

- PD ABR-635

102419

**STATUS REPORT
UKRAINIAN CHAPTER OF THE ASSOCIATION
OF ENERGY ENGINEERS - 1998**

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

**Ukraine Power Sector Reform - Local Electric Companies
Delivery Order No 18**

Final Report

Prepared for

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

Prepared by

Hagler Bailly
1530 Wilson Boulevard
Suite 400
Arlington, VA 22209-2406
(703) 531-0300

September 1, 1998

CONTENTS

Table of Contents

1 Background	1-1
2 Activities in 1997-1998	2-1
3 Future Plans	3-1
Exhibit A Registration Certificate	
Exhibit B Bylaws	
Exhibit C Business Plan	
Exhibit D Chapter Officers	
Exhibit E Financial Report	
Exhibit F List of Individual Members	
Exhibit G List of Corporate Members	
Exhibit H Financial Plan	
Exhibit I Reports on CEM Training Programs	
Exhibit J Chapter	
Exhibit K Grant Proposal	

1. BACKGROUND

The Ukrainian Chapter of the Association of Energy Engineers (AEE) is an affiliate of the Association of Energy Engineers, an international, non-profit organization with headquarters in Atlanta, Georgia. The AEE's mission is "to promote the scientific and educational interests of those engaged in the energy industry and to foster cooperative action in advancing the common purposes of its members and to promote activities designed to enable the industry to be conducted with the greatest economy and efficiency." The Ukrainian Chapter of AEE was established on August 7, 1996 on the initiative and with active support of the United States Agency for International Development, Hagler Bailly and the AEE headquarters. The Ukrainian Chapter was officially recognized by the Ministry of Justice as a legal non-profit and non-governmental Ukrainian entity on October 7, 1997. Copy of the registration certificate is attached to this document (Exhibit 1).

The Ukrainian Chapter serves to unite Ukrainian citizens addressing them in communication with their counterparts from other countries. The Chapter goals include

- ▶ To meet, protect and promote the scientific and educational interests of its members,
- ▶ To facilitate the development of professional, cultural and business cooperation among its members,
- ▶ To organize and conduct seminars, conferences, forums, symposiums, meetings, exhibitions and workshops for the exchange of experience in the energy industry, energy saving and environment,
- ▶ To establish contacts with foreign and international enterprises, organizations, unions, and associations operating in the energy industry,
- ▶ To promote professional development in the fields of energy efficiency and energy use,
- ▶ To facilitate the scientific and research work in the energy sector related fields
- ▶ To facilitate the protection of patents, copyrights and related rights and interests relevant to the intellectual property of the Chapter's members,
- ▶ To carry out charitable activities

Another significant aspect of the work of the Chapter is ongoing communication with energy services specialists at private, public and governmental industrial enterprises in all regions of Ukraine.

The Goals and Objectives of the Chapter are described in detail in the Chapter Bylaws (Exhibit 2) and in the Business Plan for 1998-1999 (Exhibit 3).

Supervision, control and direction of affairs of the Chapter is conducted by the Board of Directors which consists of the President, two Vice Presidents, the Treasurer, the Secretary, representatives of the corporate members of the Chapter and chairmen of the local subsections of the Chapter (a list of Chapter officers is inclosed to this document as the Exhibit 4) The Board of Directors has regular meetings upon call of the President at such times and places as he my designate Usually Board meetings take place not less than once a month (the next Board meeting is schedule on September 3, 1998 at Kiev's office of Hagler Bailly)

Bookkeeping support of the Chapter is provided by a hired accountant who is not a member of the Chapter The attached financial report (Exhibit 5) describes the fiscal activity of the Chapter during first seven months of 1998 and has been accepted and approved by local tax authorities That means that financial activity of the Chapter is in strict correspondence with the Ukrainian legislation

The Ukrainian Chapter of AEE currently has a membership of eighty four (84) individual members (Exhibit 6) and three (3) corporate sponsors (Exhibit 7) Since its establishment, it has received sponsorship from Hagler Bailly as part of their assistance program to the Ukraine Energy Sector under contract with the U S Agency for International Development Financial support to the Ukrainian Chapter of AEE has come primarily from USAID through its contract with Hagler Bailly, along with member dues, registration fees for CEM training programs and a grant from the International Headquarters of AEE in Atlanta, Georgia

At the time of it's inception in 1996, the Ukrainian Chapter of AEE conducted a formal training program for Ukrainian Energy Specialists wishing to become Certified Energy Engineers specializing in energy efficiency This program was carried out by professional instructors from the United States, including representatives of the International Headquarters of this initial training program formed the core of the charter members of the Chapter

2. ACTIVITIES IN 1997-1998

In November, 1997, three officers from the Ukrainian Chapter attended the Annual Conference of AEE in Atlanta, Georgia. The main objectives of the Conference were

- To obtain assistance from the AEE headquarters in establishing an AEE Chapter and learn how to develop appropriate Financial Plans for 1998 -2000 (Exhibit 8),
- To receive training in how to conduct Certified Energy Manager (CEM) training programs as a part of the normal operations of the Chapter

Since then, two additional CEM training programs have been prepared and carried out. As a result of the three training programs (one in 1996 and two in 1998) a total of eighty nine (89) students have received instruction, and a total of eighty four (84) have successfully been registered as Certified Energy Managers. Students of these programs have established eleven (11) different commercial Energy Service Companies (ESCOs) throughout Ukraine, that are currently engaged in providing energy efficiency services to various commercial facilities. The candidates applying to these training programs have come from throughout the energy industry and include representatives from Oblenergos, Administration Agencies, research and educational institutions.

Copies of the reports on the two training programs carried out in 1998 by the Ukrainian Chapter of the AEE along with the translations of articles dedicated those events are included (Exhibit 9). A third CEM training program is scheduled for September 21 -25, 1998, and will be conducted at National Technical State University "Kiev Polytechnic Institute."

An overview of the history of the Ukrainian Chapter of AEE is provided in Exhibit 10.

3. FUTURE PLANS

In the immediate future the Ukrainian Chapter of the Association of Energy Engineers plans to continue to attract new individual members and corporate members. The Chapter also intends to organized a number of its subsections alongside the subsections that already exist in Kiev, Vinnitsa and Zaporozhye. First of all it is planned to setup Chapter's subsections in Kharkov and Dnepropetrovsk and then in Lviv and Odessa. Moreover, in the nearest future the Chapter plans to organize Student Chapters throughout Ukraine which will elect officers, develop their own Bylaws consistent with AEE objectives and hold at least three meetings during the year. It is supposed that the Student Chapters will participate actively in the AEE Foundation Scholarship Program. It is planned that the first Student Chapter will be organized on the basis of Vinnitsa State University by the end of the year of 1998 and will be sponsored by all three Vinnitsa-based corporate members of the Ukrainian Chapter.

The Chapter will seek new sources of funding along with the income generated by membership fees. For this purpose the Chapter intends to be active in the following directions:

- To increase membership fees to cover a greater portion of actual expenses,
- To increase CEM training registration fees to cover more of the actual costs,
- To charge for publications of CEM training materials provided outside of normal training program,
- To obtain registration fees for special topical meetings organized by the Chapter,
- To sponsor a day-long seminars and charge registration fees for all attendees,
- To solicit donations from vendors of energy efficient equipment and services,
- To solicit grant funds.

The Chapter intends to take part in all AEE Award Programs as well as to establish its own Scholarship fund for the outstanding members of Students Subsections of the Chapter.

The Ukrainian Chapter will report the AEE headquarters on current status of its activity on monthly basis.

In September of 1998, the Ukrainian Chapter of AEE will loose its USAID funding source through Hagler Bailly, and is hereby requesting the consideration of USAID for a funding grant to provide operating expenses through September of 1999. A Copy of this grant proposal is included (Exhibit 11).

EXHIBIT A
REGISTRATION CERTIFICATE

СРІДОЦТРО

про реєстрацію
структурного осередку громадської (неурядової)
організації зарубіжної держави в Україні

_____ 19__р

№ 01

1 структурного осередку _____

зва держави де знаходяться центральні статутні органи _____

цій статутний орган Співільнота "СОР", Гадзівська вулиця
(повна назва адреса)

в. вул. Співільнота, 70

істр юстиції України _____
прізвище



BEST AVAILABLE COPY

EXHIBIT B
BYLAWS

Registered by
the Ministry of Justice of Ukraine
“ 7 ” October 1997
Certificate № 91

Approved by
the Board of Directors of
the Association of Energy Engineers
Resolution № 39 of “ 22 ” July 1997

B y l a w s
of the Ukrainian Chapter of
the Association of Energy Engineers

Kiev - 1997

Article 1 General

Section 1 Ukrainian Chapter of the Association of Energy Engineers (hereinafter - the Chapter) is an affiliated office of public organization of a foreign state (the United States of America) which unites Ukrainian citizens and citizens of other countries sharing common interest in achieving the goal and accomplishing the tasks stipulated in this Charter

Section 2 The Chapter shall carry out its activity in accordance with the Constitution of Ukraine, current legislation and the bylaws

Section 3 The Chapter shall operate within the territory of Ukraine

Section 4 The Chapter shall acquire a status of a legal entity from the moment of its registration in the Ministry of Justice of Ukraine, have a separate balance, a round seal, an emblem, symbols and other requisites, which are to be approved by the Chapter's Board of Directors and registered in order established by the law. The Chapter may open its accounts with the banking institutions, including the currency accounts

Section 5 The Chapter, on its own behalf, may acquire the property and personal non-property rights, undertake relevant obligations, represent and protect legitimate interests of the Chapter and its members in the state and public bodies, act as a plaintiff and a defendant in the court, arbitration and courts ad hoc

Section 6 The Chapter shall be responsible under its obligations by the owned property which, according to the current legislation, may be subject to claim. The state, its bodies (organizations) shall not be responsible under the obligations of the Chapter, the Chapter shall not be responsible under the obligations of the state and its bodies (organizations). The Chapter shall not be responsible under the obligations of the Chapter's members, the Chapter's members shall not be responsible under the Chapter's obligations

Section 7 The location of the Chapter's headquarters is Kyiv, Ukraine

Article 2 Definition

Section 1 The term "Association" implies the Association of Energy Engineers, which establishes the present Chapter

Section 2 The term "good standing" means a member of the Association of Energy Engineers who has paid dues within sixty (60) days of his/her renewal date

Article 3 Purposes and Tasks

Section 1 The Chapter's main purpose is to meet, protect and promote the scientific and educational interests of those engaged in the energy industry and to facilitate the development of professional, cultural and business cooperation among them

Section 2 The Chapter's tasks are

- to create favorable conditions for activities of the Chapter's members,
- to contribute to economic renaissance of Ukraine,
- to create the system of representation of interests of the Ukrainian Chapter of

Association of Energy Engineers in development of the standard legal acts that fall under the scope of the Chapter's interests,

- promotion of the objectives of the Association

Section 3 To meet the purposes and tasks set forth in these bylaws, the Chapter, in order established by the law, shall

- organize and conduct seminars, conferences, forums, symposiums, meetings, workshops on the exchange of experience in energy and other issues related to the chartered activity,
- carry out publishing activity and distribute information, and promote the Chapter's ideas and goals,
- establish mass media,
- submit proposals to the state authorities,
- establish structures for the exchange of information and experience,
- facilitate protection of copyright and related rights and interests relevant to the intellectual property of the Chapter's members,
- promote control over observance of the Code of Ethics,
- establish contacts with foreign and international organizations, unions, associations operating in the energy industry,
- engage in the work of the governmental and intergovernmental bodies regulating activity in the fields of energy sector and energy use,
- promote distribution of information on energy sector,
- facilitate the scientific and research works in the energy sector related fields,
- carry out charity activities,
- promote professional upgrading in the fields of energy sector and energy use,
- perform necessary economic and other commercial activity by creating self-supporting institutions and organizations with the status of legal entity, establishing enterprises,
- carries out other activities that are not banned by the law of Ukraine

Article 4 Membership

Section 1 A member of the Chapter is at the same time a member of the Association. The membership in the Chapter may be individual or collective. A member of the Chapter must be a member in good standing of the Association of Energy Engineers.

Section 2 Duration of membership and resignation. Membership in the Chapter may be terminated by voluntary withdrawal as is herein provided, or otherwise in pursuance of these bylaws. All rights, privileges and interest of a member in or to the Chapter shall cease on the termination of membership. Any member may, by giving written notice of such intention, withdraw from membership.

Section 3 Suspension and expulsion. Membership may be suspended for appropriate cause. Sufficient cause for such suspension may be violation of the Bylaws or practice adopted by the Association, or any other conduct prejudicial to the interest of the Association as determined by a 2/3 vote of the Chapter's Board of Directors.

Section 4 Voting. Members shall have voting rights for those items brought before them by the Chapter's Board of Directors or by appropriate decision of the meeting.

Section 5 Student-members may not vote or hold office but may serve on committees

Section 6 The Board of Directors may want to include various local grades, i e Affiliate member, Student, Retired

Article 5 Dues

Section 1 The annual dues for each member of the Association shall be determined by the Chapter's Board of Directors

Section 2 Members who fail to pay their dues within sixty (60) days after the established term shall be notified by the secretary, chief executive officer or an employee duly authorized by the Board of Directors In the case where payment is not made within the next succeeding thirty (30) days, the member shall be, without additional notification, dropped from the rolls and thereupon forfeit all rights and privileges of the Chapter membership Reinstatement will be considered upon request of a member and for good cause shown

Article 6 The Chapter's Bodies

Meetings

Section 1 Annual The annual meeting of the Chapter is its supreme body, and it shall be held not less than once a year during the month ordered by the Chapter's Board of Directors Notice of such meeting, signed by the secretary, shall be mailed at least thirty (30) days before the time appointed for the meeting

Section 2 Special Special meetings of the Chapter may be called by the President Notice of any special meeting shall be mailed to each member at his last recorded address at least ten (10) days in advance, with a statement of time and place and information as to the subject or subjects to be considered

Section 3 Quorum Ten per cent (10%) of Chapter members in good standing present at the meeting shall constitute a quorum, and, in cases where fewer than this number, the presiding officer may adjourn the meeting from time to time until quorum is present In the absence of quorum, the Chapter officers are empowered to act for the Chapter

Sectors of the Chapter

Board of Directors

Section 5 The Board of Directors is a permanent central statute organ of the Chapter It shall be elected from the members of the Chapter and it shall have the supervision, control and direction of the affairs of the Chapter

Section 6 The Board of Directors shall be composed of the President, Vice-Presidents, President-Elect, Secretary, Treasurer and Chairmen of the standing committees

Section 7 The Board of Directors shall meet upon the call of the President

Section 8 A majority of the whole Board of Directors shall constitute a quorum

Officers

Section 9 The elected officers of the Chapter shall be a President, President-Elect, Vice-Presidents, Secretary and Treasurer. The candidates shall be nominated prior to the annual meeting, and elected by the Chapter during the Chapter's meeting.

Section 10 The President shall preside at the meetings of the Chapter and of the Board of Directors. He shall be a member, with right to vote, of all committees except the nominating committee.

Section 11 The Vice-President may be appointed by the President to perform his duties during his absence. He shall be responsible for development of the Chapter in various regions of Ukraine.

Section 12 The Treasurer shall be responsible for consideration of financial operations of Ukrainian Chapter of the Association.

Section 13 The Secretary's duties shall be to give notice of the meeting, keep a record of proceedings and other obligations relevant to his office.

Article 7 Committee

Section 1 The President, subject to the approval of the Chapter's Board of Directors, shall annually appoint such standing or special committees or subcommittees as may be required for successful work of the Chapter.

Section 2 Nominations Committee shall consist of three members. It shall be held by the Chapter's Board of Directors at the end of each year for nominating the candidates to various offices. The Committee shall notify the Secretary in written of the nominees, at least thirty (30) days prior to the annual meetings.

Section 3 The Chapter's members may also nominate the candidates to the posts, on condition of obtaining proposals thirty days prior to the annual meetings.

Article 8 Chapter's Funds and Property

Section 1 The Chapter shall acquire the propriety right to funds and property

- transferred to it by the founders, members or a state in the prescribed order,
- acquired from the admission and membership dues,
- donated by citizens, enterprises, institutions and organizations,
- acquired at their own cost, or from other sources, as provided or not prohibited by law

The Chapter shall also have the right to property and funds acquired as a result of the economic and other commercial activity of self-support institutions and organizations, and enterprises established by it.

Section 2 The Chapter's funds and property shall be composed of

- admission and membership dues of the Chapter's members,
- donations and charity dues from Ukrainian and foreign organizations, other legal entities and citizens in the form of monetary funds, material values and real estate, services, works etc ,
- gifts, deposits and other receipts, not prohibited by law,

- earnings from the economic and other commercial activity of self-support institutions and organizations, and enterprises established by the Chapter

- other not prohibited by Ukraine's legislation sources

Section 3 The Chapter's funds and property shall be the Chapter's ownership

Section 4 The Chapter's funds shall be directed to achieving the goal and accomplishing the tasks of the Chapter under this bylaws Any section of these funds can not be spent in favour of the Chapter's members or distributed between them

Section 5 The Chapter shall report, in the order stipulated by Ukrainian legislation, to financial and statistical bodies The Chapter's fiscal year shall coincide with the calendar year

Article 9 Indemnification

The Chapter may, by resolution of the Board of Directors of the Chapter, provide the indemnification of each member against expenses actually and necessarily incurred by him in connection with the defence of any action, suit, or proceeding in which they are made sections

Article 10 Procedure of introducing amendments and additions to the Chapter's Bylaws

Section 1 The amendments and additions to the bylaws shall be made by resolution of the Chapter's Meeting and shall be deemed adopted if determined so by a 2/3 vote of members of the Meeting In exclusive cases the amendments and additions to the bylaws may be introduced by the Board of Directors subject to further approval at the regular Meeting In any case such amendments shall be accorded with the Association

Section 2 The Chapter shall notify the Ministry of Justice of Ukraine, within a five-day term, of the amendments and additions to the bylaws

Article 11 Authorization

Section 1 A member of the Chapter shall not enter into contractual obligations with the third parties on behalf of the Association without prior written consent of the Chapter's Board of Directors

Section 2 The Chapter shall cooperate with the Association of Energy Engineers in compliance with its request for reports on activities, meetings and budget

Article 12. Dissolution

Section 1 The Chapter may be dissolved through the reorganization (merger, affiliation, division) or liquidation in order and in cases stipulated by Ukrainian law

Section 2 The Chapter shall be reorganized by a decision of the Meeting as determined by a 2/3 vote of members of the Meeting

Section 3 The Chapter shall be liquidated by a decision of the Meeting as determined by a 2/3 vote of members of the Meeting or in accordance with the decision of a court

Section 4 The Chapter shall be liquidated in the established order by the Liquidation Committee to be established by the Meeting or a body which has adopted the decision on liquidation of the Chapter

Section 5 When the Chapter is liquidated on the initiative of the Meeting, after the creditors' claims are satisfied, property and monetary funds obtained as a result of the sale of the Chapter's property or those remaining on the Chapter's accounts, shall not be redistributed between the Chapter's members and shall be used to accomplish the tasks stipulated by this bylaws or for charity purposes, and in cases provided for by the legislation, upon decision of the court, shall be directed to the state budget

EXHIBIT C
BUSINESS PLAN
March 1998

Mission Statement To promote the scientific and educational interests of those engaged in the energy industry and to foster cooperative action in advancing the common purposes of its members and to promote activities designed to enable the industry to be conducted with the greatest economy and efficiency

Statement of Purpose The Chapter takes an active part in the work of committees, commissions, seminars and presentations of all levels, including the Energy Efficiency and Energy Saving Work Group of the Program to Promote Sustainable Development in Ukraine Within the framework of these activities the Chapter engages in the work of governmental and intergovernmental bodies regulating activities in fields of energy saving and energy use, submits proposals to the state authorities, discusses projects and inquiries pertaining to its activities with representatives of the Administration of the President of Ukraine, different ministries and agencies

The Chapter maintains constant communication with energy services specialists at industrial enterprises of various forms of ownership in all regions of Ukraine

- To promote professional development in the fields of energy sector and energy use,
- To facilitate patent protection, protection of copyright and related rights and interests relevant to the intellectual property of the Chapter's members,
- To facilitate the scientific and research works in the energy sector related fields,
- To perform necessary economic and other commercial activity by creating self- supporting institutions and organizations with the status of legal entity, establishment of enterprises

The Chapter also plans to carry out charitable activities

Board of Directors Alexander Petrov, President,
Alexander Novoseltsev, Vice President,
Anatoly Sherba, Vice President,
Valery Boiko, Treasurer,
Lionora Chuprina, Secretary

Structure The Ukrainian Chapter of the Association of Energy Engineers (AEE) was established on the initiative and with active financial support of the United States Agency for International Development on August 7, 1996 with 40 members from 6 regions of Ukraine Currently, the Chapter enlists 65 individual and 2 corporate members The Chapter was officially recognized by the Ukrainian Ministry of Justice on October 7, 1997

The Ukrainian Chapter of AEE is an affiliated office of an international public (non-profit) organization with headquarters in Atlanta, Georgia The international organization serves to

unite Ukrainian citizens and citizens of other countries sharing common interests, goals and tasks

The Chapter is directed by a Board of Directors consisting of the President, two Presidents, Treasurer and Secretary

Competition The Scientific-and-Technical Union of Power and Energy Engineers of Ukraine, Ukrainian Engineering Academy

Management The Chapter is managed by a Board of Directors that is elected according to the By-laws which are appended to this document

Plans for Growth and Development

I Membership

Current Membership 65 individual members and 2 corporate members

Membership Goal Year End 1998 95 individual members and 3 corporate members

Membership Goal Year End 1999 140 individual members and 6 corporate members

Potential Members to Target Power Engineers and Economists engaged in energy industry, educational institutions and institutions of Academy of Sciences

Methods for Member Attraction

- ▶ Elucidation of goals and objectives of the Chapter at various seminars, conferences, forums, symposiums, exhibitions and workshops,
- ▶ Conducting CEM training courses,
- ▶ Advertisement of the Chapter in mass media,
- ▶ Recruitment of new members by active members of the Chapter,
- ▶ Printing and distributing of the Chapter's newsletter

2 Membership Services

Current Programs

Certification of Energy Engineers

Number of Certified Energy Managers in Ukraine March 31, 1998 37

Number to be certified by year end 1998 67

Number to be certified by year end 1999 100

New Programs

Creation of the Center of Energy Management jointly with the Instrumental Chair of Kiev Polytechnic Institute

Additional Services

Assistance to Western ESCOs in search for local counterparts,

Assistance to Ukrainian ESCOs and engineering companies in search appropriate Western energy efficient technologies and instruments

Action Plan and Time Line

Training CEM Seminar in Vinnitsa — May 25 - May 29, 1998

Training CEM Seminar in Kiev — July 20 - July 24, 1998

Annual Chapter's Meeting in Kiev — September 11, 1998

BUDGET FOR 1998

Income

Dues collected (95x\$20 + 3x\$200)	\$2,500
Aid from AEE headquarters	\$1,000
CEM Seminars (2 seminars for 14 and 16 students @ \$50/head)	\$1,500
Donation from USAID via Hagler Bailly	\$12,150
Donation from USAID for establishment of Chapter office	\$15,650

Total Income *\$32,800*

Expense

Annual Chapter's Meeting	\$1,250
Printing of CEM training materials	\$6,300
Conducting of two CEM training seminars (for 14 + 16 = 30 students)	\$5,250
Newsletters (printing & mailing)	\$150
Establishment of Chapter office (start-up costs)	\$15,650
Contingency Fund	\$4,200

Total Expense *\$32,800*

BUDGET FOR 1999

Income

Dues collected (140x\$20 + 6x\$200)	\$4,000
Conducting of four CEM Seminars (for 4x15=80 students @ \$100/head)	\$8,000
Donation from USAID for compensation of operational costs of Chapter office	\$8,350
Donation from USAID for support of CEM training programs	\$6,000

Total Income *\$26,300*

Expense

Annual Chapter's Meeting	\$1,600
Conducting of four CEM training programs (for 4x15=80 students)	\$14,000
Operational costs of Chapter office	\$8,350
Newsletters (printing & mailing)	\$250
Contingency Fund	\$2,100

Total Expense *\$26,300*

EXHIBIT D CHAPTER OFFICER LISTING

CHAPTER NAME The Ukrainian Chapter of the Association of Energy Engineers
Annual Chapter Meeting Day The Second Friday of September
Annual Chapter Meeting Location 128/2 Peremogy Ave ,Institute of Electrodynamics of
National Academy of Sciences, Kiev, 252115, Ukraine

PRESIDENT

Name Alexander Petrov
Member Number 034607
Mailing address for chapter materials 10th floor, 20 Esplanadna St , Kiev, 252023, Ukraine
Phone + 380 (44) 229-5782 Fax + 380 (44) 220-4692

VICE PRESIDENT

Name Alexander Novoseltsev
Member Number 034421
Address 10th floor, 20 Esplanadna St , Kiev, 252023, Ukraine
Phone + 380 (44) 229-5782 Fax + 380 (44) 220-4692

VICE PRESIDENT

Name Anatoly Shcherba
Member Number 034454
Address Office # 27, 128/2 Peremogy Ave , Institute of Electrodynamics, Kiev, 252115,
Ukraine
Phone + 380 (44) 441-2464 Fax + 380 (44) 446-9266

TREASURER

Name Valery Boiko
Member Number 034467
Address Building #18, 37 Peremogy Ave , National Technical University of Ukraine "Kiev
Polytechnic Institute", Kiev, 252056, Ukraine
Phone + 380 (44) 449-2856 Fax + 380 (44) 220-4692

SECRETARY

Name Leonora Shuprina
Member Number 034473
Address Office # 27, 128/2 Peremogy Ave , Institute of Electrodynamics, Kiev, 252115,
Ukraine

Chapter Officer Listing ▶ D-2

Phone + 380 (44) 532-3461 Fax + 380 (44) 446-9494

CHAIRMAN OF KIEV'S SUBSECTION

Name Vyacheslav Melnik

Member Number 038032

Address Box B-149 22 Kresgchatik St , Kiev, 252001, Ukraine

Phone + 380 (44) 457-2951 Fax + 380 (44) 269-7096

CHAIRMAN OF VINNITSA'S SUBSECTION

Name Vadim Fesenko

Member Number 034465

Address Apt 44, 119 Pirogova St , Vinnitsa, 268057, Ukraine

Phone + 380 (0432) 32-15-63 Fax + 380 (0432) 35-30-75

CHAIRMAN OF ZAPOROZHYE'S SUBSECTION

Name Vasily Stepanenko

Member Number 034537

Address 11 Mayakovsky Ave , Zaporozhye, 330090, Ukraine

Phone + 380 (0612) 34-35-67 Fax + 380 (0612) 33-15-75

REPRESENTATIVE OF VINNITSA OBLENERGO (CORP MEMBER)

Name Alexander Biryukov

Member Number 037114

Address Apt 814, 9-Janvarja St , Vinnitsa, 286000, Ukraine

Phone + 380 (0432) 32-68-94 Fax + 380 (0432) 32-48-39

REPRESENTATIVE OF VINNITSA STATE TECHNICAL UNIVERSITY (CORP MEMBER)

Name Boris Mokin

Member Number 037114

Address 95 Khmelnitskoe Shosse, Vinnitsa, 286021

Phone + 380 (0432) 31-12-15 Fax + 380 (0432) 31-12-14

REPRESENTATIVE OF SOUTH-WEST INTERENERGO (CORP MEMBER)

Name Pavel Pisklyarov

Member Number hasn't tagged yet

Address 2 1st May St , Vinnitsa, 039132

Phone + 380 (0432) 38-44-67 Fax + 380 (0432) 35-05-51

ACCOUNTANT

Name Tatiana Semenova

Member Number is not a member of the chapter

Address 10th floor, 20 Esplanadna St, Kiev, 252023, Ukraine

Phone + 380 (44) 229-5782 Fax + 380 (44) 220-4692

EXHIBIT E
FINANCIAL REPORT
July 1998

Financial Report ▶ Exhibit E-2

Data	Payment	Income	Expenses
35816	Corporate membership fee (Vinnitsa Oblenergo)	764 00	
35817	Corporate membership fee (from Vinnitsa Technical University)	764 00	
2/3/98	Bank interest	0 51	
2/27/98	Bank interest	1 53	
3/31/98	Bank interest	1 53	
4/20/98	Purchasing of bank forms		28 12
4/30/98	Banking service		3 00
4/30/98	Bank interest	1 50	
5/8/98	Participation in CEM seminar and AEE membership fees (1 person)	210 00	
5/13/98	Participation in CEM seminar and AEE membership fees (1 person)	210 00	
5/15/98	Participation in CEM seminar and AEE membership fees (2 persons)	420 00	
5/18/98	Participation in CEM seminar and AEE membership fees (4 persons)	840 00	
5/19/98	Participation in CEM seminar and AEE membership fees (4 persons)	840 00	
5/20/98	Participation in CEM seminar and AEE membership fees (2 persons)	420 00	
5/21/98	Participation in CEM seminar and AEE membership fees (1 person)	210 00	
5/22/98	Participation in CEM seminar and AEE membership fees (1 person)	210 00	
5/23/98	Participation in seminar and AEE membership fees (1 person)	210 00	
5/29/98	Bank interest	5 07	
6/23/98	Purchasing of check book		5 00
6/30/98	Banking service		3 00
6/30/98	Bank interest	5 05	
7/6/98	Participation in seminar and AEE (3 persons)	300 00	
7/7/98	Participation in seminar and AEE (3 persons)	300 00	
7/8/98	Participation in seminar and AEE (3 persons)	500 00	
7/9/98	Participation in seminar and AEE (3 persons)	500 00	
7/10/98	Participation in seminar and AEE (3 persons)	200 00	
7/17/98	Corporate Membership Fees (from 'PivdennoZakhidInterEnergo)	848 00	
7/22/98	Participation in seminar and AEE (1 person)	100 00	
Bank Balance on July 22, 1998		7822 07 Hr	

EXHIBIT F
LIST OF INDIVIDUAL MEMBERS
August 1998

List of Individual Members ▶ F-2

#	Name	Position	Affiliation	AEE ID #
1	Valentina P Andiyash, CEM	Deputy Director	State Joint Stock Co "Giproselmash", Kiev	37113
2	Victor A Barsky, CEM	Director	"Energysaving", Kharkov	34462
3	Alexander A Biryukov, CEM	General Director	Vinnitsa Oblenergo, Vinnitsa	37114
4	Valery S Boiko, CEM	Professor	National Technical University of Ukraine "Kiev Polytechnic Institute", Kiev	34467
5	Bronislav Rogalsky	Professor	Vinnitsa Technical University, Vinnitsa	39116
6	Yury K Bykov, CEM	Energy Management Expert	Burns & Roe, Kiev	34460
7	Lenora V Chuprina, CEM	Engineer	Institute of Electrodynamics, Kiev	34473
8	Roman E Dorosh, CEM	1 st Grade Engineer	Ternopil Oblenergo, Trnopol	34534
9	Nikolai Dubrov, CEM		"Energysaving", Kharkov	34422
10	Vladimir A Dukov, CEM	Deputy Head	State Committee for Energy Conservation, Kiev	34468
11	Alexander I Dykhnenko, CEM	Deputy Head of Department	Ministry of Economy , Kiev	34472
12	Vadim K Fesenko, CEM	Deputy Chief Engineer	Vinnitsa Oblenergo, Vinnitsa	34465
13	Alexander E Filippov, CEM	Manager	Burns & Roe, Kiev	38026
14	Mikhail D Geraimchuk, CEM	Professor	National Technical University of Ukraine "Kiev Polytechnic Institute", Kiev	34461

List of Individual Members ▶ F-3

15	Alexander A Golovko, CEM	Professor	State Academy of Light Industry, Kiev	34522
16	Vladimir Grabko	Professor	Vinnitsa State Technical University, Vinnitsa	39178
17	Alexander G Gutsol, CEM	Deputy Chief Energy Engineer	Mogilev-Podolsky Machinery Plant, Mogilev-Podolsky, Vinnitsa Oblast	34471
18	Yuri G Kachan, CEM	Professor	Zaporozhie Engineering Academy, Zaporozhie	34468
19	Valentin A Katounin, CEM	Chief Metrologist	DonORGRES, Gorlovka, Donetsk Oblast	34532
20	Vitaly G Katsman	Director	Electric Engineering Association "ELTA", Kharkov	36799
21	Andrei A Kononov	Senior Project Specialist	Hagler Bailly, Inc , Kiev	36627
22	Yuri G Koval, CEM	Head of Department	UkrEnergoEffektivnost, Kiev	34524
23	Victor S Krazhan, CEM			34470
24	Vasily V Kreshchuk, CEM	Head of Department	Vinnitsa Vidokanal, Vinnitsa	34466
25	Alexander V Krupin	Chief Engineer	"Giproverf", Kiev	36628
26	Valeryan Kievsky		Vinnitsa Oblenergo, Vinnitsa	38930
27	Viacheslav M Leshchenko, CEM	Senior Researcher	Kharkov State Technical University	34525
28	Peter D Lezhnyuk, CEM	Professor	Vinnitsa State Technical University	38031
29	Alexander L Lifshits		Electric Engineering Association "ELTA"	36800
30	Yury S Lyashenko, CEM	1 st Grade Engineer	Dneprovsky Regional Dispatch Center	34535

List of Individual Members ▶ F-4

31	Vitaly E Maistrenko, CEM	Postgraduate Student	National Technical University of Ukraine "Kiev Polytechnic Institute"	34521
32	Mikhail N Malevany	Expert	AES	36629
33	Vladimir M Mamalyga, CEM	Professor	National Technical University of Ukraine "Kiev Polytechnic Institute"	34417
34	Galina A Matvychuk	Database Manager	Hagler Bailly, Inc	37119
35	Vyacheslav P Melnik	Director	Proton Ltd	38032
36	Mikhail S Mezhebovsky	Director	ESCO-Kharkov	37120
37	Sergei Ya Mezheny, CEM	Head of Department	Scientific & Research Center "Electroset"	34587
38	Victor N Mikhailov, CEM	Deputy Chief Energy Engineer	Nikopol Pipe-Rolling Plant	34525
39	Boris Mokin	Rector	Vinnitsa State Technical University	38937
40	Alexander V Novoseltsev, CEM	Professor	National Technical University of Ukraine "Kiev Polytechnic Institute"	34421
41	Anatoly V Ovcharenko		VinnitsaErgoNaladka	38033
42	Valery V Perekrest, CEM	Senior Researcher	National Technical University of Ukraine "Kiev Polytechnic Institute"	34528
43	Alexander A Petrov, CEM	Senior Project Specialist	Hagler Bailly, Inc	34607
44	Sergei N Pokalitsyn		Regional Energy Manager Club	36807
45	Vladimir V Prokopenko, CEM	Energy Management Expert	Burns & Roe	38034

List of Individual Members ▶ F-5

46	Alexander V Romanov, CEM	Business Development Manager	Danfoss T o v , Kiev	36633
47	Alla A Romanova, CEM	Principal Specialist	Danfoss, T o v , Kiev	36808
48	Eugeny V Senko, CEM	Postgraduate Student	National Technical University of Ukraine "Kiev Polytechnic Institute"	34418
49	Anatoly A Shcherba, CEM	Head of Department	Institute of Electrodynamics	34458
50	Alexander G Shryanov, CEM	Senior Engineer	National Technical University of Ukraine "Kiev Polytechnic Institute"	34529
51	Vladimir D Sidorenko, CEM	Head of Department	Engineering Institute "MekhanObrCherMet"	34458
52	Konstantin K Sidorsky, CEM	Deputy Head of Department	South-West Regional Despatch Center	34419
53	Alexander E Silakin, CEM	Energy Management Expert	Burns & Roe	38037
54	Leonid S Simonenko	Head of Department	National Electricity Regulatory Commission	37276
55	Nelly G Smirnova, CEM	Energy Management Expert	Burns & Roe	38040
56	Vasily A Stepanenko, CEM	Technical Director	ESCO-East	34537
57	Miroslav T Strelkov, CEM	Deputy Director	Institute of Comprehensive Energy Engineering	34455
58	Natalia I Suprunovskaya, CEM	1 st Grade Engineer	Institute of Electrodynamics	34463
59	Nikolai Sviridov	Professor	Vinnitsa State Technical University	39185

List of Individual Members ▶ F-6

60	Victor L Svistunov, CEM	Energy Management Expert	Burns & Roe	36635
61	Mikhail V Tarnovsky, CEM	Energy Management Expert	Burns & Roe	38041
62	Igor Trotsenko, CEM	Deputy Chief Engineer	Nikopol Ferro-Alloy Plant	34576
63	Vladimir A Tsyssin	Senior Project Specialist	Hagler Bailly, Inc	38042
64	Vasily Kutin	Professor	Vinnitsa State Technical University	39133
65	Stanislav I Vypanasenko, CEM	Professor	Dnepropetrovsk State Main Academy	34456
66	Vladimir A Yakovlev, CEM	Deputy Director	Nikopol Local Utility	34530
67	Anatoly I Zamulko, CEM	Postgraduate Student	National Technical University of Ukraine "Kiev Polytechnic Institute"	34531
68	Igor A Zamulko, CEM	Head of Department	Joint Stock Company "GiproSelMash"	34532
69	Victor Yu Zhuravsky, CEM	Head of Department	UkrEnergoEffektivnost	34457
70	Valery N Zvarich, CEM	Senior Researcher	Institute of Electrodynamics	34459
71	Nikolai Baz', CEM	Chief Energy Engineer	Vadishany Bakery, Vinnitsa Oblast	Not tagged
72	Viktor Barchenko, CEM	Deputy Chief Energy Engineer	JSC "Mayak", Vinnitsa	Not tagged
73	Alexander Brodsky, CEM	Chief Engineer	JSC "InTechEnergo", Kharkov	Not tagged
74	Yuri Dets, CEM	Foreman	Municipal Heat Distribution Networks, Vinnitsa	Not tagged

List of Individual Members ▶ F-7

75	Valentin Dmitruk, CEM	Chief Energy Engineer	Oil and Fat Combined Works, Vinnitsa	Not tagged
76	Valery Kulchitsky, CEM	Power Engineer	Kalinovsky Mechanical Plant, Vinnitsa Oblast	Not tagged
77	Peter Latanyuk, CEM	Chief Energy Engineer	Glukhovetsky Kaolin Plant, Vinnitsa Oblast	Not tagged
78	Evgeny Litinsky, CEM	Chief Energy Engineer	JSC "Volodarka", Vinnitsa	Not tagged
79	Vladimir Mosyichuk, CEM	Deputy Chief Engineer	Vinnitsa TeploKomunEnergo	Not tagged
80	Nikolai Nesteruk, CEM	Chief of Electric Engineering Workshop	JSC "VinnitsaMiaso", Vinnitsa	Not tagged
81	Vasily Palamarchuk, CEM	Chief Electric Engineer		Not tagged
82	Evgeny Petrovsky, CEM	Principal Engineer	JSC "VinnitsaEnergo-Naladka", Vinnitsa	Not tagged
83	Tatiana Panasyuchenko, CEM	Engineer	Vinnitsa Oblenergo	Not tagged
84	Stanislav Tkachenko	Professor	Vinnitsa State Technical University	Not tagged

EXHIBIT G
LIST OF CORPORATE MEMBERS
August 1998

#	Name	Address	Representatives
1	Vinnitsa Oblenergo	2 1 st May St , Vinnitsa, 039132	Alexander Biryukov Vadim Fesenko Valeryan Kievsky
2	Vinnitsa State Technical University	95 Khmelntskoe Shosse, Vinnitsa, 286021	Boris Mokin Bronislav Rogalsky Vladimir Grabko
3	South-West Interenergo	2 1 st May St , Vinnitsa, 039132	Pavel Pisklyarov

EXHIBIT H
FINANCIAL PLAN
November 1997

CHAPTER CASH REQUIREMENTS

	1998	1999
INCOME		
Local dues collected	\$2,000 00	\$2,500 00
Aid from AEE headquarter	\$1,000 00	\$1,000 00
Donations from other institutions	\$1,500 00	\$1,500 00
Educational courses, symposia, other	\$1,250 00	\$2,000 00
TOTAL FINANCE (1)	\$5,750 00	\$7,000 00
EXPENSES		
Meetings.		
Facility Rental	\$250 00	\$250 00
Meals	\$500 00	\$750 00
Notices (printing & mailing)	\$120 00	\$150 00
Promotions	\$200 00	\$300 00
Honoraria	\$250 00	\$250 00
Transportation	\$80 00	\$100 00
Other	\$100 00	\$200 00
Subtotal.	\$1,500 00	\$2,000 00
Educational Courses/Symposia		
Facilities Rental	\$300 00	\$300 00
Transportation	\$300 00	\$350 00
Honoraria	\$500 00	\$550 00
Printing/mailing-Announcement	\$150 00	\$150 00
Translation	\$50 00	\$50 00
Making copies	\$700 00	\$750 00
Other	\$100 00	\$100 00
Subtotal	\$2,100 00	\$2,250 00
Newsletter/Journal		
Issue	\$300 00	\$450 00
Other	\$100 00	\$100 00
Subtotal	\$400 00	\$550 00
Operating		
Stationery	\$100 00	\$150 00
Postage	\$100 00	\$150 00
Clerical Help	\$200 00	\$250 00
Bank Service Charges	\$100 00	\$150 00
Transportation	\$150 00	\$200 00
Legal & Accounting	\$500 00	\$300 00
Office Supplies	\$300 00	\$350 00
Telephone	\$200 00	\$250 00
Other	\$100 00	\$150 00
Subtotal	\$1,750 00	\$1,950 00
TOTAL EXPENSES (2)	\$5,750 00	\$6,750 00
TOTAL CHAPTER CASH FLOW	\$0 00	\$250 00
REQUIREMENTS (1) - (2)		

EXHIBIT I
REPORTS ON CEM PROGRAMS

**ASSOCIATION OF ENERGY ENGINEERS
UKRAINIAN CHAPTER**

**TRAINING PROGRAM
FOR
CERTIFIED ENERGY MANAGER**

**Vinnitsa Polytechnical Institute
May 25- 29, 1998
Vinnitsa Ukraine**

Sponsored by

**U S Agency for International Development
Hagler Bailly, Inc
Vinnitsa Oblast Presidential Administration
Vinnitsa Local Electric Company (Vinnitsa Oblenergo)
Vinnitsa Polytechnical Institute
Commercial Bank "Energobank"**

ASSOCIATION OF ENERGY ENGINEERS
UKRAINIAN CHAPTER
Training Program for Certified Energy Manager
VINNITSA POLYTECHNICAL INSTITUTE
MAY 25 - 29, 1998

A Certified Energy Manager (CEM) training seminar took place in the city of Vinnitsa from May 25-29, 1998 in the modern, fully equipped, training facility of Vinnitsa Polytechnical Institute. The seminar was conducted by the Ukrainian Chapter of the Association of Energy Engineers with the support of USAID (via Hagler Bailly), Vinnitsa oblenergo, Vinnitsa Polytechnical Institute, and Vinnitsa Oblast Administration. The course of study for the seminar extended for five days and included lectures, demonstrations and site visits. The agenda of the seminar is attached to this report (Attachment 1). Nineteen (19) trainees took part in the seminar, and seventeen (17) successfully passed the certification exam. A list of the trainees (Attachment 2) and an analysis of participant evaluation forms (Attachment 3) are attached.

Seminar expenses totaled 5,371.83 Hr (Attachment 4). The Chapter received the financial support from USAID (via Hagler Bailly) which covered all the expenses for the Seminar. Earnings of the Chapter of included registration fees and AEE membership was 3,570 Hr. Since the Chapter has to transfer membership fees for 17 people equal to 1,122.00 Hr to the AEE headquarters as well as has to pay VAT equals 714.00, the actual income of the Ukrainian Chapter from the seminar was 1,810.50 Hr.

The Chapter had two main objectives for conducting the seminar. The first was to train and certify energy professionals as CEM's. The second was to certify two professors of Vinnitsa Polytechnical Institute (Prof. Lezhnyuk who is a specialist in the electric engineering and Prof. Tkachenko, an expert in heat engineering) who will be able to train students during our future CEM seminars conducted by the Chapter.

During the seminar the trainees became acquainted with the modern measuring and testing equipment (air flow meter, laser pyrometer, humidity meter, HV tester, etc.). In addition two site visits were organized for the trainees. The first visit was to Vinnitsa Municipal Enterprise of Heat Distribution Networks where adjustable speed drives and a modern digital control system for a powerful gas-fired boiler were demonstrated to the trainees. The second visit was to JSC "VinnitsaEnergoNaladka" where an experimental heat pump was displayed. Moreover, two principal managers of the private enterprise "Interface" (engaged in lighting business) were invited to Vinnitsa Polytechnical in order to demonstrate their products, such as energy efficient lamps and different types of electronic ballast. In participant's opinion demonstration of energy efficient equipment was really helpful for their better understanding of the CEM theoretical course.

About a dozen of the best students of the Power Engineering Department of Vinnitsa Polytechnical Institute who are engaged in more in-depth study of the English language, were invited to the lecture by Phil Hastings. The organizers of the seminar decided to invite those students since they hoped the students would be appropriate candidates for CEM in the near future.

The trainees came from a variety of professional backgrounds, including engineers for various enterprises, employees of Vinnitsaoblenergo, and faculty of Vinnitsa Polytechnical Institute.

The CEM training seminar was wrapped up with a formal reception and dinner which took place at Vinnitsa Oblenergo's cafeteria. To the reception/dinner besides the trainees were also invited Mr. Vakhovsky, the First Deputy Head of Vinnitsa Oblast Administration, Mr. Kovalenko, Deputy Manager of "EnergoBank" which partly sponsored the CEM seminar as well as the reception/dinner and Alexander Biryukov, General Director Vinnitsa oblenergo which also sponsored the reception/dinner.

Special Recognition

The following officials took part in the official opening ceremony of the seminar: Vakhovsky, the First Deputy Head of Vinnitsa Oblast Administration, Alexander Biryukov, General Director of Vinnitsa Oblenergo, academician Boris Mokin, Rector of Vinnitsa Polytechnical Institute, Anatoly Karpov, Chief of Power Engineering and Energy Conservation Department of Vinnitsa Oblast Administration. Due to extensive preliminary advertisement of the seminar, representatives of local mass media displayed a keen interest in the seminar, which allowed the organizers to gain the expected recognition of the first CEM Seminar conducted by the Chapter. Copies of translated news articles are attached at the end of this report (Attachment 5).

The seminar was organized, managed and conducted by the following individuals:

- Alexander Petrov, Ph D, CEM, President of the Ukrainian Chapter of the AEE, Senior Project Specialist of Hagler Bailly
- Alexander Novoseltsev, Ph D, CEM, Vice-President of the Ukrainian Chapter of the AEE, Professor of Kiev Polytechnical Institute
- Philip Hastings, PE, Treasurer of the Maine Chapter of AEE, Senior Consultant of Hagler Bailly/CMPI
- Valery Boiko, Ph D, CEM, Treasurer of the Ukrainian Chapter of the AEE, Professor of Kiev Polytechnical Institute

Reports on CEM Programs ▶ I-5

- Vadim Fesenko, CEM, Member of the Board of Directors of the Ukrainian Chapter of the AEE, Deputy Chief Engineer of Vinnitsa Oblenergo
- Stanislav Tkachenko, Ph D , Professor of Vinnitsa Polytechnical Institute
- Pete Lezhnyuk, Ph D , Professor of Vinnitsa Polytechnical Institute
- Lynn Goldfarb, LKGoldfarb and Assoc , Senior Consultant to Hagler Bailly, provided guidance and planning for the Seminar

ATTACHMENT 1

**ASSOCIATION OF ENERGY ENGINEERS
UKRAINIAN CHAPTER
Training Program for Certified Energy Manager
VINNITSA POLYTECHNICAL INSTITUTE
MAY 25 - 29, 1998**

AGENDA

Time	Topic(s)	Speaker(s)
<i>Monday, May 25, 1998</i>		
9 30-10 15	Registration of participants	Vadim Fesenko
10 15-11 00	Welcome and introductions	Alexander Petrov, Vladimir Vakhovsky, Boris Mokin, Alexander Biryukov
11 00-11 15	Coffee break	
11 15-12 00	Energy Efficiency and Demand-Side management, CEM examination information	Alexander Petrov
12 00-13 00	Introduction to Energy Management	Alexander Novoseltsev / Valery Boiko
13 00-14 30	Lunch	
14 30-16 00	Conduction of Energy Audit	Alexander Novoseltsev / Valery Boiko
16 00-16 15	Coffee break	
16 15-19 30	Book 1, Chapter C - Measurement equipment Book 2, Chapter D - Energy codes and standards	Alexander Novoseltsev / Valery Boiko
<i>Tuesday, May 26, 1998</i>		
9 00-11 00	Book 5, Chapter I - Economic analysis and life cycle costing	Phil Hastings / Alexander Petrov
11 00-11 15	Coffee break	
11 15- 13 00	Book 5, Chapter I - Economic analysis and life cycle costing	Phil Hastings / Alexander Petrov
13 00-14 30	Lunch	
14 30-16 00	Book 3, Chapter I - Fuel supply and fuel switching, Purchasing natural gas	Vadim Fesenko / Alexander Novoseltsev

Reports on CEM Programs ▶ I-7

Time	Topic(s)	Speaker(s)
16 00-16 15	Coffee break	
16 15-18 30	Book 9, Chapter O - Energy use in buildings Book 9, Chapter O - Heat storage Book 10, Chapter P - Boilers and steam generation	Stanislav Tkachenko / Vladimir Didenko
<i>Wednesday, May 27, 1998</i>		
9 00-11 00	Book 6, Chapter K - Peak load reduction and power factor improvement Book 6, Chapter L - Lighting system improvement	Valery Boiko / Peter Lezhnyuk
11 00-11 15	Coffee break	
11 15- 13 00	Book 7, Chapter M - Motors and adjustable speed drives	Valery Boiko / Peter Lezhnyuk
13 00-14 30	Lunch	
14 30-16 00	Book 8, Chapter N - Insulation Book 8, Chapter O - HAVAC Systems	Stanislav Tkachenko / Vladimir Didenko
16 00-16 15	Coffee break	
16 15-18 30	Book 9, Chapter O - Energy use in buildings Book 9, Chapter O - Heat storage Book 10, Chapter P - Boilers and steam generation	Stanislav Tkachenko / Vladimir Didenko
<i>Thursday, May 28, 1998</i>		
9 00-11 00	Book 11, Chapter P - Boilers and steam generation	Stanislav Tkachenko / Vladimir Didenko
11 00-11 15	Coffee break	
11 15- 13 00	Book 12, Chapter Q - Waste heat recovery	Stanislav Tkachenko / Vladimir Didenko
13 00-14 30	Lunch	
14 30-16 00	Book 13, Chapter Q - Cogeneration	Stanislav Tkachenko / Vladimir Didenko
16 15-18 30	Book 14, Chapter U - Maintenance Book 14, Chapter V - Control systems Book 5, Chapter J - Example of CEM examination test	Peter Lezhnyuk / Alexander Novoseltsev
16 00-16 15	Coffee break	

Reports on CEM Programs ▶ I-8

Time	Topic(s)	Speaker(s)
<i>Friday, May 29, 1998</i>		
9 00-11 00	Book 15, Chapter V - Energy management control systems	Valery Boiko / Peter Lezhnyuk
11 00-11 15	Coffee break	
11 15-13 00	Add Book - ESCO business	Alexander Petrov / Alexander Novoseltsev
13 00-14 30	Lunch	
14 30-18 30	CEM examination test	Alexander Petrov / Alexander Novoseltsev / Valery Boiko

ATTACHMENT 2

**ASSOCIATION OF ENERGY ENGINEERS
UKRAINIAN CHAPTER
Training Program for Certified Energy Manager
VINNITSA POLYTECHNICAL INSTITUTE
MAY 25 - 29, 1998**

List of Trainees

(Names of the trainees who did not pass the exam are highlighted)

#	Name	Position	Affiliation
1	Nikolai Baz'	Chief Energy Engineer	Vadishany Bakery, Vinnitsa oblast
2	Viktor Barchenko	Deputy Chief Energy Engineer	JSC "Mayak", Vinnitsa
3	Alexander Brodsky	Chief Engineer	JSC "Intechenergo", Karkov
4	Yuri Dez'	Foreman	Municipal Heat Distribution Networks, Vinnitsa
5	Valentine Dmitruk	Chief Energy Engineer	Oil and Fat Combined Works, Vinnitsa
6	Valery Kulchitsky	Power Engineer	Kalinovsky Mechanical Plant, Vinnitsa oblast
7	Peter Latanyuk	Chief Energy Engineer	Glukhovetsky Kaolin Plant, Vinnitsa oblast
8	Evgeny Litinsky	Chief Energy Engineer	JSC "Volodarka", Vinnitsa
9	Vladimir Mosyichuk	Deputy Chief Engineer	Vinnitsa TeploKomunEnergo
10	Nikolai Nesteruk	Chief of Electric Engineering Workshop	JSC "VinnitsaMiaso", Vinnitsa
11	Anatoly Ovcharenko	Principal Engineer	JSC "VinnitsaEnergo-Naladka", Vinnitsa
12	Alexander Romanov	Business Development Manager	Danfoss T o v, Kiev
13	Inna Romanova	Principal Specialist	Danfoss T o v, Kiev
14	Larisa Tretyakova	Assistant Professor	Kiev Polytechnical Institute
15	Anatoly Karpov	Chief of Department of Power Engineering and Energy Conservation	Vinnitsa Oblast Administration
16	Alexander Biryukov	General Director	Vinnitsa Oblenergo
17	Peter Lezhnyuk	Full Professor	Vinnitsa Polytechnical Institute
18	Stanislav Tkachenko	Full Professor	Vinnitsa Polytechnical Institute
19	Tatiana Panasyuchenko	Engineer	Vinnitsa Oblenergo

ATTACHMENT 3

**ASSOCIATION OF ENERGY ENGINEERS
UKRAINIAN CHAPTER
Training Program for Certified Energy Manager
VINNITSA POLYTECHNICAL INSTITUTE
MAY 25 - 29, 1998**

I ANALYSIS OF PARTICIPANT EVALUATION FORMS

Did the Seminar

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer
9	3	0	0

Were the speakers responsive to your needs

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer
8	4	0	0

Based on the materials we sent to you prior to the Seminar, did we accurately describe the program so that it

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer
7	4	0	1

Where their aspects of this course that you expected that were not covered in the curriculum?

Yes	No	Without Answer
6	6	0

Did the faculty, which was assembled to teach this course

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer
8	3	0	1

Did the materials that you received during the course

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer

Reports on CEM Programs ▶ I-11

6	6	0	0
---	---	---	---

Did the training facilities at Vinnitsa Polytechnical Institute

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer
8	4	0	0

Did the food service (meals and breaks) at Vinnitsa Polytechnical Institute

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer
10	1	0	1

Did the Training Program prepare you properly for the Certification of Energy Manager examination?

Yes	No	Without Answer
10	1	1

Would you recommend the Association of Energy Engineer's Training Program to a colleague?

Most definitely	Probably	I don't think so	Without Answer
8	2	0	2

Will you be able to apply the information you learned in your current work?

Yes	No	Partially	Without Answer
8	0	4	0

II ANALYSIS OF MISTAKES MADE BY TRAINEES DURING PASSING CEM EXAM

A list of questions to which 50 and more percent of trainees answered wrong is the following

Question Number	Percentage of Wrong Answers
3	63 2
6	57 9
7	78 9
18	68 4
24	84 2
30	52 6
38	63 2
41	68 4
48	63 2
58	57 9
73	89 5
76	52 6
78	78 9
79	57 9

Analysis of mistakes

- ▶ Supervisors of CEM training program must either to change the wording of listed questions (making them more clear) or to change the method of teaching of the related program topics
- ▶ Questions that are listed above comprise only 17 5% of the total number of exam questions Distribution of questions over training blocks is the following
Lighting – 1,
Electric Engineering – 2,
Heat Engineering – 2,
Energy Management –4
Economics – 5

The biggest number of wrong answers concerns the questions that are not related to calculations and are not the first priority in the day-to-day activity of Ukrainian Energy Managers

ATTACHMENT 4

ASSOCIATION OF ENERGY ENGINEERS

UKRAINIAN CHAPTER

Training Program for Certified Energy Manager

VINNITSA POLYTECHNICAL INSTITUTE

MAY 25 - 29, 1998

BALANCE SHEET

EXPENSES

#	Product or Service	Hr
1	Renting of premises 225 sq m total space for the term of 5 days, 9 hours a day	607 50
2	Lunch for the 20 participants/day	532 00
3	Breaks (Coffee, Tea, Servicing)	256 50
4	Supplies (folders, pens, badges, notebooks, etc) for the 20 participants	248 40
5	Advertising sheet, announcement on the radio, publication in the newspaper	430 60
6	Site-visits to two enterprises	360 00
7	Transport expenses	300 00
8	Lodging for two instructors (Prof Novoseltsev and Prof Boiko) from May 24 till May 30, 1998	280 80
9	Organization of formal handing over of CEM certificates appetizers hot meals	348 73
10	Per Diem for 2 instructors for 6 5 days @ 62 10 Hr/day,	807 30
11	Preparation the training materials	600 00
12	Lecture fees	600 00
Total Expenses		5,371 83

Reports on CEM Programs ▶ I-14

INCOME

USAID/Hagler Bailly financial support	5,371 83
CEM Training Program Registration Fee (100 Hr x 17 people)	1,700 00
(FREE x 2 people) ¹	0 00
AEE Headquarters Membership Fee (110 Hr x 17 people)	1,870 00
MINUS	
AEE Membership Fee paid to AEE headquarters (\$30 00 x 17 people = = \$510 00 = \$510 00 x 2 05, where 2 05 is exchange rate \$/Hr)	- 1,045 50
VAT ((17 people x 210 00 Hr) x 20%)	- 714 00

Gross Income 7,182 33

Expenses 5,371 83

Net Income 1,810 50

¹Note Since Prof Lezhnyuk and Prof Tkachenko will be very helpful for future CEM training activity of the Chapter, Board of Directors of the Chapter decided to exempt both of them from registration fees Both Prof Lezhnyuk and Prof Tkachenko also did not pay AEE membership fees because they are employees of the Vinnitsa Polytechnical Institute, which is a corporate members of AEE

“Yuzny Bug” newspaper, May 25, 1998

Energy Manager: Who needs him?

Isn't this question a bit naive? For any modern production line such an expert is like a precious jewel knowledgeable of how to properly consume energy. And for the specialist himself this is a good chance of professional growth since presently this specialization is not widely spread.

Where are energy managers trained? The point is that currently not a single higher educational institution in Ukraine is practically ready to train them. However now there exists a handful of people who while observing all our perestroika-devastation, instead of quarreling and blaming their fate, are making decisive steps to control the situation.

One of such enthusiasts works at Vinnitsaoblenergo is a deputy chief engineer on energy saving. Vadim K. Fesenko is an executive director of the Association of Energy Managers. He is among those few experts of Ukraine possessing a Certified Energy Manager's Diploma of American type.

Now let us explain several things. Last year the Association of Energy Managers has celebrated its 20-th Anniversary. It unites 8163 members from 75 countries of the world. Its headquarters are in Atlanta, Georgia, USA. The Ukrainian Chapter of the Association was founded in August 1996, it has 57 members of whom 38 have taken full training course and successfully passed the American-style test for Certified Energy Managers (CEM).

Ever since its birth, the Ukrainian Chapter of the Association, which in essence is a public organization, is fulfilling a responsible function of teaching Ukrainian specialists some modern business approaches in the field of rational use of energy.

That is why on May 25-29 this year a Seminar is to be conducted jointly with Vinnitsa Polytechnic University based on the International program of energy saving and efficiency which would be concluded with CEM-examination.

Certification program is focused not so much on rendering technical knowledge to the specialists who already have such knowledge and know how to practically employ it, - says Alexander V. Novoseltsev, doctor of technical sciences, professor of Kiev Polytechnic.

Institute, vice-president of the Ukrainian Chapter of the Association of Energy Managers and one of the organizers of the Seminar. Our objective is to focus the thinking of our students on modern energy business. Certified Energy Manager in the USA is ranked even higher than a candidate of sciences here in Ukraine.

Thus there are some prospects. However there exist many problems. Invitations to the Seminar were mailed to practically all major enterprises of the oblast. They needed to pay only slightly over 200 hryvnas per one participant in the Seminar.

And the last, why Vinnitsaoblenergo is taking to itself such functions? The reason is simple: experts from the oblenergo while possessing all the necessary knowledge, want to teach, first of all, their colleagues - energy engineers - how to get themselves oriented in a new situation. Production process should consume only adequate amount of energy, better in compliance with the International standards.

Galina Stebnovska
Head of Vinnitsaoblenergo Press-service

“Vinnitsky Vedomosty” newspaper, May 25, 1998

Hot News

“Together With CEM - Against Energy Crisis”

The first joint Ukrainian-American comprehensive training program (seminar) has started in Vinnitsa. The training seminar will be working for the whole week. The choice of our city for conduction of the seminar is not at all occasional. The reason is that in future Vinnitsa will have its regional center on re-training of energy managers.

Organizers of this training program are the Ukrainian Chapter of the Association of Energy Managers aided by USAID, Vinnitsaoblenergo and Vinnitsa Politechnic Institute (University). Participants to the seminar are the leading specialists of the major Vinnitsa city and oblast enterprises who are engaged in efficient energy use and saving. These experts are to master modern methods and means of energy use at regional level. Besides with such knowledge, after finishing their training and successfully passing the test, students will obtain the Certified Energy Manager license (diploma) which is being recognized in 75 countries of the world.

(Photograph shows the AEE Board member, treasurer, doctor of sciences, professor, CEM Valery S. Boiko.)

**ASSOCIATION OF ENERGY ENGINEERS
UKRAINIAN CHAPTER**

**TRAINING PROGRAM
FOR
CERTIFIED ENERGY MANAGER**

**State Academy of Light Industry
July 13 -17, 1998
Kiev, Ukraine**

Sponsored by
U S Agency for International Development
Hagler Bailly, Inc
State Academy of Light Industry

ASSOCIATION OF ENERGY ENGINEERS
UKRAINIAN CHAPTER
Training Program for Certified Energy Manager
STATE ACADEMY OF LIGHT INDUSTRY
JULY 13 -17, 1998

A Certified Energy Manager (CEM) training seminar took place in the city of Kiev from July 13 to July 17, 1998 in a training facility of State Academy of Light Industry. The seminar was conducted by the Ukrainian Chapter of the Association of Energy Engineers with the support of USAID (via Hagler Bailly) and State Academy of Light Industry. The course of study for the seminar extended for five days and included lectures and demonstrations. The agenda of the seminar is attached to this report (Attachment 1). Thirty-three (33) trainees took part in the seminar, and thirty (30) successfully passed the certification exam. A list of the trainees (Attachment 2) is attached along with analyses of participant evaluation forms and mistakes made by trainees (Attachment 3).

Seminar expenses totaled 6,071.10 Hr (Attachment 4). The Chapter received the financial support from USAID and Hagler Bailly, which covered all the expenses for the Seminar. Earnings of the Chapter of registration fees was 3,100.00 Hr (No VAT payment is required). So, the net income of the Chapter totaled 3,100.00 Hr.

The Chapter had two main objectives for conducting the seminar. The first was to train and certify energy professionals as CEM's. The second was to certify two professors of State Academy of Light Industry (Prof. Svishchev who is a specialist in the electric engineering and Prof. Lutsyk, an expert in heat engineering) who will be able to train students during the future CEM seminars conducted by the Chapter.

During the seminar the trainees became acquainted with Energy Manager's set (a set of modern measuring and testing equipment such as air flow meter, laser pyrometer, humidity meter, HV tester, etc.). Such sets were granted by USAID to every local energy management expert of Burns & Roe. In participant's opinion demonstration of energy efficient equipment was really helpful for their better understanding of the CEM theoretical course.

Due to a preliminary advertisement of the seminar (Attachment 5), the number of specialists who wished to take part in it exceeded the maximum anticipated level of attendees.

Despite that initially Seminar organizers planned to visit two industrial sites (Bolshevik enterprise and Zelan' sewing plant), site visits were cancelled due to a blackout that happened in Kiev.

The trainees came from a variety of professional backgrounds, including employees of different ministries, project, engineering and educational institutes, institutes of National Academy of Sciences, consulting companies, etc.

The CEM training seminar was wrapped up with a formal reception and dinner which took place at State Academy of Light Industry's cafeteria. To the reception/dinner besides the trainees and trainers were also invited Prof. Golovko, Rector of Stalexander Biryukov,

General Director of Vinnitsa Oblenergo, Peter Collins, Resident Advisor of Hagler Bailly and Charlie Fafard, Task Manager of Burns & Roe

Special Recognition

The following officials took part in the opening ceremony of the seminar Prof Golovko, Rector of State Academy of Light Industry, Tatiana Kornilova, U S Agency for International Development - Energy Efficiency and Energy Conservation Work Group, Alexander Filippov, Task Manager of Burns & Roe, Miroslav Strelkov, Deputy Director of Institute of Comprehensive Energy Engineering of National Academy of Sciences The seminar was organized, managed and conducted by the following individuals

- Alexander Petrov, Ph D , CEM, President of the Ukrainian Chapter of the AEE, Senior Project Specialist of Hagler Bailly
- Alexander Novoseltsev, Ph D , CEM, Vice-President of the Ukrainian Chapter of the AEE, Professor of Kiev Polytechnical Institute
- Valery Boiko, Ph D , CEM, Treasurer of the Ukrainian Chapter of the AEE, Professor of Kiev Polytechnical Institute
- Vadim Fesenko, CEM, Member of the Board of Directors of the Ukrainian Chapter of the AEE, Deputy Chief Engineer of Vinnitsa Oblenergo
- Stanislav Tkachenko, Ph D , Professor of State Academy of Light Industry
- Yury Bukov, CEM, Burns & Roe, Energy Management Expert

**ASSOCIATION OF ENERGY ENGINEERS
UKRAINIAN CHAPTER
Training Program for Certified Energy Manager
STATE ACADEMY OF LIGHT INDUSTRY
JULY 13 -17, 1998**

AGENDA

Time	Topic(s)	Speaker(s)
<i>Monday, July 13, 1998</i>		
11 00-11 45	Registration of participants	Leonora Chuprina
11 45-13 00	Greetings and introduction of participants, Info on AEE, Ukrainian Chapter of AEE and requirement to CEM	Alexander Petrov, Dmitry Golovko, Alexander Novoseltsev
13 00-14 00	Lunch	
14 00-15 30	Book 1, Chapter A - Need for energy management, Book 1, Chapter B - Conducting an Energy Audit	Alexander Novoseltsev, Valery Boiko
15 30-15 45	Coffee break	
15 45-18 00	Basics of electrical engineering and heat engineering	Valery Boiko, Stanislav Tkachenko
<i>Tuesday, July 14, 1998</i>		
9 00-10 30	Book 2, Chapter D - Energy Codes and Standards Book 3, Chapter E - Fuel Supply and Fuel Switching Book 3, Chapter E - Purchasing of Natural Gas	Alexander Novoseltsev Vadim Fesenko,
10 30-10 45	Break (coffee)	
10 45-12 00	Book 4, Chapter F - Energy Accounting in Buildings Book 4, Chapter G - Energy Rate Structures Book 4, Chapter G - Electric Rate Structures	Vadim Fesenko, Alexander Novoseltsev
10 45-12 00	Book 4, Chapter F - Energy Accounting in Buildings Book 4, Chapter G - Energy Rate Structures Book 4, Chapter G - Electric Rate Structures	Vadim Fesenko, Alexander Novoseltsev
12 00 -13 00	Book 6, Chapter L - Lighting Basics and Lighting System Improvements	Valery Boiko, Alexander Novoseltsev
13 00-14 00	Lunch	

Reports on CEM Programs ▶ I-21

Time	Topic(s)	Speaker(s)
14 00 - 15 45	Book 8, Chapter N - Insulation Book 8, Chapter O - HVAC Basics and HVAC System Efficiency	Stanislav Tkachenko, Victor Didenko
15 45 -16 00	Break (coffee)	
16 00-17 30	Book 9, Chapter O - Building Envelope, Thermal Energy Storage Book 10, Chapter P - Boilers and Thermal System	Stanislav Tkachenko, Victor Didenko
<i>Wednesday, July 15, 1998</i>		
9 00-11 00	Book 11, Chapter P - Steam and Condensate System Book 12, Chapter Q - Waste Heat Recovery	Stanislav Tkachenko, Victor Didenko
11 00-11 15	Break (coffee)	
11 15-13 00	Book 13, Chapter Q - Co-generation Book 14, Chapter U - Maintenance Book 14, Chapter V - Control Devices	Stanislav Tkachenko, Victor Didenko, Valery Boiko
13 00-14 00	Lunch	
14 00-15 30	Book 1, Chapter C - Energy Audit Instrumentation	Yuri Bykov, Alexander Novoseltsev
15 45-17 30	Book 6, Chapter K - Electric Energy Management	Valery Boiko, Alexander Novoseltsev
<i>Thursday, July 16, 1998</i>		
9 00-11 00	Book 7, Chapter M - Motors and Applications Book 7, Chapter M - Electric Drives	Valery Boiko, Alexander Novoseltsev
11 00-11 15	Break (coffee)	
11 15-13 00	Book 5, Chapter I - Economic Analysis and Life Cycle Costing	Alexander Petrov, Alexander Novoseltsev
13 00 -14 00	Lunch	
14 00- 16 00	Book 5, Chapter I - Economic Analysis and Life Cycle Costing	Alexander Petrov, Alexander Novoseltsev
16 00- 16 15	Break (coffee)	
16 15- 17 30	Book 5, Chapter J - CEM Exam Review and Questions	Valery Boiko, Alexander Novoseltsev
<i>Friday, July 17, 1998</i>		
8 00-10 00	Book 15, Chapter V - Control Systems Add Book - Business Operations by ESCOs	Valery Boiko, Alexander Novoseltsev, Alexander Petrov
10 00-10 15	Break (coffee)	
10 15-12 00	Business Game	Alexander Petrov
12 00 - 13 00	Lunch	
13 00 - 17 00	CEM examination test	Alexander Novoseltsev

ATTACHMENT 2

**ASSOCIATION OF ENERGY ENGINEERS
UKRAINIAN CHAPTER
Training Program for Certified Energy Manager
STATE ACADEMY OF LIGHT INDUSTRY
JULY 13 -17, 1998**

List of Trainees

(Names of the trainees who did not pass the exam are highlighted)

#	Name	Position	Affiliation
1	Yelena V Kevlina	Chief of Recerch Group	State Engineering Institute "Giprovert"
2	Mikhail V Tarnovsky	Energy Management Expert	"Burns & Roe"
3	Victor L Svistunov	Energy Management Expert	"Burns & Roe"
4	Nelya G Smirnova	Energy Management Expert	"Burns & Roe"
5	Gennady A Podgainy	Chief of Energy Conservation Department	Ministry of Defence
6	Ilya M Kulik	Principal Specialist	Design Institute "Khimneftemashproekt"
7	Nadezhda Ye Aksenova	Group Manager	Design Institute "Khimneftemashproekt"
8	Anatoly I Koba	Principal Specialist	Design Institute "Khimneftemashproekt"
9	Vyacheslav N Visich	Chief Engeneer of Project	Design Institute "Khimneftemashproekt"
10	Boris A Kostyukovsky	Recercher	Institute of Comprehansive Energy Engineering
11	Georgy L Baranov	Deputy Director	Scientific and Recerch Institute "Kvant-Navigatsya"
12	Dmitry A West	Director	Institute of Perspective Development
13	Vitaly P Opryshko	Head of Board	Ministry of Industrial Policy of Ukraine
14	Vladimir J Guslenko	Head of Department	Ministry of Industrial Policy of Ukraine
15	Alexander E Filippov	Task Manager	Burns & Roe
16	Vladimir V Prokopenko	Energy Management Expert	Burns & Roe
17	Oxana V Gorbunova	Lead Engineer	JSC Ukrenergoprom
18	Tatyana M Slynko	Head of Department	Institute of Perspective Development
19	Alexander E Silakin	Energy Management Expert	Burns & Roe
20	Victor M Didenko	Senior Consultant	"Ukrenergoeffektivnost"
21	Valery A Deineko	Energy Management Expert	Burns & Roe
22	Sergei V Deineko	Expert	"Consulting Energy Service"

Reports on CEM Programs ▶ I-23

23	Geogry Yu Kovalchuk	Lead Technologist	Corporation "UkrResursoSberezhnie"
24	Igor A Dubinchak	Head of Department	Corporation "UkrResursoSberezhnie"
25	Alexander V Krupin	Chief Engineer	"Giprovert"
26	Mikhail V Svishchev	Chairman	State Academy of Light Industry
27	Vladimir I Karas	Manager	Industrial Company "Infras"
28	Sergei B Surnin	Deputy Director	"Arena-Eco"
29	Dmitry E Kramarenko	Expert	"Consulting Energy Service"
30	Ruslan F Koltsov	Director	ESCO "Center", Kiev Branch
31	Alexander N Solovyanov	Lead Specialist	Ministry of Industrial Policy of Ukraine
32	Rostislav V Lutsyk	Chairman	State Academy of Light Industry
33	Valentina P Andriyash	Deputy Director	JSC "Giproselmash"

ATTACHMENT 3

**ASSOCIATION OF ENERGY ENGINEERS
UKRAINIAN CHAPTER
Training Program for Certified Energy Manager
STATE ACADEMY OF LIGHT INDUSTRY
JULY 13 -17, 1998**

I ANALYSIS OF PARTICIPANT EVALUATION FORMS

Did the Seminar

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer
13	10	1	1

Were the speakers responsive to your needs

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer
13	10	1	1

Based on the materials we sent to you prior to the Seminar, did we accurately describe the program so that it

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer
14	8	2	1

Where their aspects of this course that you expected that were not covered in the curriculum?

Yes	No	Without Answer
10	12	3

Did the faculty, which was assembled to teach this course

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer
11	12	1	1

Did the materials that you received during the course

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer
12	12	1	0

Did the training facilities at State Academy of Light Industry

Reports on CEM Programs ▶ I-25

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer
0	19	3	3

Did the food service (meals and breaks) at State Academy of Light Industry

Exceeded Your Expectations	Meet Your Expectations	Fail to Meet Your Expectations	Without Answer
12	12	0	1

Did the Training Program prepare you properly for the Certification of Energy Manager examination?

Yes	No	Without Answer
14	11	0

Would you recommend the Association of Energy Engineer's Training Program to a colleague?

Most definitely	Probably	I don't think so	Without Answer
20	3	1	1

1 Will you be able to apply the information you learned in your current work?

Yes 14	No 0	Partially 10	Without Answer 1
-----------	---------	-----------------	---------------------

1 Are you are member of the Ukrainian Chapter of the Association of Energy Engineers?

Yes 6	No 17	I am planning to join 7	Without Answer 2
----------	----------	----------------------------	---------------------

II ANALYSIS OF MISTAKES MADE BY TRAINEES DURING PASSING CEM EXAM

1 A list of questions to which 50 and more percent of trainees answered wrong is the following

Question Number	Percentage of Wrong Answers
6	75.8
7	84.8
8	54.5
21	69.7
24	60.6
47	66.7
48	60.6
52	69.7
53	51.5
76	63.6

2 Analysis of mistakes

- Supervisors of CEM training program must either to change the wording of listed questions (making them more clear) or to change the method of teaching of the related program topics
- Questions that are listed above comprise only 12.5% of the total number of exam questions. Distribution of questions over training blocks is the following
 - Lighting – 1,
 - Electric Engineering – 1,
 - Heat Engineering – 2,
 - Economics – 3,
 - Energy Management – 3
- The biggest number of wrong answers concerns the questions that are not related to calculations and are not the first priority in the day-to-day activity of Ukrainian Energy Managers

ASSOCIATION OF ENERGY ENGINEERS
UKRAINIAN CHAPTER
Training Program for Certified Energy Manager
 STATE ACADEMY OF LIGHT INDUSTRY
 JULY 13 -17, 1998

BALANCE SHEET

EXPENSES

#	Product or Service	Hr
1	Renting of premises 200 sq m total space for the term of 5 days, 9 hours a day	936 00
2	Lunches	1232 00
3	Breaks (Coffee, Tea, Mineral Water, Servicing)	372 90
4	Supplies (folders, pens, markers, notebooks) for participants	652 00
5	Advertisement in a newspaper	60 00
6	Transport expenses (car)	210 00
7	Lodging two instructors (Vadim Fesenko, Stanislav Tkachenko) in from July 13 to July 17, 1998	83 20
8	Organization of formal handing over of CEM certificates, Reception/Dinner	720 00
9	Per Diem for 2 instructors for 4 5 days @ 60 Hr/day	540 00
10	Preparation of training materials	600 00
11	Lectures fees	600 00
13	Rent of an overhead projector and a kettle	65 00
Total Expenses		6,071 10

INCOME

USAID/Hagler Bailly financial support	6,071 10
CEM Training Program Registration Fee (100 Hr x 31 people) (FREE x 2 people) ¹	3,100 00 0 00
Gross Income	9,171 10
Expenses	6,071 10
Net Income	3,100 00

¹Note Since Prof Svishchev and Prof Lutsyk will be helpful for future CEM training activity of the Chapter, Board of Directors of the Chapter decided to exempt both of them from registration fees

62

EXHIBIT J

CHAPTER HISTORY

August 1998

July - August 1996 Initial Certification Energy Manager (CEM) Training sponsored by USAID, Hagler Bailly and the AEE headquarters Thirty-eight (38) Ukrainian engineers stratified as CEMs

August 1996 - Formation of the Chapter and constituent assembly of its members Initially the number of members who organized the Chapter was forty (40)

September 1997 - Second annual meeting of the Chapter

October 1997 - The Chapter officially recognized by Ministry of Justice of Ukraine

November 1997 - Three (3) officers of the Chapter attend the 20th World Energy Engineering Congress which took place in Atlanta, GA Prof Alexander Novoseltsev certified by the AEE headquarters as a CEM trainer The Ukrainian Chapter qualified as the official entity which can certify CEMs in Ukraine

December 1997 - The Chapter teamed with Bechtel/London wins the UkrESCO project funded by EU TACIS and EBRD

January 1998 - Training of Chapter officers in Business Planning and Budgeting provided by Hagler Bailly

February 1998 - Official registration of the Ukrainian Chapter of AEE in Ukraine Banking accounts established, Accountant hired

March 1998 - Vinnitsa Oblenergo and Vinnitsa State Technical University become the first corporate members of the Chapter

May 1998 - CEM training program in Vinnitsa Nineteen (19) Students attend, Seventeen (17) Pass CEM certification examination, Two (2) Instructors stratified

July 1998 - CEM training program in Kiev (33) Students attend, Thirty (30) students pass CEM certification examination, Two (2) instructors stratified

EXHIBIT K GRANT PROPOSAL

Background

The Ukrainian Chapter of the Association of Energy Engineers (AEE) was established on the initiative and with active financial support of the United States Agency for International Development on August 7, 1996. The Ukrainian Ministry of Justice officially recognized the Chapter on October 7, 1997.

The Ukrainian Chapter of AEE is an affiliate of the Association of Energy Engineers, an international, non-profit organization with headquarters in Atlanta, Georgia. The Ukrainian Chapter serves to unite Ukrainian citizens with citizens of other countries sharing common interests, goals and tasks.

The parent organization celebrated its 20th anniversary in 1997. It unites 8388 members in 71 countries. The AEE mission is to promote the scientific and educational interests of those engaged in the energy industry, to foster cooperative action in advancing the common purposes of its members, and to promote activities designed to enable the industry to be conducted with the greatest economy and efficiency.

Mission Statement

The Mission of the Ukrainian Chapter of the Association of Energy Engineers is

- ▶ To meet, protect and promote the scientific and training interests of its members
- ▶ To facilitate the development of professional, cultural and business cooperation among them
- ▶ To organize and conduct seminars, conferences, forums, symposiums, meetings, exhibitions, workshops, business trips for the exchange of experience in the energy industry, energy saving and environment
- ▶ To establish contacts with foreign and international enterprises, organizations, unions, and associations operating in the energy industry

Another significant aspect of work of the Chapter is its constant communication with energy services specialists at private, public and governmental industrial enterprises in all regions of Ukraine. In this arena the Chapter works

- ▶ To promote professional development in the fields of energy sector and energy use

- ▶ To facilitate the protection of patents, copyrights and related rights and interests relevant to the intellectual property of the Chapter's members
- ▶ To facilitate the scientific and research work in the energy sector related fields
- ▶ To carry out charitable activities

Management

The Chapter is managed by a Board of Directors that is elected according to the By-laws which are appended to this document

Accomplishments

The Ukrainian Chapter was established on August 7, 1996, with 40 founding members from 6 regions of Ukraine. Currently, the Chapter has 84 individual and 3 corporate members

The Chapter and its members play an active part in the work of committees, commissions, seminars and presentations of all levels, including the Energy Efficiency and Energy Saving Work Group of the Program to Promote Sustainable Development in Ukraine. Members are involved in the work of governmental and intergovernmental bodies which regulate activities in energy saving and energy use. They submit proposals to the state authorities and discuss projects and inquiries pertaining to energy efficiency activities with representatives of the Administration of the President of Ukraine, different ministries and agencies

One of the major initiatives of the Chapter is the delivery of a weeklong training course. This course is designed to prepare Ukrainian Engineers to successfully pass an examination that will allow them to become Certified Energy Managers. The Certification is internationally recognized. Currently, the Chapter is also working to have the Certification recognized by the Ukrainian Ministry of Education

The development of qualified energy professionals in Ukraine is essential in order for the country to reduce its dependence on energy imports, improve its global competitiveness, and participate in world wide efforts to reduce greenhouse gases which result in global warming. We recently completed the first training course, which was held at Vinnitsa Polytechnic Institute. Nineteen members attended the course and seventeen passed the certification examination. There are now 54 members who have passed this rigorous examination based on the American standards and have received diplomas. These diplomas signify that the holders are Certified Energy Managers. Members who are currently certified include representatives of local electric companies, energy service companies, industrial enterprises, academic and project organizations

In our first year the Ukrainian Chapter has become an organization that unites professionals in all fields of the energy sector. The Chapter has become a think-tank for leaders in Ukraine's power sector. Our members include prominent scientists, engineers and energy business leaders who are working to improve the Ukrainian energy system, advance market principles, promote the newest technologies, and enhance the development of the country's economy.

Initial, Critical Support Provided by USAID

The financial support of USAID under the auspices of Hagler Bailly was critical to the establishment of the Ukrainian Chapter of AEE, to the preparation of our leadership who were able to attend a training course for Chapter officers held in Atlanta, and to the development and delivery of our first training program for Certification of Energy Managers. Through the sponsorship of USAID, the Chapter has been able to maintain an office presence in Kiev at the office of Hagler Bailly.

Future Plans

The Chapter has developed a two-year operating budget that is attached which will allow the organization to increase its membership, continue and expand its education program and increase its services to members. These plans include:

- ▶ Doubling our membership within two years
- ▶ Holding semi-annual membership meetings to include educational programs
- ▶ Delivering three sessions each year of the AEE Training Program for Certification of Energy Managers, including the examination for certification, at sites throughout Ukraine
- ▶ Adding one additional training program each year from the curriculum offered by the AEE office in Atlanta
- ▶ Increasing Chapter and member involvement in energy policy development and economic development in Ukraine

Request for Grant

With the completion of Hagler Bailly's current contract later this year, the Chapter must prepare itself to become self-sustaining. In order to expand our membership, the services offered to our members and to contribute significantly to the sustainable development and stability of one of our country's most vital industries, we need to continue to have a strong, growing presence in Ukraine. We therefore plan to open a small office in Kiev from which we can conduct the business of the Chapter. As the attached budget indicates, our capital costs for rent, refurbishing, furnishing and equipping a small office would be \$15,650 and our first year operating budget is estimated to be \$8,350. Moreover, in order for the Chapter to continue to conduct CEM training programs in Ukraine it is necessary to cover the

6/5

difference between costs of the programs and registration fees of the participants. The Chapter plans to conduct four CEM training programs in the year of 1999 for 80 people (20 students per program). The actual cost per training of a student is \$175. At the same time the Chapter intends to charge each student of the CEM seminar \$100. Therefore, in order to cover the difference between costs of training of 80 trainees and their registration fees the Chapter needs an additional $80 \times \$175 - 80 \times 100 = \$6,000$.

The Ukrainian Chapter of the Association of Energy Engineers is requesting a grant in the sum of \$30,000 from USAID. These funds would allow the Chapter to establish an office in Kiev, to operate that office for one year as well as to continue to conduct CEM training programs. It is hoped that during that year, we would move to become more financially self-sufficient through increased dues provided by an expanded membership and from fees generated by our activities. The attached two-year budget indicates our plans to move toward such self funding.

BUDGET FOR THE ESTABLISHMENT OF CHAPTER OFFICE IN KIEV

I Start-up costs

1 Estimate cost of the refurbishment of the office (approximate area of the office is 20 m²) 20 m² x \$200/m² = \$4,000

2 Estimate cost for office furniture and equipment

#	Furniture	Number of units	Estimate costs
3 1	Desk	4	\$520
3 2	Chair	4	\$200
3 3	Bookcase	4	\$800
3 4	Table lamp	4	\$120
3 5	Drawer cabinet	4	\$280
3 6	Stationary	-	\$200
TOTAL			\$2,120

3 Purchasing of two telephone lines \$2,000

4 Estimate cost for office equipment

#	Equipment	Model	Number of units	Estimate costs
5 1	Computer	Pentium 2-266/32/4 3G/1 44/S3 Virgle 2M/15" SVGA	2	\$2,400
5 2	Modem	USR SPORTSTER 33,600 V34 bis, external	2	\$300
5 3	Printer	HP LaserJet 6P	1	\$850
5 4	UPS Unit	Back UPS 500 MI	2	\$300
5 5	Scanner	HP SCANJET 5P	1	\$300
5 6	Fax-machine	Sharp FO-2600	1	\$850
5 7	Copier	Sharp Z830	1	\$1,000
5 8	Telephone	GE-9382	2	\$100
5 9	Answering machine	GE-9892/97	1	\$60

Grant Proposal ▶ K-6

5 10	Electric heater	GENERAL	2	\$170
5 11	Air Conditioner	GE 2 5	1	\$700
5 12	Curtain (vertical blind)		2	\$150
TOTAL				\$7,180

- 5 Tap to the Internet \$50
- 6 The registration of the Chapter Web site \$100
- 7 Installation of alarm system \$200

TOTAL START-UP COSTS \$15,650

II Operating expenses

- 1 Annual fee for use Internet \$600
- 2 Annual fee for Web site support \$480
- 3 Rent of the office space and utility bills for 1-year period \$2,400
- 4 Annual telephone fee \$1,200
- 5 Toner for the printer for 1-year period \$150
- 6 Toner for the fax-machine for 1-year period \$100
- 7 Toner for the copier for 1-year period \$ 150
- 8 Paper for printer, fax-machine and copier for 1-year period \$360
- 9 Transportation expenses \$1,200
- 10 Expenses for office security for 1-year period \$600
- 11 Miscellaneous \$1,100

TOTAL OPERATIONAL COSTS \$8,350

TOTAL COSTS \$24,000