
***PROBLEMS OF ENERGY
MANAGEMENT SYSTEM – 2018***

**V International Scientific-Technical.
Methodological Conference
«Problems of Energy Management
System – PEMS’18»**

PROGRAM

**V INTERNATIONAL SCIENTIFIC-TECHNICAL,
METHODODOLOGICAL CONFERENCE**

**«PROBLEMS OF ENERGY
MANAGEMENT SYSTEM – PEMS’18»**

April 17-19, 2018

Igor Sikorsky Kyiv Polytechnic Institute

Kyiv

2018

ORGANIZERS:

- **National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute»**
- **State Energy Efficiency and Energy Efficiency Agency of Ukraine;**
- **Scientific and Technical Cooperation of Power Engineers and Electrical Engineers of Ukraine.**

HELD WITH SUPPORT

- **Ministry of Education and Science of Ukraine;**
- **Ministry of Energy and Coal Industry of Ukraine;**
- **Scientific and production complex "Ukrenergozberezhennia" ..**

Working languages of the conference: Ukrainian, Russian, English.

Venue: Igor Sikorsky Kyiv Polytechnic Institute.

Organizational committee of the conference:

National Technical University of Ukraine « Igor Sikorsky Kyiv Polytechnic Institute », Institute of Energy saving and Energy management. 3056, Ukraine, Kyiv, 115/3 Borshchagivska st., b. 22, r. 315, tel/fax (38-044) 204-85-14;
e-mail: pems@kpi.ua, link: <http://pems.kpi.ua/>

CONFERENCE PROGRAM COMMITTEE

DEPUTIE HEADS

DENYSIUK Sergey

*Director of the Institute of Energy saving and
Energy management*

“Igor Sikorsky Kyiv Polytechnic Institute”

SAVCHUK Sergiy

*Head of the State Agency for Energy efficiency and
Energy saving of Ukraine*

MEMBERS OF PROGRAM COMMITTEE:

<p>Basok Borys, Ass. Member of NAS Ukraine Institute of Engineering Thermophysics NAS Ukraine, Ukraine</p> <p>Vypanasenko Stanislav, Prof. National Mining University, Ukraine</p> <p>Deshko Valeriy, Prof. Igor Sikorsky Kyiv Polytechnic Institute, Ukraine</p> <p>Dogmatov Anatoliy, Prof. National Aerospace named after M.E. Zhukovsky “KhAI”, Ukraine</p> <p>Dupak Oleksandr, Scientific and technical Association of power engineers and electrical engineers of Ukraine</p> <p>Zharkin Andriy, Ass. Member of NAS Ukraine Institute of Electrodynamics NAS Ukraine, Ukraine</p> <p>Zhuikov Valeriy, Prof. Igor Sikorsky Kyiv Polytechnic Institute , Ukraine</p> <p>Zabolotnyi Anatoliy, Doc. Zaporizhzhya National Technical University, Ukraine</p> <p>Kaplun Viktor, Prof. Kyiv National University of Technology and Design, Ukraine</p> <p>Kachan Yuriy, Prof. Zaporizhzhya State Engineering Academy, Ukraine</p> <p>Kiorsak Mychailo, Prof. Institute of Energy AS Moldova , Moldova</p> <p>Kudrya Stepan, Prof. Institute of Renewable Energy NAS Ukraine, Ukraine</p> <p>Lezhniuk Petro, Prof. Vinnytsya National Technical University, Ukraine</p>	<p>Lie Bernt, Prof. Telemark University College, Norway</p> <p>Malinovsky Anton, Prof. Lviv Polytechnic National University, Ukraine</p> <p>Marchenko Andriy, Prof. National Technical University “KhPI”, Ukraine</p> <p>Metelsky Volodymyr, Prof. Zaporizhzhya National Technical University, Ukraine</p> <p>Nyzhnyk Oleksandr, Prof. Poltava National Polytechnic University named after Y. Kondratiuk, Ukraine</p> <p>Sadovyi Oleksandr, Prof. Dniprodzerzhynsk State Technical University, Ukraine</p> <p>Sychenko Viktor, Prof. Dnipropetrovsk National University of Railway Transport named after academician V. Lazaryan, Ukraine</p> <p>Sinchuk Oleg, Prof. Kryvyi Rih National University, Ukraine</p> <p>Burbelo Mykhailo, Prof. Vinnytsya National Technical University, Ukraine</p> <p>Tankevych Yevgen, Prof. Institute of Electrodynamics NAS Ukraine, Ukraine</p> <p>Fialko Nataliya, Ass. Member of NAS Ukraine Insitute of Engineering Thermophysics NAS Ukraine, Ukraine</p> <p>Fomichov Yevgeniy, Prof. Odesa National Polytechnic University, Ukraine</p> <p>Zakharchenko Victor, Prof. National Aviation University, Ukraine</p> <p>Shchokin Vadym, Prof. Kryvyi Rih National University, Ukraine</p> <p>Lazurenko Oleksandr, Prof. National Technical University of Ukraine “Kharkiv Polytechnic Institute”, Ukraine</p>
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ORGANIZING COMMITTEE OF THE CONFERENCE

Veremiichuk Yurii, Ph.D, senior lecturer, Yarmoliuk Olena, Ph.D., senior lecturer, Sokolovskii Pavlo, assistant , Opryshko Vitalii, assistant.

Institute of Energy saving and Energy management, Igor Sikorsky Kyiv Polytechnic Institute.

CONFERENCE WORK AREAS

Scientific-technical:

1. Legislative and regulatory issues in energy saving and energy efficiency.
2. Methodological basics for monitoring and management of the effective fuel and energy consumption
3. Modern energy management systems.
4. Intellectual energy systems Smart Grid and energy management.
5. Integrated energy management systems.
6. Energy management position in management of enterprise and branches of economy.
7. Resources planning for the enterprise from the side of energy efficiency management.
8. Security of energy and industrial objects.
9. Environmental issues in energetics and integrative approach to energy resources use.
10. Practical organizational, technical and economic issues (best practice) in energy

Educational-methodical:

1. Methodology in formation of studying content in the field of energy efficient technologies and the energy management field.
2. Modern studying and laboratory equipment for provision fundamentally specific and practical training of energy managers.

Schedule of the conference	
April 17, 2018	Arrival of participants
April 18-19, 2018	Plenary and sectional meetings Igor Sikorsky Kyiv Polytechnic Institute, IEE

The length of the performances is up to 10 minutes.

PROGRAM OF PLENARY MEETING

April 18, (Wed) 2018

9.00-10.00 AM – Registration of participants of the conference

10.00–10.20 AM– OPENING

Hall of the Academic Council Igor Sikorsky Kyiv Polytechnic Institute, building number 1

Congratulations to the conference participants:

ZGUROVSKYI M.Z., Rector of the National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute », Academician of the National Academy of Sciences of Ukraine

SAVCHUK Sergiy

Head of the State Agency for Energy efficiency and Energy saving of Ukraine

10.20 AM–5.00 PM. – PLENARY MEETING

Chairman of the plenary session - Sc. D., Professor S. Denysiuk

P-1. Features of modernization of energy supply infrastructure with the expanded use of renewable energy sources

S. DENYSIUK, Sc. D., National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Kyiv.

P-2. Prospects for implementation of energy management systems at power plants

V. ULIDA, President of the All-Ukrainian Public Organization "High Council of Energy Auditors and Energy Managers of Ukraine", Kyiv

P-3. From energy management to the energy service. Examples of implemented projects

Y. BUSHMA, Director of DTEK ESCO, Kiev

P-4. Examples of realization of engineering systems using Vaillant energy saving equipment in the construction industry of Ukraine.

O. PELYKH, design engineer of DP "Weillant Group Ukraine", Kyiv

P-5. Examples of implementation of the principles of resource-efficient and clean production at Ukrainian enterprises

I. SHILOVICH, Director, Center for resource-efficient and clean production

P-6. Energy efficiency of the residential sector of Ukraine and the EU

S. DUBOVSKII, Sc. D., **M. BABIN**, Senior Researcher, Institute of Technical Thermophysics of the National Academy of Sciences of Ukraine, Kyiv

P-7. Municipal energy management

P. LADETSKYI, Head of Energy Management and Standardization Department, State Energy Efficiency and Energy Efficiency Agency of Ukraine, Kyiv.

P-8. Software and algorithmic support for energy audit of buildings and their energy certification

A. MALINOVSKIY, Sc.D., prof., *V. TURKOVSKIY*, Ph.D., Associate Professor, *POKROVSKIY B.*, Ph.D., Associate Professor, *MUZYCHAK A.*, Ph.D. Lviv National Polytechnic University, Lviv.

P-9 Energy security in the context of the formation of innovative cluster entities

V. ROZEN, Doctor of Technical Sciences, professor, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", *L. DAVIDENKO*, Candidate of Technical Sciences, Associate Professor, Lutsk National Technical University, Ukraine, *N. DAVIDENKO*, assistant professor, National University of Water Management and Nature Management, Lutsk.

P-10. Estimation of occupational risks of electric trauma for staff of electric stations and systems

E. BONDARENKO, Sc.D., prof., *T. ANDRIENKO*, Student, *D. KUSNNIR*, Student, Vinnitsa National Technical University, Vinnytsya.

P-11 Energy efficiency and energy saving - a tool to reduce CO₂ emissions

E. FOMICHOV, Candidate of Technical Sciences, Associate Professor, *E. NECHIPORUK*, Engineer, Odessa National Polytechnic University, Odessa.

P-12. Increase of energy efficiency of the technical power system on the basis of rank analysis

V. VASILENKO, post-graduate student. National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

PROGRAM OF SECTORAL MEETINGS

SECTIONAL SESSION 1

"INNOVATIVE METHODS AND TECHNOLOGIES ENHANCING ENERGY EFFICIENCY »

10.00 AM–6.00 PM, April 19 (Thu), 2018

Auditorium № 316, building number 22, IEE, " Igor Sikorsky Kiev Polytechnic Institute "

S-1.1. Individual heating unit with electric boilers

BASOK B.I., member of the cor. National Academy of Sciences of Ukraine Doctor of Technical Sciences, Professor, **LISENKO O.M.**, Ph.D., **LUNINA A.O.**, **LYASHENKO N.E.**, Institute of Technical Thermophysics of the National Academy of Sciences of Ukraine, Ukraine

S-1.2 Thermophysical model for calculation of heat loss through two-chamber ventilated double-glazed windows

BASOK B.I., member of the cor. National Academy of Sciences of Ukraine Dr., prof., **KUZHEL L.M.**, Ph.D., **NOVIKOV V.G.**, Ph.D., S.N.S., **OLIINIK L.V.**, Ph.D., Institute of Technical Thermophysics of the National Academy of Sciences of Ukraine, Ukraine

S-1.3 Influence of the moist state of the wall fencing structure on its insulation properties

BASOK B.I., member of the cor. National Academy of Sciences of Ukraine, Doctor of Technical Sciences, Professor, **DAVIDENKO B.V.**, Ph.D., Prof., **GONCHARUK S.M.**, Ph.D., **KALININA M.F.**, Ph.D., Institute of Technical Thermophysics of the National Academy of Sciences of Ukraine, Ukraine

S-1.4. Technical and economic aspects of the construction of virtual power plants

DENYSYUK S.P., Sc. D., prof., **SOKOLOVSKYI P.V.**, postgraduate student. National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-1.5 Analysis of energy demand changes in buildings when replacing windows

DESHKO V.I., Sc.D., prof., **BILOUS I.U.**, **GUREYEV M.V.**, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-1.6. Mutual influence of groups of elements in local power systems

GORENKO D.S., post-graduate student. National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-1.7. Optimization of operating modes of industrial ventilation plant

DELOV V.V., Master's Degree, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-1.8 Alternative energy supply for energy efficient home

YERIMEYEV I.S., doctor of technical sciences, professor, Vernadsky Taurida National University, **YESCHENKO O.I.** Ph.D., Associate Professor, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-1.9 Processing of load data of transformer substations with use of cluster analysis

ZAMULKO A.I., Ph.D., Associate Professor, **CHERNETSKA Y.V.**, assistant, **GORDIANKO K.I.**, master's degree, National Technical University of Ukraine "Kyiv Polytechnic Institute named after Igor Sikorsky", Ukraine

S-1.10 Obtaining heat-accumulation suspensions that change their aggregate state

YOVCHEENKO A.V., assistant professor, **BESPALKO S.A.**, Ph.D., associate professor, **ROGA M.P.**, assistant professor, **POLYAKOV S.P.**, Ph.D. Professor, Cherkasy State Technological University, Ukraine

S-1.11. Combined power supply system based on a wind power installation equipped with a hydraulic accumulator

KOSTYUK V.O., Ph.D., Associate Professor, **TINDYRIKA Y.O.**, Master's Degree, National Technical University of Ukraine "Kyiv Polytechnic Institute named after Igor Sikorsky", Ukraine

S-1.12. Information support of the economic-mathematical model of the development of the energy system of Ukraine with the use of renewable technologies

KOSTYUK V.O., Ph.D., associate professor, **PROASCHIK O.V.**, master's degree, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-1.13. The method of suboptimal and economic control of the frequency of the combined power system

KOSTYUK V.O., Ph.D., Associate Professor, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-1.14. Policy in the field of technological development of electric power industry of Ukraine

KROTSYAK M.O., postgraduate student, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-1.15. Measures of superconducting of the aperiodic component of current at switching overhead power lines with superheavy voltage with SF6 circuit breakers

KUCHANSKY V.V., art. Sciences associate professor, Ph.D., Institute of Electrodynamics of the National Academy of Sciences of Ukraine, Ukraine

S-1.16. Energy security in the context of the formation of innovative cluster entities

MIKOLIUK O.A., Ph.D., Associate Professor, Khmelnytsky National University, Ukraine

S-1.17. Influence of frequency-controlled asynchronous electric drives on distortion of the form of network current and voltage (National aspects of management of energy efficiency of electrical equipment of the enterprise)

MISCHENKO V.A., doctor of economic sciences, prof., **KLEPIKOVA S.V.**, senior lecturer, National Technical University "Kharkiv Polytechnic Institute", Ukraine

S-1.18 Increasing the efficiency of solutions relative to the use of dispersed generation in conditions of uncertainty of information.

POPOV V.A., Doctor of Technical Sciences, Professor, **TKACHENKO F.V.**, Master. National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-1.19. Preparation of energy auditors for certification of energy efficiency and inspection of engineering systems of buildings

PEREKREST A.L., Ph.D., associate professor, ***CHORNA V.O.***, Candidate of Technical Sciences, Associate Professor, ***CHEBOTARYOVA E.O.***, Postgraduate Student, Kremenchuk National University, Ukraine

S-1.20 Multi-criteria planning and optimization of the operation modes of integrated power supply systems

PRITISKACH I.V., Ph.D., senior lecturer. ***ONIKIYCHUK M.A.***, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-1.21. Comparison of methods of forecasting energy consumption of grain processing enterprises

PROKOPENKO V.V., Ph.D., associate professor, ***KOROTENKO V.V.***, Master's Degree, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-1.22. Analysis of technological expenses of electric energy in distribution electric networks of Ukraine

STRELKOVA G.G., Ph.D., Associate Professor, ***PUSTOVOYTOV A.M.***, Master's Degree, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

P-1.23. Technical condition and prospects of development of distributive electric networks of Ukraine

STRELKOVA G.G., Ph.D., Associate Professor, ***PUSTOVOYTOV A.M.***, Master's Degree, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

P-1.24. Influence of frequency-controlled asynchronous electric drives on distortion of the form of network current and voltage

KHALAMIRENKO I.V., Ph.D., Associate Professor, ***KOROTKOV V.I.***, Master's Degree, Odessa National Polytechnic University, Ukraine

C-1.25 Optimization of energy efficiency of asynchronous electric drives

KHALAMIRENKO I.V., Ph.D., Associate Professor, ***KOROTKOV V.I.***, Master's Degree, Odessa National Polytechnic University, Ukraine

P-1.26. Methods of increasing energy efficiency at dairy enterprises

CHERNIAVSKYI A.V., Ph.D., Associate Professor, ***BIKOVSKYI A.O.***, Master's Degree, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

SECTIONAL SESSION II

«MANAGEMENT OF ENERGY»
10.00 AM–6.00 PM, April 19 (Thu) 2018

Auditorium № 310, building number 22, IEE, " Igor Sikorsky Kiev Polytechnic Institute "

S-2.1. Features of the application of the method of the main components for assessing the level of energy efficiency

BORICHENKO O.V., Candidate of Technical Sciences, Associate Professor, **OSTAPCHUK Y.Y.**, Master's Degree, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-2.2. The use of two-zone tariffs in the management of energy consumption at the regional level

VEREMIYCHUK Y.A., Ph.D., senior lecturer., **ZAMULKO A.I.**, Ph.D., Associate Professor, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", **LISENKO O.M.**, Ph.D., Institute of Technical Thermophysics of the National Academy of Sciences of Ukraine, Ukraine.

S-2.3. Correction of frequency deviation of energy systems when measuring power by digital technology

VOLOSHKO A.V., doctor of technical sciences, professor, **SHERSHEN O.I.**, master's degree, National Technical University of Ukraine " Igor Sikorsky Kiev Polytechnic Institute ", Ukraine

S-2.4. Assessment of the results of monitoring of energy efficiency in the regions of Ukraine

DENISIUK S.P., Sc.D., prof., **TARGONSKY V.A.**, master's degree. National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

P-2.5 Professional training of persons intending to carry out certification of energy efficiency and inspection of engineering systems

DENISIUK S.P., Sc.D., Prof., **KOTSAR O.V.**, Ph.D., Associate Professor, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-2.6. Principles of building an intellectual neighborhood (Smart community)

DENISYUK S.P., Sc.D., prof., **CHAYKOVSKY S.I.**, MSc, National Technical University of Ukraine " Igor Sikorsky Kiev Polytechnic Institute ", Ukraine

S-2.7. Experience in introducing elements of the energy management system at the National University of Water Management and Nature Management

DOVBENKO V.S., Candidate of Technical Sciences, Associate Professor, **KIZIIEV M.D.**, Candidate of Technical Sciences, Associate Professor, **KLYUKHA O.**, Ph.D., Associate Professor, **BROKER B.S.**, Associate Professor, Associate Professor, National University of Water Management and Nature Management, Ukraine

S-2.8 Energy intensity of thermo-modernization of housing stock

DUBOVSKY S.V., Sc.D., **BABIN M.E.**, art. Sciences, Ph.D., Institute of Technical Thermophysics of the National Academy of Sciences of Ukraine, Ukraine.

S-2.9. Problem of compensation of reactive power in urban electric networks

ZORIN V.V., Doctor of Technical Sciences, professor, **MATSKEVICH Y.M.**, Master's Degree, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-2.10 Smart-metering, accounting and energy management systems

KOTSAR O.V., Ph.D., Associate Professor, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-2.11. Energy management of business entities

NAUMOV A.O., student, EIU Power engineering, automation and energy conservation of the National University of Life and Environmental Sciences of Ukraine, Ukraine

S-2.12. Energy Management in the Context of "Strategy for the Development of Energy of Ukraine until 2035"

NEMIROVSKYI I.A. Ph.D., associate professor, master, National Technical University "Kharkiv Polytechnic Institute", Ukraine

S-2.13. Formation of the concept of power hubs for farms using demand management systems

PROKOPENKO V.V., Candidate of Technical Sciences, Associate Professor, **OPRYSHKO V.P.**, assistant, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-2.14. Modeling of the dependence of energy efficiency parameters of the well borehole drive on the volume of asphalt-resinous-paraffin deposits

RAITER P.M., Ph.D., Prof., **KHARUN V.R.**, Ph.D., Associate Professor, Ivano-Frankivsk National Technical University of Oil and Gas, Ukraine

S-2.15. System differentiation of electricity tariffs

STRELKOV M.T., Ph.D., associate professor, **MOROZHENKO A.O.**, Master., National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-2.16. System decomposition of electricity tariffs

STRELKOV M.T., Ph.D., associate professor, **MOROZHENKO A.O.**, Master., National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-2.17. General scientific approaches and special research methods in the field of energy management, power supply and electricity consumption

STRELKOVA G.G., Ph.D., Associate Professor, **FEDOSENKO M.M.**, Ph.D., Associate Professor, **ZAMULKO A.I.**, Ph.D., Associate Professor, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-2.18. Diversification of energy sources based on bioresource technologies

FEDOREIKO V.S., Sc.D., prof., **ZAGORODNIY R.I.**, Ph.D., Volodymyr Hnatiuk Ternopil National Pedagogical University, **ISKERSKYI I.S.**, Ph.D., Ph.D., National University of Life and Environmental Sciences of Ukraine

S-2.19. Estimation of reliability of initial information and its influence on calculations of modes of distributive electric networks

FEDOSENKO M.M., Candidate of Technical Sciences, Associate Professor, **ARTEMEV M.V.**, Master, **ARTYSYUK B.A.**, Master's Degree, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

S-2.20. Development of programs to stimulate energy efficiency of buildings in Ukraine

SHOVKALYUK M.M., Ph.D., associate professor, **LIECONTSEVA O.E.**, postgraduate student, National Technical University of Ukraine " Igor Sikorsky Kiev Polytechnic Institute ", Ukraine

S-2.21. Estimation of output characteristics of micro and mini hydroelectric power stations in the conditions of limited statistical hydrological data

YARMOLYUK O.S., Ph.D., Art. Off., **SUKALSKA L.A.**, MA, **VOLOSHIN S.O.**, MA, **BONDARENKO T.A.**, MA, National Technical University of Ukraine " Igor Sikorsky Kiev Polytechnic Institute " Ukraine

SECTIONAL SESSION III

« ENVIRONMENTAL ASPECTS AND APPROACHES
TO USE ENERGY RESOURCES »

10.00 AM–6.00 PM, April 19 (Thu) 2018

Auditorium № 310, building number 22, IEE, "Igor Sikorsky Kiev Polytechnic Institute"

S-3.1. Reduction of CO₂ emissions in the use of solar energy in the Odessa region

BASOK B.I., member of the cor. National Academy of Science of Ukraine Dr., prof., Institute of Technical Thermophysics of the National Academy of Sciences of Ukraine, **VEREMYCHUK Y.A.**, *Candidate of Technical Sciences*, **HUDENKO V.O.**, Master, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute», Ukraine

S-3.2. Selection of indicators for assessing the resource efficiency of the enterprise

VORFOLOMIEEV A.V., Ph.D., Art. , National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

C-3.3. Application of methods for assessing the quality of electricity for the efficient use of energy resources

KOVALENKO A.V., Master's Degree, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

PANEL – DISCUSSION

«RESULTS OF ENERGY EXAMINATION SOCIAL INSTITUTIONS OF THE SOLOMIAN DISTRICT OF KYIV»

2.00–5.00 PM., April 18 (Wed) 2018

Auditorium № 309a, building number 22, IEE, "Igor Sikorsky Kiev Polytechnic Institute"

P.D.-1. Increase the level of utilization of energy resources of residential buildings in the city district

VASILENKO V.I., assistant, *GOLUB V.D.*, student, *MELNIKOV K.I.* student, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

P.D.-2. Increase of the level of energy resources utilization of separate shops of the Meridian enterprise. SP The Queen

VASILENKO V.I., assistant, *MAXIMENKO A.M.*, student, *BUBNOV V.V.* student, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

P.D.-3. Increase use of energy resources of pre-school educational institutions in the city district

VASILENKO V.I., assistant, *PYATYGORETS Y.S.*, student, *FEDORUS G.O.*, student
National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

P.D.-4. Increase use of energy resources of secondary schools in the city district

VASILENKO V.I., assistant, *LYAH V.M.*, student, *CHUBENKO D.E.*, student, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine

P.D.-5. Increase of the level of energy resources utilization by the results of the energy survey of the school №159 of Kyiv

VASILENKO V.I., assistant, *DOBROVOLSKY M.C.*, student, *GETMANCHUK G.O.*, student, National Technical University of Ukraine "Igor Sikorsky Kiev Polytechnic Institute", Ukraine