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THE WORLD BANK

Washington, D.C.

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The World Bank

1818 H Street NW

Washington DC 20433

Telephone: 202-473-1000

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RUSSIA - General - 1992

RUSSIA GENERAL 1992

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Russia - General - 1v



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Russians

Jan 25 ^W

A L L - I N - 1 N O T E

DATE: 22-Jan-1993 05:35pm

TO: Jonathan Brown

(JONATHAN BROWN)

FROM: Blaine R. Dalby, ESMOD

(BLAINE R. DALBY)

EXT.: 36993

SUBJECT: VISIT OF RUSSIAN PETROCHEMICAL INDUSTRY EXECUTIVES AND MANAGERS

At the request of Richard Stern I am making arrangements for a group of some 25 Russian executives and managers to meet with the Bank on Thursday morning, January 28, regarding the Bank's activities in the refining and petrochemicals sectors. The group (list attached) includes senior representatives from several Russian Production Associations.

I would appreciate if you could advise which members of your group should be invited to the meeting. I would also appreciate if someone from your group could be made available to direct the meeting and provide a short introduction to the Bank and an overview of the Bank's activities in Russia.

It is envisioned that the program for the meeting will be as follows:

1. General Introduction to the Bank
2. Activities in Russia
3. Activities in the Petrochemical Sector
4. Activities in the Refining Sector
5. Question and Answer Session

Roger Heath has agreed to provide the overview of the Bank's activities in the petrochemicals sector and is making arrangements for someone to provide a similar overview of activities in the refining sector. Arrangements are also being made to invite IFC to provide an overview of their activities (they will confirm early next week).

The Russian group is in Washington on a study tour facilitated by INTELX, a U.S. based, not-for-profit foundation that arranges high level educational programs for American and foreign professionals (Mr. Paulo Liebl von Schirach).

The meeting will take place in J1-050 from 10:00 a.m. to noon on Thursday the 28th of January. Necessary arrangements for the conference room, overhead projector, and a coffee and tea service (available 9:30 a.m.) have been made by Dianne Thomas (ext. 3-6989) who is coordinating the meeting room arrangements. The Russian group will be accompanied by their own translator and arrangements are being made for a supplemental translator from the Bank.

Russian Participants Expected:

Vasily B. Ivanov - Senior Expert, Neftechinform
Grigoriy M. Cherviakov - Vice Director, Riazan Oil Refining Plant (OPR)
Dmitriy F. Melnikov - General Director of the Production Assoc.

Aleksandr I. Sisenko - Vice Director of the Production Assoc. (PA)
Viktor T. Kliakov - Vice Director of the Razanskiy ORP
Anatoliy E. Lichachov - Director of the Perm ORP
Aleksandr R. Plantonov - Vice Chief Engineer of the Moscow ORP
Leonid I. Vasilevakiy - Chief Energy master of the Mozirakiy ORP
Irina V. Ascova - Chief Accountant of the Moscow PA
Uriy A. Desiatkin - Chief Accountant of the JV "MILO"
Mariya V. Churkina - Director of the firm "Plastik"
Svetlana T. Rlinova - Chief Accountant of the Achinsk ORP
Dmitriy V. Poloveshkov - Director of the Rostov Chemical PA
Boris L. Plotnikov - Vice Director of the Rostov Chemical PA
Lubov E. Pronina - Economist of the Uchtinskiy ORP
Tatiana V. Gromziakova - Vice General Dir. of the Irkutskiy PA
Valentina N. Kovileva - Chief of the Dept. of the Irkutskiy PA
Galina Alexsandrova - Chief of the Dept. of the Irkutskiy PA
Uriy V. Shuvaev - General Dir. of the Ivanovskiy PA
Vadim I. Rimskiy - Chief Engineer of the Ivanovskiy PA
Izabella A. Arutiunova - Economist of the Chichenskiy Ministry of
Chemical and Oil refining
Tamara P. Ladovakaya - Vice General Dir. of the Astrahanskiy PA
Hamzat R. Hadgimuradov - Vice General Dir. PA
Lubov S. Podkolzina - Chief Accountant PA
Galina Z. Ternushina - Chief of Department PA
Nila P. Darma - Chief of Department PA
Viktor P. Okunev - Chief Engineer PA
Vladimir J. Glotov - Chief Engineer PA
Vadim B. Lurij - chief of Mechanics of Permenfteorgsintez PA

CC: Richard Stern	(RICHARD STERN)
CC: Hossein Razavi	(HOSSEIN RAZAVI)
CC: Petter Nore	(PETTER NORE)
CC: Reynaldo Ortiz	(REYNALDO ORTIZ)

10/03/93 47:44

002

P. Lipbl Von Schirach TEL: 202-686-0306

Jan 04, 93 17:00 No.004 P.02



NETTECHIMINFORM PROGRAM JAN.- FEB. 1993

LIST OF PARTICIPANTS

Vasily B. Ivanov - Senior Expert, "Nettechiminform"
Grigoriy M. Cherviakov - Vice Director, Riazan Oil Refining Plant (OPR)
Dmitriy F. Melnikov - General Director of the Production Assoc.
Aleksandr I. Sisenko - Vice Director of the Production Association (PA)
Viktor T. Kliakov - Vice Director of the Razanskiy ORP
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Aleksandr R. Plantonov - Vice Chief Engineer of the Moscow ORP
Leonid I. Vasilevskiy - Chief Energy Master of the Mozirskiy ORP
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Tatiana V. Gromziakova - Vice General Dir. of the Irkutskiy PA
Valentina N. Kovileva - Chief of the Dept. of the Irkutskiy PA
Galina Aleksandrova - Chief of the Department of the Irkutskiy PA
Uriy V. Shuvaev - General Director of the Ivanovskiy PA

NEFTECHIMINFORM

page 2

Vadim I. Rinskiy - Chief Engineer of the Ivanovskiy PA

Izabella A. Arutiunova - Economist of the Chichenskiy Ministry of
Chemical and Oil Refining

Tamara P. Ledovskaya - Vice General Dir. of the Astrahanskiy PA

Hamzat R. Hadgimuradov - Vice General Director PA

Lubov S. Podkolzina - Chief Accountant PA

Galina Z. Ternushina - Chief of Department PA

Nila P. Darma - Chief of Department PA

Viktor P. Okunev - Chief Engineer PA

Vladimir J. Glocov - Chief Engineer PA

Vadim B. Lurij - Chief of Mechanics of Permnefteorgsintez PA

10/03/:: 47:43

001

202 000 0306

P. Liebl Vnn Schirach TEL: 202-686-9306

Jan 04, 93 17:00 No.004 P.01

PAOLO LIEBL VON SCHIRACH
4201 Cathedral Avenue, N.W.
Apt. 1202 W
Washington, DC 20016

Tel. (202) 362-6358
Fax. (202) 686-9306

TELEFAX COVER SHEET

TO: MR. RICHARD STERN, DIRECTOR INDUSTRY and ENERGY

OF: THE WORLD BANK

FAX: 202 477 0547

DATE: JAN. 4, 1993

Number of pages including cover sheet: 3

If you have any problems receiving this transmission, please call (202) 362-6358.

SUBJECT:

Dear Mr. Stern:

As per our conversation earlier today, I herewith attach a copy of the list of Russian petrochemical industry executives who will be visiting the U.S.A. at the end of this month. To summarize what I told you over the phone, I am serving as Program Director for this Study Tour on behalf of INTELX, a U.S. based, not-for-profit foundation, specialized in organizing high level educational programs for American and foreign professionals.

The Russians who will be coming are all managers of petrochemical plants. (See attached list). They have a strong interest in understanding western technology in this field. As they are people directly involved in "running" facilities, we believe that a meeting with World Bank specialists would be a key part of this educational experience.

Thursday January 28 a.m. or early p.m. would be very good for us. Please, let us know if this can work for you.

Thanking you for your help in this matter, I remain--

Sincerely,

Car you
HR
Hlasen
SOD?
or Russian
organize something!
handle this for these guys?
Reibel
P. Liebl von Schirach

Paolo Liebl von Schirach

WORLD BANK OFFICE TRACKING SYSTEM
DIRECTOR, INDUSTRY & ENERGY
Routing and Action Transmittal Sheet

=====

TO:	HOSSEIN RAZAVI, IENOG	DATE:	1/07/93
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=====

=====

| SUBJECT DOCUMENT: |

From: PHOLO VON SCHIRACH
To: R. STERN
Dated: 1/04/93

Reference No.: ESM930107028

Topic: RUSSIAN PETROCHEMICAL INDUSTRY EXECUTIVES VISIT TO US

=====

=====

ACTION INSTRUCTIONS:	DUE DATE:
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___XXX___	HANDLE	1/07/93
_____	REVIEW AND RECOMMEND	
_____	FOR YOUR INFORMATION	
_____	DISCUSS WITH _____	
_____	AS WE DISCUSSED	
_____	PREPARE RESPONSE FOR _____ SIGNATURE	
_____	FOR YOUR FILES	
_____	RETURN TO _____	
_____	OTHER: _____	

Remarks: CAN YOU OR RUSSIAN SOD?- ORGANIZE SOMETHING/HANDLE THIS FOR THESE GUYS?

=====

WORLD BANK OFFICE TRACKING SYSTEM
DIRECTOR, INDUSTRY & ENERGY
Routing and Action Transmittal Sheet

=====

TO:	HOSSEIN RAZAVI, IENOG	DATE:	1/07/93
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___XXX___ HANDLE
____ REVIEW AND RECOMMEND
____ FOR YOUR INFORMATION
____ DISCUSS WITH _____
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____ PREPARE RESPONSE FOR _____ SIGNATURE
____ FOR YOUR FILES
____ RETURN TO _____
____ OTHER: _____

1/07/93

Remarks: CAN YOU OR RUSSIAN SOD?- ORGANIZE SOMETHING/HANDLE THIS FOR THESE GUYS?

=====

202 000 0000

P. Liebl von Schirach TEL: (202) 686-9306

JAN 04 03 17:00 No. 004 P 01

PAOLO LIEBL VON SCHIRACH

4201 Cathedral Avenue, N.W.

Apt. 1202 W

Washington, DC 20016

Tel. (202) 362-6358

Fax. (202) 686-9306

TELEFAX COVER SHEET**TO:** MR. RICHARD STERN, DIRECTOR INDUSTRY and ENERGY**OF:** THE WORLD BANK**FAX:** 202 477 0547**DATE:** JAN. 4, 1993Number of pages including cover sheet: 3

If you have any problems receiving this transmission, please call (202) 362-6358.

SUBJECT:

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Thursday January 28 a.m. or early p.m. would be very good for us. Please, let us know if this can work for you.

Thanking you for your help in this matter, I remain--

Sincerely,

Car you

P. Liebl von Schirach

Paolo Liebl von Schirach

→ HR
Hassan SOD?
on Russian
organize something!
handle this for these guys?
Richard



NEFTECHIMINFORM PROGRAM JAN.- FEB. 1993

LIST OF PARTICIPANTS

Vasiliy B. Ivanov - Senior Expert, "Neftechiminform"

Grigoriy M. Cherviakov - Vice Director, Riazan Oil Refining Plant (OPR)

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Galina Alexsandrova - Chief of the Department of the Irkutskiy PA

Uriy V. Shuvaev - General Director of the Ivanovskiy PA

NEFTTECHIMINFORM

page 2

Vadim I. Rimskiy - Chief Engineer of the Ivanovskiy PA

Izabella A. Arutiunova - Economist of the Chichenskiy Ministry of
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Viktor P. Okunev - Chief Engineer PA

Vladimir J. Glotov - Chief Engineer PA

Vadim B. Lurij - Chief of Mechanics of Permnefteorgsintez PA

ALL - I N - 1 N O T E

DATE: 23-Dec-1992 01:20pm

TO: See Distribution Below

FROM: Shigeru Kubota, EMTIE

(SHIGERU KUBOTA)

EXT.: 32806

SUBJECT: Russian Gas Turbine Industry - Invitation to A Meeting

1. A meeting will be held on Wednesday, January 6, 1993 at 10:00 a.m. (till about 12:00) in Conference Room H 4-195, inviting all the key Bank staff in power and gas sectors, and external specialists, Professors Robert Socolow and Robert Williams from Princeton University, New Jersey and Dr. Carl Wienberg from Pacific Gas and Electricity Company, California. Please advise your convenience in EM by c.o.b. Tuesday, January 5.

2. The meeting will be basically a free discussion regarding strategies for the development of Russian gas turbine industry, in particular, conversion of aeroderivative turbines for power and mechanical drive applications. First the external specialists will present their recent findings in Russia. At the end we may find some action plans.

DISTRIBUTION:

TO: Gary Stuggins

(GARY STUGGINS)

TO: David Craig

(DAVID CRAIG)

TO: Charles Feinstein

(CHARLES FEINSTEIN)

TO: Achilles Adamantiades

(ACHILLES ADAMANTIADES)

TO: Ken Newcombe

(KEN NEWCOMBE)

TO: Roger Batstone

(ROGER BATSTONE)

TO: Harold E. Wackman

(HAROLD E. WACKMAN)

TO: Mohsen Shirazi

(MOHSEN SHIRAZI)

TO: Salem Ouahes

(SALEM OUAHES)

TO: Arturo Roa

(ARTURO ROA)

TO: Howard Ash

(HOWARD ASH)

TO: Blaine R. Dalby

(BLAINE R. DALBY)

TO: Juergen Franz

(JUERGEN FRANZ)

CC: Hossein Razavi

(HOSSEIN RAZAVI)

CC: Jean-Pierre Charpentier

(JEAN-PIERRE CHARPENTIER)

CC: Bjorn Hamso

(BJORN HAMSO)

ROUTING SLIP		Date
		12/11/92
NAME		ROOM NO.
Hossein Rezavi		G-2121
URGENT	☒ For Action/Comment	Per Your Request
Appropriate Disposition	☒ Information/Discard	Returned
Approval/Clearance	Note And Return	See My E-Mail
File	Per Our Conversation	Signature/Initial
RE: <i>Russia: Environment Project</i>		
REMARKS: <i>Hossein: Denis Anderson is attending the meeting on Dec. 15 & will follow-up on this - However, some inputs are likely to be needed from your side. Trevor.</i>		
TREVOR A. BYER		
From	DIVISION CHIEF Room No.	Ext.
ESMAP STRATEGY & PROGRAMS DIVISION		
202-473-3273 ROOM G2035		

P-1862

JM

hard D. Stern
MAP Manager
11 DEC 1992

Beaussonnet street

Mr Anderson
~~Mr Byer~~

Dennis Trevor
Can you handle?
Hossein should also get

the Initial Executive Project Summary
ment Project. The IEPS was prepared
Prime Minister Shokhin requesting a
ject. The project would focus on
i) environmental institution building;
ment with special emphasis on the oil
forestry and nature protection.

ed for Board presentation in FY94 in
nce with the Russia Oil Sector project
and Gas Distribution projects.

attend a meeting to review the IEPS.
Mario Bleger and held on December 15,
-237. The peer reviewers will be Jack
earing), David Wheeler (ENVAP)
Meriwether Wilson (EMTEN)

Leah
know how
You decide
to handle
R

Messrs/Mdmes -- Thalwitz, Blanchi (2), Selowsky (3) (ECAVP)
Fox, (ECACA)
Cheetham, Blejer, Jeurling, Michalopoulos (EC3DR)
Huang, Westin, Whittle, McGraw Olive (EC3C2),
Batstone, Campello, Alahdad, Ash, Adamantiades,
Barnes, Craig, Hughes, Kearney, Lovei, Levitsky,
McKay, McPherson, Stuggins, Podolske (EC3IV) Gould,
Mudahar (EC3IA), Liebenthal (EC3PH), Stoutjesdijk,
Molineus, Voronin (EC3MO)
Kohli (EMTDR), Seth, Whitford, Wilczynski, Sephenson,
Wilson (EMTEN) Kohli (EMTDR), Wackman, Shirazi
(EMTIE), Garg (EMTAG), Pellegrini, Loccusol, Watkins
(EMTIN), Sethi (EMTPR), Schumacher (EC2AW) Fritz
(ASTEN),
El Ashry (ENVDR), Munasinghe (ENVPR), Koch-Weser,
Wheeler, Baranik (ENVAP), Strongman (AFTIE), ~~Stern~~
(ESMMR)
Kashiwaya (CFSVP), Wyss (CODDR), Churchill (IENDR),
Rao (IECDR), Rovani (DGO), Kavalsky (FRMDR),

OFFICE MEMORANDUM

DATE: December 9, 1992

TO: Distribution

FROM: Jonathan Brown, Chief, EC3IV Richard D. Stern
ESMAP Manager

EXTENSION: 32469

SUBJECT: Russia: Environment Project
IEPS Review Meeting

11 DEC 1992

1. Please find attached the Initial Executive Project Summary (IEPS) for the Russia: Environment Project. The IEPS was prepared following a letter from Deputy Prime Minister Shokhin requesting a PPF advance to prepare this project. The project would focus on three priority areas, namely: (i) environmental institution building; (ii) industrial pollution abatement with special emphasis on the oil and gas subsectors; and (iii) forestry and nature protection.

2. The project is proposed for Board presentation in FY94 in order to be processed in sequence with the Russia Oil Sector project and the Russia Gas Transmission and Gas Distribution projects.

3. You are invited to attend a meeting to review the IEPS. The meeting will be chaired by Mario Bleger and held on December 15, 1992 at 10:00 a.m. in Room H-3-237. The peer reviewers will be Jack Fritz (ASTEN) (technical/engineering), David Wheeler (ENVAP) (environmental economics) and Meriwether Wilson (EMTEN) (ecology/nature protection).

Distribution:

Messrs/Mdmes --Thalwitz, Blanchi (2), Selowsky (3) (ECAVP)
Fox, (ECACA)
Cheetham, Blejer, Jeurling, Michalopoulos (EC3DR)
Huang, Westin, Whittle, McGraw Olive (EC3C2),
Batstone, Campello, Alahdad, Ash, Adamantiades,
Barnes, Craig, Hughes, Kearney, Lovei, Levitsky,
McKay, McPherson, Stuggins, Podolske (EC3IV) Gould,
Mudahar (EC3IA), Liebenthal (EC3PH), Stoutjesdijk,
Molineus, Voronin (EC3MO)
Kohli (EMTDR), Seth, Whitford, Wilczynski, Sephenson,
Wilson (EMTEN) Kohli (EMTDR), Wackman, Shirazi
(EMTIE), Garg (EMTAG), Pellegrini, Loccusol, Watkins
(EMTIN), Sethi (EMTPR), Schumacher (EC2AW) Fritz
(ASTEN),
El Ashry (ENVDR), Munasinghe (ENVPR), Koch-Weser,
Wheeler, Baranik (ENVAP), Strongman (AFTIE), ~~Stern~~
(ESMMR)
Kashiwaya (CFSVP), Wyss (CODDR), Churchill (IENDR),
Rao (IECDR), Rovani (DGO), Kavalsky (FRMDR),

Mr. Anderson
~~Mr. By...~~

Dennis / Trevel
Can you handle?
Hossein should also get

Leah
Involved
Fritz

Leah
Fritz
You decide
to handle
R



Norsk Hydro a.s Oslo

Adresseblankett Telefaks/Telefax

Til To	Navn/Name MR. PETTER NØRE	Telefaks nr./Telefax No. 095-1-202-676.0436
	Adresse/avdeling - Address/Department WORLD BANK WASHINGTON D.C.	

Fra From	Navn/Name HARALD HASTHEIM	Telefaks nr./Telefax No. 43.23.44
	Adresse/avdeling - Address/Department NORSK HYDRO OSLO	

Date/Date 20 Nov. 1992	Antall sider/No. of pages Inst. cover sheet 3
----------------------------------	---

Merknader/Remarks

RE. TELEFON YESTERDAY

ALL THE BEST !

R (905)

Log No.

Date Received 11/20/92

Page No.

To, Mr. NØRE

a. SUBJECT/ESPROD FILES

Date of release

Name of agency

Oslo, 20 November 1992

To: Petter Nore, World Bank
From: Harald Aasheim, Norsk Hydro

Gordon
Hughes

33584

World Bank: Russian Economic Reform

(R) 10⁰⁰

Re telecon yesterday on uncertainty linked to Russian export figures for natural gas for 1990 and 1991.

See enclosure of page 182 of said report.

According to my figures for 1991 the Russian situation was as follows:

Russian production	643
Imports Kazakhstan	6
Turkmenistan	17
Consumption	463
Exports Former CIS	98
Exports ROW	105

Exports Former CIS was as follows: Ukraine 67.1; Belarussia 15.5; Kazakhstan 1.4; Moldova 3.9; Latvia 3.0; Lithuania 6.0 and Estonia 1.5.

Production figures seem to correspond with World Bank view. I am a bit uncertain about the split between domestic consumption and exports to Former CIS, but is confident that the exports to ROW (i.e. Eastern and Western Europe) amounted to 103 for that particular year.

Any idea about the reason for the discrepancy between my figures and World Bank figures?

WORLD BANK: "RUSSIAN ECONOMIC REFORM"

182 Chapter 11

market liberalization would not show up as lower energy consumption until 1995. Oil and gas consumption are the same in both scenarios for 1992.

Table 11-1: Russia Energy Scenarios 1992-96

	1990	1991	1992	1993	1994	1995	1996
Scenario A: Effective reform in late 1992							
Oil (millions of tons)							
Production	516	461	395	375	375	395	410
Consumption	227	242	213	160	140	130	120
Exports to FSU	133	128	102	90	80	75	70
Exports to ROW	156	91	80	125	155	190	220
Gas (billions of cu. m.)							
Production ^a	641	643	630	580	550	550	560
Consumption	418	416	444	380	350	330	320
Exports FSU	140	139	99	90	80	80	80
Exports ROW	69	69	0	240	200	140	140
Scenario B: No effective reform until late 1993							
Oil (millions of tons)							
Production	516	461	360	320	300	320	350
Consumption	227	242	213	200	160	140	130
Exports to FSU	133	128	102	90	80	75	70
Exports to ROW	156	91	45	30	60	105	150
Gas (billions of cu. m.)							
Production ^b	641	643	630	580	550	540	530
Consumption	418	416	444	410	380	350	330
Exports FSU	140	139	99	90	80	80	80
Exports ROW	83	88	87	80	90	110	120

a. From 1994 onwards gas production is constrained by export volumes.

b. From 1995 onwards gas production is constrained by export volumes.

Impact in 1993

11.20 Export taxes on oil would be reduced significantly after the 1992/93 heating season, i.e., by mid-1993. After this second increase in worldwide prices, most oil and gas producers would be in a position to finance well workovers as well as some other investments. Many would start to pay normal corporate profits tax. Nonetheless, in the absence of additional production from startups on new fields, increased workover activity would not be sufficient to offset the natural decline of existing fields. Oil output would fall from 395 million tons in 1992 to around 375 million tons in 1993. In the absence of energy price and tax reform, the present rapid decline in oil output would continue—from 360 million tons in 1992 down to around 320 million tons in 1993. Hence, already in 1993, early energy price and tax reform could yield a supply side benefit of up to 65 million tons of oil (i.e., 375 less 310).

11.21 By mid-1993 in a scenario of sustained reform, interenterprise arrears would have been significantly reduced and there should be significant progress in restructuring. Industrial energy consumers would adjust to the energy price increases to be introduced before and after the 1992/1993 heating season. At a minimum, energy consumption in 1993 will reflect the decline in industrial output and national income recorded in 1991/1992. On this basis, oil consumption would drop to around 160 million tons in 1993—down from 213 million tons in 1992. In the absence of energy price and tax reform, oil consumption in 1993 would remain closer to 1992 levels, perhaps around 200 million tons. Hence, on the demand side, early energy price and tax reform could yield an additional benefit of 40 million tons of oil (i.e., 200 less 160) in 1993.

very
of world

Supplied by the Russians → IMF

Log No. _____
Date Rec'd: 10/28/92
Project Name: _____
Project Officer: MR SVENSSON
cc: SUBJECT/EXTD FILES
Telephone: 071 821 1444
Our Fax: 071-821 9765
Dispatch No: _____
Fax No: _____

British Gas plc
EC Relations Department
100 Rochester Row
LONDON SW1P 1JP

FACSIMILE TRANSMISSION

TO: MR BENT SVENSSON
WORLD BANK
WASHINGTON

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ORIGINATOR: PETER LEWIS

TELEPHONE EXT: 44 525 375325

MESSAGE:

T.O.R. DRAFTS ON THE
OTHER JOB:- EASTERN EUROPE.
(THIS TIME COMMENTS WOULD
BE USEFUL.!)

I SPOKE TO ANTONIO GARCIA FRAGIO
ABOUT THE RUSSIAN JOB AND HE
SAID THAT THE CONTRACT WAS ABOUT TO
BE LET & WORK WILL START IN A FEW WEEKS

REGARDS
PETER

Terms of Reference and Call for Tenders: Gas Interconnection Study

A. BACKGROUND

It is in the interests of the countries of Central and Eastern Europe (CCEE) to increase their use of natural gas for reasons both of diversification in energy provision and of better environmental protection. At present, these countries are heavily dependent on gas supplies from the former Soviet Union. Major pipeline systems in some of the CCEE also serve as transit lines for gas exports from Russia to Western Europe.

The CCEE will be considering purchase of gas from sources other than those in the former Soviet Union in order to diversify the supply of gas. There have been few examples of new pipelines being financially justified as security linkages - instead such justification has usually been tied to contracts for purchase of gas. However, a diversity of sources can give security at an acceptable cost and can also enhance the buying power of the gas companies concerned. It appears that a comprehensive study is needed which will examine supply options from economic, technical and security points of view. There could be benefits from a Regional approach to these problems.

B. MAIN OBJECTIVES OF THE STUDY

The Study should have the main objectives of identifying the most attractive options for the gas industries of the CCEE in terms of obtaining secure long term sources and routes of gas supply and of developing grid systems able to ensure reliable and economic supplies to end-users, together with improved profitability for the gas companies involved.

C. SCOPE OF THE STUDY

The countries included in the Study should be Albania, the three Baltic Republics, Bulgaria, the Czech and Slovak Republic, Hungary, Poland and Romania. The countries of former Yugoslavia should be included for the specific purpose of examining routes into and through their territories; it is not expected that effective consultation will be possible at first, though this may change during the course of the Study.

The Study should proceed in the following overlapping stages:-

SUPPLY AND DEMAND: ABOUT 16 MAN-MONTHS

1. To define three scenarios for the development of gas markets in the CCEE and in Western Europe which will encompass a range of reasonably likely outcomes over the periods to be considered. As well as a central case, two outer scenarios should be constructed,

based on alternative trends in the World price of oil and alternative views on gas demand growth in the CCEE. High oil prices should be combined with high gas demands so as to explore a wide range of possible supply sources. Lower oil prices should be associated with lower gas demands so as to examine the economics of achieving adequate diversification in such circumstances. Most emphasis should, however, be put on the central case. Maximum use should be made of existing studies (such as those by the EC and IEA as listed in an Appendix) in drawing up the above three scenarios. The remaining stages of the Study should refer to each scenario in as much detail as is appropriate for the aspect under consideration. Particular years on which to focus for presentation of results should be 1995, 2000 and 2010.

2. To consider the balance of supply and demand in each of the countries of Central and Eastern Europe with reference to the likely rate of development of indigenous production and to measures to increase the penetration of gas in energy markets. On the supply side, the extension of use of coal-bed methane should not be forgotten, though most attention should be directed to the effect of exploration programmes for oil and gas. On the demand side, the general level of economic activity will be of importance and particular attention will need to be given to whether or not the use of gas in petrochemical and fertiliser industries will be maintained. The additional natural gas load resulting from conversion from town gas should be covered. Attention should also be given to the possibility of more use of gas in residential markets and in central power stations. In all markets, likely improvements in the technologies of conservation and efficient combustion of gas should be taken into account, including the gas industry's own use of natural gas in compressors, etc. The influence of increased price in all these developments will be crucial. Consideration should also be given to the development of more interruptible sales, in which customers are offered a lower price in return for agreeing to switch to other fuels (usually oil) at times of high gas demand.
3. To give similar but less detailed attention to supply and demand in the countries of Western Europe with the aim of determining the degree of competition from those countries for the available supplies and the requirement for transit of gas through the CCEE. The potential for the countries of the former Soviet Union to export gas will also need to be assessed, taking into account efficiency improvements in their own use of gas. In doing this, it will also be necessary to assess the extent of limitations due to difficulties in developing gas fields and problems in replacing existing pipelines, compressors, etc.

NETWORK ANALYSIS: ABOUT 40 MAN-MONTHS

4. To gather adequate technical data on existing network facilities such as pipelines, compressor stations, storage, offtakes, blending points, etc. The condition and reliability of such facilities will need to be taken into account. In general, it should be necessary only to consider mains of over 40 bar operating pressure, but where plans exist to develop lower pressure systems, they should be taken into account insofar as they affect offtakes from the high pressure systems.
5. To achieve a realistic simulation of the operation of the existing high pressure networks under critical seasonal demand conditions. This will require allocation of demands to offtake points and simulation of the operation of compressor stations, customer interruption agreements, storage facilities, etc., as well as the use of network analysis routines for looped and branched systems. Average daily flows under steady state conditions should be adequate for these simulations and linepack should be ignored. Problems of differing gas quality standards and grid segregation should be taken into account.
6. To examine the security of the existing system in terms of the amount and location of load shed due to failure to maintain adequate pressures under various conditions of demand and various supply reductions, line breaks, etc. A criterion for acceptable levels of security should be chosen, after discussion with the gas companies of the CCEE. This might be a given percentage or volume of load at risk under low probability conditions.
7. To identify and cost possible improvements to the security of the existing system, achievable over the next few years (up to 1995) by such measures as interconnection, looping, enhancement of compressors, modification to enable reverse flows etc. Cost-benefit assessments of such improvements should be developed and the results presented in terms of the cost of avoiding the shedding of each unit of load. Particular attention should be given to the introduction of cross-border linkages where national systems have evolved independently.

SUPPLY DEVELOPMENTS OVER THE MEDIUM AND LONGER TERM: ABOUT 30 MAN-MONTHS

8. To identify suitable sources of new gas supplies on a year-by-year basis up to 2000 and thereafter with snapshots at 2005 and 2010. The analysis should take into account (a) the expiry dates of existing gas supply contracts and likely terms for their renewal and (b) the capital and running costs of new sources and routes (both pipelines and sea-borne LNG). As well as sources in Russia and the other countries of the former Soviet Union, gas from the North Sea, from

North Africa and from the Middle East should all be considered. A limited number (say, 10 or 12) of sources, routes and connection points (landing points in the case of sealines or LNG) should be selected as cases for detailed study with opportunities and timescales being identified by the above supply/demand study. Again, most emphasis should be on the central demand scenarios with the other scenarios being dealt with in as much detail as is required to expose the main issues and problems.

9. To assess the way in which such sources, routes and connection points will fit in with the CCEE networks for each case and scenario selected for study and to assess the gas purchase and transit costs associated with them. In doing this, it will be necessary to gather information on existing and planned pipeline systems in the former Soviet Union and in Western Europe but a full network analysis of these systems should not be necessary since what is mainly required is a set of feasible and economic solutions for the supply of incremental quantities of gas in well-defined cases.
10. To identify and to cost any known opportunities for increases in large scale storage of natural gas, such as aquifers and depleted fields, whether existing or believed to be capable of introduction over an appropriate time-scale. Cross-border use of storage should be considered wherever countries within or outside the CCEE have an excess of economically available storage.

DEVELOPMENT PLAN: ABOUT 6 MAN-MONTHS

11. To bring together the data and forecasts on supply, demand and network engineering so as to investigate measures for cost-effective enhancement of security under critical seasonal conditions for selected years (1995, 2000 and 2010) and hence to arrive at the optimum choice of supply sources, network development, interruptible demand, etc. for each scenario. The cost of obtaining increasing standards of supply security should be shown.
12. To summarise a robust and flexible plan for negotiation of future supply contracts and development of network facilities, setting out any opportunities for co-operative effort by the CCEE.

FINANCIAL ANALYSIS: ABOUT 7 MAN-MONTHS

13. To estimate the capital investment requirements for each of the major developments considered above and also for general system improvements. The extent to which equipment purchases will need to be in hard currency should be assessed.

14. To derive broad cash flow and profit forecasts on an incremental basis for new developments over the CCEE as a whole. Selling prices for gas should be assumed to be related to the alternative fuel prices in each internal market but having regard to the likely rate of development of general energy prices and the progress by the CCEE towards World price levels and fully commercial pricing policies. Official controls over residential and other gas prices need not be considered in this context nor need the accountancy treatment of existing assets. Likely income from transit fees should be included.
15. To outline feasible methods of financing the above capital expenditure, having regard to the possibilities for equity and to the availability of funds from the World Bank, IFC, EIB, EBRD, etc. The risks of take-or-pay exposure should be assessed for each scenario. Attention should be given to the problem of giving adequate collateral for loans and the need for state guarantees. The extent to which local investments can be financed without the need for hard-currency loans should also be investigated, with payment in kind (either as gas or as transit) as a further possibility.

ENVIRONMENTAL IMPACT: ABOUT 1 MAN-MONTHS

16. To analyse the overall environmental impact of the developments considered. Such analysis to include the reduction in certain emissions as listed in the technical Appendix resulting from the displacement of other fuels by gas as well as the direct impact of production, network construction and end-use of gas.

TRAINING AND TRANSFER OF TECHNIQUES:

17. To set out the methodology and to provide the computer codes to enable further network analysis to be carried out by the gas companies of the CCEE and to provide training courses for certain staff from those companies to enable them to carry out such analyses. The budget for this work will be 100,000ECU. Up to 40 staff may be involved and it can be assumed that training will be carried out at one or two central locations within the CCEE in two sessions of 20 each.

D. OTHER CONSIDERATIONS

The studies listed in the attached Appendix should be used so as to avoid duplication of effort. A copy of the UN/ECE report "Interconnection and Extension of Gas Networks in Europe" is supplied with this invitation to tender; the others may be obtained from the organisations concerned.

It should be appreciated that over the period studied, the gas industries of the CCEE will be undertaking various measures which will lead to changes in organisation and, in some cases, privatisation. Such programmes should be taken into account, especially in relation to the ability to move to commercial pricing of energy and the possible influence of taxation and regulation.

Also taken into account should be the likely influence of the provisions of the European Energy Charter, especially those concerning Third Party Access which could lead gas companies to be less ready to incur the risks of take-or-pay in their gas purchase contracts or to invest for additional security of supply for their customers.

E. CONDUCT OF THE STUDY

- i) The time input required for the study is estimated to be approximately 100 man/months broken down as shown above under the various stages of the Study. The breakdown is indicative only and need not be followed rigidly. It is envisaged that the work on the Study should begin on 1st January 1993, and be completed in December 1993.
- ii) The selected consultancy or consortium will consist of a team which should demonstrate the following experience and abilities:
 - a) experience in matters to operation and planning in the gas supply industry, including economic and financial aspects
 - b) ability to perform steady state simulations of gas networks
 - c) knowledge of the CCEE and ability to send teams to visit and gather data in the countries concerned
 - d) excellent communication skills with ability to work in English
- iii) The gas companies of Western Europe as represented in EUROGAS and those of the former Soviet Union, as well as the utilities in Central and Eastern Europe, will be requested by the Commission to co-operate actively with the consultant. Particularly the Ministries responsible for energy policy and the utilities in the PHARE countries will be requested to assist in providing necessary information, data and contacts.

- 7 -

- iv) The consultant will produce monthly progress reports with details on the study's progress. A draft final report should be ready by end-November 1993. The Commission will provide comments on this report to the consultant within two weeks. The final report should be submitted in reasonable time after the Commission's comments. Parallel to the final report a workshop will be organised by the contractor with participation of representatives of the European Commission and the Ministries of the recipient countries, at which meeting the consultant will present the main results of the study. The consultant will provide 15 copies of the interim report, 15 copies of the draft final report and 30 copies of the final report.
- v) At the request of the recipient countries, the English language will be used in all communications between the parties. All reports submitted to the European Commission will be in this language. All translation work will be financed by the consultant.
- vi) This call for Tender will be evaluated under competitive tendering. The basis for the cost calculation should be the time input outlined including travelling, accommodation etc., above together with the expenditure on training and transfer of techniques. The training plans (within the budget total) should form part of the tender.

POL
16/10/92

APPENDIX I (Technical)

For gas volumes use:

Billions Cubic Metres (bcm)
Standard Calorific Value
(Gross Basis):

1 cu. metre natural gas: 9500 K.Cal
or 39.7746 MJ

For energy consumption use:

Million Tonnes Oil Equivalent
(MTOE) defined as (Net Basis):

10^{13} K.Cal

Linepipe for new construction: UP to 80 bar and 48 inches

Steel specification to give hoop
stress at operating pressure equal
to 72% of minimum yield

Emissions to be considered in environmental assessment for gas and
other fuels under the headings:

CO₂, SO₂, NO_x, Particulates

Also, consider CH₄ from coal production, gas production and
distribution.

APPENDIX II (Studies)

1. General Reports

UN/ECE Geneva: Interconnection & Extension of European gas Networks

IEA Paris: Natural Gas Prospects & Policies

CEC: A View to the Future

CEC/ERL Energy: Integration of Gas Networks in the EC

World Bank/ADL: The future of Natural Gas in Eastern Europe.

2. Specific Studies

- POLPIPE Study of Gas from Norway
- LNG Pre-Feasibility Study (Pentagonal Group/Kellogg)
- TRANSMED Study (SNAM)
- Natural Gas Market Potentials in Hungary (World Bank ESMAP)
- SOVGASCO Baltic Pipeline Study by FISCOT and J P Kenny)

3. Studies in Progress

IEA Paris Gas Transportation in IEA Countries and in Eastern/Central Europe - Regulations and Possibilities for Interconnections.



■ Correspondence

■ Energy - San Francisco

VIA FACSIMILE - 202-676-0436

Date: 26 October 1992

To: Jonathan Brown
The World Bank

From: Richard Hildahl
Ernst & Young

Transneft Delegation Visit to Washington, DC

15 representatives of Transneft will be visiting Washington, DC from Wednesday, 28 October through Friday, 30 October, 1992. Included in the delegation are Mr. A. I. Stepanov, Chief Financial Officer of Transneft and Mr. Nosov of the Ministry of Fuel and Power (See attached list of delegation).

We believe it would be worthwhile for the delegation to hear a presentation from the World Bank on their role in the Commonwealth of Independent States (CIS). The presentation will help them to understand the important role the World Bank will have with their organizations. With this delegation it would be valuable to go through the steps in a loan program.

The best day for this meeting would be Friday morning at the World Bank or we can arrange a meeting place at the Omni Hotel in Georgetown where they are staying.

Please notify us of the availability to accomplish this presentation, by fax at (415) 951-3296 or by voice at (415) 951-3304.

Best Regards.

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**List of the Delegation of Specialists in Economic Activity of the Oil
Transportation Company Transneft for Work Visit to Study the Pipeline
Transportation System in the US**

- | | |
|------------------------|---|
| 1. A. I. Stepanov | Director of Economic Activity of Executive Board of Transneft Company, Head of the Delegation, Moscow |
| 2. E. A. Hmel'nitskaya | Head of the Department of Economic Development and Finance of Executive Board of Transneft, Moscow |
| 3. I. N. Anisimova | Head of the Department of Account of Executive Board of Transneft, Moscow |
| 4. N. N. Golishkina | Head of the Department of New Methods of Administration and Financial Stimulation of Executive Board of Transneft, Moscow |
| 5. M. A. Saydashev | Deputy Director of Industrial Association Ural-Siberia Trunk Oil Pipelines, Ufa |
| 6. V. N. Halturin | General Director of Industrial Association of Volga Trunk Oil Pipelines, Samara |
| 7. A. S. Aktemirova | Head of the Economic Department of Industrial Association of North-Western Trunk Oil Pipelines, Bugulma |
| 8. Y. D. Sedoy | General Director of Industrial Association of Upper Volga Trunk Oil Pipelines, Nizhniy Novgorod |
| 9. A. M. Vasilev | Deputy Director of Central Siberia Industrial Association of Trunk Oil Pipelines, Tomsk |
| 10. L. V. Guselkova | Deputy Director of Trans-Siberia Industrial Association of Trunk Oil Pipelines, Omsk |
| 11. V. V. Ivanetskaya | Head of the Economic and Finance Department of Industrial Association of Black Sea Trunk Oil Pipelines, Novorossiysk |
| 12. V. V. Miromanova | Head of the Economic Department of Industrial Association of North-Caucasus Trunk Oil Pipelines, Grozniy |

**List of the Delegation of Specialists in Economic Activity of the Oil
Transportation Company Transneft for Work Visit to Study the Pipeline
Transportation System in the US**

- | | |
|--------------------|--|
| 13. V. P. Korotkov | General Director of Industrial Association of North Trunk Oil Pipelines, Uhta |
| 14. V. A. Nosov | Deputy Head of the Department of Ministry of Fuel and Energy of the Russian Federation, Moscow |
| 15. I. V. Panin | Interpreter |

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A L L - I N - 1 N O T E

DATE: 02-Oct-1992 06:46pm

TO: Anthony A. Churchill

(ANTHONY A. CHURCHILL)

FROM: Maritta Koch-Weser, ENVAP

(MARITTA KOCH-WESER)

EXT.: 33286

SUBJECT: Chernobyl

Re. our discussion the other day:

Please see page 3 - does the Bank take any stance?

CC: Richard Stern

(RICHARD STERN)

CC: Dennis Anderson

(DENNIS ANDERSON)

CC: Mohamed T. El-Ashry

(MOHAMED T. EL-ASHRY)

CC: Andrew Steer

(ANDREW STEER)

Richard D. Stern
ESMAP IV

5 OCT 1992

→ HR FYI

A L L - I N - 1 N O T E

DATE: 02-Oct-1992 09:17am EST

TO: See Distribution Below

FROM: Mari Horne, EC3C2 (MARI HORNE)

EXT.: 37355

SUBJECT: RFE-RL 10/2/92

RFE/RL Daily Report

No 190, 2 October 1992

SUCCESSOR STATES OF THE USSR

UKRAINIAN PARLIAMENT VOTES OUT CABINET. The Ukrainian parliament on 1 October overwhelmingly approved a motion of no confidence in the cabinet of ministers, Western agencies reported. The decision followed Prime Minister Vitold Fokin's request to step down as head of government the day before. Ukrainian lawmakers gave President Leonid Kravchuk ten days to appoint a new prime minister, who then will work together with the President to form a new cabinet. The fall of Fokin and his cabinet was the result of constant charges by the opposition that the government was failing to implement economic reforms in the country. (Roman Solchanyk, RFE/RL Inc.)

KRAVCHUK VS CENTRALIZED CIS. Ukrainian President Leonid Kravchuk told parliament on 30 September that Ukraine will never allow itself to be subordinated to any kind of centralized CIS structures, Ukrinform-TASS reported. Kravchuk said that these kinds of ideas are currently being propagated, and that they are oblique references to recent proposals for tighter CIS integration made by Kazakhstan President Nursultan Nazarbaev. At the same time, Kravchuk emphasized that as in the past, the closest possible ties will be maintained with Russia. (Roman Solchanyk, RFE/RL Inc.)

RUSSIAN SUBMARINE SALE TO IRAN STILL ON? A Russian submarine is still sailing to Iran, the Washington Post reported on 2 October, despite Russian indications that the submarine sale was cancelled. The Post article indicated that the submarine was nearing the English Channel en route to the Persian Gulf. In response to the Russian sale, the US Senate on 1 October attached an amendment to a foreign aid bill that would cut assistance to Russia if it sells arms to Iran, Western news agencies reported. While the final bill must still be coordinated with the House of Representatives, the amendment was a sign of the seriousness with which the arms sale was being viewed. (John Lepingwell, RFE/RL Inc.)

CONTINUED STRIFE IN TAJIKISTAN. Fighting continued in southern Tajikistan on 1 October, ITAR-TASS reported, and the Russian division stationed there was taking additional measures to protect

its equipment, some of which supporters of deposed President Rakhmon Nabiev have already stolen or otherwise acquired. Troops of the Tajik Ministry of Internal Affairs and prison administrators issued an ultimatum to the government and party leaders that they will release the inmates of correctional institutions if attacks on them are not stopped; armed groups have been raiding prisons in order to obtain arms from the guards. Meanwhile, Russian border guards reported more battles with persons seeking to cross the Tajik-Afghan border illegally. (Bess Brown, RFE/RL Inc.)

RUBLE PLUNGES ON CURRENCY EXCHANGE. The ruble lost nearly 22% of its value against the dollar in narrow trading on the Moscow Interbank Currency Exchange on 1 October, Interfax reported. The dollar rose from 254 rubles to 309 rubles. The fall in the value of the ruble was generally attributed to fears of very high inflation (an annual rate of over 2,000% is expected in 1992) or hyperinflation. Acting Russian Central Bank Chairman Viktor Gerashchenko blamed the pending increase on the price of energy-carriers. Government adviser Aleksei Ulyukayev promised that the government would take unspecified joint measures with the Russian Central Bank to stabilize the exchange rate of the ruble, ITAR-TASS reported. And writing in Trud, Deputy Prime Minister Vladimir Shumeiko called on the West to expedite the \$6 billion stabilization fund to "correct" the ruble exchange rate. (Keith Bush, RFE/RL Inc.)

RUSSIAN RUBLE TO BE INTRODUCED? The Acting Chairman of the Russian Central Bank, Viktor Gerashchenko, told Interfax on 1 October that while his bank favored the retention of the ruble zone, Russia may have to introduce its own monetary and currency unit if other CIS governments insist on pursuing different economic policies and fail to agree upon and to coordinate policies. He called for clear government agreements on the size of credit emission in the ruble zone and on regulating credits provided to importers of Russian goods. Many observers believe that the ruble zone exists only on paper and that "Russian rubles" are already distinct from "Moldovan rubles" or "Kazakh rubles." (Keith Bush, RFE/RL Inc.)

OTHER CURRENCY DEVELOPMENTS. Belarus replaced the ruble on 1 October with a special coupon system in areas near the Lithuanian and Ukrainian borders, ITAR-TASS reported. A Belarusian National Bank official explained that the move was made because the introduction of non-ruble currencies in Lithuania and Ukraine could prompt an unwanted influx of rubles into Belarus. Lithuania replaced the ruble on 1 October with temporary coupons that will be used until the new Lithuanian currency, the litas, is introduced, Reuters reported. And Moldovan Economics Minister Sergiu Certan was quoted by Interfax on 1 October as saying that it would be a mistake to introduce a national currency now when Moldova is in an economic crisis. (Keith Bush, RFE/RL Inc.)

GORBACHEV ATTACKS YELTSIN. Former CPSU Secretary General Mikhail Gorbachev told journalists that he is thinking about creating his own political party as part of a political comeback, but he added

that the time for this was not yet right, Nezavisimaya gazeta reported on 30 September. He called President Boris Yeltsin "a loss," arguing that terrible mistakes had been committed in foreign and economic policies. He said Yeltsin's privatization plan was a "deception." He also criticized Yeltsin for not responding to Kazakh President Nursultan Nazarbaev's proposal for tighter integration of CIS member states. Gorbachev recommended that President Yeltsin and other Russian leaders welcome Gorbachev advisors like Aleksandr Yakovlev into the inner circle of government decision-makers. (Alexander Rahr, RFE/RL Inc.)

FILATOV SUPPORTS YELTSIN. First deputy parliamentary speaker Sergei Filatov has joined forces with the democrats and called for an expansion of President Boris Yeltsin's executive powers. In an interview with Stolitsa (no. 38) he warned that parliamentary speaker Ruslan Khasbulatov is violating the constitution and seeking to create an administrative-command system in parliament, thereby restricting the rights of the deputies. He argued that the president should be given the right to dissolve at least part of the legislature, since parliament has the right to impeach the president. He noted that at the moment, the balance of power in Russia is distorted to the disadvantage of the executive branch. (Alexander Rahr, RFE/RL Inc.)

RYZHKOVA TESTIFIES AT THE CPSU TRIAL. Speaking at the CPSU hearing in the Constitutional Court on 1 October, former USSR Prime Minister Nikolai Ryzhkov denied receiving instructions from the Communist Party leadership, Russian TV reported. Since the abrogation of the provision in the Soviet Constitution on the leading role of the Communist Party, Ryzhkov said that he answered only to the USSR President and his Presidential Council. However, Ryzhkov said that Gorbachev, who had combined the post of the CPSU General Secretary with that of the President, had often mixed up these two roles. Ryzhkov denied that the CPSU was the sole cause of the country's crisis. He said that immediately following the election of Boris Yeltsin to be Speaker of the Russian parliament in 1990, the CPSU in fact ceased to be the governing party, since its largest component, the Russian communists, became an opposition movement and could not act in the party's traditional manner. Ryzhkov also denied any wrongdoings by his government during the Chernobyl nuclear accident in 1986. (Julia Wishnevsky, RFE/RL Inc.)

TWO CHERNOBYL REACTORS TO BE RESTARTED? The director of the Chernobyl nuclear energy station told Reuters on 1 October that two of the station's four reactors will be restarted soon. The No. 3 reactor will be restarted in October and the No. 1 in November to meet increased demands for electric power in winter. Official pronouncements on whether the Chernobyl reactors will be recommissioned have been inconsistent and contradictory. The current intention appears to be that all power generation at the Chernobyl station shall be halted at the end of 1993 (see The Guardian, of 10 September). (Keith Bush, RFE/RL Inc.)

KGB EXTERNAL SURVEILLANCE CODE MADE PUBLIC. The voice of the right nationalist opposition, Den, (Numbers 37-39) has published the complete instructions of secret surveillance methods employed by the former KGB. The document describes the techniques and equipment used by the KGB in overt and covert monitoring of its victims and opponents. The weekly obtained the instructions from former KGB officers, which left the agency because of "chaos and uncertainty prevailing in the present state security organs." Giving its own reason for the publication, Den wrote that the instructions can be used in support of the so-called "patriotic resistance" and underground activities in case pro-Western forces attempt to impose a direct dictatorship". (Victor Yasmann, RFE/RL Inc.)

CENTRAL AND EASTERN EUROPE

ROMANIA REACTS TO MFN VOTE. President Ion Iliescu expressed bitterness over the vote in the US House of Representatives against restoration of most-favored-nation trade status for Romania. Radio Bucharest quoted him as saying that the decision "protracts the discrimination to which Romania is unfairly subjected." Iliescu accused Hungarian-born US Congressman Tom Lantos of having "misinformed" the House on the situation in Romania. In a separate statement, the Foreign Ministry said that the House vote demonstrates both "a lack of understanding" for the changes in Romania and the "virulence of the anti-Romanian lobby in the US." (Dan Ionescu, RFE/RL Inc.)

OECD RECOMMENDS DEBT REDUCTION FOR BULGARIA. In a report released in Paris on 2 October, the Organisation for Economic Cooperation and Development suggests that Bulgaria be offered a "substantial cut" in both its principal foreign debt and interest burden, Western agencies report. Without debt reduction, the report argues, Bulgaria can neither expect a significant inflow of foreign capital, nor will it be able to consolidate its economic achievements and speed up structural reforms. After a vote passed by the National Assembly last Friday, Bulgaria will be paying some 25% of the interest due for the last six months of 1992. (Kjell Engelbrekt, RFE/RL Inc.)

[As of 1200 CET]

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TO: Masayuki Kondo	(MASAYUKI KONDO)
TO: Katharina Katterbach	(KATHARINA KATTERBACH)
TO: Carlos Ferreira	(CARLOS FERREIRA)
TO: Andrei Barannik	(ANDREI BARANNIK)
TO: John OConnor	(JOHN OCONNOR)
TO: Boris Blazic-Metzner	(BORIS BLAZIC-METZNER)
TO: Jitendra Borpujari	(JITENDRA BORPUJARI)
TO: Jong-Goo Park	(JONG-GOO PARK)
TO: Young Chul Kim	(YOUNG CHUL KIM)
TO: Gabriela Martin	(GABRIELA MARTIN)
TO: Ava Ayrton	(AVA AYRTON)
TO: Zlatko Kovach	(ZLATKO KOVACH)
TO: David Cieslikowski	(DAVID CIESLIKOWSKI)
TO: Adriana Bianchi	(ADRIANA BIANCHI)
TO: William Easterly	(WILLIAM EASTERLY)
TO: Yukon Huang	(YUKON HUANG)
TO: Wafik Graiss	(WAFIK GRAISS)
TO: K. Tanju Yurukoglu	(KADIR YURUKOGLU)
TO: Jaime Biderman	(JAIME M. BIDERMAN)
TO: Elizabeth Monosowski	(ELIZABETH MONOSOWSKI)
TO: Peter Whitford	(PETER WHITFORD)
TO: Leila Webster	(LEILA WEBSTER)
TO: Richard Ackermann	(RICHARD ACKERMANN)
TO: William McGreevey	(WILLIAM MCGREEVEY)
TO: Maria Gracheva	(MARIA GRACHEVA)
TO: Erlissa Y. Velasco	(ERLISSA Y. VELASCO)
TO: Silvina Vatnick	(SILVINA VATNICK)

TO: Zeynep Taymas
TO: Michael S.V. Rathnam
TO: Bernard Drum
TO: Richard Westin
TO: Erik Nielsen
TO: Dennis Whittle
TO: Philippe Le Houerou
TO: Douglas Galbi
TO: Victor Gabor
TO: Misha Belkindas
TO: Rosalinda Dacumos
TO: Lynette Wardle
TO: Vladimir Konovalov
TO: Geoffrey B. Lamb
TO: Emilia Arriola
TO: Frances Rosenthal
TO: Robert Elings
TO: Elena Suhir
TO: Daniel Kaufmann
TO: Chandrashekar Pant
TO: Theodore Ahlers
TO: Marsha McGraw-Olive
TO: Lars Jeurling
TO: Qimiao Fan
TO: Taru Bhargava
TO: Michael Mills
TO: Irina Kichigina
TO: Timothy Heleniak
TO: Suzanne Barnes
TO: Galina Mikhlin
TO: Dilek Barlas
TO: Lily Chu
TO: Gur Ofer
TO: Martha De Melo
TO: Wayne Ringlien

(ZEYNEP TAYMAS)
(MICHAEL S.V. RATHNAM)
(BERNARD DRUM)
(RICHARD WESTIN)
(ERIK NIELSEN)
(DENNIS WHITTLE)
(PHILIPPE LE HOUE ROU)
(DOUGLAS GALBI)
(VICTOR GABOR)
(MISHA BELKINDAS)
(ROSALINDA DACUMOS)
(LYNETTE WARDLE)
(VLADIMIR KONOVALOV)
(GEOFFREY B. LAMB)
(EMILIA ARRIOLA)
(FRANCES ROSENTHAL)
(ROBERT ELINGS)
(ELENA SUHIR)
(DANIEL KAUFMANN)
(CHANDRASHEKAR PANT)
(THEODORE AHLERS)
(MARSHA MCGRAW-OLIVE)
(LARS JEURLING)
(QIMIAO FAN)
(TARU BHARGAVA)
(MICHAEL MILLS)
(IRINA KICHIGINA)
(TIMOTHY HELENI AK)
(SUZANNE BARNES)
(GALINA MIKHLIN)
(DILEK BARLAS)
(LILY CHU)
(GUR OFER)
(MARTHA DE MELO)
(WAYNE RINGLIEN)

A L L - I N - 1 N O T E

DATE: 01-Oct-1992 03:55pm

TO: Joanne Salop (JOANNE SALOP)

FROM: Richard Stern, ESMR (RICHARD STERN)

EXT.: 36826

SUBJECT: RE: Russia -- Loan Committee Review

We support the loan. I think it is a very opportune involvement by the Bank in the sector. However, I would like to reiterate the need for the appraisal mission to:

- (a) develop a mechanism for monitoring the sector restructuring process which is likely to be quite extensive with participation of many multilaterals, bilateral and public and private parties;
- (b) ensure the availability of technical assistance during the restructuring process in particular as we move to specific actions in development of legal framework, regulatory regime, etc.

CC: John Voneiff	(JOHN VONEIFF)
CC: Pauline J. Clephane	(PAULINE J. CLEPHANE)
CC: Dennis Anderson	(DENNIS ANDERSON)
CC: Anthony A. Churchill	(ANTHONY A. CHURCHILL)
CC: Mohamed T. El-Ashry	(MOHAMED T. EL-ASHRY)
CC: Hans Wyss	(HANS WYSS)
CC: Hossein Razavi	(HOSSEIN RAZAVI)

Jonathan P. Stern

Researcher and Consultant

Telephone 44 (0) 71-252 8647
Facsimile 44 (0) 71-252 8662

98, Erlanger Road
LONDON SE14 5TH
UK

September 15, 1992

Mr. Bent Svensson
Senior Energy Economist
Industry and Energy Operations Division
Natural Gas Development Unit, Room N-6048
The World Bank
WASHINGTON DC 20433
U S A

010 1 202 676 0436

Dear Bent,

Following our conversation yesterday I have called the World Bank office in London and American Express in London. This is the situation:

- I need you to send a travel authorisation to AMEX in London before they can issue the ticket (there is some confusion at AMEX whether your Division is using AMEX or Thomas Cook). When they receive the authorisation, they will issue the ticket.
- I have to get my finished draft to the London office by 1 pm tomorrow so that it can be couriered to reach you by Friday. I think this should just about be possible. If you don't hear from me, expect to receive the paper on Friday.

I hope to hear from you later in the week regarding the visa.



Log No.	
Date	09/15/92
Subject	MR. SVENSSON
File	SUBJECT FILE
File	55400 FILE

JOHN R. LACEY INTERNATIONAL LTD.
LACEY COURT, 344 - 12TH AVENUE SOUTHWEST
CALGARY ALBERTA T2R 0H2 CANADA
TELEPHONE (403) 266 6995 FACSIMILE (403) 294 0667 TELEX 03-822763 QUIKFAX HO CGY

FACSIMILE TRANSMISSION

TO WORLD BANK
Room G2093
1818 H Street W, Washington, D.C.

FACSIMILE NUMBER
202 676 0436

ATTENTION Peter Law
Energy Specialist

NO. OF PAGES (INCLUDING THIS)
3 (three)

FROM DR. JOHN LACEY

DATE August 13, 1992

Dear Peter:

I understand that the World Bank is negotiating with one party (who shall be nameless at this point) regarding advice on tariffication of the CIS system.

As you are aware from our previous discussions we have done preliminary work on this and have explored the facets with the Russians at the Ministerial and GasProm level over the last 30 months.

I was very surprised that the Bank had not followed this up with us especially as people such as IEA, EEC, EBRD, etc, are well aware of the contacts we have in this area and senior officials in Russian Ministry of Fuel and Power appeared to be seeking assistance in this way and which I though had passed to the Bank. Obviously this is not a task that can be undertaken by our group alone, so we are bringing together a team comprising of highly experienced rate specialists, regulatory legal specialists and engineering and financial personnel together with software specialists all to be focused on this critical problem.

As you know we have been involved in tariffication matters in a number of areas of the globe over the past 20 years - and recognize the critical differences that must apply to reflect the social aspirations of the countries and the financial and political realities of the various areas. Clearly the CIS has all these

concerns and they must be addressed in a manner that will permit strengthening of the supply and delivery system within an acceptable framework while at the same time ensuring that national energy deliveries can still meet social aims and that the producing sections in regions receive a return adequate to address maintenance of supply and incentive for improvements.

To the best of my knowledge the task of looking at tariffication by the Bank has not gone out to bid or been open to general discussion, I would like to ask you if this can be pursued and to ensure that our background and interest in this is brought to the attention of whomsoever is in charge of this matter.

I would be pleased to expand on any of the points or let you know to whom we have been talking with in Russia and will call you if necessary from here. I am currently in Australia, will be in Perth from 15-22nd of August, Bangkok on 23rd, Paris with IEA on 24th and back in Calgary on 25th, but I can be contacted through my office all the time or you can fax me at the Parmelia Hilton, Perth (Fax 61 9 481 0857)

I hope the other information sent on the supply side was what you wanted.

With kind regards

John McDonald
FOR JOHN R. LACEY

ESMAP/...	
Log No.	_____
Date Received	08/13/92
Project Name	_____
Project Officer	MR. LAW
cc.	SUBJECT FILE
	ESM-0 FILE

FROM:WB ESMOD 202 676 0436

TO:WORLD BANK EC3IV

AUG 12, 1992 10:58AM #988 P.02

THE WORLD BANK / INTERNATIONAL FINANCE CORPORATION / MIGA

OFFICE MEMORANDUM

DATE: August 11, 1992

TO: Peter Whitford

FROM: Peter Law, ESMOD

EXTENSION: 36977

SUBJECT: RUSSIAN FEDERATION: Summary of GEF Technical Review
Panel Comments: Multi End-Use and Marketing of Recovered
Associated Gas in the Russian Federation

1. A technical review meeting chaired by Mr. Peter Whitford was held on August 10, 1992 in Washington D.C. to review the GEF proposal for the above-mentioned project. Additional persons present were: Roger Batstone, Viren Sirolin (~~ESMOD~~); Francine Steininger, Sherif Arif, (EMTEN); Rohit Khanna (UNEP); Tom Kearney (~~IEPS~~); Charles Feinstein (ENVGC); Thomas I. Joyce (WB Consultant); Deborah Blevis (International Institute for Energy Conservation) (External Reviewer); Peter Law (ESMOD) was designated in-house technical adviser. Mr. ~~.....~~ also acted as external technical adviser, but was unable to attend the meeting. Written comments from both external technical advisers are attached.

2. A summary of the major issues raised at the meeting is presented below:

The task manager presented the project in its environmental context. Here the former Soviet Union (FSU) is the world's second largest flarer of associated gas (10-15 bcm/yr), exceeded only by Nigeria. The proposed project is focused on using currently flared associated gas from fields in Western Siberia, where use of flared gas has been inhibited by inaccessibility to local markets and institutional barriers. However, a new oil and gas conservation law currently under development in the USA, incorporates much of modern western thinking (including the use of associated gas) and has attracted the strong interest of the Russian authorities. There is very likelihood that a similar environmental law will be adopted in Russia in the near term, which would offer a favorable context for the proposed project.

3. Although the draft IEPS discuss^{2.5} recovery of Associated gas to some extent, it does not place sufficient emphasis on natural gas transportation and end-use. It was noted that the flared gas volumes under consideration are very large. In view of this, and the possibility that large quantities of excess gas may become available in FSU during this decade (the so called go bubble), there may be large quantities of gas (both associated and non-associated) competing for limited internal markets. In the event of excess gas supply, there may be economic justification for prioritizing consumption of associated over non-associated gas. Nonetheless it is essential that the importance of preparing preliminary market

- 2 -

assessments for flared gas use be recognized at the earliest stages of project design.

4. It was noted that the draft IEPS does not give a sense of the costs involved of transporting the gas to market, which could be very substantial. Also, the revised IEPS needs to provide a clearer sense of the rationale for GEF funding and the cost effectiveness when compared to other projects in the region which may be competing for the same funds. The benefits of reduced CO₂ emissions as suggested in the draft IEPS should not be taken as more than indicative in the broadest sense and this needs to be highlighted ~~should they be used~~ revised IEPS.
in a
5. Concern was expressed that there is no real justification for the cost breakdown of the GEF project subcomponents shown in IEPS paragraph 10, since the project is insufficiently developed. Rather, it would be more meaningful at this stage to adopt an approach whereby the IEPS highlights, in principle, the potential environmental benefits of capturing and using flared gas. It was accepted that the proposed master plan should, as its principal objective, prepare a ranking of priority projects from which selected less economically favorable ones could be considered for financing under GEF.
6. It was noted that GEF should only seek to provide partial funding for the gas flaring master plan, since some of the priority projects yet to be identified may offer economic viability. Supplemental funding *could come from BPA. Check PPF for the Bank Project.*
7. The issue of the need to create a separate institutional body to market flared gas was raised. It was agreed that a separate body may be a useful mechanism for speeding up the process of institutional reform to facilitate effective use of associated gas.
8. It was agreed to include the following items in the revised IEPS:
 - i) Identify the market risk as a principal project risk in IEPS paragraph 19
 - ii) Include the requirement for preliminary market assessment for Associated Gas as part of the proposed master plan in IEPS paragraph 8
 - iii) Include already available data on potential markets for Associated Gas as an annex to the revised IEPS.
 - iv) Remove project costs from IEPS paragraph 10
 - v) Revise the approach of the IEPS to take account of the need to produce an economic ranking of possible projects, from which GEF project may be identified.

attachment

cc:

(Call Francine on cc list)

ESMOR
.TCP SD

* ESMOR *

248423 WORLDBANK

RQROTHA SGAZ SU

MOSCOW SGAZ TLX 25 02.07.92

THE WORLD BANK MICAZ WASHINGTON

ATTN. MR. R. SVENSSON

DEAR MR. SVENSSON

ACCORDING TO YOUR OFFER WE ARE READY TO COME TO LONDON
JULY 23, FOR DISCUSSION INTERIM REPORT

BUT THE DEMAND OF THE BRITISH EMBASSY IN MOSCOW THE VICE
IS THE INVITATION FROM ARTHUR D. LITTLE (TELE OR FAX) FOR
MR. SERGEY Y. CHEPANDOV (MR. KOMAROV DOESN'T NEED VISA)

SO WE ARE KINDLY ASK YOU TO CONTACT TO ARTHUR D. LITTLE
WITH THE REQUEST TO SEND THE ABOVE MENTIONED INVITATION TO OUR
"GAZEXPORT" AS SOON AS POSSIBLE

WE'D LIKE ALSO TO RECEIVE THE COPY OF INTERIM REPORT BEFORE
NEGOTIATIONS IN LONDON I JUST TO BE ACQUAINTED WITH IT.

THANK YOU VERY MUCH
248423 WORLDBANK
BEST REGARDS

Y. KOMAROV
248423 WORLDBANK

411987A SGAZ SU

=07021002
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WRW1065

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NNNN

WORLDBANK TMS

Log No.	
Date Received:	02/02/92
Project Name:	
Project Officer:	MR. SVENSSON
CC:	SUBJECT FILE
To:	
From:	

TCF SD

* FSMOD *

248423 WORLD BANK

FOROTHS 8067 SU

MOSCOW SOVRAZ TIX R/W 01.07.62

THE WORLD BANK ZTC/NICA - WASHINGTON
(TELEX MOSCO 248423)

ATTN. MR RENT D. SMENSON

DEAR MR. SMENSON

THANK YOU FOR YOUR INFORMATION ABOUT THE STATE OF
DISCUSSIONS

MR. KOMAROV SHALL BE IN MOSCOW ONLY TOMORROW MORNING
AND WILL IMMEDIATELY INFORM YOU ON THE POSSIBILITY OF
OUR VISIT TO LONDON DURING THE PERIOD MAY 22 TO 24

SINCERELY YOURS

S. CHIRPANO

248423 WORLD BANK

4119070 8067 SU

=07010947

RCA488

WBM1089

=07010721

NNNN

ESMAP OF THE Division

Log No.

Date Received:

07/01/62

Project Name:

Project Officer:

MR. SUBASSON

CC SUBJECT FILE

Date of

WORLD BANK THIS

Subject File

THE WORLD BANK / INTERNATIONAL FINANCE CORPORATION
OFFICE MEMORANDUM

DATE: June 30, 1992
TO: Distribution
FROM: Blaine Dalby, ESMOD *ABD*
EXTENSION: 36993
SUBJECT: **Briefing Papers - Russian Gas Loan**

The attached information has been compiled to orient the new team members that will participate in the July 20, 1992, natural gas sector Loan Preparation Mission to Russia. Attached are:

1. The Back-to-Office Report for the May 11-20, 1992, Russia Natural Gas Sector Project Identification Mission.
2. B. Dalby's Back-to-Office Report for the Natural Gas Sector Reconnaissance work that was done as a part of the "Russia: Petroleum Critical Imports Project Identification Mission: Moscow, February 26 - March 19, 1992". The report includes the gas sector portion of the mission's aide memoire, notes from the gas related meetings in Russia, and packages of miscellaneous background information.

Please note that in regard to item number 7 of the report an updated version of the background information prepared by British gas has been included. Chapter 1 of the Petrostudies Report has therefore been omitted as the information it contains is included in the updated British Gas information.

Distribution:

Messrs/Mmes: J. Brown, C. McPherson, D. Craig (EC3IV), M. Shirazi (EMTIE),
H. Razavi, P. Nore, B. Svensson (ESMOD), A. Mashayekhi
(FODD3)

w/attachments: G. Stuggins (MN2IE), H. Beaussant (ESMOD), J. Stoddart
(LA4IE), H. Ash (Consultant)

The World Bank

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
INTERNATIONAL DEVELOPMENT ASSOCIATION

1818 H Street, N.W.
Washington, D.C. 20433
U.S.A.

(202) 477-1234
Cable Address: INTBAFRAD
Cable Address: INDEVAS

June 22, 1992

Mr. Anotoly M. Boiko
Deputy Chief, Operation Department
GASPROM - State Gas
8 Strateby
Moscow 117311, Russia

Dear Mr. Boiko:

During our recent meeting in Moscow, we promised to provide you with the World Bank sample bidding documents. We are now pleased to enclose them for your information. These documents consist of:

1. Sample Bidding Documents, Procurement of Works
2. Sample Bidding Documents, Procurement of Goods
3. Sample Form of Contract for Consultants' Services

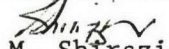
The above documents plus the two Guidelines (Guidelines for Procurement under IBRD Loans and Guidelines for the Use of Consultants by the World Bank Borrowers) that we provided you with in Moscow should give you a clear picture of the World Bank's procurement rules and regulations which are, to a large extent, in line with the industry practice. We will discuss with you different aspects of the Guidelines in the course of project preparation.

Furthermore, the World Bank is planning to organize a procurement seminar in the second half of September in Moscow. We will discuss with you the participation of your procurement staff in order to familiarize them with the Guidelines if you feel that this might be helpful.

I have attached a timetable for you to see the various steps involved in the procurement process and a table to list the procurement packages. This would also assist you in preparing the project schedule taking into consideration the said timetable.

I would like to take this opportunity to let you know that we thoroughly enjoyed working with you and your colleagues. We look forward to seeing you again July 20 when a World Bank mission is scheduled to visit Russia to continue working with you on the rehabilitation project that we identified with your great assistance during the recent World Bank mission.

Yours, sincerely,


M. Shirazi

Sr. Gas Specialist
Industry and Energy Division
Technical Department

Europe and Central Asia and Middle East and North Africa Regions

bcc and c/w: Mr. Charles McPherson (EC3IV)
bcc : Messrs. Brown (EC3IV), Mashayekhi (FODD3), Razavi,
Svensson, Dalby, Homer (ESMOD), Sethi (EMTPR),
Jeurling (EC3TC), Wackman (EMTIE), Suggins (MN2IE)

OFFICE MEMORANDUM

DATE: June 15, 1992

TO: Mr. Charles McPherson, EC3IV

FROM: John Homer, ESMOD

EXTENSION: 36973

SUBJECT: **Russian Gas Mission - May 1992**
CNG Project

1. I am sending you a report on the Russian CNG project which Gazprom proposes be part-financed by the World Bank. The proposal was made to us during the gas mission to Moscow in May and I have written the report from information obtained in a discussion with Dr. Wiacheslav Rodniansky of Gazprom on May 18, supported by an earlier discussion with Dr. Alexander Gritsenko, General Director of the research institute VNIIGAZ, on May 12.

2. After the mission, Dr. Thomas Karass, Chairman of Caritrade Systems from Quebec Province in Canada, telephoned me at the request of Gazprom. I attach a copy of a letter that I wrote to him which records our conversation. I suggest that Mr. Blaine Dalby contacts him before he goes next to Moscow in July

3. I see the project has having good strategic advantages for Russia in helping with the expected continuing shortage of diesel fuel and I believe it is worthy of further consideration by the Bank. The scope of the project is to be restricted to trucks and buses. The initial funding for the project is planned to be \$100 million, and the proposal is that the World Bank finances Gazprom's 10% share, i.e. \$10 million. Gazprom was informed that this could be possible, especially if it were wrapped into a bigger loan program for the development of Russian gas.

4. Because of the presence of the private company Caritrade in the proposed project, it may be a project for consideration also by IFC, and I am therefore copying this note to Mr. Garth Hedley whom I understand has already talked to Dr. Karass on a similar project for Hungary.

5. Dr. Karass has sent me a package of information on his company and I have handed this over to Blaine.

Attachments

cc: Messrs/Ms. H. Razavi (ESMOD), A.Mashayekhi (FODD3),
M. Shirazi (EMTIE), G. Hedley (CENCP),
P. Nore, B. Dalby, B. Svennson (ESMOD)

JH:ebt

WORLD BANK GAS MISSION TO RUSSIA

MAY 1992

Compressed Natural Gas for Vehicles

The USSR had an ambitious program, that started back in 1980, to convert a large number of vehicles to using natural gas as a fuel. According to figures in Gazprom, there are in existence 359 filling stations capable of supplying Compressed Natural Gas (CNG) in 250 towns and cities right across the republics. There were an original target of converting 1 million cars. The story now is that the cars have been converted to LPG instead and it is the trucks and buses that have been converted to CNG. Gazprom told us that there are 70,000 trucks and buses now running on CNG but "no" cars outside the research programs. (JH note - that compares with a figure of 200,00 vehicles which is often quoted in international technical reviews, which implies that 130,000 vehicles are running on LPG.) An international CNG vehicle rally, through the major cities of Europe and Scandinavia and through Leningrad, Moscow and Kiev,, was organized by Sojuzgaztehnologia in 1991. The overall program of conversion is stalled now anyway following the break up of the USSR. The Gas Research Institute who managed the program have ceased work on it for the time being but a proposal for a new program has been prepared (by Roman Samsonov in VNIIGAZ) in which Gazprom would target its efforts specifically towards fueling trucks with CNG. That strategy is in response to the chronic shortage of diesel fuel and recognize that Russia already has infrastructure investment in its CNG filling stations. That would be technically sensible as well, since the heavy gas cylinders, which the Russians can easily make, are more suitable for the heavier vehicles on the roads.

Gazprom described the proposed new CNG venture between Gazprom, Caritrade (a Quebec CNG company), Caritrade's European Division in Budapest, British Columbia Gas and General Motors Division of Buses and Trucks. The project has been two years in gestation already. A proposal has been made for initial funding for the project at \$100 million of which Gazprom's share would be 10%, i.e. \$10 million. Gazprom proposed that the World Bank fund Gazprom's share. Gazprom was told that this could be possible especially if it were wrapped into a bigger loan program for Russian gas development.

In the structure of the proposed project, it would be a Hungarian military factory which would make the conversion kits to start with, and later on the capability being extended to Russia (or the other Republics?). The Soviets would be given the know-how and would have the right to license the technology. The aim of the joint venture was to convert 600,000 trucks and buses by 1996. The Camus diesel engine,

manufactured in Russia, is the main target for conversion. It uses a gas-diesel cycle running on 20% diesel + 80% natural gas.

Mr. Bogden Budzulyak is the Board Member in Gazprom responsible for the venture and Mr. Wiacheslav Rodnianskiy, a Chief of a Sub-department in Gazprom, the contact man for future inquiries on detail. The Chairman of Gazprom, Mr. Victor Chernomyrdin, is very supportive of the project, being also Chairman of an Intersectional Council on Diesel and Natural Gas, a Council which coordinates the interests in diesel substitution of a number of ministerial industries and state planning committees.

Mr. Rodnianskiy was keen also on converting local railway engines to CNG and also in providing mobile delivery vehicles to supply tractor fuel in the agricultural industry. There is also an ongoing interest in Gazprom using more LPG in transport with a mention of converting 100,000 cars per year.

John Homer

ESMOD

6/2/92

The World Bank

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
INTERNATIONAL DEVELOPMENT ASSOCIATION

1818 H Street, N.W.
Washington, D.C. 20433
U.S.A.

(202) 477-1234
Cable Address: INTBA
Cable Address: INDEV

June 12, 1992

Mr. Thomas Karass
1760 Fortin Boulevard
Laval
Province of Quebec, H7S 1N8
Canada

Dear Mr. Karass,

I appreciated your call on June 10 and being able to learn of your enthusiasm for promoting the use of CNG in trucks and buses in Russia through the manufacturing facilities of your company in Hungary. As you know, we learned of your involvement and the general structure of the proposed CNG joint venture involving Gazprom when we visited Gazprom in Moscow in May, and I had a detailed talk with their Dr. Wiacheslav Rodniansky.

As promised, I am sending you a copy of the proceedings of a seminar on CNG which we held in the World Bank in June of last year. It was sponsored by the Canadians and aimed at the South America countries but you will see in my contribution, which I have tagged for you, a summary of World Bank involvement around the world so far in the CNG cause. Mostly, you will note, it has been somewhat limited to assisting in research pilot programs.

Also as promised, I will let Mr. Garth Hedley in IFC know of your ideas and, with regard to your previous conversation with him in Hungary, relay to him that General Motors is not part of the latest ideas for the Russian CNG project.

I will be moving out of the Bank shortly and will not be on the Bank's next gas mission to Moscow planned for July. I will ask Mr. Blaine Dalby, who will be on that mission, to give you a call. He is very familiar with the CNG story and with the activities of British Columbia Gas who are part of the venture as proposed to us.

Yours sincerely,



John Homer
Senior Gas Specialist
Operations Division
Energy Sector Management Assistance Programme

Attachment

JH:ebt

THE WORLD BANK / INTERNATIONAL FINANCE CORPORATION
OFFICE MEMORANDUM

DATE: June 15, 1992
TO: Mr. Charles McPherson, EC3IV
FROM: John Homer, ESMOD
EXTENSION: 36973
SUBJECT: **Russian Gas Mission - May 1992**
Urengoy Chemical Project

1. I am sending you the package of the information on the proposed Urengoy Chemical Project.
2. The attached folder includes technical data on the plant and process together with maps of the location and layout of the proposed plant site. It was given to us as a result of your mission to Moscow in March.
3. Attached also is my report on the project which I put together after discussion with Dr. Alexander Golod in Moscow on May 18 and in the light of the report from Mr. Blaine Dalby from the March mission. Dr. Golod is Director of the Urengoy Chemical Plant and reports into Dr. Vladimir Grunvald who is the Member of the Gazprom Board responsible for gas processing. We met with Dr. Grunvald in a general meeting with Gazprom on May 13.
4. At the conclusion of the mission, both the Ministry of Fuel and Energy and Gazprom were told that the view of the Bank was that the project was seen to be a good one and that it would receive further consideration in the Bank, but that at present it was regarded as a project of lower priority for funding than that for assisting in pipeline rehabilitation. Morgan Grenfell, the UK commercial bankers interested in the Urengoy project, have also been informed of that view by telephone to Peter Wakefield of their London office on May 22.
5. I would suggest that this view be confirmed as part of your proposed letter to the Ministry of Fuel and Energy and Gazprom.
6. Mr. Michael Gould (EC3PS) has told me that the project is seen to be of low priority in the CIS industry portfolio of his department.

Enclosure (folder and report)

cc. (report only to) Messrs/Ms. H. Razavi (ESMOD), A. Mashayekhi (FODD3), M. Shirazi (EMTIE), M. Gould (EC3PS), P. Nore, B. Dalby, B. Svensson (ESMOD)

JH:ebt

Urengoy Chemical Project

Gazprom has been preparing plans for its 300,000 tons/year Natural Gas De-ethanization and Polyethylene Manufacturing Plant at Urengoy for some time. It is a new venture for Gazprom for it would be Gazprom's first petrochemical plant. The Gazprom management is nevertheless confident that they can develop a capability to construct and operate such a plant. The sheer technical strength and size of Gazprom, even without special proven technical competence in petrochemicals, gives some degree of confidence in that view. Gazprom could certainly provide a useful corporate umbrella to direct the project through the difficult period ahead. The idea for the project arose from a Gazprom survey of opportunities in the mid 1980's into making better use of the non-methane components of its natural gas, a survey which was managed by Alexander Golod, who is an experienced gas processing project manager. Mr. Golod is now the Director of the Urengoy Chemical Project.

The project has strong commitment within Gazprom. It has the personal support of Victor Chernomyrdin, the Chairman of Gazprom, and, as witnessed in other meetings, also by other members of the Board of Gazprom including Vladimir Resdounenko, Vladimir Grunvald, Stepan Derezhev and Alexander Gritsenko. The Urengoy project could be an especially attractive one for the Russian economy because production costs will be relatively low and, with a commitment to incorporating modern process technology, the product quality should be high, so that the product should have a high value and be well placed competitively within the domestic market. Transport distances for the product are large but comparable with transport distances for the other polyethylene plants in Russia. There is sufficient infrastructure in the Urengoy region to allow the project to move quickly and investment in the region appears to be politically favored. An earlier proposal had envisaged polypropylene manufacture on the site, but the idea was rejected because the market price in the USSR was too low. A larger scheme for producing 600,000 tons/year was also rejected in favor of the smaller plant.

There are two existing polyethylene plants in Russia, one of 200,000 tons/year capacity at Kazan in the central region which started up in 1981, the other, also of 200,000 tons/year, at Budennovsk in the south which started up in 1980, both of which are being managed by the "Chemical and Petrochemical Industry" and both of which involve Union Carbide, Linde and Morgan Grenfell. The plant at Budennovsk is planned for an

expansion to 300,000 tons/year and plans are being prepared for another new plant of 200,000 tons/year at Astrakhan on Russian shore of the north Caspian Sea. Both of those projects have been delayed awaiting negotiations on financing and the establishment of satisfactory government guarantees, and presumably awaiting also the availability of funds from the foreign commercial banks.

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supplies started, and warehouses and stores on the site two-thirds completed. Some 80 million rubles have been spent already using local contractors. With no further delays and procurement authorized today, production could start in 1996. At present there are 500 people on site: at peak construction this would climb to 2,000 and under full operation, the work force would be around 1,000.

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John Homer

ESMOD

6/2/92

THE WORLD BANK / INTERNATIONAL FINANCE CORPORATION
OFFICE MEMORANDUM

Subject ✓

DATE: June 3, 1992
TO: Ms. Afsaneh Mashayekhi, FODD3
FROM: John Homer, ESMOD *AH*
EXTENSION: 39973
SUBJECT: **Russian Gas Mission - May 1992**

1. Attached is my contribution to the report of our mission to Moscow in May 1992. They cover the topics of

1. **Gas System Planning** from the discussion with VNIIEGazprom on Thursday May 15.
2. **Construction, Procurement, Engineering Standards and Environmental Protection** from discussions with Rossneftegazstroy on Wednesday May 13.
3. **Technical Research and Development in Gas** from discussions with VNIIGAZ on Tuesday May 12 and with VNIIPromgaz on Wednesday May 13.
4. **Urengoy Chemical Project** mainly from a discussion with Gazprom on Monday May 14.
5. **Compressed Natural Gas for Vehicles** from a discussion with Gazprom on Monday May 14.

2. I have underlined in sections 3,4 and 5 those words referring to mentioning of the future financial involvement of the Bank.

3. Please come back to me if you need more information or would like the reports to be in a different form.

cc. Messrs. H. Razavi (ESMOD), M. Shirazi (EMTIE), P. Nore, B. Dalby,
B. Svensson (ESMOD)

JH:ebt

WORLD BANK GAS MISSION TO RUSSIA
MAY 1992
REPORT FROM JOHN HOMER

1. Gas Transmission System Planning

VNIIE Gazprom is the gas research institute for information and economics concerned with planning and optimization of the Russian gas supply system. The Institute gathers data from each of the transmission companies and matches the supply capability of their system to forecasts of gas demand. It has operational research models that describe the whole system. Information appears to be collected in a non-systematic way more by informal contacts with people in the Regions than through a regular reporting channels and if that is so then the data base may not be of reliable or consistent quality. So saying, the Institute has on its files, data that covers, as well as the availability and capacity of each transmission section, the historic frequency of interruption to the supply and they have gone through the exercise of correlating that information with the type of defect that caused the interruptions. From this, they should be able to predict the future capacity and availability of the system, appropriate rehabilitation programs can be designed and optimized, and investment priorities can be set. From what Dr. Theodore Shtilkind, the Head of Department in the Institute said, though, it was not convincing that this process was used in a systematic way in investment planning within Gazprom.

As a policy, Gazprom gives the highest priority to supplying the gas export market and that means maintaining, at high operational efficiency, the transmission pipelines in the South and in the main Central Corridor. These lines in total carry 80% of the supply to both export and domestic markets.

On average, there is 15-20% spare capacity in the system. Only in the last few years have there been signs of increasing problems in maintaining supply. Inefficiencies in gas compression, or any weakness in the structure of the aging pipelines, are controlled by decreasing the gas transmission pressure and throughput, but at times of peak demand, those defects are becoming too limiting. Gas storage caverns are being developed to help the peak demand problem, but that does not solve the long-term problem of the aging pipelines and compressors which are increasingly liable to breakdown. There is a real concern that a fracture of one pipeline or an explosion in a compressor could damage the nearby pipeline and cause a major breakdown in the system. Replacement pipelines will need to be laid with greater protection and greater separation distances. Plans have been made to replace certain critical sections of the transmission pipelines, for which Mr. Miesel, Head of another department in VNIIE Gazprom, believes the most cost-effective solution in most cases to be using imported, factory-coated, pipe.

There are plans also to replace many of the compressors. Of particular concern, since they require foreign currency, are the 20% that are of foreign manufacture (mostly of General Electric design) which are nearing the end of their 15 year lifetime. The compressors in the western region, some of which are of imported design, need to be upgraded to comply with NO_x emission regulations under an international treaty for environmental protection that was signed with the ECE in 1985. Replacing compressors with those of more efficient design will save on the gas consumed and have an impact on increasing the supply from the transmission system.

VNIEE Gazprom would identify the higher priorities of a rehabilitation program to (names of the regions were noted by Moshen Shirazi)

- a) replacing (or reconditioning) the compressors in the 10x80 MW stations of the southern transmission line from
to..... and in 6 of the 30x80 MW stations of the pipelines in the central transmission corridor running from the Urals to the Volga River.
- b) replacing sections of the pipelines of the central transmission system in the three transmission regions of ,
....., and
..... .

4. Construction, Procurement, Engineering Standards and Environmental Protection

It was useful to compare the views of the VNIIEGazprom unit to those of Dr. Valentin Pavyuchenko, Vice President of Rossneftegazstroy. He had hands-on experience in managing development programs in Siberia, in the past being in charge of 30,000 people, 17,000 being on oil and 13,000 on gas projects. He was strong in his views in maintaining Russia's capability for construction and maintenance of its own gas transmission pipelines. With the current state of the pipelines, he believed that the Russian gas industry can be stable for several years more, with enough spare capacity in the system to meet the demand of 800 Bcm per year for the next two to three years. Accident frequencies were acceptable, being better per km than the US and ten times lower than the world average (JH note - that depends crucially on what criteria he uses for defining accidents - he was not in a position to hand over any data or to comment on trends in frequency rates - he turned us back to Gazprom for the data). If no new construction work was carried out in the next few years, then the pipeline system will deteriorate and the supply volume will start to fall. He was concerned that, with a continuing lull in construction work, Russian pipe laying skills would be lost and saw the next few years as a time to invest while construction costs in Russia were still low. Already one half of the highly qualified welders had left the industry since the peak construction period around 1988. In five years time, the costs would rise to international levels and the Russian industry would be less competitive. Rossneftegazstroy has the job of constructing pipelines under contract to Gazprom and of planning the contracting resource. They have specialist units that can work in either the gas or oil industries. Gazprom wanted to create their own construction teams but that would be difficult. Theoretically, foreign companies could be contracted either through Rossneftegazstroy or directly from Gazprom but this, he thought, would also be wrong.

Both Rossneftegazstroy and Gazprom have responsibilities for procurement in the gas industry. The present pattern (according to Dr. Pavyuchenko) is for Gazprom to procure all materials needed for maintenance and also to procure the compressors both from domestic and foreign sources. For large gas pipeline projects though, the design is set by Gazprom, the construction plan is acted on by Rossneftegazstroy and pipeline procurement is carried out by Rossneftegazstroy.

In relation to new projects, that might be receive financial help from the World Bank, it was important to note that independent committees have been created (dating from the LPG pipeline accident in Ufa in 1989) that oversee both Gazprom and Rossneftegazstroy organizations

and have the responsibility of ensuring that new construction conforms to Russian engineering standards and that it complies with legislation concerning environmental protection. Both committees report through to the Russian President. The Russian engineering standards were described by Dr. Pavyuchenko as similar to international standards.

3. Technical Research and Development in Gas

Russia has a long history in gas research. The principal gas research institute is the All-Union Scientific Research Institute of Natural Gas (VNIIGas) which has its central offices and laboratories on the southeastern outskirts of Moscow. Its General Director is Alexander Gritsenko, a distinguished Academician and a Member of the Board of Gazprom. He is a 58 year old petroleum engineer from the Ukraine.

The Institute claims to be still in a position to support the gas industry throughout the CIS. Its technical scope and organization are wider than just that of Gazprom, for it covers the production of associated gas from the oil sector and the production of gas offshore in the Barents Sea and in Sakhalin. It maintains direct research links into the CIS republics outside Russia. Funding comes partly from Gazprom, partly from the Russian Ministry of Fuel and Energy, and partly from the Regions.

There are 1490 people working in the Institute, 1312 of them being qualified scientists. Seven divisions cover programs and skills in Geology (195 staff), Production Development including underground storage (233 staff), Gas Transmission (198 staff), Pipeline Reliability (225 staff), Gas Treatment (129 staff), Gas Safety and Environment (51 staff), Planning and Forecasting (37 staff). In addition it oversees some 200 people in several small private (?) firms that promote exploitation of the results of the Institute's research. It manages a number of pilot plants in the Regions and oversees the transportation project for developing greater use of natural gas fuel for vehicles, although that particular program has been recently halted (see later).

The main problems currently being addressed by the Institute are a) the safe development of the sour gas fields in the South, b) more efficient gas separation technology and c) exploitation of the Urengoy gas condensate fields. It has been heavily involved in guiding and gathering data for Gazprom on the engineering state of the gas transmission pipelines.

Dr. Gritsenko has a plan to upgrade the facilities of the Institute at a cost of around \$50 million. He was interested by the idea that some of the money available from the World Bank for financing a pipeline rehabilitation project could be used to invest in new diagnostic technology in the Institute.

Gas Utilization R&D is carried out in a separate organization, VNIIPROMGAS, which is division within Gazprom. The main target of its program is to promote the efficient "rational"

use of gas in Russia. Dr. Fajzulla Gajnullin, the organization's General Director claims that there is as much as a 30% wastage in the way Russia uses gas at the moment. There was active interest in improving energy efficiency in Russia, and he quoted recent offers of assistance from the UN (JH note - presumably the UNDP and the GEF axis)

VNIIPROMGAS has a staff of 500. It used to be double that, but the newly independent republics took over responsibilities for their staff and pilot plants in the respective regions. It has special interests in the industrial use of gas, for example in the copper and nickel mill in Noricsk and the car assembly plant in Gorky. Its staff are being used also in the pilot test program for underground gas storage.

4. Urengoy Chemical Project

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5. Compressed Natural Gas for Vehicles

The USSR had an ambitious program, that started back in 1980, to convert a large number of vehicles to using natural gas as a fuel. According to figures in Gazprom, there are in existence 359 filling stations capable of supplying Compressed Natural Gas (CNG) in 250 towns and cities right across the republics. There were an original target of converting 1 million cars. The story now is that the cars have been converted to LPG instead and it is the trucks and buses that have been converted to CNG. Gazprom told us that there are 70,000 trucks and buses now running on CNG but "no" cars outside the research programs. (JH note - that compares with a figure of 200,00 vehicles which is often quoted in international technical reviews, which implies that 130,000 vehicles are running on LPG.) An international CNG vehicle rally, through the major cities of Europe and Scandinavia and through Leningrad, Moscow and Kiev, was organized by Sojuzgaztehnologia in 1991. The overall program of conversion is stalled now anyway following the break up of the USSR. The Gas Research Institute who managed the program have ceased work on it for the time being but a proposal for a new program has been prepared (by Roman Samsonov in VNIIGAZ) in which Gazprom would target its efforts specifically towards fueling trucks with CNG. That strategy is in response to the chronic shortage of diesel fuel and recognize that Russia already has infrastructure investment in its CNG filling stations. That would be technically sensible as well, since the heavy gas cylinders, which the Russians can easily make, are more suitable for the heavier vehicles on the roads.

Gazprom described the proposed new CNG venture between Gazprom, a Montreal CNG company Carritrade, Carritrade's European Division in Budapest, British Columbia Gas and General Motors Division of Buses and Trucks. The project has been two years in gestation already. A proposal has been made for initial funding for the project at \$100 million of which Gazprom's share would be 10%, i.e. \$10 million. Gazprom proposed that the World Bank fund Gazprom's share. Gazprom was told that this could be possible especially if it were wrapped into a bigger loan program for Russian gas development.

In the structure of the proposed project, it would be a Hungarian military factory which would make the conversion kits to start with, and later on the capability being extended to Russia (or the other Republics?). The Soviets would be given the know-how and would have the right to license the technology. The aim of the joint venture was to convert 600,000 trucks and buses by 1996. The Camus diesel engine, manufactured in Russia, is the main target for conversion. It uses a gas-diesel cycle running on 20% diesel + 80% natural gas.

Mr. Bogden Budzulyak is the Board Member in Gazprom responsible for the venture and Mr. Wiacheslav Rodnianskiy, a Chief of a Sub-department in Gazprom, the contact man for future inquiries on detail. The Chairman of Gazprom, Mr. Victor Chernomyrdin, is very supportive of the project, being also Chairman of an Intersectional Council on Diesel and Natural Gas, a Council which coordinates the interests in diesel substitution of a number of ministerial industries and state planning committees.

Mr. Rodnianskiy was keen also on converting local railway engines to CNG and also in providing mobile CNG delivery vehicles to supply tractor fuel in the agricultural industry. There is also an ongoing interest in Gazprom using more LPG in transport with a mention of converting 100,000 cars per year.

John Homer

ESMOD

6/2/92

PROJECT PROPOSAL
RESTRUCTURING THE GAS INDUSTRY
RUSSIA

I. BACKGROUND

Russia is the world's largest producer and exporter of oil and gas and the major revenue items on Russia's balance of payments. The share of natural gas in Russia's energy balance is around 40%. While oil production started declining in 1987, gas production has expanded until 1991. In 1991, it declined slightly for the first time. Institutional and organisational factors are a major factor behind this development. Price distortions throughout the gas chain give wrong signals from production to enduse. General mismanagement caused due to poor incentives is another major problem.

The Russian gas sector consists of two enterprises:

- * GasProm which owns all the dry gas fields. Gas is produced in 14 production associations (oblasts) which have a high degree of autonomy. GasProm buys the gas produced by oil production associations. The ownership of GasProm was recently divided between Russia, Ukraine and Belarus. GasProm transmits all gas to the city gates for domestic use and sells gas for exports to East and Western Europe at the delivery points at the border with Eastern Europe. GasProm also supplies gas to German Verbundnetzgas (VNG) with Wintershall through their joint marketing company, WIEH.
- * Rosstrojgazificazia is responsible for distribution of gas within the city gates.

Main Issues

The Government/GasProm/Rosstrojgazificazia plan to convert the two gas enterprises into joint stock companies and it is believed that the shareholders would be State and/or the oblasts. No private participation is planned.

The main issues raised by such as policy include:

- * the role of the Government as owner of state owned enterprises
- * the role of the Government as regulator
- * the extent to which state ownership should continue in the sector
- * the degree to which vertical or horizontal integration will be beneficial

- * the disruption which could arise in the event of major revisions to the structure
- * the possibilities for introducing competition
- * the scope for for increasing and rationalising end user prices
- * the need for major investments in the sector
- * the extent to which foreign participation is acceptable to Russian opinion and attractive to foreign entities
- * the varying forms such participation could take
- * the practicality and advantages of privatisation
- * the prospects for introducing a rational tax regime
- * the need to encourage improvements in efficiency and the rapid introduction of commercial management and methods
- * the sequencing of changes and the management of the transition period

II. PROPOSED PROJECT

A. *Objectives*

The study should assess the present organisation of the gas sector and evaluate alternative organisational structures of the Russian gas sector from the wellhead to the citygate under the assumption that a restructuring of the sector takes place prior to an eventual privatisation of the sector. The study should also evaluate pro and contra of each proposed structure and how the implementation could take place. Finally, the study should assess a possible change of ownership and the possible gains in efficiency due to private sector involvement.

B. *Scope of study*

Qualified consultants are asked to submit proposals on a study leading to recommendations for the optimal structure the Russian gas sector. The recommended structure should facilitate the achievement of the Government's/GasProm's goals. The scope of the study should include:

- * A critical review of the existing organizational structure and procedures of GazProm.
- * A critical review of the overall sector management and regulatory environment within GasProm operates.

- * An assessment of the potential for improved efficiency within existing organisations.
- * A critical evaluation of alternative organizational structures.
- * Assess how an effective legal and regulatory framework could be established in order to ensure safety, standards, market pricing and performance improvement.
- * Assess how competition within the sector could be encouraged.
- * An assessment of present and possible forms of ownership, including an evaluation of possible gains in efficiency due to private sector involvement
- * An assessment of present management techniques and procedures to determine areas for improvement.
- * A critical review of staffing and staffing procedures.
- * An evaluation of GasProm's accounting system and of its financial situation.
- * Assess how a rapid development of gas reserves could be encouraged.
- * An assessment of options for future financing of gas activities.
- * The design of a detailed plan for a phased implementation of recommendations on restructuring.

Study organization and restructuring

The consultants would report to the World Bank/Esmap. The task manager will supervise the consultants. GasProm would provide a counterpart team to work on the study and in particular, to assist in providing the necessary information and data and contact with other Russian authorities.

In addition:

- * The consultant will provide the task manager with a draft report (20 copies) within 5 months.
- * The consultant will provide the task manager with a final report (30 copies) within 6 months.
- * All reports submitted to the Bank would be in English.
- * All translation work will be the responsibility of the consultant.

Timing

The restructuring should begin as soon as possible and no later than June 1, 1992 and be completed before the end of 1992.

Country:	Russia
Activity Name:	Restructuring of the gas s
Duration of Activity:	July-December 1992
Activity ID:	
Origin of Funds:	Applying members
Source of Funds (SOF) Code:	
Sector/Sub-Sector:	Gas sector
Task Manager:	Bent R. Svensson

Amount approved by Donor(s):	0
Funds received as of (Date):	0
Remaining funds available (Recv-Com):	0

		Total budget m/w	US \$
10.	Personnel		
11.01	ESMAP Staff	8.0	22,400
11.50	International Consultants Fees	35.0	175,000
11.60	International Consultants travels		50,000
13.01	Administrative support	0.0	0
15.00	Official Travel		0
16.00	Mission Costs (Bank Staff)		20,000
17.00	Local Consultants	0.0	0
20.	Sub-Contracts		
21.00	International	0.0	0
22.00	Local	0.0	0
30.	Training		
32.00	Workshops/seminars/TC		0
40.	Equipment		
41.00	Expendable Equipment		0
42.00	Non-expendable Equipment		0
43.00	Premises		0
50.	Miscellaneous		
51.00	Operation & Maintenance		
52.00	Reporting Costs		0
53.00	Sundries		0
99.00	Sub-Total	43.0	267,400
159.0	Agencies Support Costs (ASC)		
159.1	UNDP		
159.2	Bank		
179.0	Subtotal for External Funding (bl 99+159):	43.0	267,400
199.0	Bank cost-sharing (Staff costs)	0.0	0
999.0	TOTAL ACTIVITY COST	43.0	267,400

PROJECT PROPOSAL
GAS PRICING AND EXPORTS
RUSSIA

I. Background

Demand for natural gas is expanding in Central and Eastern Europe (CEE) as well as in Western Europe. Forecasts show that until the year 2010, 200 bcm per year or more of gas imports needs to be contracted in Europe as a whole, of which around 75 bcm is expected to be contracted by CEE. In the Eastern European gas Seminar arranged by the World Bank in London January 16-17, 1992, the CEE countries expressed a desire (i) to cooperate as buyers in a consortium arrangement; and (ii) to develop common gas grids and storage facilities. Both solutions provide enhanced security, which was a common concern expressed by the East Europeans. There was unanimous agreement on the need for a regional approach.

Compared with requirements for gas imports of 200 bcm the major gas-suppliers to Europe other than the CIS, Algeria, the Netherlands and Norway have only relatively small volumes of gas to offer Europe, in particular exports to Eastern Europe would be hampered by the reduced ability to pay high import prices in Eastern Europe. Iran has the potential to deliver big volumes to Europe. However, there is no pipeline infrastructure in place to deliver exports.

The introduction of market economies in CEE and the breakup of the Soviet Union is likely to have a major impact on gas exports and prices in Europe in the 1990's. In 1991, the CEE countries began paying in hard currency for Russian gas imports (although barter trade is still ongoing). For several CEE countries the price (and volume) for Russian gas is fixed on a yearly basis. Also as a result of new national borders and the change in political power, transit countries began demanding higher fees for transport of gas through their countries and delivery points for gas exports have changed. An example involving most of these factors is Gasprom's and Wintershall's gas sale to German Verbundnetzgas (VNG). In western Europe gas prices under long-term gas import contracts are usually negotiated every third year. Exporters use these price review clauses to ensure that the market price is paid for the gas. Another major issue with a potential impact on future exports and prices to western Europe is the possible introduction of third party access within the EC.

Main Issues

1. Gas exports

What is the potential for future gas exports from Russia to East and Western Europe.

2. Pricing

How do present export prices for Russian gas to East and Western Europe compare with exports from Algeria, Norway and the Netherlands? How have these export prices developed in the last five to ten years in old contracts, during regular price reviews and in new contracts compared with the development of Russian export prices. How could gas export prices be expected to develop in future considering the changes in demand in East and Western Europe, transit fees, third party access, development of the power market, environmental standards etc.

II. Proposed Project

A. Objectives

The study should evaluate future export markets for Russian gas and assess the present price level for Russian exports compared with other exporters to Europe. Moreover, the development of likely future export prices should be assessed.

B. Scope of work

1. Summarize demand projections and supply options to East and Western Europe, based on the report on Future of natural gas in Eastern Europe.

2. Provide cost data for the around gas supply projects listed in the attachment in order to compare the costs of all supply options to Europe.

3. Evaluate the likelihood of each options, in particular the most likely major supply project from Algeria, Russia, Iran, LNG to North, respectively South of Europe, taking account of the desire of Eastern European countries and CIS republics to diversify gas imports, security of supply for importing countries, existing and possible new consortia on the buying side, transit fees, the market for gas in the importing countries and their ability to pay the market price

4. Analyse present prices for gas imports in East and Western Europe from Algeria, Norway and the Netherlands, the development of these prices in old and new contracts in the last five to ten years in relation to the development of Russian export prices.

5. Calculate netback values of gas exports in different uses, such as residential, industrial, power generation in the following markets: Germany, France, Italy, the U.K. and the six CEE countries.

6. Discuss the implications of the disintegration of the CIS and the desire of East European countries to diversify gas

imports on gas markets, gas contracts, transit fees and border prices. (example the German price dispute 1991-92)

7. Elaborate the discussion on key issues from Future of Natural Gas in Eastern Europe, in particular pricing of gas and other fuels in CEE and the competition for gas between East and Western Europe.

Collaboration with Mikhail Korchemkin

The Bank wants to involve consultant Mikhail Korchemkin in reviewing the supply cost estimates of each of the Russian supply options with Arthur D. Little. As Mr. Korchemkin's estimates of Russian gas supply costs are significantly lower than those presented by ADL in Future of natural gas in Eastern Europe the Bank would like ADL to considering using the database and methods of Mr. Korchemkin. The project budget includes 1 or 2 meeting in London to discuss these estimates between ADL, Mr. Korchemkin and the Bank.

Product of the study and timing

The study should result in around 100 pages report, supported by tables charts maps etc. to be discussed in draft with the taskmanager three months after the contract is agreed and the final report should be finished four months after the contract has been agreed.

Staffing

The chosen consultant is Arthur D. Little. The project should be managed by Nick White.

Country:	Russia
Activity Name:	Export market and pricing
Duration of Activity:	May-July 1992
Activity ID:	
Origin of Funds:	Applying members
Source of Funds (SOF) Code:	
Sector/Sub-Sector:	Gas sector
Task Manager:	Bent R. Svensson

Amount approved by Donor(s):	0
Funds received as of (Date):	0
Remaining funds available (Recv-Com):	0

		Total budget	
		m/w	US \$
10.	Personnel		
11.01	ESMAP Staff	5.0	14,000
11.50	International Consultants Fees	10.0	70,000
11.60	Consultants travels		5,000
13.01	Administrative support	0.0	0
15.00	Official Travel		0
16.00	Mission Costs (Bank Staff)		3,000
17.00	Other Consultants	2.0	10,000
20.	Sub-Contracts		
21.00	International	0.0	0
22.00	Local	0.0	0
30.	Training		
32.00	Workshops/seminars/TC		0
40.	Equipment		
41.00	Expendable Equipment		0
42.00	Non-expendable Equipment		0
43.00	Premises		0
50.	Miscellaneous		
51.00	Operation & Maintenance		
52.00	Reporting Costs		0
53.00	Sundries		0
99.00	Sub-Total	17.0	102,000
159.0	Agencies Support Costs (ASC)		
159.1	UNDP		
159.2	Bank		
179.0	Subtotal for External Funding (bl 99+159):	17.0	102,000
199.0	Bank cost-sharing (Staff costs)	0.0	0
999.0	TOTAL ACTIVITY COST	17.0	102,000

SUPPLY COUNTRIES - GAS TRADE PROJECTS	Volume bcm	Investment ^{2/} \$ billion
<u>I. SUPPLY OF GAS FROM COMMONWEALTH OF INDEPENDENT STATES TO EUROPE ^{3/}:</u>		
1. <u>Option 1</u> : Pipeline from West Siberia to Polish border (Brest-Litovsk)	5	13
2. <u>Option 2</u> : Pipeline from West Siberia to CSFR border (Uzhgorod)	35	14
3. <u>Option 3</u> : Pipeline from West Siberia to Romanian Border (Ismail)	5	10

^{1/} Note that some of the project options are mutually exclusive, i.e., it is unlikely for example that both a Barents Sea LNG project and a pipeline project from this area would be realised. Also, in view of differential costs, returns, ease of implementation, marketing arrangements and state of preparation, different options would have different timing.

^{2/} Estimate of investment costs are approximate.

^{3/} To Eastern and Western Europe.

- 3 -

4. <u>Option 1</u> : Barents Sea LNG project to Poland (including liquefaction, regasification and ships)	11	6
5. <u>Option 2</u> : Pipeline from Barents Sea pipeline gas to Poland through Baltics countries	15	5
6. <u>Option 1</u> : Pipeline from new fields in Western Russia to Europe	N.A.	N.A.
7. <u>Option 1</u> : Pipeline from Turkmenistan to Europe	N.A.	N.A.
8. <u>Option 1</u> : Expansion of existing gas pipeline facilities from Russia through Ukraine to Europe, including New International (New-Brotherhood) pipeline in CSFR	N.A.	N.A.
<u>II. SUPPLY OF GAS FROM NORWAY TO EUROPE:</u>		
9. <u>Option 1</u> : Pipeline from Norway via Emden to CSFR border	10	5
10. <u>Option 2</u> : Pipeline from Norway ^{Northern} via Denmark to Poland (Niechorze)	10	4
11. <u>Option 3</u> : Norwegian LNG to Poland (including liquefaction, regasification and ships)	5.5	3
12. <u>Option 4</u> : Pipeline from Norway via Sweden, Finland, Baltics to Poland	N.A.	N.A.
<u>III. SUPPLY OF GAS FROM ALGERIA TO EUROPE:</u>		
13. <u>Option 1</u> : New Pipeline from Transmed's landfall to Monfalcone, Italy and then through Slovenia to Hungary, CSFR, Poland and/or Croatia, Serbia to Romania, Bulgaria	5	3
14. <u>Option 1</u> : LNG project from Algeria to Croatia (Omislj) and then to Hungary, CSFR, Poland and/or Serbia, Romania, Bulgaria	5.5	2
<u>IV. SUPPLY OF GAS FROM IRAN TO EUROPE:</u>		
15. <u>Option 1</u> : Pipeline via Turkey to Bulgarian border	20	7
16. <u>Option 2</u> : Pipeline via Azerbijdzan and through Georgia to Ukraine	N.A.	N.A.
17. <u>Option 1</u> : Pipeline from Iran to Pakistan and India	N.A.	N.A.



Record Removal Notice

File Title Russia - General - 1v		Barcode No. 1434246
Document Date May 5, 1992	Document Type Memorandum	
Correspondents / Participants To: Jonathan Brown, Division chief, EC3IV From: B. Svensson		
Subject / Title Gas mission to Russia		
Exception(s) Personal Information		
Additional Comments		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group.
		<table border="1"><tr><td>Withdrawn by Shiri Alon</td><td>Date September 05, 2019</td></tr></table>
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PROJECT DOCUMENT

GASFROM

THE WORLD BANK

RESTRUCTURING THE GAS INDUSTRY

MAY 1992

PROJECT DOCUMENT

GASPROM

RESTRUCTURING THE GAS INDUSTRY

This Project Document is entered into pursuant to the Letter of notification dated November 4, 1991 from the Russian Federation (RF) to the International Bank for Reconstruction and Development (the Bank) and the Letter of acknowledgment dated November 21, 1991 from the Bank to the RF, which are hereby incorporated by reference and made part thereof.

BACKGROUND

Russia is the world's largest producer and exporter of oil and gas and the revenues from these activities are the major items on Russia's balance of payments. The share of natural gas in Russia's energy balance is around 40%. While oil production started declining in 1987, gas production has expanded until 1990 to a level of 815 bcm. In 1991, it declined slightly. Institutional and organizational factors play an important role in this development. A restructuring of the gas sector, including a change in the company structure of GASPROM, is under consideration. The pricing of gas throughout the gas chain is also under review.

The Russian gas sector consists of two enterprises:

- GasProm owns all the dry gas fields. Gas is produced in 15 production associations (oblasts) which have a high degree of autonomy. GasProm buys the gas produced by oil production associations. GasProm is in the process of being turned into a joint stock company. GasProm transmits all gas to the city gates for domestic use and sells gas for exports to East and West Europe at the delivery points at the border with Eastern Europe. GasProm also supplies gas to German Verbundnetzgas (VNG) with Wintershall through their joint marketing company, WIEH.
- Rosstrojgazificazia is responsible for distribution of gas inside the city gates.

The conversion of GASPROM into a joint stock company includes no plans for private participation. The main issues in such a policy include:

1. the role of the Government as owner of state owned enterprises
2. the role of the Government as regulator
3. the extent to which state ownership should continue in the sector

4. the degree to which vertical or horizontal integration will be beneficial
5. the disruption which could arise in the event of major revisions to the structure
6. the possibilities for introducing competition
7. the scope for increasing and rationalizing end user prices
8. the need for major investments in the sector
9. the extent to which foreign participation is acceptable to Russian opinion and attractive to foreign entities
10. the varying forms such participation could take
11. the practicality and advantages of privatization
12. the prospects for introducing a rational tax regime
13. the need to encourage improvements in efficiency and the rapid introduction of commercial management and methods
14. the sequencing of changes and the management of the transition period.

Project Description

1. Objective

The first phase of study should assess the present organization of the gas sector and evaluate alternative organizational structures of the Russian gas sector from the wellhead to the city gate. The study should also evaluate pro and contra of each proposed structure and how the implementation could take place. A second phase of the study should assess a possible change of ownership and the possible gains in efficiency due to private sector involvement.

Qualified consultants are asked to submit proposals on a study leading to recommendations for the optimal structure the Russian gas sector. The recommended structure should facilitate the achievement of the Government's/GasProm's goals.

Phase I of the study should include:

- A. A review of the existing organizational structure and procedures of GasProm.
- B. A review of the overall sector management and regulatory environment within GasProm operates.

- D. A evaluation of alternative organizational structures.
- E. Assess how an effective legal and regulatory framework could be established in order to ensure safety, standards, market pricing and performance improvement.
- F. Assess how competition within the sector could be encouraged.
- G. An assessment of present management techniques and procedures to determine areas for improvement.
- H. The design of a detailed plan for a phased implementation of recommendations.

Phase II of the study should include:

- A. An assessment of the potential for improved efficiency within existing organizations.
- B. An assessment of present and possible forms of ownership, including an evaluation of possible gains in efficiency due to private sector involvement
- C. An assessment of options for future financing of gas activities.
- D. A review of staffing and staffing procedures.
- E. An evaluation of GasProm's accounting system and of its financial situation.
- F. The design of a detailed plan for a phased implementation of recommendations.

Project Output

Project output will be a report of 150-250 pages analyzing each of the above issues, presenting alternatives and making recommendations. An interim report will be presented to GASPROM before the final report is presented.

Project Implementation

The project will be implemented by GASPROM and by international and local consultants under contract with the Bank and supervised by Bank staff. GasProm would provide a counterpart team to work on the study and in particular, to assist in providing the necessary information and data and contacts with other Russian authorities.

Project Timetable, Phase I

The proposed timetable for execution of the project is as follows:

- | | |
|-----------------------------|-------------------|
| 1. Selection of consultants | June 30, 1992 |
| 2. Draft report | November 30, 1992 |
| 3. Final report | December 31, 1992 |

Joint reviews will be scheduled in close conjunction with the output dates.

Project Cost, Phase I

Costs of Bank staff and consultancy costs including travel and subsistence are estimated at US\$ 296,000. Local contributions will be in kind.

Phase II:

The second phase of the project will be agreed when the results of phase I are available.

AGREED

On behalf of the GASPROM

AGREED

On behalf of the International
Bank for Reconstruction and
Development

By
Date:

By
Date:

PROJECT DOCUMENT

GASPROM

THE WORLD BANK

GAS PRICING AND EXPORTS

MAY 1992

PROJECT DOCUMENT

GASPROM

GAS PRICING AND EXPORTS

This Project Document is entered into pursuant to the Letter of notification dated November 4, 1991, from the Russian Federation (RF) to the International Bank for Reconstruction and Development (the Bank) and the Letter of acknowledgment dated November 21, 1991 from the Bank to the RF, which are hereby incorporated by reference and made part thereof.

Background

Demand for natural gas is expanding in Central and Eastern Europe (CEE) as well as in Western Europe. Forecasts show that until the year 2010, 200 bcm per year or more of gas imports needs to be contracted in Europe as a whole, of which around 75 bcm is expected to be contracted by CEE. In the Eastern European gas Seminar arranged by the World Bank in London January 16-17, 1992, the CEE countries expressed a desire (i) to diversify gas imports (ii) to cooperate as buyers in a consortium arrangement; and (iii) to develop common gas grids and storage facilities. Both solutions provide enhanced security, which was a common concern expressed by the East Europeans. There was unanimous agreement on the need for a regional approach.

Compared with requirements for gas imports of 200 bcm the major gas-suppliers to Europe other than the CIS, Algeria, the Netherlands and Norway have only relatively small volumes of gas to offer Europe, in particular exports to Eastern Europe would be hampered by the reduced ability to pay high import prices in Eastern Europe. Iran has the potential to deliver big volumes to Europe. However, there is no pipeline infrastructure in place to deliver exports.

The introduction of market economies in CEE and the breakup of the Soviet Union is likely to have a major impact on gas exports and prices in Europe in the 1990's. In 1991, the CEE countries began paying in hard currency for Russian gas imports (although barter trade is still ongoing). For several CEE countries the price (and volume) for Russian gas is fixed on a yearly basis. Also as a result of new national borders and the change in political power, transit countries began demanding higher fees for transport of gas through their countries and delivery points for gas exports have changed. An example involving most of these factors is Gasprom's and Wintershall's gas sale to German Verbundnetzgas (VNG). In western Europe gas prices under long-term gas import contracts are usually negotiated every third year. Exporters use these price review clauses to ensure that the market price is paid for the gas. Another major issue with a potential impact on future exports and prices to Western

Europe is the possible introduction of third party access within the EC.

The Main Issues include:

1. Gas exports

What is the potential for future gas exports from Russia to East and Western Europe.

2. Pricing

How do present export prices for Russian gas to East and Western Europe compare with exports from Algeria, Norway and the Netherlands? How have these export prices developed in the last five to ten years in old contracts, during regular price reviews and in new contracts compared with the development of Russian export prices? How could gas export prices be expected to develop in future considering the changes in demand in East and Western Europe, transit fees, third party access, development of the power market, environmental standards, etc.

Project Description

1. Objective

The study should evaluate future export markets for Russian gas and assess the present price level for Russian exports compared with other exporters to Europe. Moreover, the development of likely future export prices should be assessed.

The Project will address the following issues:

A. Summarize demand projections and supply options to East and Western Europe, based on the report on Future of natural gas in Eastern Europe.

B. Provide cost data for the around gas supply projects listed in the attachment in order to compare the costs of all supply options to Europe.

C. Evaluate the likelihood of each options, in particular the most likely major supply project from Algeria, Russia, Iran, LNG to North, respectively South of Europe, taking account of the desire of Eastern European countries and CIS republics to diversify gas imports, security of supply for importing countries, existing and possible new consortia on the buying side, transit fees, the market for gas in the importing countries and their ability to pay the market price.

D. Analyze present prices for gas imports in East and Western Europe from Algeria, Norway and the Netherlands, the development of these prices in old and new contracts in the last

five to ten years in relation to the development of Russian export prices.

E. Calculate netback values of gas exports in different uses, such as residential, industrial, power generation in the following markets: Germany, France, Italy, the UK and the six CEE countries.

F. Discuss the implications of the disintegration of the CIS and the desire of East European countries to diversify gas imports on gas markets, gas contracts, transit fees and border prices. (Example the German price dispute 1991-92)

G. Elaborate the discussion of key issues from the study "Future of Natural Gas in Eastern Europe," in particular pricing of gas and other fuels in CEE and the competition for gas between Eastern and Western Europe.

Product of the study and timing

The study should result in an around 100 pages report, supported by tables charts maps, etc. The study is expected to be executed in three months after the contract is agreed.

Project Cost

Costs of Bank staff and consultant costs including travel and subsistence are estimated at US\$ 102,000.

Project Implementation

The project will be implemented by a consultant under contract with the Bank and supervised by Bank staff.

AGREED
On behalf of the GASPROM

AGREED
On behalf of the
International Bank for
Reconstruction and
Development

By
Date:

By
Date:

LIST OF GAS TRADE SUPPLY OPTIONS FOR EUROPE

SUPPLY COUNTRIES - GAS TRADE PROJECTS		Volume bcm/y
<u>I. Supply of Gas From Commonwealth of Independent States:</u>		
1.	Main pipeline from West Siberia to CSFR border (Uzhgorod)	35
2.	Additional pipeline to connect main pipeline from West Siberia to Polish border (Brest-Litovsk)	5
3.	Additional pipeline to connect main pipeline from West Siberia to Romanian Border (Ismail)	5
4.	Barents Sea LNG project to Poland (including liquefaction, regasification and ships)	11
5.	Pipeline from Barents Sea to Poland through Baltic countries	15
6.	Pipeline from new fields in Western Russia to Europe	N.A.
7.	Pipeline from Turkmenistan to Europe	N.A.
8.	Expansion of existing gas pipeline facilities from Russia through Ukraine to Europe, including New International (New Brotherhood) pipeline in CSFR	N.A.
<u>II. Supply of Gas From North Sea:</u>		
9.	Pipeline from North Sea via Emden to CSFR	10
10.	Pipeline from North Sea via Denmark to Poland (Niechorze)	10
11.	Norwegian LNG to Poland (including liquefaction, regasification and ships)	5.5
12.	Pipeline from Norway via Sweden, Finland, Baltic to Poland	N.A.
<u>III. Supply of Gas From Algeria:</u>		
13.	New Pipeline from Transmed's landfall to Monfalcone, Italy and then through Slovenia to Hungary, CSFR, Poland and/or Croatia, Serbia to Romania, Bulgaria	5
14.	LNG project from Algeria to Croatia (Omislj) and then to Hungary, CSFR, Poland and/or Serbia, Romania, Bulgaria	5.5

IV. Supply of Gas From Iran:

- | | | |
|-----|--|------|
| 15. | Pipeline via Turkey to Bulgarian border | 20 |
| 16. | Pipeline via Azerbaidzhan and through Georgia to Ukraine | N.A. |

V. Receiving Terminals in Europe:

- | | | |
|-----|---|------|
| 17. | North European LNG terminal in the Baltic Sea to receive gas from various sources i.e. North Sea or Barents Sea | N.A. |
| 18. | South European LNG terminal in the Adriatic Sea to receive gas from different sources, i.e. Algeria, Qatar, Iran or Nigeria | N.A. |

Note: Some of the supply options are mutually exclusive or dependent

ESMAP OFFICE MEMORANDUM

DATE: May 4, 1992

TO: Jonathan Brown, Division chief, EC3IV

FROM: ¹⁵ B. Svensson

EXT.: 36976

FAX: 60436

SUBJECT: Gas mission to Russia

Please find the draft letter to the Minister and Gasprom and a program for the seminar. We are planning to invite 30-40 people to the seminar, including Gasprom board members, all regional gasproms and the distribution side (Rosstrojgasfikazia).

I attach a short list of contacts for the meetings.

cc: A. Mashayekhi
H. Razavi
B. Dalby
J. Homer
M. Shirazi

Charles McPherson (copy sent to Moscow via consultant). List also included 100-150 other contacts in the gas industry

The World Bank

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
INTERNATIONAL DEVELOPMENT ASSOCIATION

1818 H Street, N.W. (202) 477-1234
Washington, D.C. 20433 Cable Address: INTBAFRAD
U.S.A. Cable Address: INDEVAS

May 1, 1992

Mr. V. Lopukhin, Minister of Fuel and Power
and Mr. S. Chernomyrdin, Chairman, Gasprom
Russian Federation
Moscow, Russia

Dear Mr. Lopukhin and Mr. Chernomyrdin,

RE: World Bank Natural Gas Mission

We outlined the proposed overall program for the petroleum mission of the World Bank in our letter of April 22. We referred there to the mission which would concentrate on issues regarding the natural gas sector. We would like to outline in slightly more detail our proposed mission for your consideration.

The mission will consist of a team of seven highly qualified gas professionals with experience in the World Bank and in international gas industries in many parts of the world. The team will be led by Ms. Afsaneh Mashayekhi. They plan to be in Moscow the week of May 11-15 to: (a) review the results of recent work the World Bank has done on European Gas markets; (b) propose two studies to be completed on a grant basis under the Technical Cooperation Agreement, namely European Markets for Russian Gas and Gas Industry Restructuring Options (including privatization); (c) present a paper on the privatization of British Gas by Mr. Brierly, former Managing Director of British gas responsible for privatization; (d) respond to Gasprom's proposal on the Urengoi gas to polyethylene project; (e) review opportunities for World Bank lending to support maintenance and rehabilitation of gas transmission lines. If sufficient progress is made, some members of the team could stay in Moscow or visit gas companies during the course of the following week (May 18-22).

We would like to propose that we hold a one day seminar on Thursday May 14 in Moscow at which senior experts from the World Bank and its consultants can present specifically the results of the European gas work, discuss aspects of gas industry structure including privatization, and describe the kind of financing of gas projects that the World Bank can promote and the role which the World Bank can play. The suggested agenda for the seminar is given in the attached. We would anticipate an audience of perhaps up to 50 or 60 people.

On the other days of the week we would plan to meet with key Russian experts to discuss possible loans to gas transmission and distribution projects as well as the study work mentioned above.

We look forward to a productive week, and thank you for your cooperation and attention.

Sincerely yours

E. Stoutjesdijk
Resident Representative, Moscow

SEMINAR ANNOUNCEMENT

INSTITUTIONAL REFORMS AND NATURAL GAS SUPPLY OPTIONS FOR EUROPE

The World Bank hosted a seminar on "Natural Gas in Eastern Europe; Regional issues and options" in London, January 1992. Six Eastern European countries and four major gas suppliers to Europe attended the seminar. The presentations and discussion at the seminar were very focused and many solutions for future supply options to Europe were discussed. Gasprom was not able to attend the seminar at that point of time. The World Bank would, however, like to invite you to attend a special seminar with a unique focus from the perspective of Gasprom.

The seminar will consist of three sessions:

- * Future Trade in the European Gas market
 - Future demand in Eastern and Western Europe
 - Future Supply Options for Europe and the Role of Russian gas
 - Import prices for gas
- * Privatization and Institutional Issues
 - Privatization of the gas sector
 - Regulatory framework
 - The role of the Government
- * Project Financing
 - Project finance
 - Availability of funds for the oil and gas sector
 - The Role of the World Bank

This will be a closed seminar for GASPROM. An analytical report prepared on the Future of Natural Gas in Eastern Europe will be distributed at the seminar.

The seminar will be in English with translation.

Contacts shortlist

Gasprom

Board

Victor S. Chernomyrdin, Chairman, Gasprom.

Mrs. Euginia K. Selikhova, Member of the Board, Economy and Finance, Gasprom. Tel 133 62 89 *

Vladimir I. Resounenko, Member of the Board, Gasprom. * (BG)

Bogdan V. Budzulyak, Member of the Board, Gasprom. *

Vladimir R. Grunwald, Member of the Board, Gasprom. *

Others contacts in Gasprom

Nicolai Belyi, Foreign economic relations, former chief geologist (Enron, BG)

Arnold A. Berzin, Deputy Chief, Foreign and Economics Department*

Victor Ivanovich Milavanov, Chief Engineer, Directorate of Gaschemical Complex*

Soyuzgasexport

Yuri A. Zaitsev*

W. Mikhalev, General manager

Stephan Romanovich Derezhez, General Director, Zarugezhgaz Association. (Gasprom's downstream division)

R & D

Eduard Leonidovich Volskii, deputy chief of R&D and ecology for Gasprom. Tel 133 05 30

Aleksandr Ivanovich Gritsenko, Director General of VNIIGas/ "Soyuzgaztehnologiya" R&D Association. Tel 399 92 06

Faizulla Gainulovich Gainulin, VNII Promgaz, Research Institute

Regional

Rim S. Suleimanov, Director General of Urengoygasprom,
628718 Novyy Urengoy
telex 412670 SOFUR SU

Georgii V. Krylov, Director General, Tiumen Gas Tekhnologiiia
Insitute
Tel 21 15 45

V. Maksimov, director general, Ukrgasprom

G. Poljakov, General Director, Tjumentrangas

Valeri Vladimirovich Remisov, General Director, Nadymgasprom

Ministry

Anatoliy D. Bikov, Deputy Minister Of Energy and Fuels*

Dr. Anatoly T. Shatalov, First Deputy Minister of Energy and Fuels,
Russian Federation. (senior gas person)

Rosstrojgasfikazia

Boris Vasilenko, Head*

Ivan V. Dudin, First deputy head*

Makarov Anatoly, Chief of Scintific and Technology Department*

Gas consumption

Igor Alexksandrovich Zhuchenko, director od VNIIEgasprom,
economics institute Tel 231 23 90

Vadim I. Eskin, Deputy Director, Institute for Energy Research.
Russian Academy of Sciences. (Rossenergo)

* indicates that the latest mission met with this person

A L L - I N - 1 N O T E

DATE: 01-May-1992 02:06pm

TO: Ken Newcombe

(KEN NEWCOMBE)

FROM: John Homer, ESMOD

(JOHN HOMER)

EXT.: 36973

SUBJECT: GEF Rusia

Ken,

I bumped into Charles. He tells me that you are warming to the opportunities for GEF in CIS/Russia.

For your information, I will be going into Russia the week of May 11 as part of a gas mission for Johnathan Brown and will be seeing the gas industry and the Ministry of Energy. If you have a message from GEF that I can convey, let me know, will you. I leave Washington Tuesday night, May 5.

John.

CC: Charles Feinstein

(CHARLES FEINSTEIN)

Joint UNDP/World Bank Energy Sector Management Assistance Programme

ESMAP OFFICE MEMORANDUM

DATE: May 4, 1992

TO: Jonathan Brown, Division chief, EC3IV

FROM: *B. Svensson*
B. Svensson

EXT.: 36976

FAX: 60436

SUBJECT: Gas mission to Russia

Please find the draft letter to the Minister and Gasprom and a program for the seminar. We are planning to invite 30-40 people to the seminar, including Gasprom board members, all regional gasproms and the distribution side (Rosstrojgasfikazia).

I attach a short list of contacts for the meetings.

ESMAP Operations Division	
Log No.	
Date Received:	05/04/92
Project Name:	
Project Officer:	MR. RAZAVI
cc. ESMOD FILE	
SUBJECT FILE	
Date Action Taken:	
Action Taken By:	

cc: A. Mashayekhi
H. Razavi
B. Dalby
J. Homer
M. Shirazi

Charles McPherson (copy sent to Moscow via consultant). List also included 100-150 other contacts in the gas industry

The World Bank

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
INTERNATIONAL DEVELOPMENT ASSOCIATION

1818 H Street, N.W.

Washington, D.C. 20433
U.S.A.

(202) 477-1234

Cable Address: INTBAFRAD
Cable Address: INDEVAS

May 1, 1992

Mr. V. Lopukhin, Minister of Fuel and Power
and Mr. S. Chernomyrdin, Chairman, Gasprom
Russian Federation
Moscow, Russia

Dear Mr. Lopukhin and Mr. Chernomyrdin,

RE: World Bank Natural Gas Mission

We outlined the proposed overall program for the petroleum mission of the World Bank in our letter of April 22. We referred there to the mission which would concentrate on issues regarding the natural gas sector. We would like to outline in slightly more detail our proposed mission for your consideration.

The mission will consist of a team of seven highly qualified gas professionals with experience in the World Bank and in international gas industries in many parts of the world. The team will be led by Ms. Afsaneh Mashayekhi. They plan to be in Moscow the week of May 11-15 to: (a) review the results of recent work the World Bank has done on European Gas markets; (b) propose two studies to be completed on a grant basis under the Technical Cooperation Agreement, namely European Markets for Russian Gas and Gas Industry Restructuring Options (including privatization); (c) present a paper on the privatization of British Gas by Mr. Brierly, former Managing Director of British gas responsible for privatization; (d) respond to Gasprom's proposal on the Urengoi gas to polyethylene project; (e) review opportunities for World Bank lending to support maintenance and rehabilitation of gas transmission lines. If sufficient progress is made, some members of the team could stay in Moscow or visit gas companies during the course of the following week (May 18-22).

We would like to propose that we hold a one day seminar on Thursday May 14 in Moscow at which senior experts from the World Bank and its consultants can present specifically the results of the European gas work, discuss aspects of gas industry structure including privatization, and describe the kind of financing of gas projects that the World Bank can promote and the role which the World Bank can play. The suggested agenda for the seminar is given in the attached. We would anticipate an audience of perhaps up to 50 or 60 people.

On the other days of the week we would plan to meet with key Russian experts to discuss possible loans to gas transmission and distribution projects as well as the study work mentioned above.

We look forward to a productive week, and thank you for your cooperation and attention.

Sincerely yours

E. Stoutjesdijk
Resident Representative, Moscow

SEMINAR ANNOUNCEMENT

INSTITUTIONAL REFORMS AND NATURAL GAS SUPPLY OPTIONS FOR EUROPE

The World Bank hosted a seminar on "Natural Gas in Eastern Europe; Regional issues and options" in London, January 1992. Six Eastern European countries and four major gas suppliers to Europe attended the seminar. The presentations and discussion at the seminar were very focused and many solutions for future supply options to Europe were discussed. Gasprom was not able to attend the seminar at that point of time. The World Bank would, however, like to invite you to attend a special seminar with a unique focus from the perspective of Gasprom.

The seminar will consist of three sessions:

- * Future Trade in the European Gas market
 - Future demand in Eastern and Western Europe
 - Future Supply Options for Europe and the Role of Russian gas
 - Import prices for gas
- * Privatization and Institutional Issues
 - Privatization of the gas sector
 - Regulatory framework
 - The role of the Government
- * Project Financing
 - Project finance
 - Availability of funds for the oil and gas sector
 - The Role of the World Bank

This will be a closed seminar for GASPROM. An analytical report prepared on the Future of Natural Gas in Eastern Europe will be distributed at the seminar.

The seminar will be in English with translation.

Contacts shortlist

Gasprom

Board

Victor S. Chernomyrdin, Chairman, Gasprom.

Mrs. Euginia K. Selikhova, Member of the Board, Economy and Finance, Gasprom. Tel 133 62 89 *

Vladimir I. Resounenko, Member of the Board, Gasprom. * (BG)

Bogdan V. Budzulyak, Member of the Board, Gasprom. *

Vladimir R. Grunwald, Member of the Board, Gasprom. *

Others contacts in Gasprom

Nicolai Belyi, Foreign economic relations, former chief geologist (Enron, BG)

Arnold A. Berzin, Deputy Chief, Foreign and Economics Department*

Victor Ivanovich Milavanov, Chief Engineer, Directorate of Gaschemical Complex*

Soyuzgasexport

Yuri A. Zaitsev*

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telex 412670 SOFUR SU

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Institute
Tel 21 15 45

V. Maksimov, director general, Ukgasprom

G. Poljakov, General Director, Tjumentransas

Valeri Vladimirovich Remisov, General Director, Nadymgasprom

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Russian Federation. (senior gas person)

Rosstroigasfikazla

Boris Vasilenko, Head*

Ivan V. Dudin, First deputy head*

Makarov Anatoly, Chief of Scientific and Technology Department*

Gas consumption

Igor Alexksandrovich Zhuchenko, director of VNIIEgasprom,
economics institute Tel 231 23 90

Vadim I. Eskin, Deputy Director, Institute for Energy Research.
Russian Academy of Sciences. (Rossenergo)

* indicates that the latest mission met with this person

202-477-0542 (Washington, D.C.)

Fax to : Mr. Razavi's Office
(ESMOD)

Attention : Eleanor
Denise

Would you please type the
enclosed and send to Afsaneh
as soon as possible, preferably
today.

Thank you,

Hossein Razavi

May 20, 1992

ESMAF Operations Division
Log No. _____
Date Received: <u>05/20/92</u>
Project Name _____
Project Officer: <u>MS. VALENCIA / MS. ARCANO</u>
<u>CC: ESMOD PLUS</u>
Date Action Taken _____
Action Taken By _____

To: J. Brown

Draft BTO
for Afsaneh

From: _____

(1)

Russia: Gas Sector Mission
Back to Office Report

1. In accordance with our terms of reference dated — we visited Moscow during May 10-20, 1992 to discuss the possibilities of future cooperation between the Bank and the gas industry. The mission ~~was~~ succeeded in:

- (a) establishing a firm relationship with the concerned entities -- Gasprom and Rosstroypromgazifikatsiya;
- (b) identifying ^{two} ~~the~~ concrete projects for immediate ~~the~~ loan processing; and
- (c) reaching agreement regarding two technical assistance activities which cover a wide range of ~~the~~ sectoral issues.

Discussions were complemented by a one-day seminar in which issues of privatization, gas exports ^{potentials} and project financing were presented to about 50 senior authorities from the Government and entities concerned with ^{the} gas industry. The seminar was well received and strengthened further the dialogue between the mission and the sector agencies.

Sectoral Issues (2)

2. Russia is the world's largest producer of natural gas. Although it exports only 15% of its gas production, it is still the ~~the~~ world's largest exporter of gas. The entire gas industry is managed by two entities -- Gasprom and Rossneft. Gasprom manages the ^{activities} upstream and ^{the} transmission ~~of~~ grid. ~~Rossneft manages the distribution network.~~ Both entities ~~are by far~~ and is by far the world's largest gas company. Rossneft manages the distribution network ~~is~~ and, again is the ~~world's~~ largest of its kind. Both companies have achieved their gigantic size through comprehensive planning and strong technical work.

3. Despite a very solid technical footing, the Russian gas industry is facing three critical issues:

(a) the manner in which the industry should be privatized including determination of the ownership structure, formation of regulatory body, design of an appropriate pricing regime, etc.;

(b) the possibility of enhancing the country's foreign exchange earnings through increased export of natural gas; and

(ccc) the urgent need to increase the ~~first~~ efficiency of the transmission/distribution system which has an estimated gas waste of 1.8 Bcm/yr. ~~for gas~~

~~The~~ The above three issues cover almost all aspects ~~of 2 managers~~ -- technical, ~~managerial~~ institutional and policy -- of ~~efficiency~~ the efficiency of the gas industry and should be addressed in a consolidated and comprehensive manner.

The Proposed Project(s)

4. The mission ~~discussed~~ ^{reviewed} the short and medium-term investment program of the gas industry. There are ~~at~~ several projects which would be suitable for Bank financing and should be included in our ~~pre~~ lending pipeline for future processing. However, ~~the~~ ^{our} immediate ~~and urgent~~ attention should be ~~focused~~ ^{facing the sector,} is needed in addressing the critical issues (para. 3). Accordingly, the mission identified a project which would aim at:

(a) assisting the Government and sector entities in ^{the} implementation of the privatization program;

- (b) assisting Gazprom in the assessment of export markets for Russian gas and establishment of a basis for ~~allocation of gas~~ consideration of trade-offs between export and domestic use of gas; and
- (c) rehabilitating the ~~transmission and~~ critical components of the transmission/distribution system which would improve safety and environmental impact, conserve significant amount of energy and optimize the system capacity.

Project(s) Description and Costs

5. The project ~~will~~ would consist of (a) two technical assistance activities in the areas of privatization of the industry and enhancement of gas exports; ~~and~~ (b) ~~rehabilitation~~ ^{repair} ~~items~~ ^{components} of the transmission system; and (c) rehabilitation ~~components~~ ^{repair items} of the distribution ~~network~~. Details of these components are given in the enclosed aide memo.

6. The total project costs are as follows:

Transmission rehabilitation	\$ 1,014 million
Distribution rehabilitation	\$ 527 million
Total	\$ 1,641 million

~~From the total cost of it.~~

The foreign exchange component of the project cost is estimated at \$1,285 million of which \$860 million is needed for transmission and the remaining \$425 million for distribution.

Bank Loan(s)

7. The mission discussed ~~two possible forms of~~ ^{with the concerned} ~~loan entities~~ the following options:
- (a) processing the entire transmission ^{and} distribution work as one Bank loan of about \$500 to \$700 million; and
 - (b) processing two separate loans to transmission and distribution entities.
- The Government and concerned entities prefer the second option.

Processing Time - table

8. The mission concluded that the sector entities are very capable and responsive to ^{our} information requirements. It is, therefore, conceivable to embark ^{upon} an exceptionally rapid loan processing ^{schedule} aiming at:
- | | |
|-----------------------------|--------------|
| Preparation / pre appraisal | July 1992 |
| Appraisal | October 1992 |
| Board presentation | January 1993 |

9. ~~After~~ The mission discussed with the sector entities the following preparatory work:
- (i) environmental impact assessments ~~which~~ ^{that} appears to be a routine requirement for both entities which follow stringent environmental standards;
 - (ii) preparation of bidding documents, which would be pursued in the ~~contract~~ context of advanced contracting and possibly retroactive financing; and
 - (iii) the information needed for the July mission ~~which should~~ a list of which should be sent to Gasprom one ~~not~~ month prior to the mission's field visit.

We have promised to send them guidelines and sample bidding documents upon return to Washington.

~~After~~

~~After~~

Mobarake Enshalah

Type as ^{is}
No need to put down author's name