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USAID ENERGY PROGRAM

USAID ENERGY PROGRAM TRAINING PLAN

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25 April 2018

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DATA

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Practice Area: Human and Institutional Capacity Development

Key Words: Competitive Markets, Variable Renewable Energy, Security of Supply

ACRONYMS

CAPEX	Capital Expenditure
ESCO	Electricity Market Operator
EU	European Union
GEDF	Georgian Energy Development Fund
GNERC	Georgian National Energy and Water Supply Regulatory Commission
GOGC	Georgian Oil and Gas Corporation
GSE	Georgian State Electrosystem
IFI	International Financial Institution
MO	Market Operator
MoESD	Ministry of Economy and Sustainable Development of Georgia
NEA	National Environmental Agency
NWP	Numerical Weather Prediction
OPEX	Operational Expenditure
OTC	Over the Counter
RES	Renewable Energy Source
RIA	Regulatory Impact Assessment
SoLR	Supply of Last Resort
TBD	To Be Determined
USAID	United States Agency for International Development
USoA	Uniform System of Accounts
VRE	Variable Renewable Energy

CONTENTS

INTRODUCTION	5
APPENDIX	6
USAID Energy Program Annual Capacity Building and Training Plan For Y1	6
Conferences in Y1	8
International Study Tours for Y1	8

INTRODUCTION

USAID Energy Program activities focus on supporting the development of competitive energy markets that promote renewable energy development and the improvement of energy security. A major part of the technical assistance to the sector is capacity building within Task 2 of the Program covering the topics in the other four Program tasks. The below table includes the training and other capacity building events to be provided by the USAID Energy Program during the first program year.

APPENDIX

USAID ENERGY PROGRAM ANNUAL CAPACITY BUILDING AND TRAINING PLAN FOR Y1

(Task 1) Energy Market Development					
Trainer	Training Title	Description	Date	Target Organizations	Sector
John Swinscoe	Electricity Market Concept	The transitional plan for developing the electricity market must go through several specific stages as the market is opened to all consumers and all generators.	April, 2018	Energy market Reforms Steering Committee	Electricity
John Swinscoe	Initial Market Trading	Market players will want to know the details of whom they can trade to, what is the length of contract period, what happens if there is not enough available energy or too much energy for the market, how power will be imported, and other market aspects	April 2018	Competitive Market Players	Electricity
Jake Delphia	Need for the Electricity Market Operator (MO)	The draft Energy Law requires an electricity MO with specific responsibilities – Bulgarian experience is highlighted as well as the role of NordPool Spot	April-May 2018	Electricity Market Opening Working Group	Electricity
John Swinscoe	Initial Balancing Mechanism	Imbalance service rules need to be simple for the initial market opening to allow customers and generators to get used to the system of balancing and imbalance service calculations	May, 2018	Electricity Market Opening Working Group Market Players	Electricity
Elene Ghubianuri	Initial market Opening Contractual Framework	The basic framework for contract negotiations, contract template, contract registration and so forth needs to be developed – each aspect will be explained	June, 2018	Electricity Market Opening Working Group, Market Players	Electricity
Valeriy Vlatchkov	3 rd Party Open Access Rules	Rules relating to non-discriminatory access to the networks for wholesale market players will be explained	May 2018	Electricity Market Opening Working Group, Market Players	Electricity
Eka Nadareishvili Andrzej Klimczyk	Communicating to the Customers and Generators	A consistent approach to communicating market opening has to be adopted – international best practices will be provided	April, 2018	Electricity Market Opening Working Group Market players	Electricity
Jake Delphia	Over the Counter (OTC) Broker	What is an OTC broker and how will it assist in market opening	April-May, 2018	Electricity Market Opening Working Group Market Players	Electricity
John Swinscoe	Settlement in a competitive market	The process of paying the liabilities between the trading parties.	May, 2018	Electricity Market Opening Working Group	Electricity
Neka Danelia	Training on Unified System of Accounts (USoA)	Accessibility to accurate and objective data necessary for setting tariffs and monitoring the rules on USoA	April – May, 2018	Georgian National Energy and Water Supply Regulatory Commission (GNERC)	Electricity
Valeriy Vlatchkov	Distribution connection fee methodology	Rules and processes for customer connections, rules and processes for generator connections, Renewable Energy Source (RES) and small RES connection rules	May, 2018	GNERC Market Players	Electricity Renewable Energy
John Swinscoe	Supply tariff for the Supply of Last Resort (SoLR)	Methodology for setting the supply tariff for the SoLR and calculating corresponding remuneration for the service provider	June, 2018	GNERC	Electricity
Valeriy Vlatchkov	Calculation and Setting of MO Service Fees	Description of the fees for services provided by the electricity market operator	May, 2018	GNERC	Electricity
John Swinscoe	Setting supply tariff for the	Methodology for setting the supply tariff for the universal service supplier	June, 2018	GNERC	Electricity

	universal service provider	and calculating corresponding remuneration for the service provider.			
Gergana Stoitcheva	Gas Market Concept	The need for a Gas Market concept is explained in context of developing the gas storage tariff methodology	March - April 2018	GNERC Georgian Oil and Gas Corporation (GOGC)	Natural Gas
Gergana Stoitcheva	Economics of Natural Gas Storage Regulation	The training will cover best European Union (EU) practices related to natural gas regulation, access regimes and tariff methodologies. Among other countries, Bulgarian experience will be shared.	May - June 2018	GNERC GOGC	Natural Gas
Ivane Pirveli	Natural Gas Transmission Entry-Exit Tariff Systems	Different models and methods of Entry-Exit Tariff systems will be reviewed and discussed. Practical examples from EU countries will be reviewed and their applicability to Georgia will be discussed with participants.	May – June 2018	GNERC GOGC	Natural Gas
Gergana Stoitcheva/Ivane Pirveli	Gas Market Rules: Gas Trading and Balancing	Overview of types and contracts for gas trading, market players, their roles and responsibilities. Gas balancing mechanism concept, international experience and applicability to Georgia	September. 2018	Gergana Stoitcheva/Ivane Pirveli	Natural Gas
(Task 2) Institutional Strengthening and Capacity Building					
Trainer	Training Title	Description	Date	Target Organizations	Sector
USAID Energy Program	Regulatory Impact Assessment (RIA) trainings (five)	Develop and implement a training plan for RIA to build the capacity to perform regular RIAs.	May-July, 2018	GNERC and Ministry of Economy and Sustainable Development of Georgia (MoESD)	Energy Sector
(Task 3) Energy Investment Optimization					
Trainer	Training Title	Description	Date	Target Organizations	Sector
Ankit Patel	Financing of Variable Renewable Energy (VRE)	Training will cover financing practices of solar and wind energy projects. Risk mitigation techniques and risk sharing. Diverse funding sources will be introduced, and evidence-based requirements will be discussed; Standard Capital Expenditure (CAPEX) and Operational Expenditure (OPEX) items will be introduced	June 2018	Georgian Energy Development Fund (GEDF) Private Developers MoESD GNERC	Electricity Renewable Energy
Ankit Patel	Public Private Partnership in VRE	Training will cover PPP forms, design, stages and application in VRE. Trainer will share practical experience and gained knowledge in structuring VRE funding agreements. During the training sessions audience will get knowledge of steps and processes necessary for VRE implementation	June, 2018	GEDF Private Developers MoESD GNERC	Electricity Renewable Energy
(Task 4) Grid Integration of Variable Energy Resources					
Trainer	Training Title	Description	Date	Target Organizations	Sector
David Mujirshvili	VRE Forecasting	Models available for Wind Forecast. Discussion of real time and historical data requirement. Numerical Weather Prediction (NWP) inputs (Global Models) Uncertainty level of proposed Models. Concept on Test Mode	March, 2018	Georgian State Electrosystem (GSE), National Environmental Agency (NEA), Qartli Wind Farm	Electricity Renewable Energy
(Task 5) Strategic Advisory Assistance to the GoG to Increase Energy Security					
Trainer	Training Title	Description	Date	Target Organizations	Sector
Ivane Pirveli/Gurgen Hakobyan	Energy Security Assessment Methodology	Various international organizations use different methodologies for assessing energy security. During the training those methodologies will be reviewed, analyzed with pros and cons and their applicability to Georgia. Energy Security assessment methodology and process developed by USAID Energy Program will be delivered.	May 2018	MoESD, GSE, GOGC	Energy Sector

Ivane Pirveli/Gurgen Hakobyan	Energy Security Issues Stakeholders	Identification of energy security issues. Energy Security of Georgia Improvement Roadmap. Discussions with stakeholders. Consensus.	May 2018	MoESD, GSE, GOGC	Energy Sector
Ivane Pirveli/Gurgen Hakobyan	Energy Security Issues Stakeholders	Categorizing Energy Security Issues for Georgia. Discussions with stakeholders. Consensus.	September 2018	MoESD, GSE, GOGC	Energy Sector
Gergana Stoitcheva/Ivane Pirveli	Gas Market Rules: Gas Trading and Balancing	Overview of types and contracts for gas trading, market players, their roles and responsibilities. Gas balancing mechanism concept, international experience and applicability to Georgia	September 2018	MoESD, GSE, GOGC	Energy Sector

CONFERENCES IN Y1

Venue	Conference Title	Date	Attendees
Radisson Blue Iveria, Tbilisi	<i>The Role of Women in Energy, Transport and Logistics</i> in the framework of the annual conference "Women's Role in Economic Growth and Policy Development"	May 28, 30, 2018	Female leaders and young specialist from the MoESD, GNERC, GSE, Electricity Market Operator (ESCO), donor organizations, energy related private sector companies and universities
TBD	Regional Energy Summit	June, 2018	Representatives of Georgian, regional and international energy stakeholders, International Financial Institutions (IFIs), private sector and academia.

INTERNATIONAL STUDY TOURS FOR Y1

Country	Study Tour Description	Date	Target Organizations	Sector
USA Host Organization <i>Open World Leadership Centre</i>	This program will help develop delegates' technical expertise. Delegates will discuss with their U.S. counterparts the development of a touristic facility on the Enguri Dam site; cooperation between Abkhazia and Georgia's mainland; the potential installation of electricity meters; and engagement of the international community in Georgian energy affairs.	April, 2018	Enguri Hydro Power Plant	Electricity
Romania	The participants will visit the System Operator and Distribution Companies to receive the first-hand information on integration of VRE plants into electricity grid.	TBD	MoESD, GSE, GNERC, NEA	VRE

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