STATE PROGRAM FOR DEVELOPMENT OF FUEL AND ENERGY SECTOR IN AZERBAIJAN (2005-2015)

Introduction

The Republic of Azerbaijan is known to possess rich hydrocarbon resources. The Apsheron peninsula and Azerbaijan's sector of the Caspian sea holds large oil and gas fields and deposits. These resources have always been used; their production and usage became even more important and helpful since Azerbaijan restored its independence and started producing and using the resources efficiently to improve the welfare of the population and the national economy.

As a result of the strict policy conducted by the all-national leader of Azerbaijan, President Heydar Aliyev, the country's oil strategy commenced in 1994 has played an increasingly important role in securing Azerbaijan's integration into the global economic framework while drawing foreign investments to the country.

Furthermore, the fuel and energy sector is exceptionally important for socio-economic development of the Republic of Azerbaijan. At present, the country's fuel and energy sector serves the high priority purpose of further securing the accomplishments of the past decade, as well as fully meeting the energy demand of both the economy and population. To this effect, the State Program for Development of Fuel and Energy Sector in Azerbaijan (2005-2015) has been developed, which identifies and sets development targets for the various sub-sectors within the sector along with a package of specifically defined measures aimed at achieving the aforementioned targets and goals within the prescribed period of the next ten years.

The purpose and principal objectives of the State Program

The overall goal of the State Program is to meet fully the electric power, gas and other energy demand of both the population and economy through the continued development of the fuel and energy sector.

The principal specific objectives of the State Program are:

- to determine the priority development targets for Azerbaijan's fuel and energy sector in compliance with the best practices and standards of the modern world;
- to implement appropriate scientific and institutional actions aimed at enhancing the operating effectiveness of the various industries within the fuel and energy sector;
- to ensure implementation of appropriate technology measures for improved production, processing, transportation, storage, accounting and consumption of energy resources;
- to help enable environment for sound competition in the fuel and energy sector;
- to increase the volume of investments drawn for development of the fuel and energy sector:
- to ensure environmental safety in the fuel and energy sector;
- to ensure fuller collections of fuel and energy (electricity and natural gas) bills.

Development targets for the oil and gas sector in Azerbaijan

71 oil and gas fields have been discovered, explored and put in operation in the Republic of Azerbaijan. Of these, 43 are onshore, and 28 are off-shore locations in Azerbaijan's sector of the Caspian Sea. Currently, 54 fields are operated (36 onshore and 18 off-shore fields) with the remaining 9 being under development and exploration.

1.5 billion tons of oil (together with condensate) and over 480 billion cubic meters of gas have been produced during the period from commencement of field operation up to date, of which offshore locations account for 0.5 billion tons of oil (together with condensate) and 352 billion cubic meters of gas.

The Heydar Aliyev Baku Oil Refinery and 'Azneftyag' refinery refine 6.2 million tons of oil annually. The refined fuel is used to meet the domestic needs while a certain portion is exported.

Comprehensive measures have been implemented over the past years to reconstruct the production processes at both refineries: a site of new storage tanks for oil products, as well as a modern gasoline and diesel terminal have been put in operation at the Heydar Aliyev Oil Refinery. The quality of product produced by the oil refineries has enhanced dramatically as a result of improved technology and intensified reconstruction activities.

The following activities are envisaged for the upcoming years in the oil and gas production with the purpose of further development of the country's fuel and energy sector:

- finding and exploring new fields;
- launching full-scale operation of discovered fields;
- drilling new wells and rehabilitating idle wells at the operated fields;
- introduction of new machinery and technologies at the operated fields to increase the oil recovery factor;
- construction, reconstruction and modernization of oil and gas production, transportation and refinery/processing systems;
- broad application of science and technology breakthroughs and advanced expertise.

Over the period of time elapsed from the date of signing the contract with the world's leading oil companies for operation of the *Azeri*, *Chirag* fields and deep level of the *Guneshly* field located in Azerbaijan's sector of the Caspian Sea, 23 contracts have been entered into for oil and gas field exploration and development and a total of USD13 billion in foreign investments has been placed in the country's oil and gas industry.

4 significant projects are currently underway in Azerbaijan's oil and gas sector:

- full-scale development of the deep levels of the Azeri, Chirag and Guneshly (ACG) field;
- first stage of development of the Shakh-Deniz gas condensate field;
- construction of the Baku-Tbilisi-Ceyhan (BTC) Main Export Pipeline;
- construction of the Baku-Tbilisi-Erzerum (BTE) South Caucasus Pipeline.

Chirag-1 platform, approximately 200 km long underwater oil and gas pipelines and Sangachal terminal have been put in operation under the ACG initial oil project.

At present, construction works are being carried out under the Phase-1 (Central Azeri) project of full-scale development of the ACG fields with the initial oil production scheduled for the first quarter of 2005. ACG Phase-2 (Western and Southern Azeri) is planned for 2006-2008 and

Phase-3 (deep level of *Guneshly*) for 2008-2010. Investments of total of USD10-12 billion are expected to finance the said projects.

The Baku-Tbilisi-Ceyhan Main Export Pipeline is envisaged as the primary route for trafficking the ACG oil.

The expected oil production rates in Azerbaijan for 2005-2008 are presented in the table below:

	2005	2006	2007	2008
Oil production in the Republic of				
Azerbaijan, thnd tons	20750	30050	30750	46750
of which:				
- SOCAR	8750	8750	8750	8750
- AIOC	12000	21300	22000	38000

The phase one construction works under the *Shakh-Deniz* gas-condensate field development project commenced in 2003 and initial gas production is scheduled for September, 2006. Annual production of 8.8 bcm of gas and 2 million tons of condensate is planned for the first phase. The following phases are expected to deliver 16 bcm of gas and 4 million tons of condensate annually.

The following activities associated with the international contracts are to be continued in 2005-2008:

- Baku-Tbilisi-Ceyhan Main Export Pipeline completed and put in operation;
- Baku-Tbilisi-Erzerum South Caucasus Pipeline completed and put in operation;
- "Central Azeri" platform completed and oil production commenced;
- "Production Rate Growth Project" implemented at "Chirag-1" platform;
- Gas pipeline completed and put in operation to deliver gas from the Sangachal terminal to the Sangachal Main Facility;
- Construction of gas and oil pipelines from the "Azeri" field to the shore;
- Construction of a compressor and water-pumping platform at the "Azeri" field;
- Construction of 2 oil tanks and auxiliary facilities at the Sangachal terminal to receive oil to be produced from the "Azeri" field;
- "Western Azeri" platform constructed and oil production commenced;
- "Eastern Azeri" platform constructed and oil production commenced;
- Oil production commenced at the deep level of the "Guneshly" field under the "Phase-3" project;
- Gas and condensate pipelines constructed and put in operation which will connect the "Shakh-Deniz" field with the Sangachal terminal;
- TPG-500 platform constructed and put in operation at the "Shakh-Deniz" field;
- Transportation of initial gas and condensate from the "Shakh-Deniz" field to the Sangachal terminal.

Development goals for the natural gas supply system

The gas supply system in Azerbaijan currently includes:

- Main and branch gas pipelines, 4000 km in length, up to 1000-1200 mm in diameter, with working pressure of 55 atmospheres, daily throughput capacity of 70 mcm and annual throughput capacity of 25 bcm;
- Over 36 thousand km long medium and low pressure gas pipelines;
- 7 gas compressor stations with a total capacity of 200 mW;
- 150 gas distribution stations;
- 2 underground gas storage facilities with total active holding capacity of up to 3 bcm.

Described below is the current condition of the natural gas system:

- average annual volume of natural gas delivered to the transportation system 8 bcm, where domestic gas production and gas imports are 4 bcm each;
- a system is up and running, which supplies gas to all large cities and 32 regional centers;
- 67 thousand gas meters have already been installed at residential gas consumer apartments, with the metering program still continued;
- meters are being installed for other consumers.

Development works in the country's gas sector include:

- improvement and strengthening of the financial and technical framework of the gas sector:
- strengthening of the financial discipline in the gas sector;
- accelerated implementation of the metering program;
- continued measures relating to collection, payments and mutual debt issues, reduction of debts and strengthening of financial discipline;
- implementation of measures seeking to develop and provide technical support capacities for Azerigaz Joint-Stock Company;
- increase in the quality and sales of gas and loss reduction.

Principal development goals for the electric and heating energy production, transmission and distribution

Azerbaijan DRES-1, Shamkir SES-1 (water power plant), Araz (Nakchivan), Terter water power plants were constructed and put in operation and Baku and Sumgayit thermal power plants were expanded in the 1970-80-ies of the 20th century in Azerbaijan's electric power system. These efforts doubled Azerbaijan's electric power generation capacity thus having eliminated the country's energy dependence on external sources.

After independence, Azerbaijan started a set of measures in 1994 in the electric power system to ensure that electric power needs are fully met; these included construction of the Yenikend SES in 1996-2003; putting in operation a modern gas turbine generator at Baku CHP-1; replacement of 4 generators with new ones at the Mingechevir SES; installation of a steam generator for the EP-300 complex of Azerkimya State Company; construction of a 400 mWatt capacity modern combined cycle steam and gas power plant at Shimal DRES.

In the meantime, the principal power plants have actually experienced a drop-down in their generating capacities due to their age. Thus, while the total design capacity of the existing thermal power plants is 4695 mWatts, in reality they are only capable of delivering 3498

mWatts; the total design capacity of water power plants is 1020 mWatts, while the actual output is only 771 mWatts.

High-voltage 500 kV lines have been extended to 450 km; 330 kV lines to 1200 km; and 220-230 kV lines to 1260 km in order to allow for effective transmission and distribution of the domestically generated power. In addition, over 50 km long low voltage transmission and distribution lines have been put in operation; all administrative districts of Azerbaijan have been equipped with two-way 35-110 kV electric lines and transformer substations.

The power system of Azerbaijan exchanges with the power systems of Russia (330 kV Derbend-Yashma line); Georgia (500 kV AzDRES-Mukhranis Veli, 330 kV Agstafa-Gardabani lines); Turkey (154/220kV Igdir-Babek lines) and Iran (230 kV Imishly-Parsabad, 220 kV Astara, 132 kV Araz, 132 kV Julfa high voltage overhead lines and 11 kV ground (cable) lines).

The existing generating capacities of the country's power system are expected to reach 6500-7000 mWatts by 2015 through construction of new thermal and power plants, modernization of the existing generating units and utilization of renewable power sources (small water power plants, wind, solar power, thermal waters, etc.).

Drastic changes have occurred lately in the structure of power consumption. Thus, while industrial consumption used to be 48% and residential consumption – 8%, the situation has reversed due to increased residential consumption to 60% with industrial consumption being as low as 16% today. Analysis of the load charts in the power system shows that 30-40% of the total power consumed at peak hours in the fall and winter seasons – as per the daily load schedule – is used to heat residential and institutional buildings.

Estimates expect the power demand to grow by 4.7% annually through 2015; therefore, the year 2015 demand will have increased by a measure of 1.7 times as opposed to year 2004. Water power plants and renewable power sources are expected to deliver 15% with the remaining part (85%) of the total electric power generation in the future being covered by thermal power plants.

Efforts will be taken to reduce the fuel used to generate 1 kWh of electric power from 386 grams of conventional fuel to 260 grams at thermal power plants by introducing new generating capacities and improving the characteristics of the old generating units.

Natural gas is envisaged as the primary fuel for power plants in the upcoming period of time, hence the natural gas demand is expected to be 5.4-5.9 bcm a year. In addition, mazut (fuel oil) is expected to cover about 15-20% of the total fuel supply and consumption at power plants with an aim to regulating the operating modes of the generating units at "technical minimum" hours of the power system (at Azerbaijan DRES and Ali Bayramly DRES), as well as to ensure an emergency back-up in case of breakdowns or other extraordinary events that may occur at the gas supply system.

Considering the necessity of fully meeting the natural gas demand of both the population and economy with domestic sources, the power plants will be able to receive the above mentioned volume of natural gas (5.4-5.9 bcm) produced domestically only starting from 2009. Hence, the power plants are to meet their natural gas needs from external sources until the year of 2009. At the same time, efforts will be taken to expand and reconstruct the electric power and gas transmission lines, rural and urban distribution networks, to improve the accounting system, reduce losses and prevent theft and inefficient use of energy in order to cover the electric power and natural gas demands.

Full coverage/payment of the cost of electricity and natural gas consumed is one of the factors that would ensure efficient use of these resources. International experience suggests that strict measures aimed at ensuring cost recovery of electric power and natural gas have been able to reduce the demand for these resources by 15-20%. Private sector is expected to play an increasingly important role in the future development of the fuel and energy sector and to account for a large portion of the total investments to be made in the sector.

In addition to providing full coverage of the country's demand for fuel and energy resources during the upcoming decade, the State Program for Development of Fuel and Energy Sector in Azerbaijan (2005-2015) also plans to reconstruct this sector, install modern equipment, as well as to introduce a management system specifically designed to operate in a market economy environment.

The State Program envisages the development the oil and gas industry and modernization of the processing/refinery sector during the period of time covered by the Program. Measures will be taken to ensure more efficient domestic usage of energy resources in addition to exporting those to world markets.

Rehabilitation of generating capacities of the power system will occur mostly at Azerbaijan DRES and Mingechevir SES. The growth of generating capacities of the power system as a result of the commissioning of new generating/power units will support the required power generation targets. While the system currently experiences power deficit, it will soon become a system equipped with sufficient additional generation resources. The system will have operating capacity (without the operating units of Ali Bayramly DRES) of 6000-6500 mWatts; generation capacity of 29-30 billion kWh by 2010 and 37-38 billion kWh by 2015.

System-forming power transmission lines will be reconstructed, relevant sub-stations will be constructed and the distribution networks will also build distribution lines and substations in the country. Overall, the State Program actions will ensure reliable and continuous power supply to each settlement and production facility in the country.

ACTION PLAN TO BE IMPLEMENTED IN FRAME OF AZERBAIJAN REPUBLIC FUEL & ENERGY COMPLEX PERSPECTIVE DEVELOPMENT PROGRAM WITHIN 2005-2015

1. OIL AND GAS SECTOR

N	Action and expected outcome	Responsible	Implementation period (years)	
1	2	3	4	
1.1. Ge	eology, geophysics and geological exploration			
1	Completion of the "Ashrafy" and "Garabag" fields exploration and preparations for industrial development	MIE (Ministry of Industry and Energy), SOCAR (State Oil Company of Azerbaijan Republic)	2006-2008	
2	Restarting of survey-exploration works on the "Umid" and "Babek" perspective structures	MIE, SOCAR	2008	
1.2. De	evelopment of oil & gas fields			
3	Development of "Ashrafy" and "Garabag" fields	MIE, SOCAR	2008-2010	
4	Preparation of a special activity plan of actions to ensure efficient development of "Gunashly" field	MIE, SOCAR	2005	
5	To ascertain the reserves of fields under development, to prepare new development projects and carry out supervisory control	MIE, SOCAR	2005-2015	
6	Drilling of horizontal wells	MIE, SOCAR	2005-2015	
7	Use of modern effective methods in layers and borehole zones to increase oil recovery of layers	MIE, SPCAR	2005-2015	
1.3. Oi	1.3. Oil & Gas Production			
8	Construction, refurbishment and rehabilitation of hydrotechnical plants for oil & gas production in offshore fields	MIE SOCAR	2005-2015	
9	Modernization of gaslift system on "Gunashly" field; rehabilitation of system for low-pressure gas collection and its transportation to shore; construction of pipeline for	MIE, SOCAR	2005-2007	

	transportation of high-pressure gas to "Oil Rocks"; upgrading of deepwater fixed oil rig power supply system			
10	Installation of computer-aided oil and gas accounting/metering nodes and upgrading of the computerized information-management system for optimization of control over oil & gas extraction and transportation processes	MIE, SOCAR	2005-2008	
11	Use "Bahar" field as an underground gas storage	MIE, SOCAR	2005-2010	
12	Rehabilitation of Mobile Deepwater Diving Plant for diving works in 200 m depths	MIE, SOCAR	2005-2008	
13	Upgrading of the "Khazardenizneftdonnama" (Caspian Oil Fleet) and purchase of modern ships to increase the quality of sea transport services	MIE, SOCAR	2005-2015	
14	Modernization of existing technical and technological facilities of Baku Deepwater Platforms Plant to meet the international standards	MIE, SOCAR	2005-2009	
1.4. Oi	1.4. Oil Refinery			
15	"Azerneftyanajag" Refinery Plant: construction of European standards (EURO-2005) hydrogen purification system for production of diesel and jet engine fuel	MIE, SOCAR	2010-2015	
16	Construction of European standard water treatment facility to supply chemically pure water to the existing and underconstruction facilities	MIE, SOCAR	2005-2007	
17	Construction of a facility for processing oil and oil product sludge	MIE, SOCAR	2005	
18	Baku Oil Refinery Plant: Modernization of the plant to increase product quality, reduce losses, ensure efficient utilization of wastes and improvement of heat exchange system of initial oil refinery ELOU-AVT-6 facility	MIE, SOCAR	2005-2007	

19	Construction of the facility for production of oxygen- component high octane petrol component – de-isopropyl	MIE, SOCAR	2005-2007		
20	ether from propane-propylene gases Construction of the butane-butylenes gases alkylation facility to produce high octane petrol which meets international standards	MIE, SOCAR	2005-2009		
1.5. Ga	as Processing				
21	Azerbaijan Gas Processing Plant (AGPP) JSC: Apply the use of propane cooling system to intensify the gas processing	MIE, AGPP JSC	2005-2008		
22	Construction and rehabilitation of automated metering system and gas metering points for dry gas delivery	MIE, AGPP JSC	2005-2008		
23	Construction of modern gas processing facility with 2.5 billion cubic meters/year processing capacity to intensify the processing of gas	MIE, AGPP JSC	2008-2010		
24	Upgrading of processing and manufacturing facilities as well as water and power supply system of the plant to ensure continuous and efficient operation mode	MIE, AGPP JSC	2005-2015		
1.6. He	1.6. Health and safety environment				
25	Establishment of training center for human life safety on the sea	MIE, SOCAR	2005-2007		
26	Development and use of alternative utilization techniques for main pollutants in production sites	MENR (Ministry of Ecology and Natural Resources), MIE, SOCAR	Regularly		
27	Clean up of oil ponds and rehabilitation of polluted areas originated from oil-gas production in Absheron Peninsula	MENR, MIE, SOCAR	Regularly		
	2. GAS SUPPLY				
28	Implementation of works on receiving, transportation and distribution of high-pressure gas coming from "Azeri", "Chirag", "Gunashly" and "Shahdeniz" fields and from	MIE, SOCAR, Azerigaz SC	2005-2008		

	Sangachal terminal		
29	Restoration of gas supply to Nakhchivan Autonomous Republic, including:		
	Construction of 530 mm high pressure "Culfa-Nakhchivan" gas pipeline with crossing of Araz river	Azerigaz SC, Cabinet of Ministers of Nakhchivan Autonomous Republic	2005
	Construction of gas metering point at Culfa city gas inlet stations, gas quality check laboratory and operator's building. Setting up communication system	Azerigaz SC, Cabinet of Ministers of Nakhchivan Autonomous Republic	2005
	Rehabilitation of gas distribution network in Nakhchivan city	Azerigaz SC, Cabinet of Ministers of Nakhchivan Autonomous Republic	2005
	Rehabilitation of gas distribution network and system in regional centers of Nakhchivan Autonomous Republic	Azerigaz SC, Cabinet of Ministers of Nakhchivan Autonomous Republic	2005
	Setting up communication system, construction of gas metering points, laboratory and new gas compressor plant on Azerbaijan (Astara city)-Iran border for gas export to Iran	Azerigaz SC	2005
30	Restoration of gas supply to Azerbaijan regional centers with suspended gas supply	MIE, Azerigaz SC, local executive authorities	2005-2008
31	Removal of gas pipelines from basements of multistory buildings and replacing them to safe places in Baku, Sumgayit and Ganja	Azerigaz SC, Baku, Sumgayit and Gandja executive authorities	2005-2007
32	Rehabilitation of Astara-Gazimammad gas pipeline	MIE, Azerigaz SC	2005-2008
33	Implementing works to expand the active gas capacity of "Garadag" and "Galmaz" gas storages up to 3.0 billion cubic meters	MIE, Azerigaz SC	2005-208
34	Construction of main pipelines and control/metering points to increase the reliability of fuel supply to AzDRES and Ali-Bayramly SRPP	MIE, Azerenergi JSC, Azerigaz SC	2005-2006

35	Construction of Sumgayit-Digah main gas pipeline and gas control/metering points required for rehabilitation of Sumgayit CHPP	MIE, Azerenerji JSC, Azerigaz SC	2005-2006
36	Connecting of control/metering system software and gas distributors' software, communication equipment and channels into a united flexible control system, and based on that, establishment of an automated Central Dispatch Board	MIE, Azerigaz SC	2005-2007
37	Installation of domestic gas meters	Azerigaz SC	2005-2008

3. POWER SECTOR

3.1.	Action Plan on Construction, Reconstruction, Capital Repair and Maintenance of Power Plants		
38	Construction of 400-500 MW-capacity modern power plant in	MIE, Azerenerji	2005-2007
	Sumgayit city		
39	Construction of 400 MW-capacity 2nd power unit at Shimal	MIE, Azerenerji	2005-2008
	DRES		
40	Rehabilitation of 1-8 units at AzDRES	MIE, Azerenerji	2005-2008
41	Complete rehabilitation of Mingechavir HPP	MIE, Azerenerji	2005-2007
42	Construction of a power plant of 800-900 MW capacity in Ali-	MIE, Azerenerji	phase 1: 2007-2009
	Bayramly City		phase 2:
			2010-2011
43	Assessment of efficiency of construction of 380 MW Tovuz	MIE, MED Azerenerji	2007
	HPP		
44	Assessment of efficiency of construction of modern CHPP in	MIE, MED Azerenerji	2007
	Sangachal settlement		
45	Assessment of efficiency of construction the Hydro	MIE, MED Azerenerji	2007
	Accumulation Power Plant in Shamkir		
46	Assessment of efficiency of construction of AzDRES 9th Unit	MIE, Azerenerji	2005-2007
47	Assessment of efficiency of construction of the 100 MW-	MIE, Azerenerji	2006-2007
	capacity CHPP in Nakhchevan AR		

48	Construction of 36 MW "Ordubad" and 4.5 MW "Vayxir"	MIE, Azerenerji, Cabinet of	2005-2009
	HPP Plant	Minister of Nakhchivan	
49	Commissioning of Nakhchivan CHPP by shifting from liquid	MIE, Azerenerji, Cabinet of	2005- 2006
	fuel to natural gas.	Ministers of Nakhchivan	
3.2.	List of activities to be perfo	ormed on high-voltage networks	
3.2.		elations with neighboring countries	
1			
50	Construction of second 330 kV line between Derbend (Russia) and Yashma (Azerbaijan) and construction of 330-110/10 kV Khachmaz substation.	MIE, Azerenerji	2005-2007
	Time maz substation.		
51	Rehabilitation of 330 kV- section of Imishly substation in order to increase electric power exchange with Islamic Republic of Iran and construction of second 330 kV ETL between Imishly and Parsabad	MIE, Azerenerji	2005-2006
52	Construction of 330 kV AzDRES-Imishly and 330 Kv Ali-Bayramly SRPP-Imishly ETLs.	MIE, Azerenerji	2005-2007
53	Construction of 220 kV ETL between Ali-Bayramly SRPP and Salyan, construction of Salyan substation with one 125 MW capacity transformer and its connecting to 110 kV ETLs	MIE, Azerenerji	2005-2006
54	Construction of 220 kV Salyan-Masaly and Masally-Astara electric power transmission lines, reconstruction of 220 kV Masally substation.	MIE Azerenerji	2005-2006
55	Construction of 110 kV ETL from Araz HPP to link to 110 kV Nakhchivan-Julfa ETL	MIE, Azerenerji	2005
3.2. 2.		Voltage Electric Networks	
56	Reconstruction of electric transmission systems and rehabilitation of National Dispatcher Center	MIE, Azerenerji	2005-2007
57	Construction of inputs & outputs of 330 4 th ETL between Ali-Bayramly DRES and Yashma substation to 500/330/220 kV	MIE, Azerenerji	2005-2006

	Absheron substation. Reconstruction of 330 kV distribution			
	system			
58	Construction of 220/110/10 kV "Boyukshor" substation and	MIE, Azerenerji	2005-2008	
	220/110/10 kV "Sheki" substation and connecting them by			
	110-35 kV ETL.			
59	Construction of two circuit 220 kV ETL between Shimal	MIE, Azerenerji	2005-2007	
	DRES "Hovsan" and "Boyukshor" – "Sanaye Govshagy"			
	substations.			
60	Replacement of old transformers with new and more powerful	MIE, Azerenerji	2005-2006	
	ones in 330/110 kV Ganja, 220/110/10 kV Khirdalan and			
	Agsu, 110/35/6 kV Binagedi, Zabrat and Akhmedli			
	substations			
3.3		r Supply of Nakhchevan AR		
61	Construction and rehabilitation of Nakhchivan HVN	MIE, Azerenerji	2005-2006	
3.4	4 Improvement of Power Supply of Baku City			
	Reconstruction of existing 110, 35, 10, 6, 0.4kV networks in	MIE, related organizations	2005-2015	
	Baku, construction of new substations, ETLs and work on their			
	connection to HVN.			
3.5		icity Supply of Sumgayit City		
63	Improvement of energy distributing in Sumgayit, Guba,	MIE, Azerenerji and related	2005-2015	
	Khachmaz, Gusar, Devechi, Siyazen, Gobustan regions.	organizations		
3.6	Electric Network Reconstruction and Rehabilitation A		nd Ali-Bayramly regions	
64	Construction of new substations and ETL, replacement of old	MIE, Azerenerji and related	2005-2015	
	transformers with new and more powerful ones in Ganja and	organizations		
	western regions in order to improve energy distribution to this			
	region of the country		2007.2017	
65	Construction of new substations and ETL, replacement of old	MIE, Azerenerji and related	2005-2015	
	transformers with new and more powerful ones in southern regions	organizations		
	in order to improve energy distribution to this region of the country	lel and energy sector		
66	Improvement of existing legislative framework	MIE, SOCAR, Azerigaz,	Dagularly	
00	improvement of existing legislative framework	MIE, SOCAK, AZEIIgaz,	Regularly	

		Azerenerji, AGPP	
67	Perform measures to improve metering points in order to ensure	MIE, SOCAR, Azerigaz,	Regularly
	accurate recording of fuel-energy resources use	Azerenerji, AGPP	,
68	Establishing of integrated computer-information network and	MIE, SOCAR, Azerigaz,	2005-2010
	centralized data bank in fuel-energy sector	Azerenerji, AGPP	
69	Establishing of sector-based information recourses and automatic	MIE, SOCAR, Azerigaz,	2005-2011
	information and project system	Azerenerji, AGPP	

Acronyms: MED – Ministry of Economic Development of the Azerbaijan Republic; MIE – Ministry of Industry and Energy of the Azerbaijan Republic; MoENR – Ministry of Environment and Natural Reserves of the Azerbaijan Republic; SOCAR – State Oil Company of the Azerbaijan Republic