

USAID ENERGY PROGRAM

ELECTRICITY SECTOR REFORM ACTION PLAN

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ELECTRICITY SECTOR REFORM ACTION PLAN

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DATA

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Key Words:	Electricity Market, Action Plan, Market Development

ACRONYMS

CDS	Closed Distribution System
DAM	Day-Ahead Market
DSO	Distribution System Operator
EC	Energy Community
ECS	Energy Community Secretariat
EnCT	Energy Community Treaty
ENTSO-E	European Network of Transmission System Operators for Electricity
EPB	Energy Performance of Buildings
ERRA	Energy Regulators Regional Association
ESCO	Electricity Market Operator
EU	European Union
EU4Energy	Programme Funded by the EU and led by the Energy Community Secretariat
GE-AR	Georgia-Armenia
GE-TR	Georgia-Turkey
GNERC	Georgian National Energy and Water Supply Regulatory Commission
GoG	Government of Georgia
GSE	Georgian State Electrosystem
HVDC	High-Voltage Direct Current
IDM	Intra-Day Market
LoEWS	Law on Energy and Water Supply
MO	Market Operator
MoESD	Ministry of Economy and Sustainable Development of Georgia
MoHLSA	Ministry of Health, Labour and Social Affairs of Georgia
NARUC	National Association of Regulatory Utility Commissioners
NEEAP	National Energy Efficiency Action Plan
NEMO	Nominated Electricity Market Operator
NREAP	National Renewable Energy Action Plan
REMIT	Regulation on Wholesale Energy Market Integrity and Transparency
SoLR	Supply of Last Resort
TSO	Transmission System Operator
USAID	United States Agency for International Development
USoA	Uniform System of Accounts
WG	Working Group

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INTRODUCTION

The objective of USAID Energy Program is to support Georgia's efforts to facilitate increased investment in power generation capacity as a means to increase national energy security and facilitate economic growth. The Program will have a significant impact on energy market reform efforts of the Government of Georgia (GoG) to comply with the country's obligations under the Energy Community Treaty (EnCT). The investment objective will be achieved through the provision of technical assistance to a variety of stakeholders in the energy sector.

The ultimate goal of this Program is to enhance Georgia's energy security through improved legal and regulatory framework and increased investments in the energy sector. The ultimate expected outcome of this project is an energy legal and regulatory framework that complies with European requirements and encourages competitive energy trade and private sector investments.

BACKGROUND

The GoG signed the EnCT in October 2016. The Treaty commits the GoG to harmonize its energy related legislation to specific European Union (EU) directives and other EU regulations. USAID Energy Program supports the GoG in development of legislation that is compliant with EU legislation.

USAID Energy Program was asked by the Ministry of Economy and Sustainable Development of Georgia (MoESD) to support in developing process of activities which should be implemented by Georgia under the Accession Protocol. These activities include development/modification process of primary and secondary legislation, monitoring of unbundling, development of Transmission System Operator and Market Operator, as well as development of balancing mechanism and regional market, as it is required by the EU Legislation.

ELECTRICITY SECTOR ACTION PLAN

To support MoESD in electricity market development process, USAID Energy Program has developed the initial Electricity Sector Action Plan. The Action Plan provides the detailed activities to be accomplished during electricity market transition for the market to reach full competition. The initial Action Plan was shared with counterparts and other stakeholders, including international donor organization, to establish responsibilities of the various parties to support all the activities.

The Action Plan aiming update the status of the activities and monitor progress of the activities are tracked and recorded in the Electricity Sector Action Plan listed in annex 1. The Electricity Sector Reform Action Plan will be shared with counterparts and other stakeholders, including international donor organizations.

Annex 1 contains the second year Action Plan for the Electricity Sector.

ANNEX 1: MATRIX

#	Action	Description of Action	Institution(s) in Charge/Beneficiaries	Assistance donor support (actual/requested)	Deadlines	Comments
		Electricity	/ Market Reform Oversight			
1	Establish Electricity Market Development Working Group (WG) and adopt the objectives and scope of work for WG	Working Group Creation, including representatives of GoG, main market players and other relevant parties for the purposes of promote reforming process.	MoESD	USAID Energy Program	2018	Established
		Electricity Policy	y, Security and Energy Effi	ciency		
2	State Energy Policy	The energy policy act providing strategies and priorities in electricity and natural gas sectors, as well as other measures and guidelines to be required by Law of Georgia on Energy and Water Supply (LoEWS), for a period of at least 10 years	GoG		12 months from the date of entry into force of LoEWS	Drafting: MoESD in cooperation with Georgian National Energy and Water Supply Regulatory Commission (GNERC) and other parties
3	Update and approve the National Energy Strategy (Optional)	The National Energy Strategy has to be updated in line with the approved Electricity Market Transitional Plan	MoESD			Assessment implemented
4	Electricity Market Concept Design	Adoption of electricity market concept to provide strategic guidance and target on i) design for electricity market reform, ii) design for electricity balancing market reform, and iii) principles for the promotion of a functioning electricity market by providing solutions for existing limitations	GoG	MoESD		Adopted by MoESD
5	Development of draft Electricity Market and Balancing Rules	This measure comprises of the development of two sets of regulatory acts that shall be compliant with EU and Energy Community (EC) acquis. Act aim to targets for implementation of the Georgian electricity and balancing market, should specify transitory periods and intermediary targets	GNERC, MoESD, Georgian State Electrosystem (GSE), Electricity Market Operator (ESCO)	Energy Community Secretariat (ECS)	12 months from the date of entry into force of LoEWS	The basic version of draft is already done by Blueberry. The draft is supported by ECS
6	Adoption of renewable energy strategic framework and package	Establishing the strategic, institutional, and financial vision and framework for renewable energy in Georgia, including, preferably, the adoption of the Law on Renewable Energy. More precisely, adoption of the National Renewable Energy Action Plan (NREAP) that sets the Georgian Government's renewable energy strategy and the government's decisions on the institutional and financial support framework, as well as the monitoring of the NREAP implementation	MoESD	ECS	2019	The law on Renewable Energy Sources (RES) is Drafted and ready for submit to the parliament

#	Action	Description of Action	Institution(s) in Charge/Beneficiaries	Assistance donor support (actual/requested)	Deadlines	Comments
7	Adoption of energy efficiency strategic Framework by the government	Establishing the strategic, institutional, and financial vision and draft framework for energy efficiency in Georgia. This shall encompass the adoption of National Energy Efficiency Action Plan (NEEAP) that sets the Georgian Government efficiency target as well as the government's decisions on the institutional and financial framework	MoESD		2019	The law on Energy Efficiency is drafted ready to submit to the parliament. NEEAP is updated for next years for 2019-2021
8	Adoption of Legislative Package for Energy Performance of Buildings (EPB) and enforcement	Create the primary and extensive legal basis for the promotion of energy efficiency in / of buildings	MoESD	ECS (Support in developing of national calculation methodology for EPB	2019	Drafted and ready for submitting to the parliament
9	Adoption of a Social Support Scheme (Rules for protection of vulnerable customers)	Such program shall establish the status of socially vulnerable customers and define the scope of their rights as well as measures aimed at protecting socially vulnerable customers in order to meet their electricity demand. The program shall also envisage a manner of direct support by the Government to vulnerable customers from revenue sources other than tariff charges by energy undertakings to avoid cross-subsidies and price distortion.	MoESD/GNERC/Ministr y of Health, Labour and Social Affairs of Georgia (MoHLSA)	USAID Energy Program	2019	In progress
10	Adoption of Public Service Obligation for Universal Supply	Find a transitory regime for the phasing-out of price regulation in the energy sector in all segments during a transitory period until 2021	GoG		9 month after adoption the law on Energy and Water Supply	
			rimary Legislation			
11	Adoption of new law on Energy and Water Supply	Adoption of draft Energy Law by government establishing the legal foundation for the electricity sector reform to a market in compliance with EC acquis. The Law shall require i) a new institutional set-up, ii) an unbundling regime, and iii) promote regulatory independence	GoG, Parliament	Drafted by EC		Drafted and ready to Submit to the Parliament of Georgia
12	Adoption of energy efficiency law in compliance with Directive 2012/27/EU	Establishing the Georgian legal foundation for implementing energy efficiency policies, measures, and support schemes in compliance with Directive 2012/27/EU	MoESD		2019	Drafted and ready to submit to the
13	Adoption of draft energy efficiency labelling law in compliance with Directive 2010/30/EU by MoESD	Adoption of draft Energy Efficiency labelling Law by MoESD as a necessary precondition to move further towards its adoption by the parliament. It will establish the Georgian legal foundation for transposing EU Directive 2010/30/EU	MoESD			Parliament of Georgia Included in the Secondary acts as well
		Se	condary Legislation			
14	Certification procedure	Legal basis for certification requirement, certification process, certification decision, monitoring of requirements, data to be submitted, protection of confidential data, charging for certification, model application for certification	GNERC	ECS		Work in progress

#	Action	Description of Action	Institution(s) in Charge/Beneficiaries	Assistance donor support (actual/requested)	Deadlines	Comments
15	Licencing conditions for transmission and distribution system operators	Conditions for exercising licensed activity, rules concerning the cooperation and information exchange on electricity market, reporting, main provisions regarding transmission of electricity, rules concerning dispatch, metering services, metring administration and settlement, rules concerning connection, disconnection and reconnection to transmission system and change of transmission capacity, rules concerning development of transmission system, construction of transmission systems and on ensuring new generation capacities, provisions concerning cross-border interconnectors, their development and capacity allocation principles, application of tariffs, basic principles for sale and purchase of balancing services and purchase of ancillary services, electricity at the electricity market, public service obligations, rules concerning monitoring of the licensed activity.	GNERC	ECS		Drafted by the ECS
16	Transmission and Distribution network code and Commercial metering code	Transmission System technical operations, technical operation of interconnections, long term system development planning, operational planning of system performance, Dispatch rules, ancillary services, power system emergencies, technical requirements and process for connection to transmission system, use of transmission system, Organization of metering services (roles and responsibilities), types and capabilities of metering devices, entities involved and interrelations, technical requirements, accuracy and standards, technical requirements for communications and data interchange, metrological provision of metering data, data collection and management, storage and custody of metering data, processing and aggregation, verification and inspection of devices, disputes resolution, fall back processes	Transmission System Operator (TSO), GNERC			GNERC, GSE (from 2014 in accordance of ENTSO's regulations)
17	Transmission system connection fee methodology	Rules and processes for demand connection, rules and processes for generators connections, High-Voltage Direct Current (HVDC) connection rules, Renewable Energy Sources connection rules, etc.	TSO, GNERC	USAID Energy Program		Drafted, submitted to GNERC
18	Rules for congestion management and procedure for interconnectors capacity allocation (the rules also includes methodology for cross-border capacity calculation)	Procedure for yearly, monthly and daily auctions, participation rules and requirements, joint auctions regime, auction platform and results, fall back procedures, use of transmission rights and rules for transferring them, secondary market rules, curtailment rules and processes, payments and clearance, etc. This document should contain the detailed methodology under which the TSO will calculate the capacity to be each time available for cross border trades	TSO, GNERC	EU4Energy		Drafted GSE (TSO) should be submitted to GNERC

#	Action	Description of Action	Institution(s) in Charge/Beneficiaries	Assistance donor support (actual/requested)	Deadlines	Comments
19	Procedure on development of the 10 - year transmission system development plan	Information on existing and forecasted demand and supply; indications of the main transmission infrastructure that needs to be built or upgraded over the next ten (10) years; all the investments already decided and identify new investments which have to be executed in the next three (3) years etc.	TSO, GNERC			Might be developed by ECS within the framework of document - Methodology of evaluation of investment plans for transmission and distribution networks
20	Commercial Metering Methodology	Metering Registries to be kept by appropriate operators, profiling methodologies where non-interval metering exists, forecast requirements entering the methodology, ex-ante determination of representation percentages, ex-post recalculations, processes when data is missing, reconciliation, combining interval and non-interval metering.	TSO, GNERC			World Bank will make an assessment what type of commercial metering is required and what it needs to do
21	DSO compliance programme	Unbundling and independence requirements of the Distribution System Operator (DSO), Managerial independence, Operational independence, provisions ensuring non-discriminatory behaviour, measures to ensure equal access to the electricity distribution system, cases for refusal to grant access to the electricity distribution system, commercial and financial relations with other participants of electricity market and third parties, avoidance of conflict of interests, brand policy, provision of information, confidentiality of information, monitoring and reporting on the implementation of the Program.	GNERC	ECS		Drafted by ECS under the EU4Energy Programme. Initial draft provided to GNERC in April 2018
22	Distribution connection fee methodology	This document should include: Rules and processes for demand connection, rules and processes for generators connections, RES and small RES connection rules, etc.	DSOs, GNERC	USAID Energy Program		Drafted
23	Retail Supply Rules including rules for electricity supply by the Supplier of Last Resort (SoLR) and draft standard contract for relevant services (General Supply Conditions)	This document should include: customer services, contact principles, publication of information, contractual and pre- contractual procedure, rights and obligations of supply, publication of applicable tariffs, non-discrimination rules, regulation on retail supply, rules for small customers, special provisions for vulnerable customers, contract implementation and termination, dispute resolution, process for supplier change, communication with customer rules, monitoring of rules application	GNERC	National Association of Regulatory Utility Commissioners (NARUC) EU4Energy		Drafted Retail Supply Rules, including SoLR and standard contract for relevant services was developed through NARUC's support, and revised by the ESC - EU4Energy
24	Rules for electricity supply by the universal service supplier and draft Standard Contract for relevant services	Rules to regulate the activities of such suppliers including, inter alia, their rights and obligations, termination of responsibilities and other relevant issues with a view to ensuring a continuous, reliable and qualitative supply of electricity to household customers and small enterprises, in line with the relevant provisions of the draft law on Energy and Water Supply	GNERC	EU4Energy		Drafted Assistance agreed within the framework of EU4Energy. Taking into account the document prepared by NARUC, consultants delivered draft by 15 April (latest – May) 2018
25	Methodology for setting the supply tariff for the universal service supplier and	Self-explanatory	GNERC	USAID Energy Program		Drafted, submitted to GNERC

#	Action	Description of Action	Institution(s) in Charge/Beneficiaries	Assistance donor support (actual/requested)	Deadlines	Comments
	calculating corresponding remuneration for the service provider					
26	Methodology for setting the supply tariff for the SoLR and calculating corresponding remuneration for the service provider	Self-explanatory	GNERC	USAID Energy Program		Drafted, submitted to GNERC
27	Procedure on imposition of the public obligation of universal services to suppliers	Detailed procedure upon which the nomination of appropriate Suppliers who will also offer universal services under articles 9 and 120 para 2 of the draft LoEWS	GoG			Should be designated in 0 month from
28	Methodology on selection (tender) on assigning a supplier of last resort	In accordance with article 122 para 11 of the draft energy law, a methodology needs to be developed under which Supply of last resort shall be provided at fair, comparable and market-based prices set and applied by suppliers of last resort in a transparent and non-discriminatory manner	GoG			Should be designated in 9 month from adoption the law
29	Procedure and form of information provision in the electricity bills	Self-explanatory	GNERC			Relevant rules will be amended by GNERC – no assistance required ; May be incorporated in Retail Supply Rules (General Supply Conditions)
30	Consumers complaint handling procedure for suppliers	Self-explanatory	GNERC			GNERC recently adopted Procedural Rules on Dispute Settlement. Amendments where appropriate.
31	Quality of service indicators for DSO and suppliers	This document should include: The Basis of Service Quality Regulation, Continuity of Supply rules, voltage quality, commercial quality, data submission, monitoring of quality indicators etc.	GNERC			Drafted and on process of approval
32	Methodology for reimbursement of expenses of universal electricity supplier associated with electricity supply to vulnerable consumers	Self-explanatory	M₀ESD, GNERC	EU4Energy		Assistance agreed with the ECS
33	Day-Ahead Market (DAM) and Intra-Day Market (IDM) rules	Participation rules to the DAM, IDM general rules and processes, accounts and registration, bidding rules, pricing, settlements and clearing, Security Cover Requirements, Invoicing and Payments, Market Information and Reporting, timetable of Market Operations etc.	TSO, Market Operator (MO), GNERC	EU4Energy	EU4Energy	Assistance agreed with the ECS.
33	Rules on Information exchange on electricity market	Detailed rules (what, in what format and when) in accordance with European Network of Transmission System Operators for Electricity (ENTSO-E) requirements and Regulation on Wholesale Energy Market Integrity and Transparency (REMIT) obligations			May be incorporated in Market Rules	

#	Action	Description of Action	Institution(s) in Charge/Beneficiaries	Assistance donor support (actual/requested)	Deadlines	Comments
34	Licensing and Certification Rules includes licencing conditions for generation licencing conditions for market operator	Conditions for exercising licensed activity, rules concerning participation at the electricity market, accounting, information and reporting requirements, rules concerning electricity sale and purchase at the electricity market, fuel reserves requirements, balancing and ancillary services, dispatch management, public service obligations, purchasing of goods and services outside electricity market, requirement for financial responsibility for imbalances, rules concerning organization of licensed activity, human resources and code of conduct for licensee's staff, disputes settlement on the licensed activity, transferability of the License.	GNERC	ECS		Assistance agreed with the ECS. Should be incorporated in a single document regulating Licensing and Certification issues
35	Electricity Market Monitoring rules includes (Requirements for protection, submission, disclosure and publishing of information by market participants)	Market monitoring Rules in accordance with REMIT	GNERC	EU4Energy		As a result of Twinning Project "Strengthening Capacities of the GNERC in Regulatory Cost Audit and Market Monitoring", Draft Rules on Electricity Market Monitoring were developed. No assistance required - GNERC will draft the Electricity Market Monitoring rules based on the abovementioned document and provide ECS with the draft for revision for September 2019
36	Rules on security of supply	Rules on security of electricity supply shall at least include detailed provisions on the Purpose and scope, Risk assessment, Risk-preparedness plan, Emergency situations, Ex-post evaluation of the crisis situations, Monitoring the security of electricity supply (according to the Article 149 of the draft Energy Law)	MoESD	EU4Energy		Drafted
37	Procedure on definition of Closed Distribution System (CDS)	Determination of closed distribution systems, electricity supply rules within closed distribution networks, third party access rules etc.	GNERC			Assistance required - GNERC will approach Energy Regulators Regional Association (ERRA) for support with drafting definition of CDS in the gas sector. If approved, this experience would be relevant for the electricity sector as well
38	Methodology of evaluation of investment plans for transmission and distribution networks	Self- explanatory	GNERC			Draft should be submitted until May, 2019
39	Rules on Uniform System of Accounts (USoA)	In order to ensure accessibility to accurate and objective data necessary for setting tariffs and monitoring energy markets, GNERC sets uniform accounting rules for all regulated undertakings.	GNERC	USAID Energy Program		Drafted, submitted to GNERC

#	Action	Description of Action	Institution(s) in Charge/Beneficiaries	Assistance donor support (actual/requested)	Deadlines	Comments
40	Methodology for Calculation and Setting of Fees for Services Provided by the Electricity MO	Fees for services provided by the electricity market operator shall reflect the justified costs incurred by the MO in providing its respective services to market participants under the terms and conditions to be stipulated in the Electricity Market Rules.	GNERC	USAID Energy Program		Drafted, submitted to GNERC
41	Adoption of Transparency Regulation	Adoption of transparency legislation and regulations that are compliant and aligned to EU and EC regulations and standards			2019	Drafted by GNERC partially, not adopted
	-	Unk	oundling of Networks			
42	Legal Unbundling	Unbundling of network owns, distribution companies and generation sources	TSO, DSOs		2018	Process has started by DSO (EPG)
43	Adopt the USoA for transmission and distribution network owners and operators (TSO and DSOs)	Transparent, fair and consistent accounting and regulatory reporting by the network owners and the corresponding operators will ensure that the basis for network tariffs are reasonable and that the network operators are funding investments in accordance with their approved network investment plans	GNERC	USAID Energy Program		Drafted and submitted to GNERC
		Development o	f Transmission System Op	erator		
44	Establish TSO	Model of the TSO unbundling has to be chosen in line with EU energy acquis	MoESD, GNERC, GSE		2019	Drafting after the adoption the LoEWS
			Market Operator			
45	Establishment of procedure for the designation of a Nominated Electricity Market Operator	Creating institutional foundations and setting operational responsibilities for the operation of the organised electricity day-ahead market	MoESD / GNERC		2019	Drafting after the adoption the LoEWS
46	Test-run of electricity DAM and DAM go-live	To offer trial runs for future participants and stakeholders of the new organised market as a way to better understand the processes of bidding, price-formation, and settlement. Put into operation the organised day-ahead electricity market of Georgia	Nominated Electricity Market Operator (NEMO)		2020	Drafting after the adoption the LoEWS
		Ba	llancing Mechanism			
47	Launch of the preparatory works for balancing mechanism deployment	Initiative to implement the first phase of a previously developed balancing concept, aiming at assuming full responsibility over the load-frequency control processes and all actions subsumed under balancing within the EC acquis (i.e. pursuant to the ENTSO-E Operation Handbook, or the Operation Guideline, respectively), covering: i) the Operation of reserves, ii) the introduction of load-frequency control and balancing energy activation processes, as well as, iii) the definition and procurement of balancing reserves	GNERC, MoESD, GSE, ESCO		2019	In progress
48	Balancing mechanism deployment	The implementation of the first phase of a previously developed balancing concept; GSE assumes full responsibility over the load-frequency control processes	GSE		2019	In progress

#	Action	Description of Action	Institution(s) in Charge/Beneficiaries	Assistance donor support (actual/requested)	Deadlines	Comments
49	Test-run of balancing market and go-live balancing market	Test-run that uses the same software and hardware as envisaged for the real operation of the balancing market in order to offer the stakeholders of the new balancing market an opportunity to better understand the processes. Establishing the underlying requirements of a non- discriminatory and fair electricity market while ensuring operational security and encompassing the go-live for the first market-based procurement of compatible standard balancing reserve and balancing energy products			2019	In progress
50	Balancing Mechanism Completion	The implementation of the second phase of a previously adopted balancing concept through the establishment of a non-discriminatory imbalance pricing and settlement scheme based on an hourly settlement timeframe and including the completion of the introduction of balance responsibility for all market participants as well as the financial settlement of imbalances			2020	
			Regional Market			
51	Joint coordinated allocation of cross-border capacity between GE-TR (Georgia- Turkey):	Introduce coordinated processes for the efficient and non- discriminatory capacity allocation between Georgia and Turkey	MoESD, NEMO	USAID Energy Program	2019	In progress
52	Sign new intergovernmental agreement between GE-AR (Georgia Armenia):	Formalise cross-border cooperation relations with Armenia	MoESD, NEMO	USAID Energy Program	2020	2 WG meetings were held

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