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**SUMMARY REPORTS OF THE SEMINARS**

**NIS Institutional Based Services Under the Energy  
Efficiency and Market Reform Project  
Contract No CCN-Q-11-93-00152-00**

**CAR Regional Energy Trade,  
Electricity Contracting and Pricing Reform  
Delivery Order No 11**

*Final Report*

*Prepared for*

U S Agency for International Development  
Bureau for Europe and NIS  
Office of Environment, Energy and Urban Development  
Energy and Infrastructure Division

*Prepared by*

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August 1996 through June 1998

DRAFT

**PROTOCOL**  
**of the meeting of the CAR Working Group**  
**on Central Asia United Power System Operation**

Ashgabat, Turkmenistan  
June 12-14, 1998

A list of participants is attached

The CAR Working Group meeting participants discussed the issues related to the problems of ensuring the parallel operation of the Central Asia power systems, studied the experience of the South Africa United Power System on power pool creation and the experience of Russia on electricity wholesale market formation, and negotiated the draft of Multilateral Contract for the Sale and Purchase of Energy in Central Asia, and Bilateral Wheeling Agreement

As a result of these negotiations the Working Group members made the following decision

- 1 In order to ensure the stable and reliable operation of power systems in the Central Asia United Power System, no individual power systems have a right to make an unilateral decision on opening the 500 kV ring
- 2 With the purpose of studying the problems which arise in the process of electricity trade, to invite the representatives of intermediate private power companies to participate in the next Working Group meeting with prior agreeing on the issues proposed by these companies for being negotiated
- 3 To take note of information related to the process of South Africa power pool creation, and the latest achievements of the electricity wholesale market formation in Russia This information will be used in the process of the regional power pool creation in Central Asia
- 4 To commend the high efficiency of the working subgroups meetings conducted in April 1998, and to conduct the regular subgroup meetings in July in order to make the preparation of the next August Working Group meeting more efficient
- 5 To approve the proposed for consideration the draft Contract for the Sale and Purchase of Energy in Central Asia with taking into account the proposals and amendments to the separate paragraphs of this Contract

To start developing the methodology of reserve capacity accounting, and to calculate the tariff on reserve capacity To make a comparative analysis of the existing

methodology of mutual settlements for frequency regulation and the newly developed methodology

To submit for consideration the reviewed and amended draft Contract for the Sale and Purchase of Energy in Central Asia to the regular meeting of Central Asia UPS Power Council

- 6 To submit the proposed Bilateral Wheeling Agreement to the working subgroups for it to be studied To consider at the next Working Group meeting the possibility of using the proposed methodology of wheeling tariff calculation in the Central Asia United Power System
- 7 To take into consideration the information presented by Mr D Kulbatsky, related to the activities and services rendered to the power systems by the JSC Sredazenergoset'proekt

The Working Group members recommended and advised to invite Mr D Kulbatsky to the regular Working Group meeting drawing special attention to the key role of the JSC Sredazenergoset'proekt in the process of developing the design approaches related to the HV grids development and future power pool creation in Central Asia

I D Ametov,  
Chairman of the Working Group,  
Chief Dispatcher of UDC "Energiya"

V K Smolyakov,  
Secretary of the Working Group meeting,  
Deputy Head of the Department under UDC "Energiya"

To add to paragraph 1 Except the cases of regime conditions, which have to be specified in the appropriate operational application

V Barsukov,  
Head of the Dispatch Center of Kazakhstan

**PROTOCOL**  
of the meeting of the CAR Working Group on  
Electricity Contracting and Pricing

Tashkent, Republic of Uzbekistan  
February 9-11, 1998

A list of the Participants is attached

The participants of the CAR Working Group meeting authorized by their respective Governments, have discussed the issues related to the creation of the Central Asia regional power pool, and legal aspects of the multilateral agreements effective within the Integrated Power System of Central Asia

- 1 Having discussed the scope of work of the CAR Working Group for 1998 and the measures aimed at the power pool creation in Central Asia, the participants admitted the following to be necessary
  - among the first and foremost measures is the signing of the "Agreement between the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan on Parallel Operation of the CAR Power Systems" by the Central Asia countries,
  - to develop the principles of the wholesale electricity market operation within the Integrated Power System of Central Asia,
  - to develop the structure of the Central Asia power pool
- 2 For more efficient and expanded activities of the Working Group, it was decided to create the Working Subgroups consisting of the representatives of power systems. The above Working Subgroups will be aimed at working out the most complicated issues, and making up the proposals in the period between the Working Group sessions. In particular, it was decided to create legal, economic and tariff policy Subgroups.
- 3 The draft "Model Contract on Electricity Sale and Purchase within the Central Asia Integrated Power System" was considered by the Working Group. It was decided to entrust the Economic and Tariff Policy Subgroup to finish the given "Model Contract" and to submit it to the next session of the Council of the IPS CA to be considered.
- 4 The information related to the USA Pooling Study Tour presented by the leaders of the national delegations was taken into account. This knowledge acquired during this Study Tour will definitely be used while creating the regional power pool in Central Asia.
- 5 The information (presented by Mr. B. Mambetov) related to the results of the USA Water Usage Study Tour of the representatives of water and power complexes of the region, and the proposals related to the water and power consortiums creation was taken into account. It was decided to ask the representatives of the CAR power

systems to take an active part in working out the proposals and finishing the foundation documents for the creation of the water and power consortium on Syr-Dariya river basin. It is necessary to define the functions and basic directions of this international consortium activities, and its powers

- 6 After making amendments based on new proposals of the power systems, it was decided to initial by the CAR Working Group the previously approved by the Council of the IPS CA draft "Agreement between the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan on Parallel Operation of the CAR Power Systems", and to submit it to the ICKKU Executive Committee to be included to the agenda of the coming session of the ICKKU in March 1998

When the given Agreement is signed, the CAR Power Systems have to conclude the Multilateral Contract on Parallel Operation of Power Systems of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan as being the members of the Integrated Power System of Central Asia (IPS CA)

- 7 The information (presented by Mr David Thornton) related to the Methodology on Electricity Transit Pricing was taken into account. This information will definitely be used while developing the principles of electricity wholesale market operation within the Integrated Power System in Central Asia

Chairman,  
Chief Dispatcher of the UDC "Energiya"

I Ametov

Secretary,  
Deputy Chief of the UDC "Energiya" Department

V Smolyakov

**MINUTES**  
**of the Regional Working Group Meeting on Parallel Operation of the CAR Power Systems and Formation of the United Power System (UPS)**

Bishkek

September 22-26, 1997

The List of participants is attached hereto

The participants, authorized by their Governments, discussed issues related to drafting the Agreement on Parallel Operation of the CAR Power Systems

- 1 As a result of the meeting the draft Agreement is developed and initialed by participants of the meeting from the Kyrgyz Republic, the Republic of Tajikistan, the Republic of Uzbekistan and Turkmenistan
- 2 The delegation of Kazakhstan refused to initial the Agreement in the presented form due to different level of market development in Central Asia countries

The specific opinion of the delegation of Kazakhstan is attached hereto

- 3 The participants off the regional meeting shall apply to the Prime-Ministers of the respective countries with the request to sign the Agreement and to the Government of Kazakhstan to join this Agreement
- 4 The participants of the meeting ask the Chairman of the Council of the Prime-Ministers of the Republic of Kazakhstan, the Kyrgyz Republic and the Republic of Uzbekistan render assistance in arranging the meeting of the Prime-Ministers of five countries of Central Asia to sign this Agreement
- 5 The participants of the regional meeting request the ICKKU Executive Committee to undertake efforts in approving the content of the Agreement among the Governments of Central Asian countries and to ensure the procedure related to the signing of the given Agreement
- 6 The participants of the meeting considered the necessity to form power pool in Central Asia taking into account the experience of pool formation in USA and western Europe which was presented to the participants by Mr David Thornton, the consultant of Hagler Bailly Inc  
The Kazakhstan delegation presented to the participants the principles and prospects of power pool creation in the Republic of Kazakhstan
- 7 The Heads of the CAR delegations and USAID representatives were received by Jumagulov A J , the prime-Minister of the Kyrgyz Republic on September 25, 1997 and they informed him on the efforts to cooperate in power sector in Central Asia to

ensure reliable, economic operation of power systems and more effective operation of basic grid of IPS

Chairmen of the meeting

Ametov I J  
Chief Dispatcher of the UDC "Energiya"

Mambetov B E  
Deputy Chairman of the ICKKU Executive Committee

**PROTOCOL**  
**of the Central Asia Electricity Working Group meeting**

Tashkent, Uzbekistan

26-27 May, 1997

The Electricity Contracting and Pricing Working Group consisting of representatives of five countries of Central Asia and UDC "Energiya" met in Tashkent (Uzbekistan) on May 26-27, 1997. The seminar was arranged by Hagler Bailly Consulting, Inc., and funded by the US Agency for International Development (USAID).

The Working Group reviewed and discussed the draft Multilateral Agreement on Parallel Operation between the Power Systems of Central Asia.

Based on the results achieved while discussing the draft Agreement, the Working Group deemed to be useful:

- 1 To submit the amended draft Agreement taking into account the remarks and proposals to the Central Asia Power Council (draft Agreement attached hereto)

To request the Central Asia Power Council to apply to the Executive Committee of the Inter-Governmental Council of the Republic of Kazakhstan, the Kyrgyz Republic and the Republic of Uzbekistan with a proposal to develop an Intergovernmental Treaty on Parallel Operation of Power Systems of the countries of Central Asia.

- 2 To propose to UDC "Energiya" to amend the tariff methodology of the payment for capacity regulation with the following: "If it is necessary UDC "Energiya" can use the reserve of power systems at the expense of their normal regulation range with subsequent adjustment in payment" and submit this amendment for the consideration of the Central Asia Power Council.
- 3 To propose UDC "Energiya" to develop the electricity wheeling attachment to the Agreement on Parallel Operation.
- 4 To ask the Central Asia Power Council to instruct the Working Group to consider and supplement the Agreement on Parallel Operation with a section which defines liabilities of the Parties for non-execution of the provisions of the above Agreement with regard to maintaining the coordinated balance of capacity, energy, frequency and capacity reserve.

5 To deem it useful to apply to the Regional Mission of the US Agency for International Development (USAID) in Central Asia with a request to continue rendering assistance in developing legal basis, functions and tasks of the pool with the purpose of possible formation of the regional power pool in Central Asia

The Protocol is signed by the Working Group

On behalf of UDC "Energiya"	I Ametov, Chairman
On behalf of the Republic of Kazakhstan	V Barsukov V Pastushkov R Khamitov
On behalf of the Kyrgyz Republic	K Kozhobaev B Pedan M Tashbolotov
On behalf of the Republic of Uzbekistan	A Khudoyatov Kh Abdullaev
On behalf of Turkmenistan	V Kochetov M Ilyasova N Arazmuradov
On behalf of the Republic of Tajikistan	A Silantiev N Pirmatov

**MEMORANDUM**  
**on the results of the international seminar of the Baltic and Central Asia countries**  
**“Baltic Experience in Electricity Trade Agreements”**

Riga, Latvia

17-20 March, 1997

- 1 In the framework of the regional project “Electricity contracts and pricing reform on import and export of electric energy in Central Asia” funded by US Agency for International Development (USAID) on 17-20 March, 1997 an international seminar of the Baltic and Central Asia countries was held on the subject of “Baltic Experience in Electricity Trade Agreements”
- 2 The representatives of the following organizations and departments participated in the seminar
  - US Agency for International Development
  - Hagler Bailly Services, Inc (USA)
  - Dispatch Center “Baltija”
  - United Dispatch Center “Energia”
  - Ministry of Energy and Electrification (Uzbekistan)
  - Kyrgyzenergoholding (Kyrgyzstan)
  - Ministry of Finance (Kyrgyzstan)
  - State Energy Agency (Kyrgyzstan)
  - United Dispatch Center of Kazakhstan
  - Joint stock company “KEGOC” (Kazakhstan)
  - Corporation “Kuuvat” under the Ministry of Energy and Industry of Turkmenistan
  - Ministry of Finance (Tajikistan)
  - Latvenargo
  - National Dispatch Center of Lietuvos Energija (Lithuania)
- 3 The participants of the seminar became acquainted with
  - experience of work of the Baltic Integrated Power System (IPS) in the conditions of transition to a market economy,
  - the operation and structure of Latvian, Lithuanian and Estonian power systems,
  - the agreement on parallel operation among the power systems of the Baltic countries,
  - agreements on supply of electric power and energy, transit and frequency regulation among national power systems of the Baltic IPS and also with Russia and Belarus,
  - principles of design for differentiated electricity tariffs and introduction of multi-tariff billing systems in wholesale and retail power and energy markets,
  - visited and got acquainted with Riga hydro power station and DC “Baltija”

- 4 In the course of the discussions on the above mentioned problems by the representatives of the Baltic IPS, IPS of Central Asia and Kazakhstan, Hagler Bailly and USAID, the parties have expressed the opinion and agreed on the following
- the existing agreements on parallel operation among power systems which are part of IPS of Central Asia require a detailed review in order to be presented to the Power Council of IPS for consideration,
  - the issues related to the compensation of frequency control costs should be reflected in a multilateral agreement which must be developed with the participation of UDC "Energiya" The draft multilateral agreement on frequency regulation has been developed by the participants of the seminar,
  - Existing methodology for the compensation calculation for the costs related to frequency control at this stage of development is acceptable and reflects the conditions of deficiency of capacity in the IPS of Central Asia,
  - Transit issues must be reflected in the agreements and agreed upon by UDC "Energiya" and, if necessary, with the UDC of Kazakhstan,
  - Agreements on electricity trade among commercial entities, irrespective of their ownership form, should not contradict the agreements on parallel operation and must be agreed upon by UDC "Energiya" and, if necessary, with UDC of Kazakhstan

On the background of existing market restructuring in the Central Asia countries, in order to improve electricity trade on the mutually beneficial basis, and in order to utilize fuel, energy and water resources in an optimum manner, it is necessary to consider the possibility to form a regional power pool

The participants of the seminar agreed to direct this Memorandum to the Regional Mission of USAID in Central Asia and also present this document for consideration to the Governments of Central Asia countries

Members of the Working Group

On behalf of Kazakhstan	A Kirdyashkin V Pastushkov R Khamitov
On behalf of Kyrgyzstan	A Kojobaev B Pedan C Tashbolotov
On behalf of Tajikistan	N Pirmatov
On behalf of Turkmenistan	M Arazmuradov M Ilyasova V Kocheto
On behalf of Uzbekistan	I Ametov Kh Abdullaev A Khidoyatov

## MEMORANDUM

on the Results of the Seminar Held in the Framework of the Regional Project  
“Electricity Contracting and Pricing Reform”

Bishkek

August 6, 1996

1 In the framework of the seminar on the regional project “Electricity Contracting and Pricing Reform” financed by the US Agency for International Development, in August 5-6 the first seminar in the Kyrgyz Republic was held on the subject of “International Electricity Contracts and Power Pooling”

2 The representatives of the following organizations and agencies participated in the work of the seminar

- “Hagler Bailly Consulting, Inc ” - Project Consultant (USA)
- International Institute of Strategic Research under the Kyrgyz Republic President - local organizer
- “Central Main Power” - invited Consultant (USA)
- “Richards Butler Robert” - juridical company (TACIS)
- Ministry of Economy - local participant
- State Energy Agency - local participant
- Department for Antimonopoly Policy - local participant
- Kyrgyzstateenergoholding - local participant
- Kyrgyz Research Power Engineering Institute - local participant

3 The participants of the seminar have agreed that the Consultant will work out the draft of the standard international Contracts

- On the capacity trade to regulate frequency and electric energy in the power plants in the region taking into account the water supply for irrigation needs, as well as billing through barter deals using some other energy resources (coal, gas, heavy fuel oil),
- A Contract Power System - a large customer in another country,
- Methodology of price calculation on energy and capacity export and import of other types of power resources

The drafts of the Contracts must be sent to the countries-participants for consideration before September 10, 1996 in order to be able to discuss them during the second series of seminars (September 26-27, 1996) The goal of the second series of the seminars is to be the development of the draft Contracts on energy and capacity trade which will be subsequently be discussed and corrected in the course of the regional seminars

4 To realize the Project in the Kyrgyz Republic, the executive (working) group has been created including the following group members

- 1 Moldokoulov Sabyrbek - First Deputy Minister of Economy,
- 2 Abasbekov Kudaikoul - Vice-President of Kyrgyzstateenergoholding,
- 3 Aitkoulov Medetbek - Deputy Director of the State Energy Agency,
- 4 Pedan Boris Ivanovitch - Head of the Dispatch Center,
- 5 Kasymova Valentina - Head of the Department of the International Institute of Strategic Research under the Kyrgyz Republic President,
- 6 Ukoulov Kurmanbek - Head of the Planning and Economic Department of Kyrgyzstateenergoholding,
- 7 Tashbolotov Maksat - Head of the Financial and Economic Department of the State Energy Agency,
- 8 Dikambayev Shamil - Deputy Director on Science

Charles Zimmermann  
Kudaikoul Abasbekov  
Medetbek Aitkoulov  
Valentina Kasymova

Gulmira Musayeva

Hagler Bailly  
Vice-President of KSEH  
Deputy Director of the State Agency  
Head of the Department of the IISR  
under the KR President  
Chief Specialist of the Ministry of  
Economy

## MEMORANDUM

on the Results of the Seminar held in the Framework of the Regional Project  
“Electricity Contracting and Pricing Reform”

Almaty

August 8, 1996

1 In the framework of the seminar on the regional project “Electricity Contracting and Pricing Reform” financed by the US Agency for International Development, in August 7-8 the first seminar in the Republic of Kazakstan was held on the subject of “International Electricity Contracts and Power Pooling”

2 The representatives of the following organizations and agencies participated in the work of the seminar

- “Hagler Bailly Consulting, Inc ” - Project Consultant (USA)
- Ministry of Energy and Coal Industry of the Republic of Kazakstan - local organizer
- “Central Main Power” - invited Consultant (USA)
- “Richards Butler Robert” - juridical company (TACIS program)
- NES “Kazakstanenergo” - local participant
- United Dispatch Center - local participant
- “Tselinenergo” - local participant
- “Zapkazenergo” - local participant

3 The participants of the seminar have agreed that the Consultant would work out the standard draft of the international Contracts

- On the capacity trade to regulate frequency and electric energy in the power plants in the region taking into account the barter deals using some other energy resources (coal, gas, fuel oil),
- A Contract Power System - National Electric Network - Large Customer,
- Methodology of price calculation on energy/capacity as well as other types of energy resources export and import

The drafts of the Contracts must be sent to the countries-participants for consideration before September 10, 1996 in order to be able to discuss them during the second round of the seminars (September 26-27, 1996) The goal of the second round of the seminars is to be the development of the draft Contracts on energy and capacity trade which will be subsequently discussed and corrected in the course of the regional seminars

4 To realize the Project in the Republic of Kazakstan an executive (working) group has been created including the representatives of the following agencies

- Ministry of Energy and Coal Industry
- NES Kazakstanenergo
- United Dispatch Center
- Zapkazenergo (West Kazakstan Energy System)

Personal participation in the working group will be defined later

Charles Zimmermann  
Anatoly Yuriev  
Anatoly Dubatov  
Alexander Kiryashkin  
Vladimir Kovalchuk  
Marat Sharipov

Hagler Bailly  
Ministry of Energy  
Ministry of Energy  
United Dispatch Center  
NES Kazakstanenergo  
Zapkazenergo

## MEMORANDUM

### on the Results of the Seminar in the Framework of the Regional Project “Electricity Contracting and Pricing Reform’

Tashkent

August 13, 1996

- 1 In the framework of the seminar on the regional project “Electricity Contracting and Pricing Reform” financed by the US Agency for International Development, in August 12-13 the first seminar in the Republic of Uzbekistan was held on the subject of “International Electricity Contracts and Power Pooling”
  
- 2 The representatives of the following organizations and agencies participated in the work of the seminar
  - “Hagler Bailly Consulting, Inc ” - Project Consultant (USA)
  - Ministry of Energy of the Republic of Uzbekistan - local organizer
  - United Dispatch Center “Energiya”
  - “Uzinvestproject” - local participant
  
- 3 The participants of the seminar have agreed that the Consultant will work out the standard draft of the international Contracts
  - On the capacity trade to regulate frequency and electric energy in the power plants in the region taking into account the water supply for irrigation needs, billing through barter deals using some other energy resources (coal, fuel oil and gas),
  - A Contract Power System - large customer in another country,
  - Methodology of price calculation on energy/capacity export and other types of energy resources import

The drafts of the Contracts must be sent to the countries-participants for consideration before September 10, 1996 in order to be able to discuss them during the second round of the seminars (September 23-25, 1996)

Ministry of Energy of the Republic of Uzbekistan will submit a package of questions for the working group members in order to prepare the answers during the coming seminar

- Ministry of Economy and Foreign Economic Relations of the Republic of Tajikistan
- Ministry of Finances of the Republic of Tajikistan
- Tajik Technical University

5 The participants of the seminar agreed that before arranging the Baltic seminar, it is reasonable to held the regional seminar in one of the Central Asian Republics focused on the results of the first stage of work

The traveling expenses and per diem will be paid by USAID (USA)

J Michael Biddison

Hagler Bailly

Khalikov Kholnazar

Head of the Fuel and Energy  
Department of the President's  
Machinery of the Republic of  
Tajikistan

Silantiev Alexey

First Vice-President of the State  
Joint Stock Holding Company  
"Barky Tochik"

Pirmatov Nasim

Head of the Administration on  
Financial Issues of Industrial  
Sector, Ministry of Finances of  
the Republic of Tajikistan

Krassiy Zinaida

Head of the Basic Industries  
Development Department,  
Ministry of Economy and  
Foreign Economic Relations of  
the Republic of Tajikistan

Akhrorova Alfiya

Pro-rector on scientific work of  
the Tajik Technical University

## MEMORANDUM

on the Results of the Seminar in the Framework of the Regional Project  
"Electricity Contracting and Pricing Reform"

Ashgabat

August 17, 1996

1 In the framework of the seminar on the regional project "Electricity Contracting and Pricing Reform" financed by the US Agency for International Development (USAID), in August 16-17 the first seminar in Turkmenistan was held on the subject of "International Electricity Contracts and Power Pooling"

2 The representatives of the following organizations and agencies participated in the work of the seminar

- "Hagler Bailly Consulting Inc" - Project Consultant (USA)
- "Central Main Power" - invited Consultant (USA)
- Cabinet of Ministers of Turkmenistan
- Ministry of Energy and Industry of Turkmenistan
- State Energy and Technological Corporation "Kuvvat"
- "Energochimmasheexport" of the Ministry of Energy and Industry of Turkmenistan

3 The participants of the seminar have agreed that the Consultant will work out the drafts for the following

- 3 1 Contract for electric energy wheeling
- 3 2 Methodology of transit tariff calculation
- 3 3 Contract power system - large customer in another country
- 3 4 Development of the electricity billing mechanism in the conditions of the transition economy
- 3 5 Working out the "Price List" of the retail electricity tariffs for the customers of Turkmenistan taking into account the international experience and the specific conditions of Turkmenistan
- 3 6 Contract on the capacity and energy trade taking into account the barter deals using some other energy resources (petroleum products)

The drafts of the Contracts stipulated in Article 3 of the present Memorandum must be sent to the countries-participants for consideration before September 10, 1996 in order to be able to discuss them during the second round of seminars. The goal of the second round of the seminars is to be the development of the draft Contracts which will be subsequently discussed and corrected in the course of the regional seminars.

4 To realize the project in Turkmenistan a working group has been created including the representatives of the following agencies

- Cabinet of Ministers of Turkmenistan
- Ministry of Energy and Industry of Turkmenistan
- State Energy and Technological Corporation "Kuvvat"
- "Energochimshexport" of the Ministry of Energy and Industry of Turkmenistan

Personal participation in the working group will be defined later

5 The participants of the seminar decided to hold the second round of the seminar in Kyrgyzstan, Bishkek, in September 23-26, 1996 A number of the participants from Turkmenistan - 5 people

The traveling expenses will be paid by USAID

Charles Zimmermann  
Soyun Niyazov

Abdourakhman Berkeliev

Hagler Bailly  
Deputy Minister of Energy and Industry  
of Turkmenistan  
Deputy Minister of Energy and Industry  
of Turkmenistan

The goal of the second round of the seminars is the working out of the draft Contracts on capacity and energy trade which will be subsequently discussed and corrected in the course of the regional seminars

4 To realize the Project in the Republic of Uzbekistan a working group has been created including the following group members

- |                      |   |
|----------------------|---|
| 1 Mouratov T S -     | Deputy Minister                               |
| 2 Khidoyatov A A -   | Head of the Central Dispatch Service          |
| 3 Pridatkin A A -    | Head of the United Dispatch Center "Energiya" |
| 4 Abdoullayev Kh N - | Head of the Planning and Economic Board       |
| 5 Usmanova M A -     | Head of the Technical Board                   |

Michael Biddison  
Mouratov T S  
Pridatkin A A

Hagler Bailly  
Deputy Minister  
Head of the United Dispatch Center "Energiya"

## MEMORANDUM

on the Results of the seminar in the Framework of the Regional Project  
“Electricity Contracting and Pricing Reform”

Dushanbe

August 21, 1996

1 In the framework of the seminar on the regional project “Electricity Contracting and Pricing Reform” financed by the US Agency for International Development (USAID), in August 20-21 the first seminar in the Republic of Tajikistan was held on the subject of “International Electricity Contracts and Power Pooling”

2 The representatives of the following organizations and agencies participated in the work of the seminar

- “Hagler Bailly Consulting, Inc ” - Project Consultant (USA)
- State Joint Stock Holding Company “Barky Tochik”
- Government of the Republic of Tajikistan
- Ministry of Economy and Foreign Economic Relations of the Republic of Tajikistan
- Ministry of Finances of the Republic of Tajikistan
- Tajikistan Technical University

3 The participants of the seminar have agreed that the Consultant will work out the drafts of the international Contracts

- On the capacity trade to regulate frequency and electric energy in the power plants in the region, taking into account water supply for irrigation needs as well as barter deals using other energy resources (coal, gas, fuel oil) The structure of the generating capacities should be taken into consideration too
- Contract power system - large customer in another country
- Methodology of price calculation on energy/capacity export and import as well as other types of energy resources import/export
- Contract for electric energy wheeling
- Draft Provision on the regional Dispatch Center of the Central Asia
- Methodology of the transit tariff calculation
- Methodology of price calculation on energy and power (emergency and reserve) export and other types of energy resources import
- World-wide experience of energy and gas trade from the point of view of declaring and custom duties

4 To realize the Project in the Republic of Tajikistan a working has been created including the representatives of the following agencies

- Government of the Republic of Tajikistan
- State joint stock holding company “Barky Tochik”