Standard Summary Project Fiche Project Number 2002/000.620.06.01

1. Basic Information

1.1. CRIS no: 2002/000.620.06.01

1.2. Title: Strengthening of the Transmission System Operator (TSO) and the

Market Operator (MO) after the restructuring of the JSC "Lietuvos

Energija"

1.3. Sector: Energy

1.4. Location: Joint-Stock Company "Lietuvos Energija", Zveju g. 14, Vilnius,

2. Objectives

2.1. Overall Objectives

The overall objectives of this 1.85 MEUR project, of which 0.06 MEUR is national co-financing, are to:

- ➤ Prepare the Lithuanian electricity market for integration into the Internal Energy Market by development of the Transmission System Operator (TSO) and the Market Operator (MO) in accordance with national as well as EU requirements (*Energy Acquis*).
- Enhance the security of electricity supply and the quality of electricity in Lithuania.

2.2. Project purpose

The purpose of this project is to:

- > Support the development of the TSO and the MO by providing necessary expertise including training of the staff in the TSO and MO in understanding and using new techniques for operation, services for the market and in the development of the electricity system;
- > Complete legal approximation to the EU requirements including support to improvement of secondary legislation and enforcement guidelines;
- ➤ Describe and develop local and regional (Baltic and/or others) institutions needed for security of electricity supply, for efficient market conditions and for improving competition from other markets using UCTE and Nord Pool structures as models.

2.3. Accession Partnership and NPAA Priority

Accession Partnership

The 1999 Accession Partnership stated that Lithuania in the short term (2000) should "ensure administrative and managerial independence of the energy utilities". In the medium term (2002) it was stated that Lithuania should "prepare for the internal energy market including adoption of energy prices to cost levels and the establishment of a regulator".

The 2001 Accession Partnership states that Lithuania should "complete the alignment process with regard to the internal energy market (electricity and gas); establish an independent transmission system operator (electricity); eliminate remaining price distortions, strengthen the regulator (National Control Commission for Prices and Energy)".

7

Prepared by Lietuvos Energija, 09/07/2002

NPAA Priorities (2001-2003)

The electricity sector is regulated by the Directive 96/92/ EC concerning common rules for the internal electricity market. For the Electricity sector it is stated in the NPAA (2001-2003) that:

The provision of this Directive has been partially transposed to the Law on Electricity, adopted on 20 July 2000. This law entered into force 1 January 2002. It is planned to review or draft legal acts necessary for the implementation of the above-mentioned law. Taking into account the actual consumption of electricity, the requirements set out in the EU Directive 96/92/EC, and the fact that the EU intends to accelerate the process of the market opening by fully opening up the market for non-household customers in 2004, Lithuania will adopt amendments to the Law on Electricity before its accession to the EU and by doing so it will adjust the level of market opening in such a way that it would conform the EU requirements.

For the Enterprises and Infrastructure of the Electricity Sector within the framework of integration into the EU energy system it is stated in the NPAA (2001-2003) that:

Lithuania continues further decentralisation, privatisation and modernisation of the sector, along with the promotion of local and foreign investment. In order to integrate its economy infrastructure, including the electricity energy system, into respective Western European networks (UCTE), Lithuania plans to construct a 400 kV electricity transmission line interconnecting Lithuanian and Polish energy systems, and at the same time ensuring the connection with the UCTE.

3.1. Background and Justification

Background

The 2001 Regular Report states "that Lithuania has achieved a reasonable level of alignment with the energy aquis, but needs to maintain its efforts – also in the area of the Internal Energy Market. Lithuania has continued to take steps to reform the energy sector. The restructuring of the electricity sector continued, despite delay in the privatisation process. Lithuania decided in June 2001, through an amendment of the Electricity Law, to postpone its entry into force by six months, until 1 January 2002. Particular attention should be given to the preparation for the Internal Energy Market. In this respect, an expedient completion of the reorganisation and privatisation of the electricity sector is needed. Furthermore, the drafting of secondary legislation, particularly in the electricity sector should be enhanced. The market opening plans in the electricity sector appear to satisfy the current requirements of the Electricity Directive. Establishment of a Common Baltic Electricity Market in 2002 will be useful with a view to preparing for the Electricity Directive. Removal of price distortions in the energy sector should continue while stranded costs also need attention

The Regular report 2001 furthermore stresses that an independent transmission system operator must be established and the Energy Agency and the regulator (National Control Commission for Prices and Energy) strengthened.

It is recalled that the future of the Lithuanian energy sector is closely linked to the closure of the Ignalina NPP.

On 1 January 2002, the new Electricity Law entered into force. In many ways it sets a new agenda for the electricity supply system in Lithuania. Market will be the driving force, but this should be without jeopardising:

- Supply security and quality of electricity;
- The use of CHP in power production;
- Consideration for the environment, and
- Development of new technologies.

Frepared by Lietuvos Energija, 09/0//20

With the enforcement of the Electricity Law, Lietuvos Energija is now the Transmission System Operator. In the initial phase of the liberalisation it has been decided that the Market Operator function shall be placed within Lietuvos Energija.

In September 2000 the Twinning Project LI99/IB-EC-02 regarding restructuring of Lietuvos Energija was started. The project will be finalised by the end of September 2002. The objective is to restructure Lietuvos Energija within the framework of the national legal acts and in accordance with the requirements of EU. The restructuring of Lietuvos Energija was formally decided and put into force 1 January 2002 when the company was divided into five independent companies: two production companies one transmission company and two distribution companies. It means that Lietuvos Energija is established in its new role as Transmission System Operator and Market Operator and for that reason Lietuvos Energija is responsible for a safe and efficient electricity supply and for developing the framework of the electricity market and for establishing cooperation with other transmission system operators and relevant authorities. However the organisation and administration of trade in electricity and balance settlements is at an initial stage.

The main results from the ongoing Twinning Project are:

- Establishment of a TSO and MO in Lithuania consistent with the Lithuanian legislation and the relevant EU Directives;
- Establishment of a market operation function consistent with the Lithuanian legislation and the relevant EU Directives;
- Establishment of a unit within the company that can maintain and repair the transmission network and be responsible for constructing new transmissions lines;
- Creation of structure and functions of the system control centre under market conditions;
- Definition of the role and responsibility of the Internal Audit Department in the company;
- Development of pricing methods for transmission, transit, reserves and ancillary services;
- Development of the system and transmission planning process in cooperation with the Ministry of Economy;
- Creation of structure, functions and responsibilities of the Human Resource Department;
- A strengthened relations and cooperation with international organisations.

The Lithuanian power system mainly consists of the very large nuclear power plant (INPP), on which in June 2002 an agreement was reached. Lithuanian Government then took the important steps of formally declaring that Unit 1 of the plant will be closed before 2005 and Unit 2 by 2009. The EU, for its part, recognised that the decommissioning of the Ignalina Nuclear Power Plant will have to continue beyond the current financial perspectives and that this effort represents for Lithuania an exceptional financial burden not commensurate with the size and economic strength of the country. The EU expressed its readiness, on the basis of Community solidarity, to continue to provide adequate additional Community assistance to the decommissioning effort also after Lithuania's accession.

The decision to close both units will place the Lithuanian electricity sector in an entirely new situation, and it will have a major impact on the security of electricity supply. The development of the electricity market in Lithuania will also be affected by the decommissioning of Ignalina INPP. In this regard Lietuvos Energija will have a key role to play in order to secure a high level of electricity supply and develop an efficient electricity market and also to analyse the situation for the electricity sector in the long run in these areas. As long as Ignalina INPP dominates the electricity market there will be a lack of competition. A great effort should therefore be done to create the necessary institutional background for competition.

Rol

Justification

The focus of this project (LI 2002-X-XX) is to push forward with the electricity market adjustments and to support the further opening up of the Lithuanian electricity sector -in line with the current and future Electricity Directive- by providing assistance to further institution building of Lietuvos Energija as a Transmission System Operator and Market Operator and to develop the external relations between the company and the new market players primarily in electricity production and distribution, but also to have a closer cooperation with the administrative/policy level in Lithuania.

The focus of the project is also to push forward the development of the preparedness of the company to deal with the responsibility of security of electricity supply with the emphasis on the consequences of the closure of both units at Ignalina INPP.

Seen from the accession priorities, the Lithuanian Energy sector and Lietuvos Energija are facing a number of new challenges within the coming years for which the EU experience is needed, such as:

- The opening up of the market in line with the Electricity Directive results in the formation of new players with new responsibilities. In this regard clarification of what role the different players are going to play in the new regime are important.
- The future framework for Lietuvos Energija will be laid down in legislation, executive orders and a licence that together implement the EU's Electricity Directive.
- The organisation should be made flexible and adaptive to face new situations and requirements of the future electricity market, new legislation, and changes in energy policies, regional co-operation and other externalities that may turn up.
- The new rules must be consistent with the international potential for the development of the Lithuanian electricity market in any practical direction (i.e. a Common Baltic Electricity Market and/or co-operation with the Poland [CENTREL], UCTE, Byelorussia, Russia or the Nordic electricity Market).
- Besides having the responsibility of operating the transmission system, the transmission system operator is also responsible for the supply security in the main electricity supply system. Energy from renewable and from CHP plants in the future will be an integrated part of the Lithuanian supply system.
- An integrated electricity market requires common international environmental regulation to ensure a level playing field for the market players in the different countries.
- There is also a growing need to target research and development to the electricity sector on the new demands arising out of environmental policies.

Therefore assistance is needed to:

- Further institution building of Lietuvos Energija to strengthen the capacity of the company to maintain an effective, competent, reliable and a transparent transmission system operator as required by the Electricity Directive;
- Setting up the market operator and the transmission system operator for further development of the competition in the power sector;
- Setting up a transparent tariff system, which reflects the costs in the electricity system and comply with the tariff systems in other countries. The tariff system should also allow for transit of electricity through Lithuania;
- Development of the Lithuanian electricity market in line with the development of a regional/international electricity market;
- Implementation and/or improvement of secondary legislation, and

Pre

• Establishment of a Data Warehouse for the data needed and procedures for quality control and updating of the Data Warehouse. A market system requires a comprehensive metering, electronic communications and computer-system to handle the plans, which the market players submit every day to the TSO/MO, instructions from the TSO to producers regarding up-/down regulation, metering from the grid companies etc. On the basis of this data the system computes the imbalances of all market players and makes the settlement of imbalances and grid tariffs.

The following Civil Societies and NGOs have been consulted regarding the relevance of the project idea as well as the content of the Project Fiche: "National Electroenergetics Association", "Confederation of Lithuanian Industrialists", "WEC Lithuanian Member Committee". Representatives from these institutions approved this project proposal.

3.2. Linked Activities

The Lithuanian energy sector has received assistance through the Phare Programme and from bilateral donors. This has included:

- > Transposition, Implementation and Enforcement of the Energy Acquis (Phare Project LI9910).
 - "Policy and Regulatory Support to the Ministry of Economy" (LI99/IB-EC-01); "Restructuring of Lietuvos Energija" (LI99/IB-EC-02) and "Restructuring of Lietuvos Dujos" (LI99/IB-EC-03).
- > Strengthening of the Energy Market Regulator (Phare Project LT-01.04.01).

This project is designed to support the regulator – National Control Commission for Prices and Energy. Among other task the project is supposed to assist the Regulator to draft or amend some secondary legislation, which is under the responsibility of the Regulator.

There is much more secondary legislation and different technical regulations needed to enforce both Electricity and Energy laws. The project "Strengthening of the TSO and MO after the restructuring of AB Lietuvos Energija" will assist, among other tasks, JSC "Lietuvos Energija" in drafting or amending their specific secondary legislation or technical regulations. There is no overlap with the proposed project because there are two different organisations, which have its specific place in the market and need different secondary legislation and regulations, different consultants with specific and different experience.

Economic analyses in the electricity sector in Lithuania. Financed by the Danish Energy Agency in 2001.

3.3. Results

The guaranteed results expected from this project are:

- ➤ The roles of the TSO and the MO defined in relation to other commercial and non-commercial market players and other stakeholders. Secondary legislation and enforcement guidelines to define responsibilities and rights of the players updated and prepared. Consistency in legislation with the EU directives secured.
- More effective internal TSO and MO structures, procedures and communication developed. TSO and MO organisation made flexible and adaptive to face new situations and requirements of the future electricity market and the changes in legislation, new policies developed.
- Developed liberalisation process in terms of co-operation/integration in potential external markets; updated tariffs and financial management system in place; fair and transparent market information systems developed; updated and developed technologies for measurements, market regulations and balance settlements.

Col

- ➤ New techniques for the transmission system developed regarding network operation, stability, minimising grid losses and in the development of system services (mainly ancillary services); Institutional framework as regards system reliability in a national and an international context developed;
- ➤ Updated security of supply and quality of electricity to West-European standards. Procedures introduced in system development that covers energy consumption, transmission and all energy sources including renewable energy.

3.4 Activities

There are five sets of activities leading to the results from the project. They are:

- 1) Support for identification of the different players in the Lithuanian electricity market and the clarification of their roles. Follow up on legislation and guidelines for future EU legislation:
 - A description of the future tasks for the Lithuanian electricity system, connection between the tasks, and the probable roles of the players and of recommendations for the future division of these tasks between the players in the Lithuanian electricity sector;
 - Support to develop co-operation with the Ministry of Economy (see section 3.5 and 4) regarding the follow up on and the amendment of the existing legal acts in the electricity sector in relation to the EU-legal matters (energy, competition, environment etc.).
- 2) Support to general management and institutional development of the Lithuanian Transmission System Operator and Market Operator with focus on internal structures and procedures:
 - Assistance to the Transmission System Operator and the Market Operator to develop the organisational structure and human resources to create an effective organisation to meet the challenges of the electricity market;
 - Develop effective and smooth internal procedures and communication.
- 3) Management and institutional support in the areas of measurements, settlements, market regulation, development and surveillance. Develop public information systems and information management systems to support competition in electricity market:
 - Assistance to the Transmission System Operator and the Market Operator to implement and develop competitive condition in the Lithuanian electricity market, including. Establishing of rules for regulating the electricity market and for establishing responsibilities and rights of the market players;
 - Descriptions of the special conditions of the Lithuanian market, make/update the rules for: grid access, balance holders, balance market, regulating power, obligations for grid owners, communication and metering etc. as well as the market conditions for prioritised and/or renewable electricity generation and technical audit of relevant market players;
 - Assistance in building up the institutional framework needed for developing the international market dimensions and for operating the common networks maintaining a security consistent with normal West-European practice;
 - Assistance in the setting up of a transparent tariff system. Organise training in settlements and other issues related to market regulation. The number of staff trained will be app. 5;
 - Assistance to the Transmission System Operator and the Market Operator to implement and develop the information systems to support competitive condition in the Lithuanian electricity market. Updating existing market information systems, rules for communications, Data Warehouse
- 4) Support for development of new techniques for operation of the transmission system taking into account stability, losses, composite reliability, capacity building, reactive power, etc. Develop

Vest

Prepared by Lietuvos Energija, 09/07/2002

transmission system services for the market. Building of institutional framework as regards system reliability in the national and international context:

- Assisting Lietuvos Energija as the Transmission System Operator to implement and develop
 the technical condition for operating the Lithuanian electricity system in a reliable way
 under the new market conditions, including. Methods for reliability and evaluation in
 national as well as in international context, rules and procedures for system balance control
 (primary, secondary and tertiary power- frequency control), control of voltage, reactive
 power and method to establish the needs for reactive power assets;
- Assistance in building up the institutional framework needed to operate the network as part
 of a larger international network and market area, maintaining a security consistent with
 normal West-European practice;
- Support to improve preparedness and procedures to contain disturbances, terrorist acts etc. Evolve methods for energising the network after total shutdown (black start capability);
- Organise training in evaluation of system stability, frequency control, reactive power optimisation and other issues related to reliable and effective operation of the Lithuanian power system under the new market conditions. The number of staff trained will be app. 10.
- 5) Support to ensure a high level of supply security and quality of electricity, both in the short-term and the long-term. System development that covers energy consumption, transmission and all energy sources including renewable energy:
 - Assisting Lietuvos Energija in organising high level of supply security and quality of electricity. This should be in a close co-ordination between the company's operating and system- and transmission planning functions and also in agreement with other system operators;
 - Assisting Lietuvos Energija in making a coherent, sustainable system development covering analyses of energy consumption, transmission and all energy sources;
 - Assisting Lietuvos Energija in organising the set up for taking part in a sustainable oriented development of new technologies that can meet the demands coming from the environmental goals;
 - Organise training in system development and analysis. This includes comprehensive planning (from production to consumption), planning for supply security, analyses of different development scenarios and means of achieving environmental goals and analyses of action areas for research and development. The number of staff trained will be app. 8.

3.4.1. Twinning

Three PAAs will provide input of management support totalling 60 man-months. Medium and short-term adviser inputs totalling 36 man-months.

Profile of PAAs

Three PAAs providing management support as follows:

- The PAA-A (24 man months) will have the responsibility for the local organisation and coordination of the work. The PAA should be an expert within organisational development of the power industry and have knowledge of market organisation, legislation issues as well as system development. The PAA should have experience within project management and working experience from similar projects will be an advantage. Further the PAA should have experience within training activities and be able to organise the work of STAs.
- The PAA-B (18 man months) should have an extensive knowledge of electricity market organisation, development and all other market related issues. The PAA should have



knowledge of power station dispatch and some knowledge of issues related to power generation of importance for operating power stations on market conditions. The PAA should have experience within training activities and be able to organise the work of STAs within market related issues.

- The PAA-C (18 man months) should have an extensive knowledge and experience of power system operation. The PAA should be familiar with all issues of importance for system stability, reserve allocation, power system control and other issues of importance for system security. The PAA should have experience within training activities and be able to organise the work of STAs within issues of importance for system security.
- "The project is linked to two earlier Phare projects Transposition, Implementation and Enforcement of the Energy Acquis (1999) and strengthening the Energy Market Regulator (2001). The results of the project on Strengthening the Energy Market Regulator (2001) will be taken into account in order to ensure effective complementarity and potential synergies, wherever relevant, between the two projects.

Profile of Short Terms Advisers

The STA's part of the team (approximately 36 man-months input) will be between 10 and 20 persons. The STAs should have senior, specialist or middle management positions with experience from the electric power sector. They should cover the following specialists within the following topics:

- Specialists to support the PAAs in developing energy markets, covering at least the following issues:
 - Market development
 - o The relations between the market players
 - Allocation and settlements of ancillary services
 - o Allocation of prioritised generation
 - o Procedures for settlements of unbalances
 - o Knowledge of the EU energy legislation
 - o Market information systems
 - o Market regulations
 - o Developing regional electricity spot markets and OTC (over the counter) markets
- Specialists to support the PAAs in improving the security of power system operation, at least covering the following issues:
 - o System stability
 - o Technical specifications of active and reactive power reserves
 - O Developing the institutional framework for reliable system operation in Lithuania as well as on a regional (international) level
 - o Activity rules and working procedures of the Transmission System Operator
 - o Activity rules and working procedures of the Market Operator
 - O System development on generation, transmission and load management
 - o Training of the staff in such issues
- Specialists to support the PAAs in general management and organisational development, at least covering the following issues:
 - o Experience from institutional building in connection with creating energy markets
 - o Defining the roles of the new market players
 - o Organisational development
 - o Legislation issues to define and support the new market players
 - o Knowledge of the EU competition legislation and other EU legislation related to the company

- o Other secondary legislation
- o Training the staff in such issues
- Specialists to support the PAAs in general management and organisational development, at least covering the following issues:
 - o Data management- data warehouse
 - o Communication systems
- Specialists to support the PAAs in system development, at least covering the following issues:
 - o Supply security
 - o Quality of electricity
 - o Environmental aspects
 - o Transmission planning
 - o System planning
 - o Research & development

3.4.2. Services

The twinning project will be complemented by a service component covering the following:

- Development of software for market planning, accounting / settlement;
- Establishment of a Data Warehouse for the data needed and assist with establishing procedures for quality control and updating of the Data Warehouse.

Database licenses should be purchased for both the Data Warehouse and for the market planning, accounting / settlement tools.

3.5 Lessons learned

During the implementation of the on-going Twinning Project in Lietuvos Energija it has been noticed that a strong and sustained dialogue between the Ministry of Economy, the Energy Agency, the regulator -National Control Commission for Energy and Prices, the consultants involved and the electricity sector is necessary in all stages of a restructuring process. Such a dialogue is beneficial to all parties also in situations where obvious conflicts of interest are involved.

Strengthening the Transmission System Operator (TSO) and the Market Operator (MO), which is the scope of the project, might be advanced if a closer co-operation between the administrative/policy level and the company could be established. The Twinning team should work with all parties in order to advance this co-operation. PAAs and short-term advisers should therefore cooperate with the Ministry of Economy and the National Control Commission for Prices and Energy in order to keep the dialogue with the policy decision makers.

Building on the past experiences, it is needed 3 PAAs in order to cover the broad range of functions in the company with that also in the project.

4. Institutional Framework

The Project will be implemented by Joint-Stock Company (JSC) Lietuvos Energija.

JSC Lietuvos Energija

JSC Lietuvos Energija was established in 1995 following the reorganisation of the Lithuanian State Energy System.

Restructuring of JSC Lietuvos Energija

JSC Lietuvos Energija has separated its branches and business segments, involved in non-core activities. 7 daughter companies have been established instead.



At the end of 2000, the activities of Lietuvos Energija were unbundled into transmission grid, having 5 divisions, and distribution network, comprising 7 electric utilities. According to the reorganisation plan of the company, by the end of 2001 it was planned to reorganise the 7 distribution branches of Lietuvos Energija into the West Distribution Network and the East Distribution Network. Lietuvos Energija was separated into 2 (West and East) Distribution Companies, 2 (Lietuvos Elektrine and Mazeikiu Elektrine) Production Companies and Lietuvos Energija as the transmission company from January 1, 2002.

In year 2001 there were about 8.500 employees in the company. However, after the reorganisation of Lietuvos Energija the number of employees has reduced to approx. 1400. This reduction in the total number of employees is mainly due to the separation of the production and distribution activities.

Upon the reorganisation and in accordance with the provisions of the Law on Electricity, which is in force from January 1, 2002, Lietuvos Energija continues its activities as the Transmission System and Market Operator. From January 1, 2002 Lietuvos Energija owns:

- the high voltage transmission grid and substations,
- the dispatch centre,
- Kaunas HPP and Kruonis HPSP used for system balancing and control,
- the control and protection equipment for securing operation stability,
- the telecommunication network and information system for functioning of the transmission grid and performing of the power system operator's functions.

AB Lietuvos Energija as the Transmission System Operator, is responsible for:

- management and development of the transmission grid,
- integrity and compatibility of interconnected system,
- operational management of the power system and conciliation of operating conditions with transmission system operators of other power systems,
- planning of the national electricity balance.

AB Lietuvos Energija:

- connects customers, distributors and producers' equipment, ensures non-discriminative conditions for connections and access to the transmission grid,
- implements and maintains electricity metering in the transmission grid,
- secures efficient, reliable and environment friendly functioning of the transmission grid,
- secures reliability of operation of Lithuanian power system and interconnection lines with other power systems,
- secures provision of ancillary services required for safe, reliable and high quality operation of the power system.

The main function of AB Lietuvos Energija as the Market Operator is to organise electricity trade, transit and payment settlements in the internal and foreign markets in compliance with the Rules of Electricity Trade. AB Lietuvos Energija is responsible for making public the electricity prices and organization of payment procedures between the market players.

During the transition period, JSC Lietuvos Energija, apart from the Transmission System and Market Operator activities, performs the functions of Independent Suppliers and Electricity Exporter.

The main shareholder of the company is the state of Lithuania. The State owns about 86 percent of the shares, foreign capital amounts about 11 percent and other shareholders own about 3 percent of shares.

Steering Committee

In order to organise the work and to evaluate the project during the completion, a steering committee should be set up. The organisational set-up and the staffing of the steering committee should involve the management, technical experts as well as government officials and also respective officials from the member state country.

The following institutions will be represented in the steering committee: Ministry of Economy, Energy Agency, National Control Commission for Prices and Energy, Lietuvos Energija and respective institutions from the member state partner. There will also be representatives from the consumer side: "National Electroenergetics Association", "Confederation of Lithuanian Industrialists", "WEC Lithuanian Member Committee".



5. Budget (in € million)

Project Components	Investment Support	Institution Building	Total Phare	National Co- financing	IFI	Total
Twinning and Training Package	-	1.60	1.60	-	-	1.60
Services	-	0.19	0.19	0.06	-	0.25
Total	 -	1.79	1.79	0.06	-	1.85

The Phare amount is binding as a maximum amount available for the project. The ratio between the Phare and national amount is also binding and has to be applied to the final contract price. The national co-financing commitment is a tax-excluded net amount.

6. Implementation Arrangements

6.1 Implementing Agency

The CFCU is responsible for contracting and accounting of the project. Responsibility for technical preparation, control and management of the PAA/STAs under twinning will remain with the beneficiary, Lietuvos Energija.

PAO: Zilvinas Pajarskas, Director of the CFCU

Address: J. Tumo Vaizganto 8A/2 - 241 Telephone: + 370 2 22 66 21

2600 Vilnius Fax: + 370 2 22 53 35 Lithuania e-mail: Info@cfcu.lt

SPO: Marijus Franckevicius, Director of the Energy Agency

Address: Gedimino 38/2 – 906 Telephone: + 370 2 62 97 31

2600 Vilnius Fax: + 370 2 62 68 45

Lithuania e-mail M.Franckevicius@po.ekm.lt

6.2 Twinning

The beneficiary institution is Lietuvos Energija. The contact person is:

Petras Apanavicius, Head of International Relations Department

Address: Zveju 14 Telephone: + 370 2 78 22 22

2600 Vilnius Fax: + 370 2 78 21 11

Lithuania e-mail: <u>trs@lpc.lt</u>

6.3 Non-standard aspects

There are no non-standard aspects to this project and the CFCU will ensure that the PRAG is strictly followed. The project has two components: twinning and service.

6.4 Contracts

The total value of the project is 1.85 MEUR. Phare support will be amount to 1.8 MEUR, which will be contracted as follows:

- Contract 1. Twinning and training package: 1.6 MEUR;
- Contract 2. Services: 0.25 MEUR, including national co-financing of 0.06 MEUR.



Prepared by Lietuvos Energija, 09/07/2002

7. Implementation

Component	Start of Tendering	Start of Project Activity	Project Completion
Twinning and Training	3Q/02	2Q/03	1Q/05
Service	1Q/03	3Q/03	3Q/04

8. Equal opportunity

Equal opportunity principles and practices in ensuring equal opportunities in the Project will be guaranteed. In the tender for the project the member state shall ensure that the principle of equal opportunities is taking into account in the project. During the implementation of the project the steering committee will be responsible for monitoring that the requirements on equal opportunity is met, also from the candidate country.

9. Rates of Return

Not applicable.

10. Investment Criteria

Not applicable.

11. Conditionality and Sequencing

Lithuanian side will contribute 0.06 MEUR in line with the Phare co-financing requirements.

A clear administrative and management structure for the Project will be established within Lietuvos Energija, involving regular reporting on activities and achievement of targets.

The key milestones in this project are:

- > Appointment of the Twinning Member State
- Commencement of Twinning
- > Completion of training activities



Annexes to Project Fiche

- 1. Log frame Matrix (Annex 1)
- 2. Detailed Implementation Chart (Annex 2)
- 3. Cumulative Contracting and Disbursement Schedule for the Project (Annex 3)
- 4. Organisational structures (Annex 4)
- 5. List of Relevant Laws and Regulations currently in force (Annex 5)



Prepared by Lietuvos Energija, 09/07/2002

		D	Transmission Curtain
LOGFRAME PLANNING MATRIX	,	rrogram name and number	LI03xx
For Project:		Contracting period	Disbursement period
Strengthening the Transmission System Operator (TSO) and the Market Operator (MO) after the	rket Operator (MO) after the	2004	expires 3Q/2005
restructuring of the AB "Lietuvos Energija".		Total budget: E 1.85 Million	Phare budget: E 1.79 Million
Overall objective	Objectively verifiable indicators	Sources of Verification	
Prepare the Lithuanian electricity market for integration into the Internal Energy Market by development of the Transmission System Operator (TSO) and the Market Operator (MO) in accordance with national as well as EU requirements (<i>Energy Acquis</i>). Enhance the security of electricity supply and the quality of electricity in Lithuania.	Performance indicators defined in Directives on Electricity (92/96/EC) equal or better than in comparable member states	Regular Reports	
	Regional spot-market and bilateral contracts including cross-border trade established		
	Development of tools for assessment of the security of electricity supply		
Project purpose	Objectively verifiable indicators	Sources and means of Verification	Assumptions
Support the development of the TSO and the MO by providing necessary expertise including training of the staff in the TSO and MO in understanding and using new techniques for operation, services for the market and in the development of the electricity system;	Implementation of EU directives (and amendments) and secondary legislation complete	Regular Reports TSO and MO reports	Continued commitment to achieve the Acquis.
Complete legal approximation to the EU requirements including support to improvement of secondary legislation and enforcement guidelines;	Market players' and consumers' satisfaction documented	Surveys of market players' satisfaction	
Describe and develop local and regional (Baltic and/or others) institutions needed for security of electricity supply, for efficient market conditions and for improving competition from other markets using UCTE and Nord Pool structures as models.	Benchmarking with other electricity market areas in terms of the amount of cross-border trade, development in	Spot-market reports and statistics of bilateral contracts	
	electricity prices, amount of consumers who changed the supplier		
	Staff (app. 20) trained		
Results	Objectively verifiable indicators	Means of verification	Assumptions
The roles of the TSO and the MO defined in relation to other commercial and non-commercial market players and other stakeholders. Secondary legislation and enforcement guidelines to	Draft legislation and guidelines accepted by TSO and MO	PAA reports and project leader reports	Legislation enacted as planned
define responsibilities and rights of the players updated and prepared. Consistency in legislation with the EU directives secured.	Rules for spot-market organisation and bilateral contracts including cross border	Market information reports	Reforms carried out as planned
More effective internal TSO and MO structures, procedures and communication developed. TSO and MO organisation made flexible and adaptive to face new situations and requirements of the future electricity market and the changes in legislation, new policies developed.	trade completed Increased number of users connected to	Visitors on the homepage	Finance for the system available when needed
	the network		Opening of the



Opening

Developed liberalisation process in terms of co-operation/integration in potential external markets; updated tariffs and financial management system in place; fair and transparent market	Assessment of the total electricity production capacity in relation to the	electricity markets in other countries in the
information systems developed; updated and developed technologies for measurements, market regulations and balance settlements.		market area.
New techniques for the transmission system developed regarding network operation, stability, minimising grid losses and in the development of system services (mainly ancillary services); Institutional framework as regards system reliability in a national and an international context developed;	interruptions and the duration of these Realised market and public information systems	
Updated security of supply and quality of electricity to West-European standards. Procedures introduced in system development that covers energy consumption, transmission and all energy sources including renewable energy.	A transparent tariff system which reflects the costs in the electricity system	
Activities	Means	Assumptions
Support for identification of the different players in the Lithuanian electricity market and the clarification of their roles. Follow up on legislation and guidelines for future EU legislation. Support to general management and institutional development of the Lithuanian Transmission System Operator and Market Operator with focus on internal structures and procedures. Management and institutional support in the areas of measurements, settlements, market regulation, development and surveillance. Develop public information systems and information management systems to support competition in electricity market. Support for development of new techniques for operation of the transmission system taking into account stability, losses, composite reliability, capacity building, reactive power, etc. Develop transmission system services for the market. Building of institutional framework as regards system reliability in the national and international context. Support to ensure a high level of supply security and quality of electricity, both in the shortterm and the long-term. System development that covers energy consumption, transmission and all energy sources including renewable energy	Twinning and training package including one PAA for 2 years and two PAAs for 1.5 years each, and 36 person/months of short term expertise One international service contract for software development concerning the market planning tool and accounting / settlement tool.	Appropriate Twinning partner can be found
	Preconditions National or financial and analysis of financial and financ	
	National co-financing available Necessary TSO and MO mannower secured	





Detailed Implementation Chart for the Project

Strengthening the Transmission System Operator (TSO) and the Market Operator (MO) after the restructuring of the AB "Lietuvos Energija"

Year 2002	Month 7 8 9 10 11 12 1 2 3 4	Twinning	Service
	1 2 3		
	ν.		
20	9		
003	8 /	201 Table 17 St.	
	6		
Control of the Contro			
	1		
	10 11 12		
	-		
	7		
	ю		
	4		
	5 6		
2004	7		
	∞		
	6		
	10		
	10 11 12		
	12		
7	-		
2005	~~~		



Design Tendering Implementation



Annex 3

Cumulative Contracting and Disbursement Schedule for the Project (MEUR)

Strengthening the Transmission System Operator (TSO) and the Market Operator (MO) after the restructuring of the AB "Lietuvos Energija"

	Date												
		20	2003			20	2004			2(2005		2006
	31/03	30/08	31/03 30/06 30/09 31/12 31/03	31/12	31/03	30/08	30/06 30/06	31/12	31/03	30/08	31/03 30/06 30/09	31/12	31/03
Contracting													
 Twinning 		1.6											
• Service			0.19										
Total contracting (cumulative)		1.6	1.79										
Disbursement													
• Twinning		0.4	0.55	0.7	0.85	1.0	1.15	1.30	1.45	1.60			
• Service			0.05	0.08	0.11	0.14	0.17	0.19	0.19	0.19			
Total disbursement (cumulative)		0.4	9.0	0.78	96.0	1.14	1.32	0.96 1.14 1.32 1.49		1.64 1.79			



,

Safety at Work & Fire Prevention Division Acquisition Division Assets Maintenance "Vilniaus Diskas" General Affairs Storage Facilities Security Services Fleet Services Procurement Department Director Division Klaipėda Transmission Kaunas Transmission Šiauliai Transmission Vilnius Transmission Utena Transmission Equipment Operation Relay Protection & Automation Division Grid Department **Grid Director** Division Division Division Division Division Division Lietuvos energija AB Management Structure GENERAL DIRECTOR Environmental Protection & **Energy Development** Planning & Investment Metering Division Quality Division Power System Dispatch Center Design Division Kruonis HPSP Kaunas HPP Department Director BOARD Division IT & Telecommunications Development & Marketing Accounting Department Maintenance Division Systems Maintenance Application Systems Economics Division Backbone Network Finance Director Treasury Division Division Division Division **TSO Transactions Division** Market Servicing Division Information Department External Relations and Electricity Trade (PPAs) Personnel Department Internal Audit Division Legal Affairs Division Market Department Strategy Division Chancellery Division (MO)

List of Relevant Laws and Regulations

LAW ON ELECTRICITY

20 July, 2000, No. VIII -1881 as amended by 20 December, 2000, No.IX-97

LAW ON THE REORGANISATION OF THE SPECIAL PURPOSE COMPANY "LIETUVOS ENERGIJA"

18 May 2000 No. VIII-1693 Vilnius

BIO FUEL LAW

18 July 2000; No. VIII-1875 Vilnius

COMPANY LAW

5 July 1994 No. I-528 (As amended by 16 March 2000 No. VIII-1570)

Vilnius

ENERGY LAW

16 MAY 2002, No. IX-884 Vilnius

NATIONAL ENERGY STRATEGY

05 October 2000, VIII-1348 Vilnius