on the date of signature of this MOU by its Chief Executive The SAPP shall come into being on the date of the fourth signature of this MOU

#### **5 2 TERMINATION**

Any Member may terminate its participation in the SAPP by giving three (3) months notice to the Executive Committee, provided the Member is not a signatory of the Agreement between Operating Members A Member which is a signatory of the Agreement between Operating Members, shall have the right to terminate its participation in the SAPP as specified In the Agreement between Operating Members Any unfulfilled duties including financial obligations existing as a result of the Pool at the date of termination, shall continue in full force until such items have been fulfilled or have expired

### **ARTICLE 6 CONDITIONS FOR MEMBERSHIP**

#### **6 1 MEMBERSHIP**

All Electricity Supply Enterprises as defined in Article 3 3 situated in a SADC country as of September 1994, and any other non-SADC countries subject to approval of the SADC Energy Ministers, may become a member of the SAPP The recommendation from the Executive Committee for the acceptance of an Electricity Supply Enterprise from a non-SADC country which has applied for Membership, must receive a two-thirds majority before it can be forwarded to the SADC Ministers for approval or rejection

#### **6 2 OBSERVER STATUS**

By consensus or, failing this, by a two third majority the Executive Committee may grant, upon approval of the SADC Energy Ministers Observer status to an Electricity Enterprise interested in the interconnected operation of the Pool Electricity Supply Enterprises having obtained observer status shall all have the same rights and obligations as specified in advance by the Management Committee

**ARTICLE 7 AGREEMENTS WITH NON-MEMBERS**

This MOU shall not restrict any Member from having interconnections or agreements with Non-Members, provided the following conditions are met

- 7 1 1 such agreement(s) shall not create obligations upon a Member which is not party to such agreement(s)
- 7 1 2 such agreement (s) shall not impair a Member from fulfilling its obligations under the SAPP Agreement
- 7 1 3 unless all the affected Members have agreed beforehand Members shall trade in electricity only with the Non-Member systems to which they are directly connected

**ARTICLE 8 PREVIOUS AGREEMENTS**

- 8 1 The execution of this MOU shall not impair, amend or change any previous contract or agreement, and such contracts or agreements shall continue, including all rates, terms and conditions, until the expiration of such contracts or agreements or termination of such contracts or agreements in accordance with the provisions contained in such contracts or agreements
- 8 2 If this MOU requires Members to fulfill duties which are already specified in existing agreements, nothing additional needs to be done by the Members in those specific areas
- 8 3 If this MOU requires Members to fulfill duties which are only in part specified in existing agreements, only the portion of the requirements which is in excess of what is already specified in existing agreements needs to be added to what must already be done by the Members

**ARTICLE 9 INTERCONNECTED TRANSMISSION FACILITIES**

**9 1 OWNERSHIP**

Unless otherwise agreed, each Pool Member, whether an Operating Member or not, shall at its own costs, build, operate and maintain its own transmission facilities

**9 2 OPERATION**

To the extent that the Management Committee is satisfied that no use of transmission facilities will cause overload, abnormal losses, endanger the stability of the interconnected system or cause undue hardship to another Member, nothing in this MOU shall restrict a Member in the use of its own transmission facilities

## **ARTICLE 10 EXECUTIVE COMMITTEE**

### **10 1 REPRESENTATION**

The fourth signature of this MOU shall automatically create an Executive Committee consisting of the Chief Executives of eligible Members as defined in Article 4 2 It shall act as the Board of the Pool and shall be the authority governing the administration and formulating the objectives of the SAPP

### **10 2 MEETINGS**

The Executive Committee shall meet at least once a year and the Chairperson shall be from the Member hosting the meeting The Chairmanship and the venue of the meeting shall rotate annually and meetings at other times shall be at the call of the Chair or at the request of a Member(s)

### **10 3 MINUTES**

A summary of the main revisions shall be prepared at the end of each meeting and signed by the Member's representatives The minutes of the meetings shall be prepared by TAU and shall include, but shall not be limited to a summary of all decisions made, actions taken, tasks to be carried out and all future deadlines Copies of such minutes shall be mailed within twenty-one (21) days after each meeting to each Member of the Committee Failure to object in writing to the minutes within thirty (30) days after mailing shall be deemed to constitute approval thereof The minutes of all meetings shall be kept by TAU and shall be made available to the SADC Energy Ministers for information and to all Members

### **10 4 CHAIRPERSON**

The Committee shall elect a Chairperson who shall hold office for a period of at least one year, but not more than three (3) years The Chairmanship shall rotate among the Members who are signatories of the Agreement between Operating Members

### **10 5 MANAGEMENT COMMITTEE AND SUB-COMMITTEES**

The Executive Committee shall specify and amend from time to time the duties and authority, other than set forth herein, of the Management Committee, the Environmental Sub-Committee, the Planning Sub-Committee the Operating Sub-Committee and any Working Group or Task Force which may be established by the Executive Committee

### **10 6 OTHER MATTERS**

The Executive Committee shall decide within sixty (60) days on any matter referred to it by a Member(s) or by the Management Committee, including the exclusion of a Member(s)

#### 10 7 ACCEPTANCE OF NEW MEMBERS

The Executive Committee shall, upon the approval of the SADC Energy Ministers, accept new Members into the SAPP as specified in Article 6 1

#### 10 8 GRANTING OF OBSERVER STATUS

The Executive Committee shall have the authority, upon approval of the SADC Energy Ministers, to grant observer status to Electricity Supply Enterprises which may apply as defined Article 6 2 The granting of Observer status shall allow the Electricity Supply Enterprise to attend meetings and participate, but it shall have no voting rights in any of the committees or sub-committees

#### 10 9 COMMITTEE EXPENSES

Each Member represented at the Executive Committee shall arrange and finance the participation of its own representative(s) in the various committees, task forces and subcommittees TAU shall arrange and finance the participation of its own representative(s)

#### 10 10 DECISION PROCEDURES

10 10 1 Each Member shall have one vote at the Executive Committee

10 10 2 Decisions will be made by consensus or, failing this, by a two thirds majority of the Members present at the meeting, unless otherwise stated in the MOU

10 10 3 The presence at the meeting of two thirds of the Members shall constitute a quorum

10 10 4 Only Members which are signatories of the Agreement between Operating Members shall vote on Service Schedules and on operational issues

10 10 5 The decisions made by the Committee shall be binding on all Members, including those which did not attend the meeting

10 10 6 In case of a dispute between Operating Members, the matter shall be referred to Arbitration in accordance with the Agreement between Operating Members, unless another procedure is agreed to by the Members

### ARTICLE 11 THE MANAGEMENT COMMITTEE

#### 11 1 REPRESENTATION

The Management Committee shall consist of a maximum of three representatives per Member and these representatives shall be of sufficient seniority in their own organization to make all relevant decisions A Member's main representative(s) at the Planning and at the Operating Sub-Committees shall also be its representatives at the Management Committee

## 11 2 MEETINGS

The Committee shall meet at least once a year. The Chairperson of the forthcoming meeting shall send notice of the meeting at least one month prior to the meeting. A final detailed Agenda shall be sent to all Members at least three weeks in advance. The date and venue of the following meeting shall be decided by the Members at each meeting.

## 11 3 MINUTES

A summary of the main decisions shall be prepared at the end of each meeting and signed by the Members' representatives. Minutes shall be prepared by the Chairperson and shall include, but shall not be limited to, a summary of all decisions made, actions taken, tasks to be carried out and all future deadlines. Copies of such minutes shall be mailed within twenty-one (21) days after each meeting to each Member of the Committee. Failure to object in writing to the minutes within thirty (30) days after mailing shall be deemed to constitute approval thereof. Minutes of all meetings shall be sent to the Coordination Center.

## 11 4 DECISION PROCEDURES

- 11 4 1 Each Member shall have one vote at the Management Committee.
- 11 4 2 Decisions will be made by consensus or, failing this, by a two thirds majority of the Members present at the meeting, unless otherwise stated in this MOU.
- 11 4 3 The presence at the meeting of two thirds of the Members shall constitute a quorum.
- 11 4 4 Only Members which are signatories of the Agreement between Operating Members shall vote on recommendations pertaining to Service Schedules and on operational and planning issues affecting interconnected operations.
- 11 4 5 The decisions made by the Committee, shall be binding on all Members, including those which did not attend the meeting.
- 11 4 6 In case of a dispute between Members which cannot be resolved by this Committee, the matter shall be referred to the Executive Committee or Arbitration in accordance with the Agreement between Operating Members.

## 11 5 DUTIES OF THE MANAGEMENT COMMITTEE

The duties of the Management Committee shall include, but shall not be limited to the following:

- 11 5 1 Oversee the work and approve the recommendations of the Sub-Committees.
- 11 5 2 Make all decisions on those matters not specifically delegated to other Committees.

11 5 3 Organize the training of the staff that will handle Pool Interactions

11 5 4 Direct the Operating, Planning and Environmental Subcommittees to establish, working groups or task forces as required

The following duties shall be carried out only by the Operating Members

11 5 5 In accordance with the directives of the Operating Members of the Executive Committee, establish a Coordination Center which will provide day-to-day information and administrative services to the Operating Members in order to assist them in the implementation of the Agreement between Operating Members

11 5 6 Establish and oversee the implementation of common accounting procedures for transactions, capacity deficits and energy deficits to determine the inter-utility payments resulting from the Agreement between Operating Members

11 5 7 Establish the methods, procedures and intervals of reporting scheduled and actual capacity and energy interchanges

11 5 8 Establish methods and procedures for accounting and billing for capacity and energy interchanges

11 5 9 Ensure the collection and analysis of the data relevant to the operation and planning of the interconnected system

11 5 10 Ensure that suitable computer hardware and software and sufficient communication facilities are available to the Members and to the Coordination Center to perform their duties

11 5 11 Recommend to the Executive Committee the introduction of new Service Schedules, the removal of unnecessary Service Schedules and the revision as necessary, of existing Service Schedules

#### 11 6 CHAIRPERSON

The Committee shall elect a Chairperson who shall hold office for a period of at least one year, but not more than two (2) years. The Chairmanship shall rotate among the Members who are signatories of the Agreement between Operating Members

#### 11 7 DUTIES OF THE CHAIRPERSON

11 7 1 The Chairperson shall provide an Agenda and preside over the Committee meetings

11 7 2 The Chairperson shall bear overall responsibility for the Committee's activities and shall act as its spokesman

11 7 3 The Chairperson shall decide whether the entire meeting or any part of it should be limited to those having Member status

- 11 7 4 The Chairperson shall nominate a representative to serve as an observer at any relevant Committee meeting
- 11 7 5 The Chairperson shall notify, in writing, all appointed Chairpersons and representatives to existing or new committees, working groups, or task forces created by the Management Committee
- 11 7 6 The Chairperson shall invite participation of other utilities, organizations or experts as required
- 11 7 7 The Chairperson shall maintain records of the proceedings of the Management Committee After the establishment of the Coordination Center, these records shall be retained at the Coordination Center to be available to all Members on request

**ARTICLE 12 DUTIES OF THE TECHNICAL AND ADMINISTRATIVE UNIT**

The duties of TAU with respect to the SAPP shall consist of the following

- (i) To provide a secretariat to the Executive Committee
- (ii) To advise the Executive Committee of the relevant rules and regulations of SADC
- (iii) To assist the Executive Committee in achieving SADC objectives with regard to the establishment and development of the SAPP
- (iv) To report to the SADC Committee of Energy Ministers
- (v) To liaise with other SADC structures
- (vi) To seek and mobilize funds as recommended by the SAPP Executive Committee

**ARTICLE 13 PLANNING SUB-COMMITTEE**

**13 1 REPRESENTATION**

The Planning Sub-Committee shall consist of a maximum of two representatives per Member and these representatives shall be of sufficient seniority in their own organization to make all relevant decisions

**13 2 DUTIES OF THE PLANNING SUB-COMMITTEE**

The duties of the Planning Sub-Committee shall include, but shall not be limited to the following

- 13 2 1 Establish and update common planning and reliability standards which have an impact on the SAPP
- 13 2 2 Based on individual Member's plans, develop every two years, an overall Pool Plan to highlight the benefits and opportunities for cost savings that can be derived by the Members from the coordination of activities The Pool Plans shall

- (i) Take into account the forecasted demand and energy consumption in each Member's system, including Demand Side Management
- (ii) Indicate the anticipated sales and purchases by each Member, including those with Electricity Supply Enterprises or independent Power Producers Non-Member of the SAPP
- (iii) Contain the characteristics, location and commissioning dates of the new generating units and new transmission facilities of 110 kV and above which are planned in each Member's system, when such facilities have a significant impact on the interconnected system
- (iv) Contain the characteristics, location and commissioning dates of the new telecommunication, telecontrol and supervisory facilities which are planned in each Member's system, when such facilities have a significant impact on the operation of the interconnected system
- (v) Identify and record new generation, transmission telecommunication or telecontrol facilities to be installed in the systems of Members and Non-Members

13 2 3 Evaluate software and other tools which will enhance the value of planning activities such as load forecasting, the determination of planning or reliability standards, cost-benefit analysis or system studies, submit proposals to the Management Committee

The following duties shall be earned out only by the Operating Members

- 13 2 4 Submit proposals to the Operating Members of the Management Committee regarding new Service Schedules, removal of unnecessary Service Schedules and revision as necessary of exiting Service Schedules
- 13 2 5 Specify the reliability standards that shall be used to determine the Accredited Capacity Obligation of each Operating Member
- 13 2 6 Present a course of action which will enable each Operating Member to comply with its Accredited Capacity Obligation
- 13 2 7 Establish the benefits attributable to each Operating Member resulting from the installation or relays, control equipment or any system study, improvement or facility required for the satisfactory operation of the interconnected system and make recommendations to the Operating Members of the Management Committee regarding the financial contribution of each Operating Member to the costs of such improvements
- 13 2 8 Establish future transfer capability limits between systems to enable the Operating Sub-Committee to prepare detailed Operating Procedures
- 13 2 9 Identify specific reliability problems and recommend the generation or transmission additions or changes required to eliminate them
- 13 2 10 Establish capacities of transmission plant in the system of Operating Members for the purposes of calculating wheeling rates and review these on an annual basis

### 13 3 CHAIRPERSON

The Planning Sub-Committee, shall elect a Chairperson to serve for at least one (1) year term, but not more than two (2) years, after which the Chair shall rotate to other Members. The Chairperson shall be elected from the Operating Members of the SAPP.

#### **13 4 ADMINISTRATIVE MATTERS**

The rules governing the meetings, minutes, decision procedures, duties, election and tenure of the Chairperson of the Planning Subcommittee, shall be the same as for the Management Committee.

In case of disagreement between Members, the matter shall be submitted to the Management Committee. The report shall reflect the majority view and include a statement by the minority.

### **ARTICLE 14 OPERATING SUB-COMMITTEE**

#### **14 1 REPRESENTATION**

The Operating Sub-Committee shall consist of representatives of Members which are signatories of the Agreement between Operating Members. It shall have a maximum of two representatives per Member and these representatives shall be of sufficient seniority in their own organization to make all relevant decisions. The main representative shall also be a participant in the Management Committee.

#### **14 2 DUTIES OF THE OPERATING SUB-COMMITTEE**

The duties of the Operating Sub-Committee shall be in accordance with the Agreement between Operating Members.

#### **14 3 CHAIRPERSON**

The Operating Sub-Committee shall elect a Chairperson to serve for at least one (1) year term, but not more than two (2) years, after which the Chair shall rotate to other Members.

#### **14 4 ADMINISTRATIVE MATTERS**

The rules governing the meetings, minutes, decision procedures, duties, election and tenure of the Chairperson of the Operating Sub-Committee, shall be the same as for the Management Committee.

In case of disagreement between Members, the matter shall be submitted to the Management Committee. The report shall reflect the majority view and include a statement by the minority.

**ARTICLE 15 ENVIRONMENTAL SUB-COMMITTEE**

**15 1 REPRESENTATION**

Each Member shall appoint one representative to the Environmental Sub-Committee

**15 2 MEETINGS**

The Environmental Sub-Committee shall hold an annual meeting in the first quarter of each calendar year and shall hold other meetings at the call of the Chairperson or at the request of any Member. At least one (1) month written notice shall be given of any meeting and shall state the time and place of the meeting and include an agenda of the items to be considered.

**15 3 CHAIRPERSON**

The Environmental Sub-Committee, at its annual meeting, shall elect a Chairperson to serve for at least a one (1) year term, but not more than two (2) years, after which the Chair shall rotate to the other Members.

**15 4 DUTIES**

Under the direction of the Management Committee, the Environmental Subcommittee shall keep abreast of world and regional matter relating to air quality, water quality, land use and other environmental issues. Where Governments have in place related Environmental Organizations, this Committee shall liaise with them to assist one another on specific issues. The Sub-Committee shall present all findings and recommendations to the Management Committee, the Planning and Operating Sub-Committees and shall also carry out other functions and activities as assigned or approved by the Management Committee.

**ARTICLE 16 COORDINATION CENTER**

**16 1 CREATION OF THE COORDINATION CENTER**

The representatives of the Operating Members at the Management Committee shall propose the creation of a Coordination Center to the representatives of the Operating Members at the Executive Committee. The functions and duties of the Coordination Center when it is established, shall be in accordance with the Agreement between Operating Members.

**16 2 CONTRIBUTIONS TO COST BY NON-OPERATING MEMBERS**

Since Members which are not signatories of the Agreement between Operating Members will nevertheless benefit from the Coordination Center by obtaining information and other services from it, they shall contribute to the costs of the Coordination Center in accordance with the rulings of the Management Committee. Non-Members may also receive information from the Coordination Center, but shall pay market rates for such information.

**ARTICLE 17 AMENDMENTS**

This MOU may be reviewed from time to time, but no modification shall be of any force or effect unless reduced to writing and approved by the Executive Committee.

**ARTICLE 18 ASSIGNMENT**

Each Member shall have the right to assign this MOU to any successor to all or substantially all of its electric properties, whether by merger, consolidation, sale or otherwise, without the consent of the other Members, provided such successor shall agree in writing to assume the obligations of such Member. This provision shall be applicable to assignees in succession.

**ARTICLE 19 NOTICES AND DOMICILIUM**

**19.1 COMMUNICATION**

Any communication or documents given or sent by any Member or TAU to any other Member or TAU shall be in writing and shall be deemed to have been duly delivered to the party to which it is addressed at its respective address, namely:

19.1.1 For BPC

Chief Executive                      Telephone     +267-3603000  
Botswana Power                      TeleFax       +267-373563  
Corporation  
Motlakase House  
Macheng Way  
P O Box 48  
GABORONE, Botswana

19.1.2 For EdM

Director Geral                      Telephone     258-1-42-2071/2  
Electricidade de                      Telefax       258-1-42-2074  
Mocambique  
Ave Agostinho, Neto 70  
Caixa Postal 2447  
MAPUTO, Mozambique

19.1.3 For ENE

Director Geral                      Telephone     +244-2-326582  
Empresa Nacional                      Telefax       +244-2-323433  
de Electricidade  
Predio Geominas- 6,7, Andores  
LUANDA, Angola

19 1 4 For ESCOM

General Manager Telephone +265-622000  
Electricity Supply Telefax +265-622008  
Commission of Malawi  
P O Box 2047  
BLANTYRE, Malawi

19 1 5 For ESCOM

Chief Executive Telephone +27-11-800-5510  
Eskom Telefax +27-11-800-5583  
P O Box 1091  
JOHANNESBURG, 2000  
South Africa

19 1 6 For LEC

Manager Director Telephone +266-312236  
Lesotho Electricity Telefax +266-310083  
Corporation  
P O Box 423  
MASERU 100, Lesotho

19 1 7 For SEB

Chief Executive Telephone +268-42548/42521/46638  
Swaziland Electricity Telefax +268-42335  
Board +268-41931  
P O Box 258 +268-48274  
MBABANE, Swaziland

19 1 8 For SNEL

President Delegee General  
Societe Nationale d'Electricite (SNEL)  
B P 500  
Avenue de la Justice 2381  
KINSHASA, Zaire  
Telex 63400 RCNF  
(Attn DMS Zaire SNEL 10)  
Telephone +243-12-33736 +871-682622676  
Telefax +243-12-33657 +871-682622677  
+260-2-313835 (SNEL Shada c/o Merzario)

19 1 9 For SWAWEK

Chairman & Managing Telephone 261-2-21830  
Director Telefax 261-2-32805  
SWAWEK  
Swawek Centre  
Corner Robert Mugabe  
and Martin Luther Streets  
P O Box 2864  
WINDHOEK, Namibia

19 1 10 For TANESCO

Managing Director Telephone +255-51-46242  
Tanzania Electricity Telefax +255-51-44668  
Supply Company (Ltd ) +255-51-36247  
P O Box 9024 +255-51-26704  
DAR ES SALAAM, Tanzania

19 1 11 For TAU/SADC

Regional Coordinator Telephone +244-2-35288  
TAU/SADC Energy Sector +244-2-345147  
CX/ Postal No 2876 Telefax +244-2-343003  
Rua Gil Vicente No 2  
LUANDA, Angola

19 1 12 For ZESA

Chief Executive Telephone +263-4739003  
Zimbabwe Electricity Telefax +263-4739854/5  
Supply Authority  
Electricity Center  
25 Samora Machel Avenue  
P O Box 377  
HARARE, Zimbabwe

19 1 13 For ZESCO

Managing Director	Telephone	+260-1-225074
Zambia Electricity Supply Corporation Stand 6949 Great East Road P O Box 33304 LUSAKA	Telefax	+260-1-222753

#### 19 2 DELIVERY TIME

- 19 2 1 If a communication is delivered by hand, it shall be deemed to have been received by the addressee on the date of delivery
- 19 2 2 If posted by pre-paid registered post, it shall be deemed to have been received by the addressee on the fourteenth (14) day after postage
- 19 2 3 If sent by telex, telegram or facsimile, it shall be deemed to have been received by the addressee one (1) day after dispatch

#### 19 3 CHANGE OF ADDRESS

Any Member may, by written notice to all of the other Members, change the address to which any notice or request intended for the Member giving such notice, shall be addressed

ARTICLE 20 SIGNATORIES

IN WITNESS whereof the said Operating Members have hereto set their hands

20 1 SIGNED ON BEHALF OF BPC AT \_\_\_\_\_ ON THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_

SIGNED \_\_\_\_\_ WITNESS \_\_\_\_\_  
NAME \_\_\_\_\_ NAME \_\_\_\_\_  
CHIEF EXECUTIVE TITLE \_\_\_\_\_  
BOTSWANA POWER CORPORATION

20 2 SIGNED ON BEHALF OF EdM AT \_\_\_\_\_ ON THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_

SIGNED \_\_\_\_\_ WITNESS \_\_\_\_\_  
NAME \_\_\_\_\_ NAME \_\_\_\_\_  
ADMINISTRATOR TITLE \_\_\_\_\_  
ELECTRICIDADE DE MOCAMBIQUE

20 3 SIGNED ON BEHALF OF ENE AT \_\_\_\_\_ ON THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_

SIGNED \_\_\_\_\_ WITNESS \_\_\_\_\_  
NAME \_\_\_\_\_ NAME \_\_\_\_\_  
DIRECTOR GERAL TITLE \_\_\_\_\_  
EMPRESA NACIONAL DE ELECTRICIDADE  
ANGOLA

20 4 SIGNED ON BEHALF OF ESCOM AT \_\_\_\_\_ ON THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_

SIGNED \_\_\_\_\_ WITNESS \_\_\_\_\_  
NAME \_\_\_\_\_ NAME \_\_\_\_\_  
CHIEF EXECUTIVE TITLE \_\_\_\_\_  
ELECTRICITY SUPPLY COMMISSION  
MALAWI

20 5 SIGNED ON BEHALF OF ESCOM AT \_\_\_\_\_ ON THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_

SIGNED \_\_\_\_\_ WITNESS \_\_\_\_\_  
NAME \_\_\_\_\_ NAME \_\_\_\_\_  
ACTING CHIEF EXECUTIVE TITLE \_\_\_\_\_  
ESCOM OF SOUTH AFRICA

54

20 6 SIGNED ON BEHALF OF LEC AT \_\_\_\_\_ ON THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_

SIGNED	_____	WITNESS	_____
NAME	_____	NAME	_____
	MANAGING DIRECTOR	TITLE	_____
	LESOTHO ELECTRICITY BOARD		_____

20 7 SIGNED ON BEHALF OF SEB AT \_\_\_\_\_ ON THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_

SIGNED	_____	WITNESS	_____
NAME	_____	NAME	_____
	CHIEF EXECUTIVE	TITLE	_____
	SWAZILAND ELECTRICITY BOARD		_____

20 8 SIGNED ON BEHALF OF SNEL AT \_\_\_\_\_ ON THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_

SIGNED	_____	WITNESS	_____
NAME	_____	NAME	_____
	PRESIDENT DELEGUE GENERAL	TITLE	_____
	SOCIETE NATIONALE D'ELECTRICITE		_____
	ZAIRE		

20 9 SIGNED ON BEHALF OF SWAWEK AT \_\_\_\_\_ ON THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_

SIGNED	_____	WITNESS	_____
NAME	_____	NAME	_____
	MANAGING DIRECTOR	TITLE	_____
	SWAWEK, NAMIBIA		_____

20 10 SIGNED ON BEHALF OF TANESCO AT \_\_\_\_\_ ON THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_

SIGNED	_____	WITNESS	_____
NAME	_____	NAME	_____
	MANAGING DIRECTOR	TITLE	_____
	TANZANIA ELECTRIC SUPPLY COMPANY		_____



20 11 SIGNED ON BEHALF OF ZESA AT \_\_\_\_\_ ON THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_

SIGNED \_\_\_\_\_  
NAME \_\_\_\_\_  
CHIEF EXECUTIVE  
ZIMBABWE ELECTRICITY SUPPLY  
AUTHORITY

WITNESS \_\_\_\_\_  
NAME \_\_\_\_\_  
TITLE \_\_\_\_\_

20 12 SIGNED ON BEHALF OF ZESCO AT \_\_\_\_\_ ON THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_

SIGNED \_\_\_\_\_  
NAME \_\_\_\_\_  
MANAGING DIRECTOR  
ZAMBIA ELECTRICITY SUPPLY  
CORPORATION

WITNESS \_\_\_\_\_  
NAME \_\_\_\_\_  
TITLE \_\_\_\_\_

***EUROPEAN ENERGY CHARTER CONFERENCE***

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**EXCERPTS FROM ENERGY CHARTER TREATY**

*(RELATED TO ENERGY TRANSPORT/TRANSMISSION, INTERNATIONAL ENERGY  
TRADE/TRANSIT AND DISPUTE RESOLUTION)*

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14 September 1994

ANNEX 1

TEXT FOR ADOPTION

**ENERGY CHARTER TREATY**

PREAMBLE

The Contracting Parties to this Treaty

Having regard to the objective of progressive liberalization of international trade and to the principle of avoidance of discrimination in international trade ,

Determined progressively to remove technical, administrative and other barriers to trade in Energy Materials and Products and related equipment, technologies and services,

Having regard to competition rules concerning mergers, monopolies, anti-competitive practices and abuse of dominant position,

Recognizing the necessity for the most efficient exploration, production, conversion, storage, transport, distribution and use of energy,

HAVE AGREED AS FOLLOWS

PART I

DEFINITIONS AND GENERAL PROVISIONS

ARTICLE 1

DEFINITIONS

For the purpose of this Treaty

- (2) "Contracting Party" means a state or Regional Economic Integration Organization which has consented to be bound by this Treaty and for which the treaty is in force

- (3) "Regional Economic Integration Organization" means an organization constituted by states to which they have transferred competence over certain matters a number of which are governed by this Treaty, including the authority to take decisions binding on them in respect of those matters
- (6) "Investment" means every kind of asset, owned or controlled directly or indirectly by an Investor and includes
- (a) tangible and intangible, and movable and immovable, property, and any property rights such as leases, mortgages, liens, and pledges,
  - (b) a company or business enterprise, or shares, stock, or other forms of equity participation in a company or business enterprise, and bonds, and debt of, a company or business enterprise,
  - (c) claims to money and claims to performance pursuant to contract having an economic value and associated with an Investment,
  - (d) Intellectual Property,
  - (e) Returns,
  - (f) any right conferred by law, contract or by virtue of any licenses and permits granted pursuant to law to undertake any Economic Activity in the Energy Sector
- (8) "Make Investments" and "Making of Investments" mean establishing new Investments, acquiring all or part of existing Investments or moving into different fields of Investment activity

## ARTICLE 2

### PURPOSE OF THE TREATY

This Treaty establishes a legal framework in order to promote long-term cooperation in the energy field, based on complementarities and mutual benefits, in accordance with the objectives and principles of the Charter

PART II  
COMMERCE  
ARTICLE 3

INTERNATIONAL MARKETS

The Contracting Parties shall work to promote access to international markets on commercial terms, and generally to develop an open and competitive market, for Energy Materials and Products

ARTICLE 6  
COMPETITION

- (1) Each Contracting Party shall work to alleviate market distortions and barriers to competition in Economic Activity in the Energy Sector
- (2) Each Contracting Party shall ensure that within its jurisdiction it has and enforces such laws as are necessary and appropriate to address unilateral and concerted anti-competitive conduct in Economic Activity in the Energy Sector

ARTICLE 7  
TRANSIT

- (1) Each Contracting Party shall take the necessary measures to facilitate the Transit of Energy Materials and Products consistent with the principle of freedom of transit and without distinction as to the origin, destination or ownership of such Energy Materials and Products or discrimination as to the pricing on the basis of such distinctions, and without imposing any unreasonable delays, restrictions or charges
- (2) Contracting Parties shall encourage relevant entities to cooperate in
  - (a) modernizing Energy Transport Facilities necessary to the Transit of Energy Materials and Products,
  - (b) the development and operation of Energy Transport Facilities serving the Areas of more than one Contracting Party,
  - (c) measures to mitigate the effects of interruptions in the supply of Energy Materials and Products,
  - (d) facilitating the interconnection of Energy Transport Facilities

- (3) Each Contracting Party undertakes that its provisions relating to transport of Energy Materials and Products and the use of Energy Transport Facilities shall treat Energy Materials and Products in Transit in no less favorable a manner than its provisions treat such materials and products originating in or destined for its own Area, unless an existing international agreement provides otherwise
- (4) In the event that Transit of Energy Materials and Products cannot be achieved on commercial terms by means of Energy Transport Facilities the Contracting Parties shall not place obstacles in the way of new capacity being established, except as may be otherwise provided in applicable legislation which is consistent with paragraph (1)
- (5) A Contracting Party through whose Area Energy Materials and Products may transit shall not be obliged to
  - (a) permit the construction or modification of Energy Transport Facilities, or
  - (b) permit new or additional Transit through existing Energy Transport Facilities,

which it demonstrates to the other Contracting Parties concerned would endanger the security or efficiency of its energy systems, including the security of supply

Contracting Parties shall, subject to paragraphs (6) and (7), secure established flows of Energy Materials and Products to, from or between the Areas of other Contracting Parties

- (6) A Contracting Party through whose Area Energy Materials and Products Transit shall not, in the event of a dispute over any matter arising from that Transit, interrupt or reduce, permit any entity subject to its control to interrupt or reduce, or require any entity subject to its jurisdiction to interrupt or reduce the existing flow of Energy Materials and Products prior to the conclusion of the dispute resolution procedures set out in paragraph (7), except where this is specifically provided for in a contract or other agreement governing such Transit or permitted in accordance with conciliator's decision
- (7) The following provisions shall apply to a dispute described in paragraph (6), but only following the exhaustion of all relevant contractual or other dispute resolution remedies previously agreed between the Contracting Parties party to the dispute or between any entity referred to in paragraph (6) and an entity of another Contracting Party party to the dispute
  - (a) A Contracting Party party to the dispute may refer it to the Secretary - General by a notification summarizing the matters in dispute The Secretary - General shall notify all Contracting Parties of any such referral
  - (b) Within 30 days of receipt of such a notification, the Secretary - General, in consultation with the parties to the dispute and the other Contracting Parties concerned, shall appoint a conciliator Such a conciliator shall have experience in the matters subject to dispute and shall not be a national or citizen of or permanently resident in a party to the dispute or one of the other Contracting Parties concerned

- (c) The conciliator shall seek the agreement of the parties to the dispute to a resolution thereof or upon a procedure to achieve such resolution. If within 90 days of his appointment he has failed to secure such agreement, he shall recommend a resolution to the dispute or a procedure to achieve such resolution and shall decide the interim tariffs, and other terms and conditions to be observed for Transit from a date which he shall specify until the dispute is resolved.
  - (d) The Contracting Parties undertake to observe and ensure that the entities under their control or jurisdiction observe any interim decision under paragraph (7) (c) on tariffs, terms and conditions for 12 months following the conciliator's decision or until resolution of the dispute, whichever is earlier.
  - (e) Notwithstanding sub-paragraph (b) Secretary - General may elect not to appoint a conciliator if in his judgement the dispute concerns Transit that is or has been the subject of the dispute resolution procedures set out in sub-paragraphs (a) to (d) and those proceedings have not resulted in a resolution of the dispute.
  - (f) The Charter Conference shall adopt standard provisions concerning the conduct of conciliation and the compensation of conciliators.
- (8) Nothing in this Article shall derogate from a Contracting Party's rights and obligations under international law including customary international law, existing bilateral or multilateral agreements, including rules concerning submarine cables and pipelines.
- (9) This Article shall not be so interpreted as to oblige any Contracting Party which does not have a certain type of Energy Transport Facilities used for Transit to take any measure under this Article with respect to that type of Energy Transport Facilities. Such a Contracting Party shall, however, be obliged to comply with paragraph (4).
- (10) For the purpose of this Article
- (a) "Transit" means
    - (i) the carriage through the Area of a Contracting Party, or to or from port facilities in its Area for loading or unloading, of Energy Materials and Products originating in the Area of another state and destined for the Area of a third state, so long as either the other state or the third state is a Contracting Party, or

- (ii) the carriage through the Area of a Contracting Party of Energy Materials and Products originating in the Area of another Contracting Party and destined for the Area of that other Contracting Party, unless the two Contracting Parties concerned decide otherwise and record their decision by a joint entry in Annex N. The two Contracting Parties may delete their listing in Annex N by delivering a joint written notification of their intentions to the Secretariat, which shall transmit that notification to all other Contracting Parties. The deletion shall take effect four weeks after such former notification.
- (b) "Energy Transport Facilities" consist of high-pressure gas transmission pipelines, high-voltage electricity transmission grids and lines, crude oil transmission pipelines, coal slurry pipelines, oil product pipelines, and other fixed facilities specifically for handling Energy Materials and Products.

PART III

INVESTMENT PROMOTION AND PROTECTION

ARTICLE 10

PROMOTION, PROTECTION AND TREATMENT OF INVESTMENTS

- (1) Each Contracting Party shall, in accordance with the provisions of this Treaty, encourage and create stable, equitable, favorable and transparent conditions for Investors of other Contracting Parties to Make Investments in its Area Such conditions shall include a commitment to accord at all times to Investments of Investors of other Contracting Parties fair and equitable treatment Such Investments shall also enjoy the most constant protection and security and no Contracting Party shall in any way impair by unreasonable or discriminatory measures their management, maintenance, use, enjoyment or disposal In no case shall such Investments be accorded treatment less favorable than that required by international law, including treaty obligations Each Contracting Party shall observe any obligations it has entered into with an Investor or an Investment of an Investor of any other Contracting Party
- (2) Each Contracting Party shall endeavor to accord to Investors of other Contracting Parties, as regards the Making of Investments in its Area, the Treatment described in paragraph (3)
- (3) For the purposes of this Article, "Treatment" means treatment accorded by a Contracting Party which is no less favorable than that which it accords to its own Investors or to Investors of any other Contracting Party or any third state, whichever is the most favorable
- (12) Each Contracting Party shall ensure that its domestic law provides effective means for the assertion of claims and the enforcement of rights with respect to Investment, investment agreements, and investment authorizations

ARTICLE 16

RELATION TO OTHER AGREEMENTS

Where two or more Contracting Parties have entered into a prior international agreement, or enter into a subsequent international agreement, whose terms in either case concern the subject matter of Part III [Promotion and Protection] or V [Dispute Settlement] of this Treaty,

- (1) nothing in Part III or V this Treaty shall be construed to derogate from any provision of such terms of the other agreement or from any right to dispute resolution with respect thereto under that agreement, and

- (2) nothing in such terms of the other agreement shall construed to derogate from any provision of Part III or V of this Treaty or from any right to dispute resolution with respect thereto under this Treaty

Where any such provision is more favorable to the Investor or Investment

#### PART IV

#### CONTEXTUAL

#### ARTICLE 18

#### SOVEREIGNTY OVER ENERGY RESOURCES

- (1) The Contracting Parties recognize state sovereignty and sovereign rights over energy resources They reaffirm that these must be exercised in accordance with and subject to the rules of international law
  
- (4) The Contracting Parties undertake to facilitate access to energy resources inter alia by allocating in a non-discriminatory manner on the basis of published criteria authorizations, licenses, concessions and contracts to prospect and explore for or to exploit or extract energy resources

#### ARTICLE 20

#### TRANSPARENCY

- (1) Laws, regulations, judicial decisions and administrative rulings of general application which affect trade in Energy Materials and Products are, in accordance with Article 29 (2) (a), among the measures subject to the transparency disciplines of the GATT and relevant Related Instruments

#### ARTICLE 22

#### STATE AND PRIVILEGED ENTERPRISES

- (1) Each Contracting Party shall ensure that any state enterprise which it maintains or establishes shall conduct its activities in relation to the sale or provision of goods and services in its Area in a manner consistent with Contracting Party's obligations under Part III or this Treaty

- (3) Each Contracting Party shall ensure that if it establishes or maintains a state entity and entrusts the entity with regulatory, administrative or other governmental authority, such entity shall exercise that authority in a manner consistent with the Contracting Party's obligations under this Treaty
- (4) No Contracting Party shall encourage or require any entity to which it grants exclusive or special privileges to conduct its activities in its Area in a manner inconsistent with the Contracting Party's obligations under this Treaty
- (5) For the purpose of this Article, "entity" includes any enterprise, agency or other organization or individual

### ARTICLE 23

#### OBSERVANCE BY SUB-NATIONAL AUTHORITIES

- (1) Each Contracting Party is fully responsible under this Treaty for the observance of all provisions of this Treaty, and shall take such reasonable measures as may be available to it to ensure such observance by regional and local governments and authorities within its Area
- (2) The dispute settlement provisions in Parts II, IV and V of this Treaty may be invoked in respect of measures affecting the observance of this Treaty by a Contracting Party which have been taken by regional or local governments or authorities within the Area of the Contracting Party

### ARTICLE 24

#### EXCEPTIONS

- (3) The provisions of this Treaty other than those referred to in paragraph (1) shall not be construed to prevent any Contracting Party from taking any measure which it considers necessary
  - (a) for the protection of its essential security interests including those
    - (i) relating to the supply of Energy Materials and Products to a military establishment, or
    - (ii) taken in time of war, armed conflict or other emergency in international relations,
  - (b) relating to non-proliferation of nuclear weapons or other nuclear explosive devices
  - (c) for the maintenance of public order

Such measure shall not constitute a disguised restriction on Transit

- (4) The provisions of this Treaty which accord most favored nation treatment shall not oblige any Contracting Party to extend to the Investors of any other Contracting Party any preferential treatment,
- (a) resulting from its membership in a free-trade area or customs union, or
  - (b) which is accorded by bilateral or multilateral agreements concerning economic co-operation between the states that were constituent parts of the former Union of Soviet Socialist Republics pending the establishment of their mutual economic relations on a definitive basis

PART V

DISPUTE SETTLEMENT

ARTICLE 26

SETTLEMENT OF DISPUTES BETWEEN AN INVESTOR AND A CONTRACTING PARTY

- (1) Disputes between a Contracting Party and an Investor of another Contracting Party relating to an Investment of the latter in the Area of the former, which concern an alleged breach of an obligation of the former under Part III shall, if possible, be settled amicably
- (2) If such disputes can not be settled according to the provisions of paragraph (1) within a period of three months from the date on which either party to the dispute requested amicable settlement, the Investor party to the dispute may choose to submit it for resolution
  - (a) to the courts or administrative tribunals of the Contracting Party party to the dispute,
  - (b) in accordance with any applicable, previously agreed dispute settlement procedure, or
  - (c) in accordance with the following paragraphs of this Article
- (3)
  - (a) Subject only to sub-paragraphs (b) and ( c), each Contracting Party hereby gives its unconditional consent to the submission of a dispute to international arbitration or conciliation in accordance with the provisions of this Article
  - (b)
    - (i) The Contracting Parties listed in Annex ID do not give such unconditional consent where the Investor has previously submitted the dispute under paragraph (2) (a) or (b)
    - (ii) For the sake of transparency, each Contracting Party that is listed in Annex ID shall provide a written statement of its policies, practices and conditions in this regard to the Secretariat no later than the date of the deposit of its instrument of ratification, acceptance or approval in accordance with Article 39 or the deposit of its instrument of accession in accordance with Article 41
  - (c) A Contracting Party listed in Annex IA does not give such unconditional consent with respect to a dispute arising under the last sentence of Article 10 (1)
- (4) In the event that an Investor chooses to submit the dispute for resolution under paragraph (2) ( c), the Investor shall further provide its consent in writing for the dispute to be submitted to

- (a) (i) The International Center for Settlement of Investment Disputes, established pursuant to the Convention on the Settlement of Investment Disputes between States and Nationals of other States opened for signature at Washington 18 March 1965 (hereinafter referred to as the "ICSID Convention") if the Contracting Party of the Investor and the Contracting Party party to the dispute are both parties to the ICSID Convention, or
- (ii) The International Center for Settlement of Investment Disputes, established pursuant to the Convention referred to in sub-paragraph (a) (i), under the rules governing the Additional Facility for the Administration of Proceedings by the Secretariat of the Center (hereinafter referred to as the "Additional Facility Rules"), if the Contracting Party of the Investor or the Contracting Party party to the dispute, but not both, is a party to the ICSID Convention,

OR

- (b) a sole arbitrator or ad hoc arbitration tribunal established under the Arbitration Rules of the United Nations Commission on International Trade Law (hereinafter referred to as "UNCITRAL"),
  - (c) an arbitral proceeding under the Arbitration Institute of the Stockholm Chamber of Commerce
- (5) (a) The consent given in paragraph (3) together with the written consent of the Investor given pursuant to paragraph (4) shall satisfy the requirement for
- (i) written consent of the parties to a dispute for purposes of Chapter II of the ICSID Convention and for purposes of the Additional Facility Rules,
  - (ii) an "agreement in writing" for purposes of article II of the United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards, done at New York, 10 June 1958 (hereinafter referred to as the "New York Convention"), and
  - (iii) "the parties to a contract [to] have agreed in writing" for the purposes of article 1 of the UNCITRAL Arbitration Rules
- (b) Any arbitration under this Article shall at the request of any party to the dispute be held in a state that is a party to the New York Convention. Claims submitted to arbitration hereunder shall be considered to arise out of a commercial relationship or transaction for the purposes of article 1 of that Convention
- (6) A tribunal established under paragraph (4) shall decide the issues in dispute in accordance with this Treaty and applicable rules and principles of international law

- (7) An Investor other than a natural person which has the nationality of a Contracting Party party to the dispute on the date of the written request referred to in paragraph (4) and which, before a dispute between it and that Contracting Party arises, is controlled by Investors of another Contracting Party, shall for the purpose of article 25 (2) (b) of the ICSID Convention be treated as a “national of another Contracting State” and shall for the purpose of article 1 (6) of the Additional Facility Rules be treated as a “national of another State”
- (8) The awards of arbitration, which may include an award of interest, shall be final and binding upon the parties to the dispute. An award of arbitration concerning a measure of a sub-national government or authority of the disputing Contracting Party shall provide that the Contracting Party may pay monetary damages in lieu of any other remedy granted. Each Contracting Party shall carry out without delay any such award and shall make provision for the effective enforcement in its Area of such awards.

## ARTICLE 27

### SETTLEMENT OF DISPUTES BETWEEN CONTRACTING PARTIES

- (1) Contracting Parties shall endeavor to settle disputes concerning the application or interpretation of this Treaty through diplomatic channels.
- (2) If a dispute has not been settled in accordance with paragraph (1) within a reasonable period of time, either party thereto may, except as otherwise provided in this Treaty or agreed in writing by the Contracting Parties, and as concerns the application or interpretation of Article 6 or Article 19 or, for Contracting Parties listed in Annex IA, the last sentence of Article 10 (1), upon written notice to the other party to the dispute submit the matter to an ad hoc tribunal under this Article.
- (3) Such an ad hoc arbitral tribunal shall be constituted as follows:
- (a) The Contracting Party instituting the proceedings shall appoint one member of the tribunal and inform the other Contracting Party to the dispute of its appointment within 30 days of receipt of the notice referred to in paragraph (2) by the other Contracting Party.
  - (b) Within 60 days of the receipt of the written notice referred to in paragraph (2), the other Contracting Party party to the dispute shall appoint one member. If the appointment is not made within the time limit prescribed, the Contracting Party having instituted the proceedings may, within 90 days of the receipt of the written notice referred to in paragraph (2) request that the appointment be made in accordance with paragraph (3) (d).
  - (c) A third member, who may not be a national or citizen of a Contracting Party party to the dispute, shall be appointed by the Contracting Parties parties to the dispute. That member shall be the President of the tribunal. If, within 150 days of the receipt of the notice referred to in paragraph (2), the Contracting Parties are unable to agree on the appointment of a third member, that appointment shall be made, in accordance with paragraph (3)

- (d), at the request of either Contracting Party submitted within 180 days of the receipt of that notice
- (d) Appointments requested to be made in accordance with this paragraph shall be made by the Secretary - General of the Permanent Court of International Arbitration within 30 days of the receipt of a request to do so. If the Secretary - General is prevented from discharging this task, the appointments shall be made by the First Secretary of the Bureau. If the latter, in turn, is prevented from discharging this task, the appointments shall be made by the most senior Deputy.
  - (e) Appointments made in accordance with paragraph (3) (a) to (d) shall be made with regard to the qualifications and experience, particularly in matters covered by this Treaty, of the members to be appointed.
  - (f) In the absence of an agreement to the contrary between the Contracting Parties, the Arbitration Rules of UNCITRAL shall govern, except to the extent modified by the Contracting Parties parties to the dispute or by the arbitrators. The tribunal shall take its decisions by a majority vote of its members.
  - (g) The tribunal shall decide the dispute in accordance with this Treaty and applicable rules and principles of international law.
  - (h) The arbitral award shall be final and binding upon the Contracting Parties parties to the dispute.
  - (i) Where, in making an award, a tribunal finds that a measure of a regional or local government or authority within the Area of a Contracting Party listed in Part I of Annex P is not in conformity with this Treaty, either party to the dispute may invoke the provisions of Part II of Annex P.
  - (j) The expenses of the tribunal, including the remuneration of its members, shall be borne in equal shares by the Contracting Parties parties to the dispute. The tribunal may, however, at its discretion direct that a higher proportion of the costs be paid by one of the Contracting Parties parties to the dispute.
  - (k) Unless the Contracting Parties parties to the dispute agree otherwise, the tribunal shall sit in The Hague, and use the premises and - facilities of the Permanent Court of Arbitration.
  - (l) A copy of the award shall be deposited with the Secretariat which shall make it generally available.

PART VI  
TRANSITIONAL  
ARTICLE 29

INTERIM PROVISIONS ON TRADE RELATED MATTERS

- (1) The provisions of this Article shall apply to trade in Energy Materials and Products while any Contracting Party is not a party to the GATT and Related Instruments
- (2)
  - (a) Trade in Energy Materials and Products between Contracting Parties at least one of which is not a party to the GATT or a relevant Related Instrument shall be governed, subject to sub-paragraphs (b) and (c) and to the exceptions and rules provided for in Annex G, by the provisions of the GATT and Related Instruments, as applied on 1 March 1994, and practised with regard to Energy Materials and Products by parties to the GATT among themselves, as if all Contracting Parties were parties to the GATT and applied the Related Instruments
  - (b) Such trade of a Contracting Party which is a state that was a constituent part of the former Union of Soviet Socialist Republics may instead be governed, subject to the provisions of Annex TFU, by an agreement between two or more such states, until 1 December 1999 or the admission of that Contracting Party to the GATT, whichever is the earlier
  - (c) As concerns trade between any two parties to the GATT, sub-paragraph (a) shall not apply if either of those parties is not a party to GATT 1947
- (3) Each signatory to this Treaty, and each state or Regional Economic Integration Organization acceding to this Treaty shall, on the date of its signature or of its deposit of its instrument of accession, provide to the Secretariat a list of all tariff rates and other charges levied on Energy Materials and Products at the time of importation or exportation, notifying the level of such rates and charges applied on such date of signature or deposit. Any changes to such rates or other charges shall be notified to the Secretariat which shall inform the Contracting Parties of such changes
- (4) Each Contracting Party shall endeavor not to increase any tariff rate or other charge levied at the time of importation or exportation
  - (a) in the case of the importation of Energy Materials and Products described in Part I of the Schedule relating to the Contracting Party referred to in article II of the GATT, above the level set forth in that Schedule, if the Contracting Party is a party to the GATT,
  - (b) in the case of the exportation of Energy Materials and Products and that of their importation if the Contracting Party is not a party to the GATT, above the level most recently notified to the Secretariat, except as permitted by the provisions made application by paragraph (2) (a)

- (5) A Contracting Party may increase such tariff rate or other charge above the level referred to in paragraph (4) only if
- (a) in the case of a rate or other charge levied at the time of importation, a provision of the GATT or of a Related Instrument, other than those listed in Annex G, permits such action, or
  - (b) it has, to the fullest extent practicable under its legislative procedures, notified the Secretariat of its proposal for such an increase, given other interested Contracting Parties reasonable opportunity for consultation with respect to its proposal, and accorded consideration to any representations from such Contracting Parties
- (6) Signatories undertake to commence negotiations not later than 1 January 1995 with a view to concluding by 1 January 1998, as appropriate in the light of any developments in the world trading system, a text of an amendment to this Treaty which shall, subject to conditions to be laid down therein, commit each Contracting Party not to increase such tariffs or charges beyond the level prescribed under that amendment
- (7) Annex D to this Treaty shall apply to disputes regarding compliance with provisions applicable to trade under this Article and, unless both Contracting Parties agree otherwise, to disputes regarding compliance with Article 5 between Contracting Parties at least one of which is not a party to the GATT, except that Annex D shall not apply to any dispute between Contracting Parties, the substance of which arises under an agreement that
- (a) has been notified in accordance with and meets the other requirements of paragraph (2) (b) and Annex TFU, or
  - (b) establishes a free-trade area or a customs union as described in article XXIV of the GATT

## ARTICLE 31

### ENERGY RELATED EQUIPMENT

The provisional Charter Conference shall at its first meeting commence examination of the inclusion of energy related equipment in the trade provisions of this Treaty

## ARTICLE 32

### TRANSITIONAL ARRANGEMENTS

- (1) In recognition of the need for time to adapt to the requirements of a market economy, a Contracting Party listed in Annex T may temporarily suspend full compliance with its obligations under one or more of the following provisions of this Treaty, subject to the conditions in paragraphs (3) to (6)

Article 6, paragraphs (2) and (5)  
 Article 7, paragraph (4)  
 Article 9, paragraph (1)  
 Article 10, paragraph (7) - specific measures  
 Article 14, paragraph (1) (d) - related only to transfer of unspent earnings  
 Article 20, paragraph (3)  
 Article 22, paragraphs (1) and (3)

- (2) Other Contracting Parties shall assist any Contracting Party which has suspended full compliance under paragraph (1) to achieve the conditions under which such suspension can be terminated. This assistance may be given in whatever form the other Contracting Parties consider most effective to respond to the needs notified under paragraph (4) (c) including, where appropriate, through bilateral or multilateral arrangements.
- (3) The applicable provisions, the stages towards full implementation of each, the measures to be taken and the date or, exceptionally, contingent event, by which each stage shall be completed and measure taken are listed in Annex T to this Treaty for each Contracting Party claiming transitional arrangements. Each such Contracting Party shall take the measure listed by the date indicated for the relevant provision and stage as set out in Annex T. Contracting Parties which have temporarily suspended full compliance under paragraph (1) undertake to comply fully with the relevant obligations by 1 July 2001. Should a Contracting Party find it necessary, due to exceptional circumstances, to request that the period of such temporary suspension not previously listed in Annex T be introduced, the decision on a request to amend Annex T shall be made by the Charter Conference.
- (4) A Contracting Party which has invoked transitional arrangements shall notify the Secretariat no less often than once every 12 months
- (a) of the implementation of any measures listed in its Annex T and of its general progress to full compliance,
  - (b) of the progress it expects to make during the next 12 months towards full compliance with its obligations, of any problem it foresees and of its proposals for dealing with that problem,
  - (c) of the need for technical assistance to facilitate completion of the stages set out in Annex T as necessary for the full implementation of this Treaty, or to deal with any problem notified pursuant to sub-paragraph (b) as well as to promote other necessary market oriented reforms and modernization of its energy sector,
  - (d) of any possible need to make a request of the kind referred to in paragraph (3)
- (5) The Secretariat shall
- (a) circulate to all Contracting Parties the notifications referred to in paragraph (4),

- (b) circulate and actively promote, relying where appropriate on arrangements existing within other international organizations, the matching of needs for and offers of technical assistance referred to in paragraphs (2) and (4) (c)
- (c) circulate to all Contracting Parties at the end of each six month period a summary of any notifications made under paragraph (4) (a) or (d)
- (6) The Charter Conference shall annually review the progress by Contracting Parties towards implementation of the provisions of this Article and the matching of needs and offers of technical assistance referred to in paragraphs (2) and (4) (c) In the course of that review it may decide to take appropriate action

#### ARTICLE 34

#### CHARTER CONFERENCE

- (3) The functions of the Charter Conference shall be to
  - (g) encourage co-operative efforts aimed at facilitating and promoting market oriented reforms and modernization of energy sectors in those countries of Central and Eastern Europe and the former Union of Soviet Socialist Republics undergoing economic transition,

#### ARTICLE 36

#### VOTING

- (8) In the event of persistent arrears in a Contracting Party's discharge of financial obligations under this Treaty, the Charter Conference may suspend that Contracting Party's voting rights in whole or in part

ARTICLE 43

ASSOCIATION AGREEMENTS

- (1) The Charter Conference may authorize the negotiation of association agreements with states or Regional Economic Integration Organizations, or with international organizations, in order to pursue the objectives and principles of the Charter and the provisions of this Treaty or one or more Protocols
- (2) The relationship established with and the rights enjoyed and obligations incurred by an associating state, Regional Economic Integration Organization, or international organization shall be appropriate to the particular circumstances of the association, and in each case shall be set out in the association agreement



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**Hagler Bailly**

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**Update**  
**Russian Wholesale Power Market**

**Presented to:**  
**CAR - Electricity Working Group**

**June 12, 1998**

*Presented by:*  
**Michael Bekker**



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# Russian Wholesale Power Market

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## Current status

- The FEC and RAO EES sent out an order in February 1998 to expand the National Energy Market (NER), to include all wholesale power market members and service providers (this was based upon Hagler Bailly's recommendation)
- The NER now includes most AO Energos, RAO UES generators, Rosenergoatom nuclear power plants, and over 20 large industrial customers
- A Supervisory Council representing buyers, sellers and service providers created to manage the market operations
- An independent financial operator (IFO) has been operating since last August. It buys and sells power based on cash only-basis and upfront payment
- The Supervisory Council is to set up four committees to assist them in developing the wholesale market



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# Russian Wholesale Power Market

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## Current status (cont.)

- RAO EES has selected a new CEO, Anatoly Chubaïs. Mr Chubaïs has stated a strong desire to implement transparent pricing and settlement systems for the wholesale power market.
- The Central Dispatch Administration (CDA) and the FEC have decided to use unit commitment and economic dispatch for tariff development and for actual generator and transmission dispatch. Hagler Bailly recommended several changes over the last year to procedures, computer software, and pricing principles. Most of those changes are being implemented.



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# Russian Wholesale Power Market

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## Major Existing Hurdles

- No Electricity Law and probably small chance of passing one in either the DUMA or Federated Council
- Barter-bias and regional control issues
- Lack of knowledgeable consultants supporting reforms
- Questionable quality of accounting/record keeping
- Lack of metering and associated communication hardware and software



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# Russian Wholesale Power Market

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## Major Existing Hurdles (cont.)

- Non-transparency in any current pricing scheme including the new IFO
- Surplus capacity creating a high price for system capacity and no plans to retire or place into cold storage any unneeded surplus capacity



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# Russian Wholesale Power Market

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## Next Steps

- Organizational change at RAO EES - by function - development of a vision for RAO EES and its functions, strategic plan development
- Separated pricing for RAO EES function - transmission, generation, dispatch operations, other services
- Introduction of capital recovery concept and elimination of investment funds
- Cash discount auction for IFO - weekly spot market
- Completion of economic unit commitment and economic dispatch implementation for the development of energy and capacity balances



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# Russian Wholesale Power Market

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## Next Steps (cont.)

- Assessment of metering, development of the minimum requirements, and financing and installation of required metering and associated equipment
- Extraction of the Contracts and Settlement Group (RDTs) from RAO EES and merger into NER activities
- Creation and development of the NER committees - development of market rules, settlement rules, operating procedures, etc by representatives of the NER
- Licensing of each NER member

## The Electricity Pool

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### Joining the Pool

## JOINING THE POOL

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## Notice

The information contained in this booklet has been prepared at the request of the Executive Committee for the Pooling and Settlement System in England and Wales (the "Pool Executive Committee"). No independent verification of any such information has been made. No representation or warranty, express or implied, is or will be made in or in relation to, and no responsibility or liability is or will be accepted by the Pool Executive Committee or any member thereof as to or in relation to the accuracy or completeness of this booklet and any liability therefore is expressly disclaimed.

The information contained in this booklet acts only as a guide and should not be relied upon in forming any decision about whether to participate in the pooling and settlement arrangements described.

For full details refer to the Pooling and Settlement Agreement copies of which can be obtained from the Chief Executive's Office, Electricity Pool of England and Wales.

## The Electricity Pool

The Electricity Pool of England and Wales was established on 31 March 1990 as a result of electricity privatization and is a mechanism to allow trading between generators and suppliers; it does not itself buy or sell electricity.

The payments for electricity generation are calculated according to defined trading rules by a computerized system known as the Settlement System. These rules are defined under the terms of the Pooling and Settlement Agreement - the contract between all companies participating in the Pool.

The Pool is managed by the Executive Committee on behalf of Pool Members. The Executive Committee is responsible for progressing Pool issues and overseeing Pool operations and developments. In taking decisions, the Executive Committee must develop the Pool in ways which take account of and balance the interests of the Pool as a whole.

## 1 INTRODUCTION

'Joining the Pool' has been developed to assist Companies and their professional advisers in understanding the process of becoming a Pool Member or a Party to the Pooling and Settlement Agreement. It may also assist other interested parties in their understanding of the requirements.

## 2 BACKGROUND

### **The Electricity Pool of England and Wales**

On 31 March, 1990 a new market, the Electricity Pool of England and Wales, was established for the trading of electricity between those who produce electricity - the Generators - and those who take that production and supply it to domestic and individual users, or use it themselves - the Suppliers.

The expression "the Pool" is not formally defined in any of the legal agreements, but is commonly used as a term to describe the electricity trading arrangements as specified in the Pooling and Settlement Agreement.

The Pool does not itself buy or sell electricity but is a contractual framework through which all sales and purchases of electricity are made between all participating Generators and Suppliers. The operation of this new market is governed by the Pooling and Settlement Agreement including a set of rules - the "Pool Rules" - by which the calculation of payments due to Generators and from Suppliers is made.

A pre-requisite of joining the Pool is to sign on to the Pooling and Settlement Agreement.

### **The Pooling and Settlement Agreement**

The Pool Rules and the constitution of the Pool are set out in the Pooling and Settlement Agreement. The Agreement was signed on 30 March 1990 and has been modified and will continue to be modified to reflect the changes necessary for the effective operation of the Pool. The Agreement defines the rules for determining the prices and payments due and the rules are incorporated in a computerized system known as the Settlement System.

Aside from the creation of the Pool Rules the Pooling and Settlement Agreement has the following objectives:

- the establishment, maintenance and efficient operation of computer and other systems to implement these rules, and
- the operation, review and development of systems taking into account, and balancing, the interests of actual and potential Generators and Suppliers of electricity, consumers of electricity and those providing ancillary services.

## **Managing the Pool**

Overall supervision of the Settlement System and its operation is the responsibility of the Executive Committee (PEC) composed of individuals elected by Pool Members. The committee consists of five Generator and five Supplier representatives. The Pool Chairman chairs meetings of the Executive Committee.

A representative of OFFER - The Office of Electricity Regulation - which oversees the operation of the electricity market is entitled to attend and speak at Executive Committee meetings and to make proposals but not to vote.

The same right is available to the other functional parties of the National Grid Company as follows:

### **The Settlement System Administrator**

Day to day operation of the Pool calculations is carried out by the Settlement System Administrator. He is responsible for gathering data from both Generators and Suppliers and carrying out the daily settlement runs which calculate prices and payments due.

### **The Energy Pool Funds Administrator**

Financial Settlement is arranged by the Pool Funds Administrator who operates the Pool Bank Account on behalf of all Pool Members.

### **The Grid Operator**

Management of the transmission system and despatching of generation to meet demand is carried out by the Grid Operator.

### **The Ancillary Services Provider**

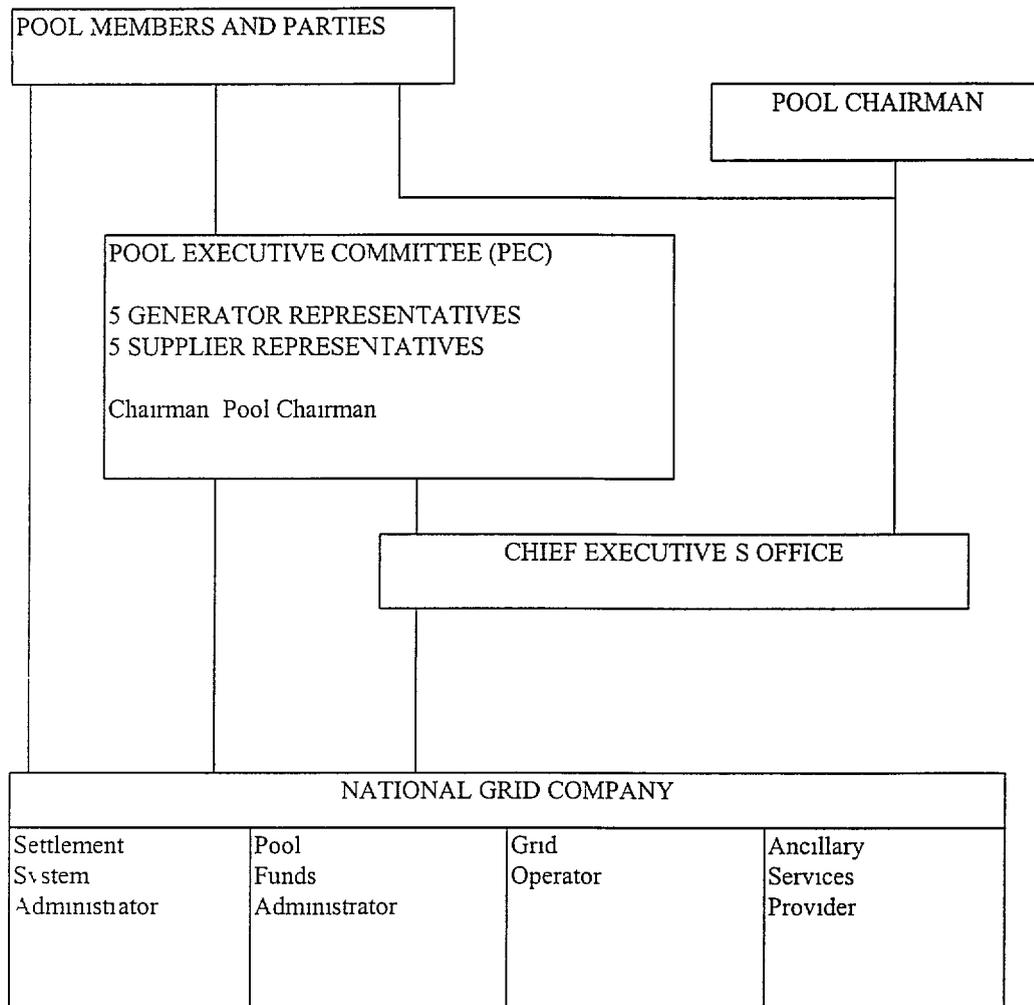
Contracting for additional services that are required by the Grid Operator for the operation of the system is dealt with by the Ancillary Services Provider.

### **The Chief Executive's Office**

The creation of the position of the Chief Executive stemmed from a recognition by Pool Members and the Executive Committee of the need for a full time resource to assist the Executive Committee in fulfilling its role under the Pooling and Settlement Agreement to monitor and manage development of the Pool.

On behalf of Pool Members, the Chief Executive's Office assists the Executive Committee in the management of the Pool by routine monitoring of key functions, and overall administration of the Pool including dealing with queries and problems of Pool Members. The office also assists with taking work forward on the development of future trading arrangements including software development.

## The Electricity Pool Organization



### 3 PARTICIPATION IN THE POOL

Participation in the Pool can be in three ways

#### **Party**

Acceding to the Pooling and Settlement Agreement but with no entitlement to trade electricity through the Pool

#### **Meter Operator Party**

Acceding to part of the Pooling and Settlement Agreement in role of Meter Operator

#### **Pool Member**

A person entitled to trade electricity through the Pool either as a Generator or Supplier Before or at the time of joining the Pool a Pool Member must accede to the Pooling and Settlement Agreement, by becoming a Party

The different capacities are not mutually exclusive and it is possible (and may be necessary) for a Pool Member to be admitted in different capacities or to change its capacity

- Externally Interconnected Parties eg Scottish Power plc and Electricite de France are also parties to the Agreement as operators of the physical links to the England and Wales System to allow for trading electricity in the Pool by "External Pool Members who are generators or suppliers outside England and Wales

## 4 BECOMING A PARTY

### 4.1 Who Can Become a Party ?

It is a pre-requisite of Pool Membership that a prospective Pool Member be or becomes a Party to the Pooling and Settlement Agreement before it is admitted as a Pool Member. The concept of Parties to the Agreement was established as a means of assisting people on the first step to becoming a trading Pool Member.

### 4.2 Party Admission Conditions

The following admission conditions must be met to become a Party

- i) Complete and submit a form of Admission Application,
- ii) Fulfil Licence condition requirements \*,
  - a) have been granted and have in force a Generation or Supply Licence,
  - b) have an application for such a License,
  - c) be exempt from the need for a Licence,
  - c) be classified as an External Pool Member,
  - d) Externally interconnected Party and have entered into an Interconnector Agreement with the National Grid Company or an agreement under which the External Pool Member can use an External Interconnector
- iii) Have in place appropriate VAT arrangements
- iv) Pay an application fee of ££250

Once approval is given by the Chief Executive, an Accession Agreement to the Pooling and Settlement Agreement is prepared.

On the completion of the Accession Agreements, the Applicant becomes a Party to the Pooling and Settlement Agreement and is bound in a contractual relationship with the other Parties.

Any additional information required by the Executive Committee to satisfy itself that the admission conditions have been met, must be submitted, to the Executive Committee, within 28 days (or a reference made to the Director General), from the date that Applicant is notified, otherwise the application will lapse.

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Under the Electricity Act 1989 anyone wishing to generate, transmit or supply electricity in England and Wales requires a licence or an exemption. Such licences or exemptions are issued by the Director General of Electricity Supply. A licensed Generator or Supplier may find itself bound by both its licence or terms of its connection agreement to become a Pool Member or Party.

#### **4.3 Benefits of Becoming a Party**

Some of the Pool Membership conditions are satisfied. If a Party subsequently wishes to become a Pool Member they will only need to satisfy those Pool Membership Conditions that they have not met at the date of admission as a Party.

Parties have the right to attend each general meeting of Pool Members, and have the right to speak but not vote at the meeting.

#### **4.4 Admission In a Different Capacity**

Once a Party to the Pooling and Settlement Agreement, an Applicant may decide to change capacities or have Party status in another capacity. As the Applicant would already be a Party and thus complying with the general admission conditions, it would need to provide evidence of its compliance with the admission conditions solely relevant to the new category that it wishes to join as

#### **4.5 Meter Operator Parties**

Meter Operator Parties only accede to that part of the Pooling and Settlement Agreement which affects Meter Operator Parties. They must also complete an Admission Application form and submit this together with a fee of £250. However, they do not require a license.

#### **4.6 National Grid Company**

The following subdivisions of National Grid Company are also parties to the Pooling and Settlement Agreement in a functional capacity:

Energy Settlements and Information Services Ltd - In their capacity as the Settlement System Administrator

Energy Pool Funds Administrator Limited - In their capacity as the Pool Funds Administrator

The National Grid Company plc - In its capacity as both Grid Operator and Ancillary Services Provider

#### **4.7 Disputes**

If a dispute arises over whether an Applicant has fulfilled the relevant admission conditions, or if a determination on the application has not been made within the 60-day period, the Applicant or the Executive Committee may refer the matter to the Director General for a ruling.

The Director General's decision is final and binding for all purposes.

## **5 BECOMING A POOL MEMBER**

### **5.1 Who can become a Pool Member?**

Pool Membership is divided into two categories

#### **i Compulsory Membership**

These fall into two groups - those required by

##### *a Licence*

Section 4 of the Electricity Act 1989 makes it an offence for anyone to generate, transmit or supply electricity unless authorised to do so by licence or exemption. The large majority of Generators and Suppliers will need to be licensed. Responsibility for the issuing of licences has been given to the Director General.

One of the conditions in the licences granted is that there is an obligation placed on the licensee to be a member of the Pool.

##### *b Connection Agreements*

Even if a Generator or Supplier is exempt from holding a licence, it may still be required to become a Pool Member under the terms of its Connection Agreement to connect into the National Grid or a Distribution System.

#### **ii Voluntary Membership**

A Generator or Supplier may be exempt from the need to hold a license and not be subject to a contract which requires it to become a Pool Member. However, it may wish to join the Pool voluntarily to take advantage of the Pooling system. This it can do provided it fulfils all the relevant admission conditions.

### **5.2 Pool Membership Admission Conditions**

The following admission conditions must be met to become a Pool Member

- i) Be a Party to the Pooling and Settlement Agreement. If the Applicant is not already a Party the two applications must be made contemporaneously.
- ii) Have completed and submitted a form of Pool Membership Application.
- iii) Fulfil Licence condition requirements \*.

- a) have been granted and have in force a Generation or Supply Licence,
- b) have an application for such a Licence,
- c) be exempt from the need for a Licence,
- c) be classified as an External Pool Member,
- d) Externally Interconnected Party and have entered into an Interconnector Agreement with the National Grid Company or an agreement under which the External Pool Member can use an External Interconnector
- iv) Acceded to the Funds Transfer Agreement and opened a designated Settlement Account
- v) Have in place the appropriate VAT arrangements
- vi) Have registered the relevant Metering Systems and ensured that there is a Registrant and Operator for each such system
- vii) Have in place the appropriate Connection Agreements
- viii) Suppliers need to have in place appropriate Security Cover and/or approved Credit Rating
- ix) Generators need to be able to operate or control one or more Generating Units which can provide or has provided electricity to the Total System
- x) In the case of an External Pool Member, have the right to use one or more Generation Trading Blocks and 1 share of the interconnector
- xi) Provide information to enable the Executive Committee to determine the classification of the Applicant and to calculate its initial Weighted Votes and Points for the calculation of Contributory Shares

### 5.3 Benefits of Pool Membership

Only Pool Members are entitled to use the electricity trading arrangements that are established under the Pooling and Settlement Agreement

Participation in the decision-making process of the Pool

#### \* Voting Rights

Each Pool Member is entitled to attend and vote at General Meetings of Pool Members or of the particular class of Pool Members to which it belongs (ie generator or supplier)  
There are three types of votes

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\* There are provisions within the Pooling and Settlement Agreement that limits the share of votes of any one member and its affiliates within a class to 44% of the Weighted Votes of that class. This prevents one Pool Member having undue influence over the Pool affairs

- (i) Membership - each member is entitled to one vote on any "show of hands" vote
- (ii) Weighted - the number of weighted votes each Pool Member is entitled is directly related to the amount of electricity that it sells or purchases through the Pool. Weighted votes are used mainly in poll votes at meetings of each particular membership class
- (iii) Total Votes - these are used when a Pool vote is required. They are recalculated from Weighted Votes, but in such a way that both classes, Generators and Suppliers, have an equal number of votes, so that neither class by itself is dominant over the other

### Application Process

Once all the necessary documentation has been completed it should be submitted to the Chief Executive's Office. Routine applications are submitted to the Chief Executive for agreement and non routine applications are submitted to the Executive Committee. Within 60 days of the receipt of an application the Executive Committee must notify the Applicant either that they can be admitted as a Party or whether additional information is required in order to satisfy the admission requirements.

### 5.4 Costs of Pool Membership

All costs mentioned are detailed in the Pooling and Settlement Agreement. If there is any discrepancy between the Pooling and Settlement Agreement and the costs set out below, then the Pooling and Settlement Agreement will take precedence.

There may be other costs associated with Pool Membership which are not directly linked to the Pool such as licence fees and use of system charges.

A Pool Member is liable to contribute to the costs of running the Settlement System. Currently the majority of these are allocated as follows (on annual basis):

#### a) Settlement Administrator's Charges

Pool Members pay an annual membership fee:

- **Small Suppliers** (less than 200MW maximum demand) or **Small Generators** (less than 50MW registered capacity) pay £££££9000, or ££2,500 if they require only their own trading information (Settlements provide a guide on the information available to Pool Members)
- **Intermediate Suppliers** (200MW- 2000MW maximum demand) or **Intermediate Generators** (50MW - 1000MW registered capacity) pay £20,000
- **Large Suppliers** (2000MW or more maximum demand) or **Large Generators** (1000MW or more registered capacity) pay ££45,000

Pool Members that are both Suppliers and Generators pay only one memberships fee

Pool Members who wish to receive only their own trading information by electronic mail pay an additional fee £800 per year

Pool Members wishing to receive data by courier pay an additional memberships fee of £1000

**b) Generator Unit Registration**

Generators pay £500 for each of their Generating Units for which standing data is submitted, a CCGT module pays £1,500 during its first year and thereafter £500

**c) Registration of Metering**

Each Pool Member pays £750 for each Metering System for which it is the Registrant,

**d) Second Tier Data Collection Charge**

Pool Members that are registrants of a Metering System at a Second Tier Site pays an amount in respect of the Second Tier System charge for each Metering System that is registered. A charge is determined annually

**e) Energy Related Charge**

The balance of any Settlement System costs, after the payment of the above sums, is allocated between Pool Members according to their respective Contributory Shares, i.e., in relation to their trading shares - the more energy you trade through the Pool, the greater the charge will be

**f) Pool Funds Administrator's Charge**

This is another energy related charge determined by Contributory Shares

Other discrete costs directly referable to a Pool Member are payable by the Member, such as Specific Information requirements

**5.5 Obligations of Pool Membership**

Obligations are placed on every Pool Member to safeguard the position of the other Pool Members and to maintain the security of the Pooling System

**Sale to Pool Members**

Currently each Generator Pool Member is required to sell its entire output of electricity through the Pool subject to

- (a) minor exceptions relating to small generating units specified by notice, and
- (b) circumstances which are deemed to be exceptional by an 80% majority on a vote of all Executive Committee Members and in consultation with the Director General
- (c) With regard to 'on site' generation the Secretary of State has made a decision that the sale should be of net output Individual companies should seek clarification of the effect of this ruling in their own case at the time of joining

#### **Buying through the Pool**

All Supplier Pool Members wishing to purchase electricity produced by other Pool Members for the Pool must do so in accordance with the terms of the Pooling and Settlement Agreement and, in particular the Pool Rules The exceptions are

- (a) where the Supplier is acting as a consumer, i.e., where it purchases the electricity for consumption on its own premises, it may purchase that electricity from another Supplier where the other Supplier has purchased the electricity through the Pool or from a source where the electricity is not required to be sold through the Pool Members
- (b) where the Supplier holds a Public Electricity Supply Licence and is acting other than as a consumer it may purchase electricity outside the terms of the Pooling and Settlement Agreement from another Supplier who holds a **Public Electricity Supply Licence** and who has already purchased their electricity through the Pool,
- (c) in circumstances which are deemed to be exceptional by an 80% majority vote of all Executive Committee Members in consultation with the Director General

#### **Confidentiality**

Pool Members are required to treat certain information supplied to them under the terms of the Pooling and Settlement Agreement in strictest confidence and not release it to anyone outside the Pool, or to anyone who is not a Party to the Pooling and Settlement Agreement

Continued Compliance with Pool Membership Conditions - it is a condition of Membership that all Members continue to comply with the conditions of Pool Membership Failure to do so will result in a breach of the terms of the Pooling and Settlement Agreement

**THE ENERGY CHARTER  
SECRETARIAT**

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CS (98) 308

CC 103

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RESTRICTED

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Brussels, 5 December 1997

**NOTE FROM THE SECRETARIAT**

**Subject      Draft Transit Conciliation Rules**

In accordance with the requirements of Article 7 of the Energy Charter Treaty, the Secretariat has drafted a set of Rules Concerning the Conduct of Conciliation of Transit Disputes, which deal with the conduct of proceedings and the compensation of conciliators

The draft rules have been reviewed by arbitration experts and the energy industry Delegations are now invited to have a first discussion on these provisions during the 17-18 December Conference, with a view to the Charter Conference being in a position to adopt the Conciliation Rules in the first quarter of 1998

Annex to CC103

**DRAFT**

**RULES CONCERNING THE CONDUCT OF CONCILIATION OF TRANSIT  
DISPUTES <sup>1</sup>**

**CONTENTS**

Rule 1 Interpretation  
 Rule 2 Notification of a dispute  
 Rule 3 Appointment of conciliator  
 Rule 4 Resignation, death or incapacity  
 Rule 5 Disqualification  
 Rule 6 The Conciliation Proceedings  
 Rule 7 Representation and assistance  
 Rule 8 Witnesses and experts  
 Rule 9 Administrative assistance  
 Rule 10 Co-operation of parties with the conciliator  
 Rule 11 Proposals for settlement of the dispute  
 Rule 12 Agreement by the parties  
 Rule 13 Recommendation/Decision of the conciliator  
 Rule 14 Termination of conciliation proceedings  
 Rule 15 Languages  
 Rule 16 Costs  
 Rule 17 Confidentiality  
 Rule 18 Role of conciliator in other proceedings  
 Rule 19 Admissibility of evidence in other proceedings

Annex A Declaration  
 Annex B Illustrative list of information to be disclosed

<sup>1</sup> *Adopted by the Energy Charter Conference under Article 7(7) by a decision dated*

## CONCILIATION RULES

These Rules apply to conciliation of disputes under Article 7 of the Energy Charter Treaty. The terms of Article 7, where relevant, are also reproduced to indicate the context within which these Rules operate<sup>2</sup>

### INTERPRETATION

#### Rule 1

The terms used in these Rules shall have the same meaning as in the Energy Charter Treaty

### NOTIFICATION OF A DISPUTE

#### Article 7(7)

**"The following provisions shall apply to a dispute described in paragraph (6), but only following the exhaustion of all relevant contractual or other dispute resolution remedies previously agreed between the Contracting Parties party to the dispute or between any entity referred to in paragraph (6) and an entity of another Contracting Party party to the dispute"**

- (a) **A Contracting Party party to the dispute may refer it to the Secretary-General by a notification summarizing the matters in dispute. The Secretary-General shall notify all Contracting Parties of any such referral "**

#### Rule 2

- (1) The referral of a dispute to the Secretary-General by a Contracting Party shall be in writing and shall identify the parties to the dispute ("Parties"), summarise the relevant facts and the basis of the Contracting Party's claim, as well as confirm the exhaustion of all relevant contractual or other dispute resolution remedies previously agreed between the Contracting Parties party to the dispute or between any entities subject to the control or jurisdiction of the Contracting Parties party to the dispute
- (2) As soon as practicable after the receipt of the notification of a referral, the Secretary-General shall notify all Contracting Parties to the Energy Charter Treaty of the existence of the referral and invite them to indicate whether they consider that they are one of the other Contracting Parties concerned for the purposes of the appointment of the conciliator under Article 7(7)(b). The form of the notification to the Contracting Parties is a matter for the Secretary-General, but the Secretary-

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<sup>2</sup> The relevant parts of Article 7 of the Energy Charter Treaty are reproduced in bold

General shall ensure that sufficient information is provided to enable the Contracting Parties to make the necessary assessment of their interest

- (3) The Secretary-General shall transmit a copy of the written notification of referral of the dispute to any Contracting Party identified therein as a Party. The Secretary-General may invite any Party which is identified in the referral to submit a statement by way of response for inclusion in the material which will be provided to the conciliator on his or her appointment. Such a Party is not bound to comply with this request.

## APPOINTMENT OF CONCILIATOR

### Article 7(7)(b)

‘ Within 30 days of receipt of such a notification, the Secretary-General, in consultation with the parties to the dispute and the other Contracting Parties concerned, shall appoint a conciliator. Such a conciliator shall have experience in the matters subject to dispute and shall not be a national or citizen of or permanently resident in a party to the dispute or one of the other Contracting Parties concerned ’

### Article 7(7)(e)

Notwithstanding subparagraph (b) the Secretary-General may elect not to appoint a conciliator if in his judgement the dispute concerns Transit that is or has been the subject of the dispute resolution procedures set out in subparagraphs (a) to (d) and those proceedings have not resulted in a resolution of the dispute

### Rule 3

- (1) The Secretary-General is to use his best judgement as to the form of the consultation about the appointment of the conciliator. In making the appointment, the Secretary-General shall have particular regard to the importance of appointing a conciliator who has or is likely to have the confidence of the Parties, will be independent and impartial, will avoid actual or apparent conflicts of interest, will respect the confidentiality requirements of these Rules, and will conduct the proceedings in a manner which ensures the integrity and reputation of the conciliation procedure.
- (2) The decision of the Secretary-General to appoint a particular person is to be final, subject to Rule 5(1).
- (3) At the time of appointment, the conciliator shall sign the declaration at Annex A of these Rules and shall disclose any information that could reasonably be expected to be known to him or her at the time which is likely to affect or give rise to justifiable doubts as to his or her independence or impartiality. The

disclosure shall include the type of information described in the Illustrative List at Annex B

- (4) The terms of appointment of the conciliator shall include a statement by the Secretary-General of his opinion as to the Parties and other Contracting Parties concerned for the purposes of the conciliator's declaration and inform the conciliator of any information relevant to the conciliation

## RESIGNATION, DEATH OR INCAPACITY

### Rule 4

- (1) A conciliator may resign by submitting his or her resignation to the Secretary-General
- (2) If a conciliator resigns, dies or, in the opinion of the Secretary-General becomes incapacitated or unable to perform his or her duties, the Secretary-General shall immediately notify the Parties and the other Contracting Parties concerned of that fact ~~He shall immediately notify the Parties and the other Contracting Parties concerned of that fact~~
- (3) The Secretary-General, in consultation with the Parties and the other Contracting Parties concerned, shall appoint a new conciliator. <sup>He shall</sup> The Secretary-General shall provide the new conciliator with the evidence, including statements and materials, collected during the course of the conciliation proceedings

## DISQUALIFICATION

### Rule 5

- (1) Any Party or other Contracting Party concerned which has or comes into possession of evidence of conduct by the conciliator which is inconsistent with the independent and impartial conduct of the conciliation, including the avoidance of the appearance of a conflict of interest, shall immediately inform the Secretary-General in writing
- (2) The Secretary-General shall decide as expeditiously as possible, having regard to the need to allow the conciliator the opportunity to respond, whether the conciliator should be disqualified. The Secretary-General may decide to suspend the proceedings temporarily, but shall only do so where it is clear that this can be done without prejudice to the time limits in Article 7. The Secretary-General shall advise the Parties and the other Contracting Parties concerned of his or her decision as to the disqualification of the conciliator
- (3) The Secretary-General, in consultation with the Parties and the other Contracting Parties concerned, shall appoint a new conciliator. The Secretary-

General shall provide the new conciliator with the evidence, including statements and materials, collected during the course of the conciliation proceedings The new conciliator, in consultation with the Parties, shall determine how such evidence may be used

## THE CONCILIATION PROCEEDINGS

### Article 7(7)(c)

"The conciliator shall seek the agreement of the parties to the dispute to a resolution thereof or upon a procedure to achieve such resolution "

### Rule 6

- (1) Subject to these Rules and the considerations of impartiality, equity and justice, the conciliator may conduct the conciliation proceedings in such a manner as he or she considers appropriate
- (2) At the earliest possible opportunity, the conciliator shall consult the Parties identified in the referral to ascertain their views as to the matters in dispute and to ensure that the Parties are properly identified at the outset of the proceedings. This may be done by the means the conciliator considers the most appropriate, including through questionnaires, conferences, hearings or the submission of written or other material
- (3) The conciliator shall ensure that any information provided to him by one Party is made available to the other Party or Parties
- (4) After consulting the Parties, the conciliator shall determine the place for meeting or taking of oral statements, having regard to the circumstances of the conciliation proceedings and the need for the costs of the proceedings to be contained. The conciliator shall consider the desirability of using the facilities of the Energy Charter Secretariat and, with the agreement of the parties, may make arrangements with the Secretary-General for such use

## REPRESENTATION AND ASSISTANCE

### Rule 7

The Parties may be represented or assisted by persons of their choice. The names and addresses of such persons are to be communicated in writing to the other Party or Parties, the conciliator and the Secretary-General

## WITNESSES AND EXPERTS

### Rule 8

- (1) The conciliator may request evidence or expert advice from persons who have information or expertise relevant to the dispute and such evidence or advice shall be made available to the Parties
- (2) Each Party, at any stage of the proceeding, may request that the conciliator hear the witnesses and experts whose evidence the Party considers relevant. The conciliator shall fix a time limit within which such hearing shall take place
- (3) Witnesses and experts shall be examined by the Parties under the control of the conciliator. Questions may also be put to them by the conciliator
- (4) If a witness or expert is unable to appear at the place of the hearing, the conciliator, with the agreement of the Parties, may make appropriate arrangements for the evidence to be given in a written deposition or to be taken by examination elsewhere. The Parties shall receive a copy of any such written deposition or shall have the right to participate in any such examination

## ADMINISTRATIVE ASSISTANCE

### Rule 9

In order to facilitate the conduct of the conciliation proceedings, the conciliator, with the agreement of the Parties, may arrange for administrative or technical assistance by the Energy Charter Secretariat or any other suitable institution or person

## CO-OPERATION OF PARTIES WITH THE CONCILIATOR

### Rule 10

- (1) The Parties shall co-operate in good faith with the conciliator and, in particular at his or her request, shall furnish all relevant documents, information and explanations as well as use the means at their disposal to enable the conciliator to hear witnesses and experts whom he or she desires to call. The Parties shall also facilitate visits to and inquiries at any place connected with the dispute that the conciliator desires to undertake
- (2) The Parties shall comply with any time limits agreed with or fixed by the conciliator

## PROPOSALS FOR SETTLEMENT OF THE DISPUTE

### Rule 11

- (1) A Party, on their own initiative or at the invitation of the conciliator, may submit to the conciliator proposals for a settlement of the dispute
- (2) The conciliator, at any stage of the conciliation proceedings, may make proposals for a settlement of the dispute

## AGREEMENT BY THE PARTIES

### Rule 12

- (1) An agreement between the Parties to a resolution of the dispute or a procedure to achieve such resolution shall be made in writing. The Parties by signing the agreement are bound by its terms
- (2) The conciliator shall inform <sup>by written note</sup> the Secretary-General of the fact that an agreement between the Parties has been reached. The Secretary-General shall notify all the Contracting Parties to the Energy Charter Treaty that such agreement has been reached

## RECOMMENDATION/DECISION OF THE CONCILIATOR

### Article 7(7)(c)

"If within 90 days of his appointment he has failed to secure such agreement, he shall recommend a resolution to the dispute or a procedure to achieve such resolution and shall decide the interim tariffs and other terms and conditions to be observed for Transit from a date which he shall specify until the dispute is resolved."

### Rule 13

- (1) Where the Parties have not reached agreement within the 90 day time limit provided for in the Energy Charter Treaty, the conciliator shall
  - (a) record in writing his or her recommendation either for a resolution to the dispute or a procedure to achieve such resolution and his or her decision on interim tariffs and other terms and conditions to be observed for Transit including the date of effect,
  - (b) include a statement of reasons for his or her recommendation and decision and

- (c) provide signed copies of his or her recommendation and decision to the Parties and the Secretary-General
- (2) The Secretary-General shall
- (a) deposit a signed copy of the recommendation and the decision in the archives of the Secretariat,
  - (b) notify all Contracting Parties of the fact that a recommendation and decision on interim tariffs has been made

## TERMINATION OF CONCILIATION PROCEEDINGS

### Article 7(7)(d)

"The Contracting Parties undertake to observe and ensure that the entities under their control or jurisdiction observe any interim decision under subparagraph (c) on tariffs, terms and conditions for 12 months following the conciliator's decision or until resolution of the dispute, whichever is earlier "

### Rule 14

The conciliation proceedings are terminated by

- (a) the signing of an agreement under Rule 12 by the Parties, or
- (b) the making of the recommendation and decision on interim tariffs by the conciliator under Rule 13

## LANGUAGES

### Rule 15

- (1) The conciliator, after consulting the Parties, shall decide the language or languages for the conduct of the proceedings
- (2) If the conciliator decides to use more than one language, any instrument or document may be provided in either language. Either language may be used at hearings, subject, if the conciliator so decides, to translation and interpretation. The conciliator shall ensure that his or her recommendation and decision is available in the language or languages he or she has decided on for the proceedings

## COSTS

## Rule 16

- (1) The conciliator shall give consideration at the commencement of the proceedings to requesting the Parties to deposit an amount as an advance for the costs enumerated in sub-paragraphs 2(a) to (d). All amounts deposited by the Parties under this paragraph shall be paid to the Energy Charter Secretariat which shall make the disbursements for such costs listed in paragraph (2).
- (2) Upon termination of the conciliation proceedings, the conciliator shall fix the costs of the conciliation and notify the Parties and the Energy Charter Secretariat of such costs in writing. The term "costs" includes only
  - (a) the fee of the conciliator, which is to be set at the time of appointment by the Secretary-General, in accordance with Regulation 14 of the Administrative and Financial Regulations of the International Centre for Settlement of Investment Disputes,
  - (b) the travel and other expenses of the conciliator,
  - (c) the travel and other expenses of witnesses or experts requested by the conciliator under Rule 8(1),
  - (d) the costs associated with the use of facilities for the conduct of hearings, other than the premises of the Energy Charter Secretariat,
  - (e) the cost of any administrative assistance provided under Rule 9 by an institution or person other than the Energy Charter Secretariat, and
  - (f) the costs incurred during the proceeding for translation and/or interpretation under Rule 15.
- (3) Unless the agreement concluded by the Parties under Rule 12 provides for the apportionment of the costs, the conciliator shall apportion the costs between the Parties bearing in mind the particular circumstances of the proceedings and notify the Parties and the Energy Charter Secretariat of his or her decision in writing. All other expenses incurred by a Party are to be borne by that Party.
- (4) The Energy Charter Secretariat shall render an accounting to the Parties of the deposits received and return any unexpended balance to the Parties or request a final payment taking into account the decision of the conciliator as to the apportionment of costs.

## CONFIDENTIALITY

### Rule 17

The conciliator, the Parties and all persons involved in the conciliation proceedings in whatever capacity shall keep confidential all matters relating to the conciliation proceedings. Confidentiality extends to the terms of the agreement between the Parties under Rule 12 and the recommendation and decision of the conciliator under Rule 13, except where disclosure is necessary for purposes of implementation and enforcement.

## ROLE OF CONCILIATOR IN OTHER PROCEEDINGS

### Rule 18

The conciliator shall not act as an arbitrator or as a representative or counsel in any arbitral or judicial proceedings in respect of a dispute that is the subject of the conciliation proceedings. The Parties and the other Contracting Parties concerned shall not present the conciliator as a witness in any such proceedings.

## ADMISSIBILITY OF EVIDENCE IN OTHER PROCEEDINGS

### Rule 19

The Parties shall not rely on or introduce as evidence in any arbitral or judicial proceedings whether or not such proceedings relate to the dispute that is the subject of the conciliation proceeding:

- (a) views expressed or suggestions made by any Party in respect of a possible settlement of the dispute,
- (b) admissions made by any Party in the course of the conciliation proceedings,
- (c) proposals made by the conciliator, or
- (d) the fact that a Party had indicated their willingness to accept a proposal for settlement made by the conciliator.

Annex A

Conciliation No

## DECLARATION

I have read the Rules Concerning the Conduct of Conciliation of Transit Disputes and shall ensure that the conciliation proceedings shall be conducted in accordance with such Rules. I shall consider only issues raised, and necessary to, the fulfilment of my responsibilities under the Rules.

I shall keep confidential all information coming to my knowledge as a result of my participation in this proceeding, as well as the content of any agreement between the Parties to this dispute under Rule 12 or any recommendation and decision I may make under Rule 13.

I shall not accept any instruction or compensation with regard to the proceeding from any source except as provided in the Rules and the terms of my appointment by the Secretary-General.

I shall not act as an arbitrator or as a representative or counsel in any arbitral or judicial proceedings in respect of a dispute that is the subject of these conciliation proceedings.

I disclose herewith any information likely to affect my independence or impartiality or which could give rise to justifiable doubts as to the integrity and impartiality of these conciliation proceedings and shall immediately advise the Secretary-General of any change in my circumstances which might be relevant to the performance of my function as a conciliator.

In the event that I resign or am unable to conclude the conciliation proceedings, I shall return all documents and materials that have come into my possession as a consequence of my appointment to the Secretary-General.

Signed

Dated

Annex B

**ILLUSTRATIVE LIST OF INFORMATION TO BE DISCLOSED**

This list contains examples of information of the type that a conciliator appointed in respect of a Transit dispute should disclose under the Rules

Each conciliator has a continuing duty to disclose the information described in Rule 3(3), which may include the following

- (a) financial interests (e.g. investments, loans, shares, interests, other debts), business interests (e.g. directorship or other contractual interests), and property interests relevant to the dispute in question,
- (b) professional interests (e.g. a past or present relationship with private clients, or any interests the person may have in domestic or international proceedings, and their implications, where these involve issues similar to those addressed in the dispute in question),
- (c) other active interests (e.g. active participation in public interest groups or other organisations which may have a declared agenda relevant to the dispute in question),
- (d) considered statements of personal opinion on issues relevant to the dispute in question (e.g. publications, public statements),
- (e) employment or family interests (e.g. the possibility of any indirect advantage or any likelihood of pressure which could arise from the conciliator's employer, business associates or immediate family members)

**FORMING THE  
SOUTHERN AFRICAN POWER POOL**

**BY  
REINER LOCK  
CAMERON MCKENNA**

**MEETING OF THE  
CENTRAL ASIA ELECTRICITY WORKING GROUP  
ASHGABAT TURKMENISTAN**

**JUNE 12, 1998**

## FORMATION OF SAPP: BRIEF HISTORY - I

- History of Regional Projects
  - e g Kariba
- Associated Transmission Linkages
- Some Technical Integration
- Political Freeze on South Africa (RSA)
- RSA's "New Dispensation"

## FORMATION OF SAPP: BRIEF HISTORY - II

- Negotiations Between 4 “Core” Utilities
- Intervention of Southern African Development Community (SADC)
- Political Compromise
  - SADC Region
  - SADC Auspices
  - Utility Run

## THE SAPP REGION

- Total Land Area = 9 09 Million sq kms  
(Note The Total Land Area for the United States of America is 9 17 Million sq kms)
- Population, 1994 = 178 Million
- 12 Countries (Plus Two?)
- Eastern and Central Africa
- Estimated Electricity Consumers, 1994=3 1 Million

## POTENTIAL FOR TRADE IN THE SAPP REGION

- Diversity/Complementarity
  - Hydro/Thermal and No Hemisphere/So Hemisphere
  - Area of Surplus and Deficit
  - Diversity of System Peaks
- Some Limitations
  - Project-Driven EHV Grid
  - Transmission Capacity
  - Vertically Integrated Domestic Market Structure

## POOL TYPES AND PRINCIPLES

- Alternatives considered
  - Tight pool as in the USA
  - The Nordel model in Scandinavia
  - Loose pool
  - SAPP modeled on U S loose pool - MAPP
  - Pool Rules include Wheeling and Third-Party Access

## BASIS FOR SAPP

- The SAPP is a loose pool governed by gentlemen's agreements
  - Inter Governmental Memorandum of Understanding
  - Inter Utility Memorandum of Understanding
  - Agreement Between Operating Members
  - Operating Guidelines

## MEMBERSHIP OF SAPP

- Electricity Supply Enterprises
  - one per country
  - G&T's
- Observer Status
- IPPs
- Operating and Non Operating Members

## THE SAPP COORDINATION CENTRE - I

- Implementation
  - Location
  - Independent and neutral entity
  - Manager
  - Reporting Structure

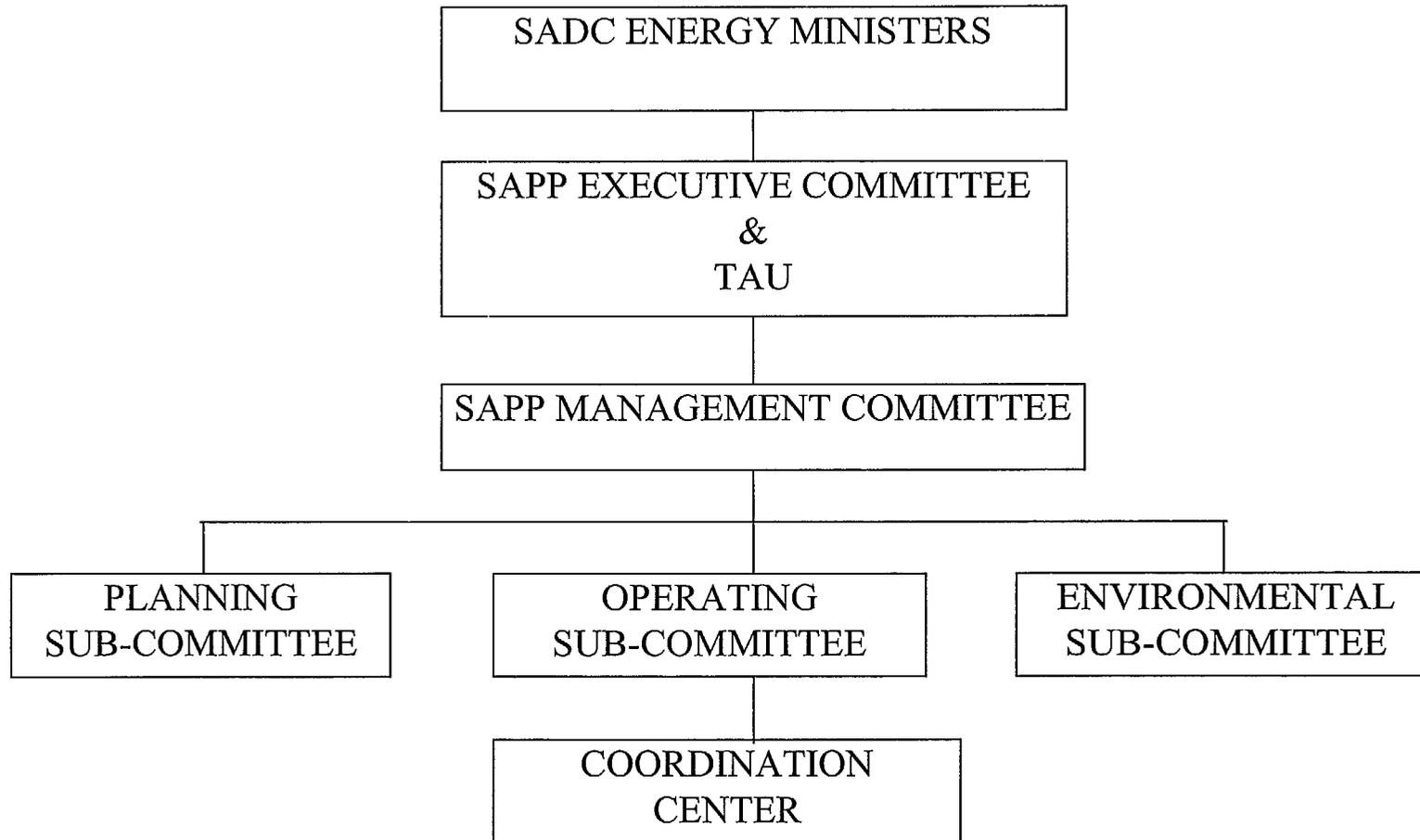
## THE SAPP COORDINATION CENTRE - II

- Functions
  - Monitors transactions, and inadvertent power flows
  - Monitors use of the Operating Guidelines and control performance
  - Convenes post disturbance committee
  - Evaluates impact of future projects on Pool operation
  - Generation and Transmission maintenance schedules
  - Official custodian of data pertaining to transactions between members
  - Budgeting and financial reporting

## MANAGEMENT OF THE SAPP

- **Planning Sub-Committee**
  - Pool Plan
  - Planning and reliability standards
  - Service schedules
  - Transfer limits
- **Operating Sub-Committee**
  - Operating day-to-day operations of the interconnected power system
  - Electricity trading
  - Coordination Centre
- **Environmental Sub-Committee**
  - Environmental standards and procedures

# SAPP MANAGEMENT STRUCTURE



## DOMESTIC MARKET CHARACTERISTICS

- State-Owned
- Vertically Integrated, including Pricing (except for ESCOM)
- Sector Reform Under Way in Most SAPP Countries

## **BENEFITS OF SAPP**

- Emergency support and improved reliability
- Reduced Required Generating Capacity and Operating Reserves
- Cooperation and integration in planning and operations
- Training and technology transfer
- Increased competition and trading in SAPP Region
- Reduction in price of electricity

## CURRENT SHORTCOMINGS OF SAPP

- Incomplete EHV Grid
- Poor frequency control
- System instability
- Lack of technical integration
- Lack of openness in information exchange
- Absence of the Wheeling Service Schedule

## EARLY SAPP EXPERIENCE: SOME LESSONS LEARNED

- In international pools, members tend to take small steps forward
- Pool Agreements need to address the needs of all members (large or small)
- Need for consistent approach in regulation/transmission
  - How much is harmonization necessary?
- Perceived need for autonomy/self-sufficiency of supply continues
  - need for mentality change
  - Botswana



## **WORLD BANK REPORT: MAIN RECOMMENDATIONS**

- Strong Autonomous Utilities
- Implement Coordination Centre Membership
- Dispute Resolution
- Transmission Access and Pricing
- Interface between SAPP and Competitive Pools
- Compatibility and Harmonization
- Planning Methodologies

## ENCOURAGING PRIVATE SECTOR PARTICIPATION - I

- IPPs, ITPs, Privatization - common needs
- Reducing “project risk” - a functioning SAPP system
  - Regional power markets
  - Effective transmission access
  - Clear uniform trading rules
  - Effective governance and dispute resolution
  - Technical/environmental harmonization

# LESSONS OF SAPP FOR CENTRAL ASIA - III

## 2. TECHNICAL INTEGRATION CHALLENGES

- SAPP
  - Interconnections weak or non-existent
  - Technical diversity between systems
  - Need for major transmission links
  - Members sidelined
  - Limitations on trading
  - Focus on developing coordination center

## LESSONS OF SAPP FOR CENTRAL ASIA - II

- **C. ASIA: Commonality v - diversity**
  - Common political traditions
  - Common language
  - Ethnic diversity
  - More compact region
  - Strong independence attitudes
  - Local authority

# LESSONS OF SAPP FOR CENTRAL ASIA - I

## 1. DIVERSITY IS NOT A BARRIER

- SAPP - vast diversity
  - Huge region
  - Political diversity
  - Language and ethnic
  - Economic development
  - Power sector development
  - Strong independence attitudes
  - The RSA dimension - birth of SADC

## ENCOURAGING PRIVATE SECTOR PARTICIPATION - II

- **Reducing “country risk” - national sectoral measures**
  - Financially viable utilities
  - Separating management and regulation from government
  - Transparent procurement process
- **Mitigating risk**
  - JV with local utilities
  - Multicountry markets

## LESSONS OF SAPP FOR CENTRAL ASIA - IV

- Central Asia
  - Developed integrated region wide EHV Grid
  - Technical conformity
  - Experienced region-wide control center
  - Potential for immediate trading
  - Basis for Grid expansion, as needed

# LESSONS OF SAPP FOR CENTRAL ASIA - V

## 3. Recognized Benefits

- SAPP
  - Diversity/complementary
  - Hydro/thermal
  - Climatic-seasonal peaks
  - Surplus/deficit
  - Reliability benefits
  - Economic trading benefits

## LESSONS OF SAPP FOR CENTRAL ASIA - VI

- Planning benefits
  - transmission
  - generation - “self-sufficiency”

### Foreign investment benefits

- larger markets
- reduced “country risk”

## LESSONS OF SAPP FOR CENTRAL ASIA - VII

- Central Asia
  - Diversity/complementarity
  - Economic trading
  - Reliability
  - Planning G&T
  - Foreign investment

## LESSONS OF SAPP FOR CENTRAL ASIA - VIII

### 4. Challenges to Implementation

- SAPP
  - Consequences of diversity
  - Development needs and size
  - Power sector reform
  - Pool governance
  - Relations with governments
  - “Self-sufficiency” - a myth?

## POOL TYPES AND PRINCIPLES

- Alternatives considered
  - Tight pool as in the USA
  - The Nordel model in Scandinavia
  - Loose pool
  - SAPP modeled on U S loose pool - MAPP
  - Pool Rules include Wheeling and Third-Party Access

## BASIS FOR SAPP

- The SAPP is a loose pool governed by gentlemen's agreements
  - Inter Governmental Memorandum of Understanding
  - Inter Utility Memorandum of Understanding
  - Agreement Between Operating Members
  - Operating Guidelines

## MEMBERSHIP OF SAPP

- Electricity Supply Enterprises
  - one per country
  - G&T's
- Observer Status
- IPPs
- Operating and Non Operating Members

## THE SAPP COORDINATION CENTRE - I

- Implementation
  - Location
  - Independent and neutral entity
  - Manager
  - Reporting Structure

## THE SAPP COORDINATION CENTRE - II

- Functions
  - Monitors transactions, and inadvertent power flows
  - Monitors use of the Operating Guidelines and control performance
  - Convenes post disturbance committee
  - Evaluates impact of future projects on Pool operation
  - Generation and Transmission maintenance schedules
  - Official custodian of data pertaining to transactions between members
  - Budgeting and financial reporting

## DOMESTIC MARKET CHARACTERISTICS

- State-Owned
- Vertically Integrated, including Pricing (except for ESCOM)
- Sector Reform Under Way in Most SAPP Countries

## **BENEFITS OF SAPP**

- Emergency support and improved reliability
- Reduced Required Generating Capacity and Operating Reserves
- Cooperation and integration in planning and operations
- Training and technology transfer
- Increased competition and trading in SAPP Region
- Reduction in price of electricity

## CURRENT SHORTCOMINGS OF SAPP

- Incomplete EHV Grid
- Poor frequency control
- System instability
- Lack of technical integration
- Lack of openness in information exchange
- Absence of the Wheeling Service Schedule

## EARLY SAPP EXPERIENCE: SOME LESSONS LEARNED

- In international pools, members tend to take small steps forward
- Pool Agreements need to address the needs of all members (large or small)
- Need for consistent approach in regulation/transmission
  - How much is harmonization necessary?
- Perceived need for autonomy/self-sufficiency of supply continues
  - need for mentality change
  - Botswana

## ENCOURAGING PRIVATE SECTOR PARTICIPATION - I

- IPPs, ITPs, Privatization - common needs
- Reducing “project risk” - a functioning SAPP system
  - Regional power markets
  - Effective transmission access
  - Clear uniform trading rules
  - Effective governance and dispute resolution
  - Technical/environmental harmonization

## LESSONS OF SAPP FOR CENTRAL ASIA - II

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## ENCOURAGING PRIVATE SECTOR PARTICIPATION - II

- **Reducing “country risk” - national sectoral measures**
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## LESSONS OF SAPP FOR CENTRAL ASIA - VIII

### 4. Challenges to Implementation

- SAPP
  - Consequences of diversity
  - Development needs and size
  - Power sector reform
  - Pool governance
  - Relations with governments
  - “Self-sufficiency” - a myth?



## LESSONS OF SAPP FOR CENTRAL ASIA - IX

- Central Asia
  - Pool Governance
  - Relation to utilities
  - Relation to domestic Governments
  - Power sector reform and regulation
  - Self sufficiency



## LESSONS OF SAPP FOR CENTRAL ASIA - IX

- Central Asia
  - Pool Governance
  - Relation to utilities
  - Relation to domestic Governments
  - Power sector reform and regulation
  - Self sufficiency

# LESSONS OF SAPP FOR CENTRAL ASIA - X

## 5. Meeting the Challenges

- SAPP
  - Dialogue and decision
  - Utility-run organization
  - Role of domestic Governments
    - MOU
  - Role of SADC
  - Governance task force
  - Regional planning mechanisms
  - Accomodating power sector reform
    - no assumptions
    - membership
    - self-sufficiency

## LESSONS OF SAPP FOR CENTRAL ASIA - XI

- Central Asia
  - Utility Pool governance?
  - Regional planning?
  - Regional organization of Governments?
  - Domestic reform and membership?

## Southern Africa Power Pool

- Aims are to
  - continue with the development of interconnections between their respective networks and expand capacity and energy trade among themselves
  - enhance the reliability of supply to their customers and share in the other benefits of interconnected operation
  - create further opportunities to coordinate the installation and operation of generation and transmission facilities
  - cooperate and seek mutually beneficial arrangements wherever possible and refrain from arrangements that would be detrimental to any member
- Countries involved
  - Angola
  - Botswana
  - Lesotho
  - Malawi
  - Mozambique
  - Namibia
  - South Africa
  - Swaziland
  - Tanzania
  - Zaire
  - Zambia
  - Zimbabwe
- Purpose
  - To coordinate and cooperate in the operation of their systems to minimize costs while maintaining reliability
  - to fully recover their costs, and
  - to share equitably in the resulting benefits
- Hierarchy of documents (in order of precedence)
  - 1 Inter-Governmental MOU
  - 2 Inter-Utility MOU
  - 3 This Agreement
  - 4 Operating guidelines
- Definitions
- Commencement and termination
  - Commences upon signature, terminates when withdrawal of a member causes separation of the interconnected system, may be restored by remaining members by re-interconnecting the system
- Requirements for Membership
  - Must be an Electricity Supply Enterprise (defined in Inter-Utility MOU)

- Must have joined SAPP
- must be interconnected with other Member(s)
- must comply with rules and requirements
- Types of memberships
  - Operating Member
    - meets all requirements (above)
    - gets 2/3 vote of existing members of Executive Committee
  - Observer
    - those who fail to get the 2/3 vote have rights and obligations as specified by Management Committee
  - Independent Power Producers
    - Same requirements as for Operating Member, however, may not participate on either the Management or the Executive Committees
- Rights and obligations of Operating Members
  - Upon an Emergency Situation, must supply Emergency Energy up to Available Accredited Capacity
  - AGC each Operating Member operates its own Control Area, and must either provide or contract with another for AGC. If this is not done, OM's tie-lines with other Oms must remain open (unless otherwise agreed by the Operating Sub-Committee)
  - Wheeling must be provided up to system limitations
  - Reserves must comply with Accredited Capacity Obligation
  - Maintenance schedules will be coordinated by SAPP
  - Disclosure of costs must be made to Planning Sub-Committee
- Operating Sub-Committee
  - establishes Operating Reserve Obligations of the Operating Members
  - establishes the System Peak Obligation and the Accredited Capacity Obligation of each OM
  - establishes and updates Operating Guidelines
    - transfer limits
    - frequency control
    - voltage control
    - tie-line power control
    - AGC
    - data exchanges
    - telecommunications
    - switching
    - safety
    - load shedding
    - restoration of supply
    - etc
  - coordinates G & T maintenance schedules
  - establishes short-term transfer limits

- determines the Net Generating Capacity of each Member's system
  - submits budget for the Coordination Center to the Management Committee
- Coordination Center - an independent and neutral entity located at a permanent location and funded by the Members of the Pool
  - Manager is appointed by Management Committee, report to Operating Sub-Committee
  - Manager chooses Coordination Center staff
  - Functions monitor operation of pool, monitor all transactions, monitor time-correction procedures, monitor inadvertent flows (and in-kind returns), provides routine daily reports to Members and to OSC, monitors use of Operating Guidelines, monitors control performance criteria, convenes a disturbance investigation committee, gives technical advice to Members, evaluates impact of future projects and advises OSC, performs operational planning studies, determines transfer limits, maintains a historical database, monitors availability of communication links, advises on wheeling, acts as custodian of data pertaining to transactions, monitors protection performance (and coordination) on tie lines, provides training to Members' staffs, prepares budget for approval by OSC
  - Costs of CC each Member pays an equal share of 30% of budget, 30% allocated among Oms by energy, 20% allocated by Annual System Peak Demand, 10% allocated by ratings of interconnections, and 10% paid by the host Member
- Accredited Capacity Obligation
  - the System Peak Obligation is taken monthly from each Member's forecast The Reserve Capacity Obligation equals 19% of the Annual System Peak Obligation for each member (if generation were totally thermal), 10% if totally hydro, or prorated for a mixture The Accredited Capacity Obligation is the sum of its Monthly System Peak Obligation and its Reserve Capacity Obligation
  - Each Member shall meet its Accredited Capacity Obligation for each month If they are unable, they must
    - advance the completion date of new facilities
    - purchase Firm Power from Oms or non-members
    - purchase or lease capacity from outside its system, or
    - reduce its Monthly System Peak Obligation
  - Failure to comply
    - the deficient member must pay a capacity deficiency charge, to be split among those members having a capacity surplus penalty equals five times the Participation Power Rate
- Services defined by the Pool
  - Emergency Energy

- available no more than six hours after the occurrence of the emergency
- emergency transfers are energy only, cannot be credited toward Accredited Capacity
- wheeling applies
- Rate the greater of 150% of total costs of owning & operating a new coal-fired station, or 115% of Seller's SRMC (or may be returned in-kind energy)
- System Energy
  - to defer the use of fuel or water, to reduce transmission losses, to improve environmental conditions, or any similar reason
  - energy only, non-capacity transactions
  - there must be an alternate and dependable capacity (including purchases) that could otherwise be started up and used
  - price depends on amount of time for notice of curtailment - generally based on Seller's SRMC (if from thermal) or Buyer's SRMC (if from hydro)
- Economy Energy
  - From thermal sources, energy-only, non-capacity transactions
  - priced based on split savings (based on SRMCs)
- Surplus Energy
  - From hydro sources, energy-only, non-capacity transactions
  - if buyer is avoiding running thermal, price NTE 75% of Buyer's SRMC, if both hydro, price is negotiated
- Energy Banking
  - for pond storage control or banking of thermal fuel
  - energy only, non-capacity transactions
  - rates and terms negotiated by Members
- Short-Term Firm Power
  - energy and capacity
  - week by week, but for no more than six months
  - \$1.92/kW/week, energy NTE 115% Seller's SRMC (if thermal), 80% of Buyer's SRMC (if Buyer is thermal)
- System Participation Power
  - less firm than Short-Term Firm Power
- Operating Reserve
  - Unused capacity above System Demand
  - 20% of total fixed costs per kW of owning and operating a large coal-fired station
- Wheeling
  - based upon rental of assets
  - take or pay
- Scheduled Outage Energy

- have to have used your Accredited Capacity to meet load commitments and Operating Reserve obligations
  - priced at the greater of Average Production Cost of either the buyer or the seller
- Firm Power
  - for periods of six months or longer
  - capacity rate shall be 115% of the total fixed costs of owning and operating a new coal-fired power station
  - energy rate shall be 115% of Seller's SRMC (if seller is thermal), or 80% of Buyer's SRMC (if Buyer is thermal), or negotiated if both hydro
- Participation Power
  - similar to Firm Power, but for a specific generating unit or units
  - terms to be negotiated, but generally not to exceed the cost of owning and operating a large coal-fired station
- Control Area Services
  - an arrangement by which one Member can become part of another (contiguous) Member's control area For Operating Members which have difficulty in meeting the control criteria as specified in the Operating Guidelines
- Metering - for both active and reactive power
- Inadvertent energy flows - to be returned in-kind, at a time when they have approximately the same value as when they occur
- Accounts
  - prepared and sent by the Operating Members themselves, settled monthly in cash (unless otherwise agreed)
  - Billing shall be based upon the scheduled amounts of energy flow and capacity purchased
  - Wheeling losses (positive or negative) shall be returned in-kind by the purchasing Member
  - Payment terms, disputed billings, handling of taxes - standard stuff
- Dispute Resolution - handled within the Management Committee
  - if either party to the dispute feels that the Management Committee's simple majority vote on the matter would not be fair, it can have the matter brought before the Executive Committee (or the Management Committee can request that the matter be heard by the Executive Committee)
  - can be taken to arbitration, either directly, or after being heard by Management/Executive Committees
- Failure to Comply - various sanctions
  - revoke the privilege to use Economy Energy and Surplus Energy
  - revoke the privilege of any Service, except Wheeling
  - revoke Operating Membership in SAPP

- Arbitration Procedures
- Force Majeure
- Indemnity
- Amendments
- Assignment
- Notices
- Signatures