

GUIDELINES ON MARKET MONITORING

PREPARED FOR ERE'S MARKET MONITORING DEPARTMENT

FINAL DRAFT

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ACRONYMS

ACER Agency for the Cooperation of Energy Regulators

APX Albania Power Exchange
DAM day-ahead market
EC European Community

EC-LEDS Enhanced Capacity for Low Emissions Development Strategies
ERE Enti Rregullator i Energjise (Albanian Energy Regulatory Authority)

EU European Union

EUR euro (European currency) HHI Herfindahl-Hirschman Index

HPP Hydro Power Plant HV High Voltage

IPP Independent Power Producer IT information technology

KESH/h Korporata Elektroenergjitike Shqiptare (power generation company)

LV Low Voltage
MM market monitoring
MO market operator
MP market participant

MV megavolts

MVA megavolt amperes

MW megawatts MWh megawatt hours

OSHEE Operatori i Shpërndarjes së Energjisë Elektrike (Albanian distribution company)
OST Operatori i Sistemit te Transmetimit (Albanian Transmission System Operator)

PSL Albania's 2015 Power Sector Law

RES renewable energy sources

SAIDI System Average Interruption Duration Index
SAIFI System Average Interruption Frequency Index
SEE CAO Coordinated Auction Office in South East Europe

SO system operator

TSO transmission system operator

BACKGROUND

Under the 2015 Albanian Power Sector Law (PSL), Enti Rregullator i Energjise (ERE), the Albanian energy regulator, has a significant statutory role in overseeing the effectiveness of the emerging electricity market, in terms of both the objectives it must pursue in performing its regulatory functions and in performing specific duties.

Under Article 18(1) of the PSL, ERE's objectives, in performing its regulatory functions, include: promotion of a competitive domestic market for all customers and suppliers, commitment to the development and operation of a competitive regional market, and elimination of restrictions in electricity trade with member countries of the European Community (EC), and promotion of effective competition and consumer protection, ensuring that customers benefit through the efficient functioning of the national market.

Article 22 requires ERE to monitor the level of market opening and effectiveness of market competition at wholesale and retail levels, including on power exchanges, prices for customers, switching rates, disconnection rates, and any distortion or restriction of competition or related information, as well as bringing any relevant cases to the relevant competition authorities.

RTI International, Engility's subcontractor, consultants David Lockhart and Aleksander Golas visited Tirana during the week beginning Monday, November 13, 2017. One of the purposes of the trip was to further the ERE's understanding of its role in implementing market monitoring (MM) duties it has under the PSL and supporting functions.

Training in MM was provided to ERE's Market Monitoring Department, which encompassed a very interactive exchange of opinions. This final version of Market Monitoring Guidelines includes the conclusions from two days of meetings with the department during November 13–18, and is supported by a revised set of data templates (see Annexes 1–3) that may serve the purpose of data collection for MM.

These Guidelines on MM are designed to provide an outline of ERE's duties and guidance for performing them.

The annexes that are attached are suggested templates for ERE to use in collecting data and sample templates, and a draft proposal for ERE to develop an online data collection and retrieval system.

2. SUMMARY CONTENT

This report sets out, following discussion and agreement with ERE, a proposed approach to establishing a MM system as well as MM in respect to electricity sector utilities licensed by ERE.

This report forms part of the technical assistance to ERE being provided by RTI International under the USAID-funded Enhanced Capacity for Low Emission Development Strategies (EC-LEDS) program.

In detail, this report is organized into chapters and sections describing:

- 1. Consultants' understanding of the current situation ERE is facing with the electricity market in Albania:
- 2. Overview of the proposed approach to establishing MM functions by ERE and steps necessary to be undertaken in the process of developing MM functions;
- MM roles assigned to ERE by the relevant legislation in Albania—both by the PSL and Market Rules as well as regionally in the context of European Union (EU) accession requirements;
- 4. Principles that need to be adopted in MM;
- 5. Guidelines useful for implementing MM responsibilities, such as the means of identifying anticompetitive behaviors and identifying price distortions;
- Implementation aspects related to MM, including processes necessary to be implemented, regulatory requirements placed upon market participants, internal organization and structuring of the MM function within ERE and rules for enforcement of the requirements.
- 7. Annexes of sample templates and a draft proposal for ERE to develop an online data collection and retrieval system.

3. OVERVIEW OF ALBANIAN MARKET

In the early 1990s, Albania enjoyed considerable overhang of generation capacity over consumption. However, resulting from rapid development of the country coming out of its communist past and increasing consumption—particularly in the household sector—this overcapacity within a decade or so transformed into a deficit. Electricity imports, heavily subsidized by the government, began to be the norm. This deficit situation in general remains in place, and especially during hydrologically bad years becomes particularly acute, often endangering the stability of the national budget.

It is mainly due to these reasons that the electricity market in Albania has undergone numerous structural reforms in the last 10 or so years.

Firstly, in accordance with Albania's policy aimed at becoming a member of the European Union and its association with the Energy Community in South Eastern Europe, it unbundled its transmission and distribution companies from generation, recognizing that unbundling of "wires" from other activities is the first step in facilitating private investment in generation.

Secondly, in terms of generation business a policy aimed at attracting greater private investment, especially in renewable energy sources (RES) resulted in considerable additions in the small hydro power plant sector. A significant portion of that investment has been committed by members of Albanian diaspora and investors attracted by their successful activities.

Albania also privatized its distribution and CEZ, the private-sector Czech Republic distribution company, was for a short time owner of the distribution company Operatori i Shpërndarjes së Energjisë Elektrike (OSHEE). Lack of improvements and critical assessment of CEZ's activities, however, resulted in the Albanian government taking back ownership and control of OSHEE, and the period of private activities in distribution ended.

Currently, the sector remains unbundled, with tariffs of major operators being annually approved by ERE, with end-user tariffs remaining under strong regulatory control by ERE.

Due to the inability to attract more external private investment and gaining access to competitive generation sources through traditional approaches, the Government's policy now is to attract investment through establishing the power exchange and enabling a competitive market to be established in the sector.

The Albanian power exchange should allow for greater competition amongst producers and suppliers—especially if companies from outside Albania (from Kosovo as well as other countries in the EC zone) are also allowed to compete in an undisturbed manner. It should also ensure the indication of the true market price of electricity in Albania, which in turn should enable ERE to continue to develop tariff and other sector reform policies.

The establishment of open and transparent competitive electricity markets requires careful monitoring by the regulator in order to streamline regulatory policies properly and design them in a way that enables removal of barriers to efficient functioning of the free market.

4. OVERVIEW OF APPROACH TO MM

This section provides an overview of the MM responsibilities and functions that ERE will be required to undertake. Broadly, the key steps include the following:

- Identify specific ERE responsibilities from the PSL that are associated with oversight of functioning of the electricity market—wholesale and retail—and type of activities that ERE must undertake.
- 2. Find the information that would be needed by ERE for it to perform its functions for each of the activities. For example:
 - What information would ERE require to assess the effective functioning of the market—both wholesale and retail market sectors, as well as in the short term and long term?
 - How would ERE obtain this information (i.e., from existing regular reports, from new regulatory requirements, or from other types of market development observations)?
 - How can the process of data collection, analysis, and MM become more efficient and speedy (e.g., automate parts of the process)?
 - Will ERE oversight concentrate on the wholesale day-ahead market (DAM) and balancing market or on retail supply to household customers? While the DAM in emerging electricity markets never constitutes a considerable portion of the market in the beginning, oversight of potential market abuses by dominant players and thus overpricing of final customers may become the primary concern.
- 3. Structure MM and collected information analysis so as to enable ERE to answer important electricity market policy questions, such as:
 - Is sector security maintained? (In particular, is the collateral policy sufficient to maintain security or is it hampering market development by creating unnecessary barriers?)
 - Is the definition of products in the DAM sufficient to address the needs of customers in Albania and the region? (Will the definition allow Albania to pursue its market coupling policies to the full extent)?
 - Is introduction of an intra-day market and financial markets for electricity-based products necessary?
 - Is the number of suppliers in the market sufficient? (Are suppliers entering into arrangements or affiliations aimed at or resulting in market concentration and limiting competition to the detriment of end users?)

- 4. Establish reporting requirements. Once information needs and means of collection are identified, determine what entities would need to submit data, when and to whom? How transparent should it be? Who should have access to data? How would the data be used? How the creation of an online database common for all respective departments within ERE (licensing, tariffs, and MM) could positively influence ERE's performance of its duties?
- 5. Discover analytical tools and processes that would be used to process the data. For example, to make judgments on the effectiveness of the market, there are analytical tools available, both for the wholesale markets and retail markets, that could be used, both from USA and Europe, such as the Herfindahl-Hirschman Index (HHI) or k-firm coefficients.
- 6. Develop a systematic plan for conducting the analysis and performing ERE's responsibilities under the PSL.
- 7. Determine staff resources and skill sets needed. At a minimum, two staff should be trained in MM to begin with. They would need to establish the systems necessary to perform ERE's MM functions.
- 8. Secure the necessary resources and implement the plan that has been developed.

RTI's consultants assisted ERE in undertaking its MM responsibilities in the following manner:

- Presented, and explained where necessary, to the MM Department of ERE the contents of these proposed MM Guidelines.
 - Included going through the steps previously described in this section, as well as other sections of this report
- Provided training to ERE's MM staff concerning these matters.
- Assisted with drafting and amending additional information-seeking forms subsequent to these discussions.

5. ERE'S ROLE IN MARKET MONITORING AND SURVEILLANCE

This chapter discusses the statutory basis under which ERE performs MM functions. There are several sources of law under which ERE is mandated to perform this role. In addition to the PSL and the Market Rules themselves, EU Regulation No. 1227/2011 ¹of the European Parliament and of the Council of 25 October 2011 on Wholesale Energy Market Integrity and Transparency, although not yet directly applicable to Albania, address market integrity issues and recommend a legislative framework that prevents market abuse.

5.1 ERE DUTIES UNDER THE POWER SECTOR LAW

The general objective of having a MM system in place, and of having electricity licensees reporting to ERE, is to enable ERE to fulfill its duties as set out in the PSL. The provisions of the PSL outlined in Table 5-1 relate directly to ERE's mandate and functions it is required to perform in this area.

Table 5-1. Provisions of the PSL directly related to ERE's mandate and functions

PSL article	Area	ERE market-oversight-related functions/responsibilities
18(1)(f)	Role of ERE	Ensure that customers benefit through the efficient functioning of the national market, promote effective competition and consumer protection
19	Duties of ERE	 Take measures/avoid cross-subventions between transmission, distribution, and supply activities as well as between categories of the clients; Cooperate with Competition Authority and market surveillance body on the review of the anti-competition conduct or any other activity of the market participants
22	Monitoring by ERE	 Implementation of power sector market rules; Compliance of licensees with transparency obligations; The of level market opening and effectiveness of market competition at wholesale and retail levels, including on the power exchange; Prices for customers including prepayment systems, switching rates, disconnection rates, charges for maintenance services; Complaints by customers; Distortion or restriction of competition or related information; Bringing any relevant cases to the relevant competition authorities; Signing of restrictive contracts, including contracts with specific exclusive conditions, which may impede non-household large customers to endorse contracts with more than one supplier simultaneously or restrict their choice to do so;

¹ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32011R1227

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PSL		
article	Area	ERE market-oversight-related functions/responsibilities
		 Implementation of rules relating to the roles and responsibilities of transmission system operator, distribution system operator, suppliers and customers and other market participants; Cooperation of transmission system operator with neighboring transmission system operators or European electricity transmission grids; Implementation of the rules on the management and allocation of interconnection capacity; Limited capacity management in transmission grid including interconnectors, and the implementation of limited capacities management; Publication of appropriate information by the transmission system operator concerning interconnectors, grid usage and capacity allocation to interested parties.
24	Dispute Resolution	Act as a dispute settlement authority regarding the complaints submitted by the customers towards the licensees and disputes between licensees.
53	Transmission System Operator (TSO)	Issue license of TSO.
57	Market Operator (MO)	Approve license of MO.
106	Administrative Investigations	Commence administrative investigations on evidenced violations.
107	Administrative Offences	Impose administrative fines on licensees.

5.2 ERE DUTIES UNDER THE MARKET RULES

Apart from the PSL there are a number of secondary rules and regulations which directly or indirectly deal with ERE's MM role, such as:

- Rules on Transparency in the power sector, setting out the detailed rules concerning information requirements for TSO, distribution system operator, generators, and consumers.
- Market Rules, which in Chapter II, provide, among other provisions, that ERE:
 - Has responsibility to define the rights and obligations of market participants, and of providing regulatory oversight of the Albania electricity market (item 1.1);
 - Continuously monitors the electricity market to ensure its nondiscriminatory and efficient functioning and protect effective competition among its participants (item 1.3);
 - Should, in its role, include control of monopoly business pricing, market abuse policing, approval of rules, and facilitate competition (item 1.6).

ERE's main purpose for reviewing financial information of licensees is to ensure that licensees have adequate financial resources to conduct their licensed activities and that they manage these financial resources prudently in order to assure safe, affordable, reliable and high-quality services which will meet the current and future needs of their consumers.

At the same time, ERE should make sure that monopolistic behaviors that might result in financial burdens on customers do not take place, or, if they occur, are terminated. Of special concern are policies and behaviors of the network companies, as these are often the key for enabling efficient competition. Extraneous or elevated requirements put forward by network operators, overly

lengthy decision-making periods related to connection consents or approvals, and high costs of network connection and/or access and use are factors that hamper competition. Discussions with ERE indicate that it realizes the resource constraints that it faces.

More specifically, ERE's MM efforts should require licensees to demonstrate that:

- Utilities have the financial ability to carry out their licensed activity (including meeting any contractual obligations they may face) and, where appropriate, to meet investment commitments.
- At the same time, MM should focus on analyzing whether market power abuse does not take place and whether access to extra-profitable sections of the market is not blocked by the incumbent operators and market participants.
- Assessment of functioning of the wholesale DAM and balancing market (by hours of the day and/or locations) is also necessary.
- Monitoring the number of suppliers in the market and their affiliations to assess supplier concentration.

Depending on the type of licensed activity, MM with regard to operational data should be designed to help ERE ensure that each licensee is functioning in the most effective and efficient manner possible. Specifically, operational reporting parameters should include criteria such as:

- System availability (that is, of the network or transportation systems)
- Speed and ease of connecting to networks
- Fair and reasonable contract terms
- Customer switching ratio—to assess whether customers are able to switch suppliers easily and to identify reasons that might hinder switching
- System reliability as measured by number of faults, shutdowns, and disconnections, especially those disabling generators from delivering their energy to customers
- Customer service management including standards such as number of complaints received and time taken to deal with complaints
- Monitoring of network losses and revenue collection efficiency securing the undisturbed revenue waterfall throughout the sector
- Quality of energy or retail supply to household customers
- Safety issues

5.3 COMPLIANCE WITH EU LEGISLATION

Albania is currently in the process of implementing the EU energy acquis communautaire in the electricity sector. The European Commission establishes the relevant legislation and the Agency for the Cooperation of Energy Regulators (ACER) implements the rules enabling efficient functioning of electricity markets—particularly by creating rules for removing barriers distorting cross-border competition.

Of most relevance to ERE as it implements its MM functions is Regulation 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency, which among other things sets out the requirements for establishing MM as well as the obligation to cooperate with other competition authorities and regulators—both internally and externally including with ACER—when pursuing market oversight. ACER in turn produces annual MM reports, which will be useful in terms of establishing the general template for ERE's future MM.

There are also other EU Directives and/or Regulations, such as Commission Regulation No 543/2013 of 14 June 2013 on submission and publication of data in electricity markets and amending Annex I to Regulation (EC) No 714/2009 of the European Parliament and of the Council. This Regulation lays down the minimum common set of data relating to generation, transportation, and consumption of electricity to be made available to market participants. It also provides for a central collection and publication of the data by the European Network of Transmission System Operators for Electricity. Among other requirements, it sets out the obligation to regularly collect and publish the information on:

- Generation assets
- Load of various network elements and transmission infrastructure, including cross border infrastructure
- Unavailability of larger network assets, particularly on consumption side
- Margin forecasts in annual perspectives
- Congestion management
- Balancing market

6. PRINCIPLES OF MARKET MONITORING IN ALBANIA

This section covers what does ERE have to do; tools needed by ERE:

- Based on information provision by market participants (MPs) and review of contracts?
- Observance of behavior?
- Other? Market power is the usual measure but not mentioned in PSL?
- What analysis is required by ERE—of MP behaviors?

Regulators' concerns about the capacity of electricity companies to efficiently and effectively deliver their services derives from the importance that their services hold in terms of sustaining and developing overall economic activity. This section concentrates on some of the important principles that ERE should adopt in MM in Albania.

6.1 MINIMIZING EFFECTS OF A MONOPOLIZED SECTOR STRUCTURE

The electricity market in Albania is currently monopolized virtually in all aspects.

- There is just one distribution company. Whereas it may be justified to have a single distribution company in a small market (and territory) such as Albania, the existence of only one company in Albania could make it hard for ERE to find potential benchmarks to use for comparison.
- Electricity generation is heavily dominated by Korporata Elektroenergjitike Shqiptare (KESh), which in addition to its monopoly comprises predominantly hydro-based generation sources only. This generation portfolio further narrows the choice of options for potential competition and is heavily conditioned by seasonal weather conditions. In addition, most of the non-KESh generation potential in Albania (mainly RES) is already committed via long-term bilateral contracts, leaving only a limited scope of generation potentially available for a free market.
- Interconnections with neighboring systems are scarce, but the situation is gradually improving in this regard.

It is for these reasons that when pursuing MM functions, ERE should especially concentrate on ensuring that the national market is efficiently functioning, and that effective competition and consumer protection are established (as per Articles 18(1)(f) and 22 of the PSL). This requirement especially applies to minimizing impacts from the current largely monopolistic generation sector

as well as enabling to the extent possible emergence of generators independent of KESh (including those available through interconnectors).

6.2 GRADUAL ELIMINATION OF SUBSIDIES

The other area where MM functions should especially focus on is the elimination of cross subsidies between various market participants (as required by Article 19 of the PSL). This aspect is important in relation to the current heavily subsidized household sector (consumption of which is ever expanding, thus the pressure from the cost of cross subsidies is likely to grow further unless the policy is changed). Elimination of indirect cross subsidies and similar market distortions also constitute primary policies of the EU and EC.

6.3 CHOOSING THE PROPER ANALYTICAL TOOLS FOR ERE

ERE needs to identify the type of activities it would have to undertake first from the wide scope envisioned in the PSL. Such activities fall into several categories, for example:

- One type of activity would be approvals of various rules and plans, such as those proposed by the MO and SO. In particular network expansion plans (i.e., those eliminating network bottlenecks on the generation to consumption path) and interconnection plans should be examined. The grid access rules would have to be assessed to ensure nondiscriminatory treatment of market players and how they promote or impinge on the effectiveness of the market.
- A second type of activity would be to monitor the market, extent of competition, performance of operators, etc. ERE may also decide to assess whether market prices are reasonable (e.g., by observing the profitability of various market participants and/or comparing with suitable benchmarks.
- Another indicator to look at is supply switching rates allowing for assessment as to the extent end customers are able to change suppliers and whether the market environment is favorable to end customers that seek alternative suppliers.
- Observance in general of the behavior of market participants—based on daily statements following the close of the DAM and balancing market.

There are other responsibilities, but this type of delineation would be a good start.

Usually, apart from the primary law, regulators also obtain their MM authority through the licenses issued to utilities. This extent of authority would have to be analyzed in future within ERE, based on the content of licenses that have been issued. Normally, licenses place certain obligations upon their holders to behave in an appropriate manner as well as requiring them to present information to the regulator so that it can monitor functioning of the market as well as licensees' activity in general (for instance, for the purpose of general performance monitoring).

It is mainly (but not only) through reviewing the information presented by a licensee that ERE is able to establish whether it has breached any of the license conditions or is behaving in a manner that may be negatively impacting the market and the interests of customers (be them private or public persons or other industry participants).

6.4 USING ALL AVAILABLE INFORMATION SOURCES FOR MARKET MONITORING

Regulators usually use different sources of information while performing their MM duties. ERE will encounter the following streams of information:

- Data presented in periodic returns required from licensees (especially networks) as well as their other reports
- Complaint investigations (from both customers and other licensees)
- On-site visits
- Public mass media (radio, TV, newspapers, and internet publications)
- Customer switching ratios
- Observation of open competitive market developments—together with growing trades on the Albania Power Exchange (APX)—in order to observe whether monopolization is occurring

In the following paragraphs ERE's approach to handling information deriving from the preceding sources is discussed.

6.4.1 REGULAR REPORTS

ERE will need to take into account the potential costs that MM and information collection requirements may impose on the licensees and their capacity to deliver against these requirements as well as the capacity available at ERE to analyze information gathered. It is presumed that existing operators should be able to follow the proposed MM requirements.

Setting overly complex requirements, which licensees are unable to meet or ERE is unable to process in the short-term, would create a risk of establishing a culture of false reporting.

6.4.2 COMPLAINTS, ON-SITE VISITS, AND MASS MEDIA

Complaint investigation in principle will be initiated by members of the general public (end customers) aggrieved by utilities' misdoings. ERE may decide to establish ad-hoc or permanent complaint investigation teams that will specialize in processing complaints received from the public or discovered through monitoring mass-media sources.

ERE may decide to perform an on-site visit to investigate the matter when the situation requires it (e.g., information gathered during the normal investigation process is insufficient). ERE may also wish to establish a set of specific rules according to which regular or ad-hoc visits will be performed throughout the year, in which case the team responsible for efficiently managing the visits will need to be appointed.

6.4.3 CUSTOMER SWITCHING RATIO

Competitive markets are established with the sole purpose of satisfying customer's needs at the most efficient cost and under the best conditions available. In perfectly competitive markets, customers should be able to freely choose their supplier of a good or service. As a result,

producers or suppliers make every possible effort to retain current customers—and the revenue they provide.

In imperfectly competitive or distorted markets, it may be difficult—if not impossible—for a customer to switch to another supplier of a good or a service. For this reason, one of the important areas for MM by ERE should be the customer switching rate. At the introduction of a competitive market, switching should be common, at least in the case of larger customers in the industrial (e.g., manufacturing and distribution), service (e.g., hotels and restaurants), and public (e.g., hospitals and municipalities) sectors. Observing the switching rate should indicate the first signs of distorted competition and ERE should seek to introduce the appropriate measures aimed at removal of these distortions.

6.4.4 REGULAR MONITORING OF THE OPEN COMPETITIVE MARKET

In advanced markets where open competitive power exchanges exist, regulators also perform monitoring of these markets. This usually takes the form of observing price, quantity, and market concentration developments in the DAM, intraday market, and balancing market.

In the context of Albania, it may be predicted that for some foreseeable period of time, the share of these markets in the overall quantities of traded electricity will remain insignificant. Nevertheless, observation of these markets is likely to be necessary as it allows for identification of first signs of problems emerging in the functioning of the markets. For instance, stubbornly low trades in a particular market segment may lead to the conclusion that some impediments in accessing the market exist. Also, domination of trades by a single operator (or a limited group of operators) may indicate mounting potential for market monopolization already at the early stages of market functioning.

The consultants have reviewed the existing regular reporting templates currently used by ERE as well as provided very detailed commentary concerning their applicability to the market monitoring role of ERE, and have proposed how these may be upgraded. Detailed comments on the data forms currently used by ERE are in Annexes 1 and 2, while the proposed additional forms upgrading the current data collection are contained in Annex 3.

6.5 INFORMATION LIMITATIONS

Regulators will always suffer from the problem of information asymmetry—regulated companies possess far more information and knowledge concerning their business than the regulator ever will. As a result, ERE will always be reliant upon information being provided to it by licensees and other parties when making its decisions.

Because of this, so long as ERE makes *best efforts* (or *best endeavors*) to carry out its duties (like appropriate ongoing data collection and monitoring), it should not be blamed if this monitoring activity ultimately fails to detect impropriety.

Similarly, ERE is also reliant upon others—authorities, ministries, statistical offices, financial auditors, or even news reporters—carrying out their duties effectively and prudently. Unless inconsistencies are clearly visible, it is not ERE's responsibility to check the integrity of the information it receives. ERE's task is instead focused on collecting and analyzing available data and, where anomalies are found, to investigate and act in an appropriate manner.

6.6 REGIONAL ASPECT

In Albania's electricity sector, the quality of services rendered by electricity companies at an affordable price is of special importance, and is thus regulated by ERE. Efficient operation of the Albanian electricity market, which is planned to become a regional market for Albania, Kosovo, or an even wider area, ensures strongly competitive Albanian market participants are likely to be successful regionally as well.

6.7 CAREFUL PLANNING OF CAPACITIES

A thorough review of the general requirements of the PSL, indicates that ERE will need to:

- Develop a systematic plan for carrying out ERE responsibilities under the PSL (for instance, establish the scope of information requirements; plan for regular MM through reports, media, etc.; and establish plans for regular on-site and ad-hoc visits).
- Identify staff resources and skill sets needed. At a minimum, two staff members should be
 trained in this area to begin with. They would need to establish the systems necessary to
 help monitor the market. To the extent necessary, ERE may decide to automate the
 system so that a consistent database for MM purposes is established, which may also
 encompass a link to the APX system.
- Secure resources and implement the plan, and regularly monitor and report upon the plan's implementation.

7. MARKET MONITORING GUIDELINES

MM requires a thorough evaluation of market participants' behavior (both current and predictable). Special effort must be devoted to looking at those participants that appear to be enjoying dominant market power.

Following identification of negative or anticompetitive behaviors, ERE should undertake the measures necessary to eliminate such behaviors—starting with development of regulatory notices, guidelines, and orders authorized under the appropriate legislative solutions and ultimately to issuing penalties.

The consultants have reviewed the existing regular reporting templates currently used by ERE as well as provided very detailed commentary concerning their applicability to the market monitoring role of ERE as well as proposed how these may be upgraded. Detailed comments upon data forms currently used by ERE are to be found in Annexes 1 and 2, while the proposed additional forms upgrading the current data collection are contained in Annex 3.

In all cases—even if no immediate anticompetitive behaviors are identified in the process of monitoring—the regulator should ensure emergence of ever-increasing efficiencies in the electricity market as well as increasing competition, since this is the best way of achieving the best monetary value for end customers.

In this chapter, RTI consultants indicate particular aspects where concentration of MM by ERE will be necessary in the context of development of the electricity market in Albania.

7.1 MARKET MONITORING FOR ANTICOMPETITIVE BEHAVIORS

There are two important areas for a regulator to concentrate on in terms of identifying the emergence of potentially anticompetitive behaviors. These are observance of behavior of natural monopolies (especially network operators) as well as abuse of naturally obtained dominant market positions in initially competitive markets.

To the extent that negative market impacts by certain market participants are identified, the regulator should implement all measures at its disposal preventing them from further engaging in such anticompetitive activities.

7.1.1 MARKET MONITORING OF NETWORK COMPANIES

Discrimination by network companies may influence competition in numerous ways but the most harmful one is where, due to actions (or inactions) of a particular network company or operator, certain generation sources which may compete in the market are excluded from doing so.

Frequent occurrence of network bottlenecks and must-runs are typical examples of improper behavior by network operators.

Network companies may have a number of reasons for discriminating against certain generation sources. For instance, to the extent they belong to some vertically integrated market structure, they are likely to discriminate against potential competitors in favor of generators that belong to their "friendly" group. Admittedly, within the framework of EU/EC markets where at least nominal unbundling of networks from generation took place some time ago, this becomes less a valid concern. Nevertheless, with recent technological changes (especially in distributed RES sources supporting local network operations, battery based systems, etc.), the situation where network operators will re-engage in some forms of generation or parageneration activities will become more and more frequent; therefore, regulatory oversight should still encompass looking at this aspect.

Another reason for abusing natural monopolistic power of a network company may derive from its engagement in long-term power-purchase or off-take agreements. It is understood that this is the case in Albania now, where RES generators have power purchase agreements with the network operator.

Finally, network companies have the tendency to avoid network expansions and investment in areas that it recognizes as difficult (i.e., costly). This may be due to right-of-way issues, insufficient funds for investment, etc.

7.1.2 MARKET MONITORING OF CONCENTRATION

Monopolized electricity markets usually result in increased cost to the end customer. Regulators (both those of general competition as well as regulators of economic infrastructure) need to monitor market concentration and undertake actions preventing abuse of market power by the dominant companies.

One of the most popular indices measuring MM concentration is the HHI.

The first step in an analysis of HHI encompasses observation of market shares of all market participants in a particular market such as an electricity DAM. Following this step, a calculation is made of the sum of square roots of these shares—which will result in an amount between zero and ten thousand.

The closer HHI is to zero, the more competitive the market is. HHI close to ten thousand indicates a monopoly. Various regulators adopt different levels of HHI, necessitating introduction of some antimonopolistic measures, but in general, an HHI higher than the 1600 to 1800 range is considered indicative of a distorted competition situation.

In order to derive information necessary for calculation of HHI, ERE may use one of two sources:

- Information on revenues of particular companies from electricity generation, sales, or supply (then, based on cumulated revenues of all companies, calculate shares of individual companies in the overall national total);
- Information from the APX—as soon as it starts trading activity and starts collecting information concerning extent of trades.

7.2 ELECTRICITY PRICE VALIDATION

The other aspect of regulatory concern—particularly in environments where open competitive electricity markets are just emerging, as is the case in Albania—is price monitoring. This encompasses looking at whether prices paid by end customers are not outstandingly higher than prices normally paid by comparable customers in comparable regulatory environments. Of course, benchmarking is never perfect due to the fact that it is especially difficult to find two environments with exactly the same type of fuel, generation, and consumption portfolios; the same terrain conditions; the same economic environments and same investment challenges, etc.

Outstandingly high prices maintained over prolonged periods that result in unreasonably high profits for certain market participants may indicate that those participants are abusing their market power.

Despite its numerous weaknesses, price benchmarking is common, and the EC and ACER regularly publish *Quarterly Reports on Electricity Markets within the Union*², which allows for some comparisons.

Also, much broader annual internal MM reports, not only concentrating on prices, are produced. The *Annual Report on the Results of Monitoring the Internal Electricity and Gas Markets in 2016* was recently published. It is noted that in the future, as Albania gets closer to admission into the EU, ERE will have to implement MM systems in compliance with EU standards.

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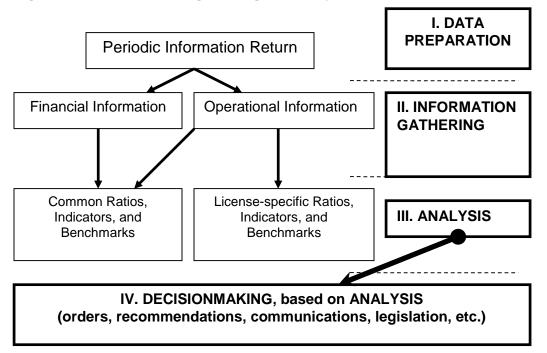
² https://www.acer.europa.eu/Events/ACER-CEER-Market-Monitoring-Report-Launch-Event-2017/default.aspx

8. IMPLEMENTATION PROCEDURES

8.1 PROCESS

The process of MM, information gathering, analyzing and making rulings on the basis of available information is complex and may be time consuming, depending on the scope of information processed. The short overview of the information gathering and analysis process for the purpose of MM is presented in Figure 8-1.

Figure 8-1. Information gathering and analysis for MM



There will be two important actors involved in MM activities, including:

- Electricity market participants (especially those licensed by ERE);
- ERE's personnel.

While marker participants will be mainly responsible for passive submission of information and implementing the regulatory guidance and orders, ERE will use the information, reports, externally obtained information, and its own analyses to support its decision-making processes for structuring the appropriate secondary legislation; issuing orders, penalties, etc.; and for otherwise facilitating competition.

8.2 RULES APPLICABLE TO MARKET PARTICIPANTS

In Phase I companies prepare data necessary for the purpose of filling in the periodic information return and then submit it to ERE. Until deadlines manifested by ERE are met,³ this data development stage will be largely beyond the area of its interest, as it will be an internal matter for the electricity companies. Where any failure to comply or obstruction of the process occurs, ERE may use its powers according to appropriate license penalty provisions and/or applicable provisions of the legislation in force.

From the perspective of setting up MM systems, it will be necessary for the companies concerned to possess appropriately skilled personnel capable of submitting information to ERE, including by way of data forms ERE may develop.

8.3 ERE'S ORGANIZATION OF MARKET MONITORING INFORMATION AND ITS ASSESSMENT

Phase II encompasses ERE's gathering of the organizational, financial, and operational information, followed by Phase III when general and license-specific information are analyzed.

Before the information gathering and analysis process can begin, ERE needs to commence the necessary organizational and human capacities necessary for data processing and analysis. These should encompass several analysts managed by the unit head.

As far as ERE's personnel are concerned, in the context of MM and related to it information collection and processing, the needs of the following members of personnel are noted:

- Director or head, responsible for day-to-day management and oversight of the MM function
- Department staff performing day-to-day information gathering and analysis

In general terms, the department's staff will be at the frontline of the MM information collection and will be directly responsible for producing reports based on the analysis, meeting requirements of any other levels of management within ERE, and ultimately making recommendations.

8.4 ERE'S ENFORCEMENT OF RULES AND PENALTIES

When ERE's findings and analysis suggest an action would be appropriate and ERE decides to take action, Phase IV should follow, including issuance of orders or recommendations to companies built on this analysis. In extreme cases, it may also be necessary for ERE to impose penalties on any market participant that is found to be in violation of regulations, in accordance with provisions of Article 107 of the PSL.

ERE needs to find a balance allowing it to retain appropriate efficiency of the monitoring process. The more frequently information will be received, the more up to date ERE will be on recent developments in the sector. This will be obviously achieved at the expense of greater effort to gather and analyze the information received though. This effort takes the form of additional human (and other) resources necessary to be employed in the process. It also necessitates additional effort by the licensees, which may ultimately result in unnecessary additional costs placed on them (and subsequently, also in higher end-user prices). On the other hand, potentially impacting ERE's ability to process information (too-frequently received, or too much information) creates a risk of non-compliance. For these reasons it is proposed that ERE's MM be based on quarterly or bi-quarterly reports submitted by licensees.

9. CONTENT OF INFORMATION REQUIREMENT FOR MARKET MONITORING

In this section, the Guidelines processes and indices found to be useful in terms of Albania's electricity market current development, its characteristics and future endeavors (such as the long-term goal of entering the EU, market coupling with Kosovo, and in the future, with the wider Balkan and then EU electricity markets) will be taken into account.

We have also reviewed the existing regular reporting templates currently used by ERE as well as provided very detailed commentary concerning their applicability to the market monitoring role of ERE as well as proposed how these may be upgraded. Detailed comments upon data forms currently used by ERE are to be found in Annexes 1 and 2, while the proposed additional forms upgrading the current data collection are contained in Annex 3.

9.1 FORMS FOR INFORMATION GATHERING

This section contains an explanation of the set of draft forms reflecting the proposed system of MM of the electricity sector for ERE. These forms are structured into two broad categories:

- Set of forms enabling ERE to obtain general data on licensees (for consistency, wherever possible, standards adopted in data forms presently used by ERE and/or ACER have been followed) and include:
 - General contact data and contacts for persons regularly dealing with reporting

The purpose of this is to provide ERE with detailed addresses to which it will be sending correspondence.

Proposed reporting form "Contact" addresses this matter (see Annex 3).

Composition of management and boards

In the short term, this is to identify persons responsible for undertaking important decisions within the licensee. In the long term, ERE may wish to track relationships (also unofficial) between various operators under its scrutiny, to more easily identify potential misbehaviors (such as abuse of dominant power through a number of linked companies).

Proposed reporting form "Board and Management Composition" addresses this matter.

Information on ownership—bonds, notes, credits, loans, and other financial obligations as well as other interests held by each particular licensee in other entities (including companies and/or utilities) and interests held in licensees by the "controlling shareholders" and lenders/bond holders. The argument for having this set of information is similar to the one set out above with regard to management and board composition (i.e., to track relations between various operators under ERE's scrutiny, to more easily identify potential misbehaviors (such as abuse of dominant power through a number of linked companies).

Proposed reporting form "Ownership" addresses this matter (see Annex 3).

- Set of license-specific forms enabling ERE to obtain data concerning each of the particular licensed activities performed. This reflects the structure of the licensing regime and encompasses separate forms for:
 - Generation
 - Transmission
 - Transmission System Operation
 - Electricity Distribution
 - Trade and Supply (sales)

With regard to these distinct licensed activities, MM reflects technical characteristics of each activity as well as takes into account the potential impacts possibly distorting the market's functioning.

9.2 FINANCIAL INFORMATION

The most basic stream of finance-related information that ERE will receive in returns, concerns the ownership structure and general scope of potential dependencies and relationships.

In order to oversee competition and market functioning, ERE should monitor the shareholding structure present within the electricity sector to detect the potential market power abuses, or a build-up of structures which are likely to negatively influence competition in the market in the future. Apart from potential personal relationships, also financial ones (such as those through bonds, notes, credits, and loans) are necessary to be tracked in the process of MM, as they may also have an effect on the way a licensed business by particular operators is conducted.

In terms of shareholding, there are two important sets of data concerning:

- · Persons holding the licensee's shares; and
- Shares held by the energy licensee in other companies.

Through observing these, ERE may monitor the structure and the areas of interest of the main players in the electricity market. The most immediate area of concern for ERE is monitoring the concentration of capital.

Monitoring the concentration of capital will help ERE in forecasting further developments in the electricity market and/or undertake appropriate steps to avoid high levels of concentration and monopolistic behaviors. This may necessitate coordination of efforts with the Competition

Authority of Albania. Information concerning relations with linked companies is necessary to assess whether market-abusive practices (such as impermissible pricing or network congestion practices) do not take place.

It may seem that in the Albanian context, because Albania's is still a fledgling electricity market, the importance of market concentration monitoring (at least at a national level) should not have high priority in the near term. Nevertheless, the process of monitoring is necessary to ensure ERE's early detection of excessive market concentration, should it start emerging. Only in this way will ERE be able to intervene properly in a timely manner.

10. AUTOMATION OF MARKET MONITORING

10.1 CURRENT PROCESSES

ERE currently has a well-developed system for collection of information concerning various areas applicable to its MM functions in the energy sector. This said, however, the system is largely manual (although some data forms are in Excel) and thus labor intensive. In addition, most of the information is collected monthly, which introduces additional workloads on ERE's staff.

10.2 ORGANIZATION OF THE AUTOMATED SYSTEM FOR MARKET MONITORING PURPOSES

As stated, the existing system is overly laborious and introduces unnecessary workload on ERE's staff and resources, which are both very limited. In addition, the current system is prone to errors of various kinds—from manual data submission (including irregular data submission by licensees that is not always detected at the time the information is processed) and re-entering the data from forms into Excel.

For these reasons, ERE wants to have the system of data collection and processing for MM (as well as for other regulatory functions) automated by way of a centralized database populated with information submitted via a web application directly accessible by market participants. Such a system would be based on information input and reports delivered by various market participants directly into the centralized database where any data gaps or obvious errors would be quickly detected.

There are two important elements of such a system, comprising:

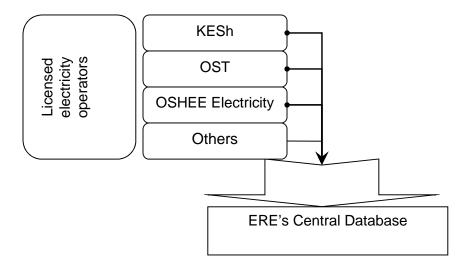
- Information collection and
- Information processing and reporting

ERE's proposed approach to both of these elements is discussed in the following sections.

10.2.1 PROCESS OF INFORMATION COLLECTION

Figure 10-1 summarizes proposed system operation for the information gathering process.

Figure 10-1. Operation of information gathering for MM



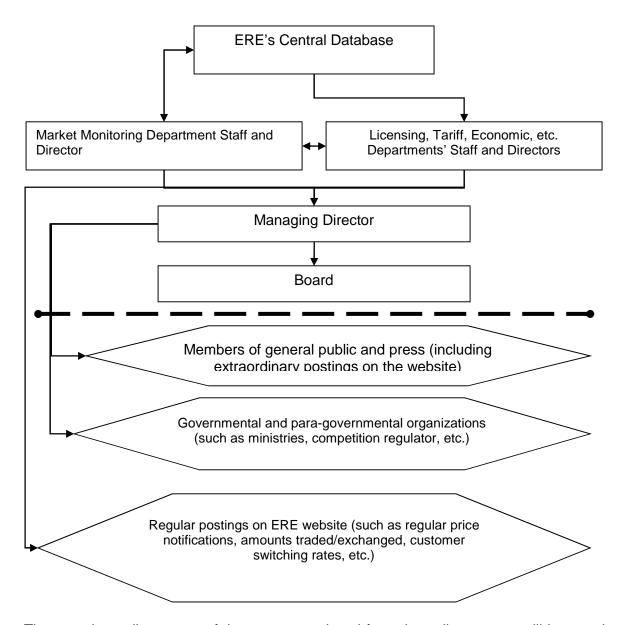
Process-specific training on information submission for MM would need to be organized by ERE for market participants having data submission duties, followed by appropriate orders requiring the submission of information could be issued by ERE. These orders (although not strictly necessary) would be in line with the relevant provisions of the PSL and licenses, authorizing ERE's reporting requirements for licensees.

It is important to note that some of the information received by ERE (such as that relating to generation or network capacities, number of transformer stations, etc.) will be relatively "static," whereas other information (such as on volumes of electricity transmitted, sold, and lost; number of meters; or customer switching numbers) will change (sometimes significantly) depending on the reporting period.

10.2.2 HOW TO PROCESS INFORMATION GATHERED

Figure 10-2 summarizes the proposed system for information processing, analysis, and reporting.

Figure 10-2. Proposed system for information processing, analysis, and reporting



The most immediate users of the reports produced from the online system will be members of ERE's staff.

A designated person responsible for the data base would perform the initial analysis and check whether information is consistent and correct (detection of "major" data flaws).

The head of the MM department would be the prime user of detailed, regular reports derived from the system. These would support their day-to-day operational decision-making process. The department head will also be responsible for directing and overseeing the creation of general and regular or one-off (depending on the actual need) reports and analyses for more senior management within ERE.

10.2.3 ACCESS RESTRICTIONS

The system should be equipped with a set of appropriate access restrictions for the purposes of:

- Maintaining the consistency of data and responsibility for inputting or correcting data and
- Maintaining security of commercially or otherwise sensitive information.

Only licensed entities and a limited number ERE's personnel should be able to access the system to enter or modify data. Specific permissions should be required to modify data after it has been entered into the system.

As far as report production is concerned, access should be wider—with the exception of licensees who should not be allowed to access certain reports.

ERE should consider whether it wishes to provide direct access to system reports to the Ministry of Infrastructure and Energy and other government bodies or stakeholders.

10.2.4 IMPLEMENTATION

The introduction of a new reporting system will likely be both a time- and effort-consuming process, especially at the implementation stage. Normally it takes approximately one to two years to set up such a system, complete testing, make necessary corrections, and to then gather information that provides a reasonable database relating to licensees. For this reason, while preparing the job description for an information technology (IT) specialist, ERE should request additional IT support for tackling these implementation challenges.

Annex 4 provides a draft proposal for ERE to establish and acquire a data collection and retrieval online system, following discussions with Bledar Qira and his team. The proposal also describes the important elements that lie behind the need for an online data collection and retrieval system, which are:

- 1. The vital importance of ensuring transparency throughout the sector.
- 2. The need to facilitate ERE's performance of its market monitoring and other roles.
- 3. The need to require relevant entities to assume responsibility for performing their own data-related duties.
- 4. The benefits for ERE in enabling it to better perform its role in providing data to other agencies.

ERE plans to request assistance from USAID in designing and procuring the online data collection and retrieval system.

ANNEX 1. CURRENT ALBANIAN ENERGY DATA ANALYSIS—ANNOTATED

Table A1-1. Albanian transmission system operator (TSO) data Jan to Aug, 2017 (MWh)

		Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2017	
	Delivered by KESH-														
	Gen to transmission														
	grid	477,789	292,067	297,922	363,385	199,863	399,077	151,754	96,942					2,278,799	
	Delivered by priority Hydro Power Plants (HPPs) to														
	transmission grid	19,301	47,302	66,771	58,359	51,523	25,641	7,627	3,057					279,581	
'ED	Delivered by small/local HPPs to transmission grid	1,669	12,152	26,699	18,594	15,370	5,802	368	ω					80,661	49
	Generation KURUM	1,000	,,,,,,,		,	,	-,								5,4
RECEIVED	Independent Power Producer (IPP)	21,378	28,017	43,116	38,597	25,991	18,026	12,908	11,367					199,399	5,085,449
	HPP of ASHTA (IPP	,	,	,	•	·	,	,	Í					,	
	agreement with														
	OSHEE)	24,792	20,138	18,974	21,156	12,011	19,584	7,406	3,572					127,633	
	HPP BANJE (IPP)	20,359	6,332	16,690	8,096	9,297	9,452	11,931	4,159					86,316	
	HPP PESHQESH	F 000	40.400	40.000	0.500	5 000	0.704	4 574	000					F0 000	
	(IPP)	5,980	13,496	13,238	8,529	5,688	2,791	1,571	800					52,093	
	Import (+) (received	266 574	242.046	142 520	02.260	240.800	1.46 E00	402.026	407 226					1 000 067	
	by interconnections)	266,571	212,046	142,529	92,369	219,890	146,509	403,826	497,226					1,980,967	4
DELIV	Transmission losses (includes own consumption)	16,207	12.302	13.897	13,615	12,001	13,364	12,532	13,886					107,805	5,085,4 48
	consumption <i>j</i>	10,207	12,502	13,031	13,013	12,001	13,304	12,002	13,000					107,003	Ω.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2017	
Delivered to distribution network	692,438	522,475	495,308	449,278	435,907	462,269	518,714	534,765					4,111,154	
Delivered to High Voltage (HV) consumers (consumers in open market)	42,918	45,498	63,832	71,397	73,130	74,230	65,114	67,250					503,370	
Export (-) (delivered to interconnection)	86,276	51,274	52,903	74,794	18,594	77,019	1,030	1,229					363,119	
Total received by transmission	837,839	631,550	625,940	609,084	539,632	626,883	597,390	617,131					5,085,449	
Transmission Losses (includes own consumption)	16,207	12,302	13,897	13,615	12,001	13,364	12,532	13,886					107,805	
Total Delivered by Transmission + delivered to interconnections	821,632	619,248	612,043	595,469	527,631	613,519	584,858	603,245					4,977,644	
Export (-) (delivered to interconnection)	86,276	51,274	52,903	74,794	18,594	77,019	1,030	1,229					363,119	
Total energy in transmission system	735,356	567,974	559,140	520,675	509,037	536,500	583,828	602,015					4,614,526	
Transmission losses (including own consumption)	16,207	12,302	13,897	13,615	12,001	13,364	12,532	13,886					107,805	
Transmission losses (%)	1.93%	1.95%	2.22%	2.24%	2.22%	2.13%	2.10%	2.25%						

Source: OST

GENERAL REMARK: IN TERMS OF MARKET MONITORING, INFORMATION FROM THIS TABLE IS NECESSARY AMONG OTHERS TO:

- 1. Track losses in the transmission. See Annex 3, Operational, C1.1., which additionally proposes tracking average cost of energy purchased for covering the transmission losses.
- 2. May be also used for competition market monitoring, if expanded for additional information requirements (the recommendations below detail these out as well as provide guidelines with references to the proposed templates in Annex 3).

RECOMMENDATIONS:

- 1. Make it automatic—introduce formulas
- 2. More aspects related to transmission network operations need to be covered, such as:

- a. Requests for grid connections, time for dealing with them, requests to access/use the network refused and the reasons for refusals (see the proposals in Annex 3, Operational, C1.2)
- b. Information concerning network unavailability together with the reasons for that and assessment of electricity not delivered/transmitted, general System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI)
- c. Load forecast for month and year ahead (see the proposals in Annex 3, Operational, D1.1 and D1.2.)
- d. Year-ahead forecast margin (based on proposals in attached Annex 3, Operational, D1.1)
- e. Summary of planned outages in the transmission grid, including interconnectors for the quarter and year ahead, together with reasons for these (replacement/rehabilitation/decommissioning) (based on information from OST concerning next year's operations and maintenance)
- f. Yearly report about critical network elements limiting offered capacities and/or plans for remedying these bottlenecks (based on information from OST concerning next year's operations and maintenance)
- g. Use of transfer capacity—auctions (based on information from SEE CAO/Podgorica data and pursuant to format it uses)
- h. Use of transfer capacity—allocations (if any are still applicable) (based on information from OST data and pursuant to format it uses)
- i. Prices on the day-ahead organized electricity market and/or balancing market—whichever applies to OST's operations. Prices: max in a month and a weighted average for the month. Later the same should apply to APX (detailed formats need to be developed in coordination with APX, as soon as it is operational)
- j. Instances of congestion management: must runs, re-dispatching, etc. (based on information from OST [dispatching center] data and pursuant to format it uses)
- k. Amount of balancing reserve under contract (based on information from OST [dispatching center] data and pursuant to format it uses)
- I. Prices of the reserved capacity of balancing reserves (based on information from OST [dispatching center] data and pursuant to format it uses)
- m. Volumes of activated balancing reserves (based on information from OST [dispatching center] data and pursuant to format it uses)
- n. Prices of activated balancing reserves (based on information from OST [dispatching center] data and pursuant to format it uses)
- o. Total imbalance volume in a month (based on information from OST [dispatching center] data and pursuant to format it uses)

Table A1-2. Periodic (monthly) data of OSHEE, Jan to Aug, 2017

TABLE	WITH PERIODIC (MONTHL M 2017	Y) DATA OF OSHEE 8-	January	February	March	April	May	June	July	August	Cumulative
Α	Total Energy at OSHEE company (MWh)	A=A.1+A.2	715,886	562,270	545,214	493,731	475,055	485,386	529,805	541,989	4,349,337
	Energy transmitted by TSO for the account of										
A.1	OSHEE Sh.a	A.1=Sum(A.1.1:A.1.5)	690,769	510,323	468,609	430,684	420,538	456,468	518,346	534,757	4,030,494
A.1.1	From KESH -Gen by TSO		460,676	274,883	286,273	351,170	183,735	386,042	137,913	74,041	2,154,734
A.1.2	By TSO as OSHEE company import		186,000	168,000	96,590	-	173,269	25,200	365,400	454,087	1,468,546
	By TSO for the account of OSHEE company customers generated from the HPP-s in the										
A.1.3	transmission grid		44,093	67,441	85,745	79,515	63,534	45,225	15,033	6,628	407,214
A.1.4	From VLORA TPP by TSO		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
A.1.5	From Bistrica 1,2 by TSO		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
A.2	Energy directly transmitted in the OSHEE company grid	A.2 = A.2.1 + A.2.2	25,117	51,947	76,605	63,047	54,517	28,918	11,460	7,233	318,843
A.2.1	Ulez,Lanabregas HPP		2,622	2,897	3,303	3,120	3,037	2,830	2,397	1,937	22,142
A.2.2	Private/Concession plants		22,495	49,050	73,302	59,927	51,481	26,088	9,062	5,296	296,701
В	Total energy in the Distribution Grid (MWh)	B=A-A.1.3	715,886	562,270	545,214	493,731	475,055	485,386	529,805	541,989	4,349,337
С	Total Losses at OSHEE company (MWh)	C=C.1+C.2+C.3	239,793	155,348	156,234	127,409	122,948	136,560	130,798	126,226	1,195,316
C.1	Technical losses in HV unit (MWh)		15,077	12,861	12,525	11,289	10,268	10,676	11,794	10,326	94,817
C.2	Technical losses at the areas (MWh)		122,373	95,095	92,156	83,507	80,943	82,518	89,929	93,735	740,256
C.3	Non-technical losses at the area (MWh)		102,343	47,392	51,553	32,612	31,738	43,366	29,075	22,164	360,243
C.1	Total losses at OSHEE company (%)	C.1= C/B	33.50%	27.63%	28.66%	25.81%	25.88%	28.13%	24.69%	23.29%	27.48%
C.1.1	Technical losses at HV unit (%)		2.11%	2.29%	2.30%	2.29%	2.16%	2.20%	2.23%	1.91%	2.18%
C.2.1	Technical losses at the areas (%)		17.47%	17.32%	17.31%	17.32%	17.42%	17.39%	17.37%	17.64%	17.41%
C.3.1	Non-technical losses at the areas (%)		14.30%	8.43%	9.46%	6.61%	6.68%	8.93%	5.49%	4.09%	8.28%

TABLE	WITH PERIODIC (MONTHL M 2017	Y) DATA OF OSHEE 8-	January	February	March	April	May	June	July	August	Cumulative
D	Energy sold for all OSHEE company customers	D=D1+D2+D3+D4	476,094	406,922	388,979	366,323	352,107	348,826	399,008	415,763	3,154,021
D.1	Sold to private customers (MWh)	D.1= D.1.1+D.1.2+D.1.3	125,048	121,047	119,765	120,075	118,650	125,359	157,948	160,417	1,048,311
D.1.1	Sold from the transmission grid for the account of OSHEE										-
D.1.2	Sold for personal needs of OSHEE company		702	582	522	402	437	386	438	422	3,891
D4.2	Sold to private customers (without the ones for personal needs		404.047	400 404	440.040	440.672	440.042	404.070	457.540	450.005	4 044 440
D.1.3 D.2	and those at HV) Sold to non-budgetary customers (MWh)		124,347 29,544	120,464 21,805	119,243 27,697	119,673 26,920	118,213 25,608	124,973 25,923	157,510 28,006	159,995 28,957	1,044,419 214,462
D.3	Sold to budgetary customers (MWh)		25,119	19,943	19,618	18,266	13,331	12,231	15,192	15,465	139,165
D.4	Sold to household customers (MWh)	D.4=D.4.1+D.4.2+D.4.3	296,382	244,126	221,899	201,061	194,517	185,313	197,861	210,924	1,752,083
D.4.2	Sold to household customers (MWh)		290,132	238,239	215,788	195,317	188,290	179,196	191,590	204,481	1,703,033
D.4.3	Sold to household customers for the common facilities		6,250	5,887	6,111	5,744	6,227	6,117	6,271	6,443	49,051
E	Invoiced to the previous month (000/ALL)		6,410,681	6,192,711	5,323,527	5,141,318	4,857,464	4,667,810	4,675,924	5,435,009	42,704,445
F	Actual month collections (000 ALL)	G=F.1+F.2+F.3+F.4	5,463,200	5,424,919	5,625,505	4,857,515	5,133,217	4,286,856	4,901,744	5,295,261	40,988,217
F.1	Collected for the current invoices of the actual year		4,034,914	3,823,606	3,566,252	3,192,614	3,125,779	2,832,640	3,056,521	3,642,695	27,275,023
F.3	Collected for other invoices of the actual year			1,116,501	1,397,720	1,333,001	1,473,741	1,223,080	1,543,113	1,652,566	9,739,721
F.4	Collected for the other invoices of the previous years		1,428,286	484,811	661,534	331,899	533,697	231,137	302,110	299,058	4,272,532
F.1	Actual month collections (%)	F.1=F/E	85.2%	87.6%	105.7%	94.5%	105.7%	91.8%	104.8%	97.4%	96.0%
F.1.1	Collected for the current invoices of the actual year (%)	F.1.1=F.1/E	62.9%	61.7%	67.0%	62.1%	64.4%	60.7%	65.4%	67.0%	63.9%

TABLI	E WITH PERIODIC (MONTHL) M 2017	Y) DATA OF OSHEE 8-	January	February	March	April	May	June	July	August	Cumulative
F.1.3	Collected for other invoices of the actual year (%)	F.1.3=F.3/E	0.0%	18.03%	26.3%	25.9%	30.3%	26.2%	33.0%	30.4%	22.8%
F.1.4	Collected for other invoices of the previous years (%)	F.1.4=F.4/E	22.3%	7.8%	12.4%	6.5%	11.0%	5.0%	6.5%	5.5%	10.0%
G	Invoiced to the reporting month (000/ALL)		6,192,711	5,323,527	5,141,318	4,857,464	4,667,810	4,675,924	5,435,009	5,635,939	41,929,702
1	No. of the customers in total (No.) Invoices issued with		1,191,140	1,192,631	1,194,338	1,196,393	1,198,115	1,199,792	1,201,961	1,202,724	1,201,961
2	reading consumption (No.)		1,041,546	941,467	960,556	975,484	960,100	934,809	957,620	980,465	7,752,047
3	Quantity of invoiced energy with reading consumption (MWh)		475,549	406,464	388,209	365,938	351,769	348,539	398,682	415,476	3,150,627
4	Invoices issued with "0" reading (No.)		241,190	253,551	239,223	224,866	244,254	271,551	252,986	228,635	1,956,256
5	No. of invoices issued without reading (unmeasured energy) (No.)		1	1	2	1	1	1	2	1	10
6	Energy quantity invoiced as unmeasured energy (MWh)		72	102	455	114	112	70	82	40	1,047
7	No. of invoices issued without reading (economic damage) (No.)		-	-	2	1	-	-	-	-	3
8	Amount invoiced as economic damage (000/ALL)		-	-	(19,444)	(19,361)	-	-	-	-	(38,805)
9	No. of invoices for which it is collected overdue payment (No.)		401,618	362,080	429,391	380,036	438,950	388,292	521,302	549,357	3,471,026
10	Value of the collected overdue payments (000/ALL)		101,478	79,858	97,788	81,193	87,546	76,118	112,319	109,676	745,976

Source: OSHEE

GENERAL REMARKS: THIS TABLE IS NECESSARY AMONG OTHERS TO:

- Track losses in the distribution. The high level of losses necessitates introduction of an improvement program and its rigid monitoring.
 Track revenue collection. The high level of unpaid bills necessitates introduction of an improvement program and its rigid monitoring. It seems that it is missing some clear comparison allowing for assessment of total receivables collected to date and how past due accounts are gradually reduced. This remark is valid to the extent that cell C31 doesn't encompass these already.
- 3. May be also used for competition market monitoring, if expanded for additional information requirements (as per recommendations below)

RECOMMENDATIONS:

More aspects related to distribution network operations need to be covered. This said, however, they are not as critical as they are in the case of transmission. Therefore, they may be introduced at later stages as it is likely distribution may not be fully able to meet all the information requirements on short notice; therefore, OSHEE needs to be consulted in order to assess the capability and time by which these requirements may be met. In the long-run, some of the examples mentioned under Table A1-1, OST (or TSO), may be utilized, depending on the extent of development of OShEE and its ability to deliver such information, including a through e below.

- a. Requests for grid connections, time for dealing with them, requests to access/use the network refused and the reasons for refusals (templates similar to those in Annex 3, Operational, C1.2., may be used for the purpose).
- b. Information concerning network unavailability together with the reasons for that and assessment of electricity not delivered/distributed, general SAIDI and SAIFI (should the extent (%) of smart metering [and networking of smart meters] allow it, these may be derived from the metering system).
- c. Load forecast for month and year ahead (templates similar to those in Annex 3, Operational, C1.2., may be used for the purpose).
- d. Summary of planned outages in the distribution network for the quarter and year ahead, together with reasons for these (replacement/rehabilitation/decommissioning) as well as an approximate number of affected customers and generators (based on information from OSHEE concerning next year's operations and maintenance).
- e. Instances of congestion management: must runs, re-dispatching, etc. in the distribution network which were not necessitated by the transmission system operator's orders

Table A1-3. Generation in 2016, plants connected to the transmission grid (MWh)

G	ENERATION	DURING 2016 FROM THE PLANTS (CONNECTED	IN THE 1	TRANSMISS	SION GR	ID (MWh)					
	ENERGITION	DOMING 2010 I NOM THE TEMNTO	BOTTIVECTED	II V III E	10111100	oror or	(111 (11)					
HPP-s and CAPACITIES	MW	COMPANY	CONNECTION	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	2017
HPP of "Fierze" installed capacity 500 MW	500.000		220 kV	182,915	69,205	85,127	119,101	60,156	151,376	46,680	40,094	754,654
HPP of "Koman" installed capacity 600 MW	600.000	"KESH" sha	220 kV	198,777	146,029	141,547	161,869	94,175	168,615	73,258	40,196	1,024,466
HPP of "V. Dejes" installed capacity 250 MW	250.000		220 kV	96,292	76,990	71,419	82,564	45,693	79,233	31,970	16,805	500,966
TPP of Vlora installed capacity 97 MW	97.000	"KESH" sha	220 kV	-195	-157	-171	-149	-161	-147	-154	-153	
HPP of "Ulez" installed capacity 25,2 MW	25.200		110 kV									
HPP of "Shkopet" installed capacity 24 MW	24.000		110 kV	21,378	28,017	43,116	38,597	25,991	18,026	12,908	11,367	199,400
HPP of "Bistrica 1" installed capacity 22,5Mw	22.500	Rufulli literilational sil.a.	110 kV	21,570	20,017	73,110	30,397	23,991	10,020	12,700	11,507	199,400
HPP of "Bistrica 2" installed capacity 5 Mw	5.000		110 kV									
HPP of "Ashta" installed capacity 48,2 MW	48.200	"Energji Ashta" shpk	110 kV	24.792	20.138	18.974	21,156	12.011	19.584	7.406	3.572	127,633
HPP of "Peshqesh" installed capacity 27,94 MW;	27.940	"Ayen As Energji"sha	220 kV	5,980	13,496	13,238	8,529	5,688	2,791	1,571	800	52,093
HPP of "Banje" installed capacity 73 MW	73.000	"Devoll Hydropower" sha	110 kV	20,359	6,332	16,690	8,096	9,297	9,452	11,931	4,159	86,315
HPP of "Bishnica 2" installed capacity 2.5 MW	2.500	"HPP of Bishnica 1,2 "shpk	110 kV	407	872	1,280	959	634	487	292	185	5,115
HPP of "Dardhe" installed capacity 5,8 MW	5.800	"Wenerg " shpk	110 kV	318	1,728	2,433	1,634	948	197	-14	-12	7,232
HPP of "Truen" installed capacity 2,5 MW	2.500	"TRUEN" shpk	110 kV	310	1,720	2,433	1,034	9 4 0	197	-14	-12	1,232
HPP of "Ternove" installed capacity 0921 Mw	0.921	"DITEKO" shpk	110 kV	86	3	431	1,127	382	-14	506	241	2,761
HPP of 'Gjorice' installed capacity 4.18 Mw	4.180	DITERO SIPK	110 kV	3,684	7,143	9,566	7,174	5,946	3,597	1,902	1,465	40,476
HPP of "Sllabinje" installed capacity 13,8 MW	13.800	"Power Elektrik Slabinje" shpk	110 kV	1,167	3,385	4,791	3,967	3,505	2,088	804	471	20,178
HPP of Bele 1 installed capacity 5 MW;		"Euron Energy" shpk										
HPP of "Topojan 2" installed capacity 5,8 MW,		l										
HPP of Bele 2"installed capacity 11 MW;	19.300	"Alb-Energy" shpk	110 kV	6,268	12,355	18,484	18,244	19,209	12,230	2,855	279	89,924
HPP of "Topojan 1" installed capacity 2,9 MW,												
HPP of "Orgjost I Ri" installed capacity 4,8 MW		"Energal" shpk										
HPP of "Klos" installed capacity 2.6 MW;	2.600			147	1,456	2,047	2,610	2,506	720	-9	-12	9,464
HPP of "Shkalle" installed capacity 1.3 MW;	1.300											
HPP of "Cerunje-1" installed capacity 2.3 MW;	2.300	"Energy partners Al" shpk	110 kV									
HPP of "Cerunje-2" installed capacity 2.8 MW;	2.800											
HPP of "Rrupe" installed capacity 3.6 MW;	3.600											
HPP of "Rapuni 1,2" installed capacity 4 dhe 4.1 MW	8.100	"C & S Construction Energy" shpk	110 kV	1,210	2,777	4,147	3,794	3,125	797	-10	-9	15,831
HPP of "Rapuni 3,4" installed capacity 8.857 MW	8.850	"C & S Energy" shpk	110 kV	1,680	3,060	3,631	2,506	1,987	815	287	234	14,200
HPP of 'Llapaj' installed capacity 13,62 MW	13.620	"Gjo.Spa.POWER"shpk	110 kV	1,315	1,212	4,936	6,519	6,869	3,317	759	125	25,051
HPP of "Lengarice" installed capacity 8.94 MW	8.940	"Lengarica & Energy" shpk	110 kV	701	2,207	2,841	827	1,046	465	93	11	8,192
HPP of 'Lura 1" installed capacity 6,54 MW			110 kV									
HPP of 'Lura 2" installed capacity 4,02 MW	6.540	"Erdat Lura" shpk	110 kV	1,109	5,106	5,727	4,246	2,572	413	28	-23	19,179
HPP of 'Lura 3" installed capacity 5,66 MW			110 kV									
HPP of "Malla" installed capacity 5,455 MW		"Gjure Rec" shpk	110 kV	540		2,021	1,400	884	282	141	109	7,220
HPP of Prella installed capacity 14.97 MW	14.970	"Prelle Energji"	110 kV	671	4,156	4,437	3,351	1,910	248	-7	-8	14,758
												3,025,109

GI	ENERATION	DURING 2016 FROM THE PLANTS	CONNECTED	IN THE	DISTRIBUT	ION GRI	D (MWh)					
HPP-s and CAPACITIES	MW	COMPANY	CONNECTION	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	2017
HPP of "Lanabregas" installed capacity 5 MW	5.000	"HPP of Lanabregas" sha	35	2,622	2,897	3,303	3,120	3,037	2,830	2,397	1,937	22,142
HPP of "Lenie" installed capacity 400 kW	0.400	"EMIKEL 2003" sh.p.k	10kV	134	219	264	264	279	256	133	62	1,610
HPP of "Çorovode" installed capacity 200 kW	0.200	EMIKEL 2005 Sn.p.k	10kV	24	66	115	100	74	32	0	0	411
HPP of "Smokthine" installed capacity 9,2 MW	9.200	"Albania Green Energy" sh.p.k	35 kV	2,370	2,770	2,822	2,279	2,121	1,562	896	751	15,571
HPP of "Bulqize" installed capacity 0,6 MW (Diber)	0.600		10kV	91	126	179	167	157	109	82	72	982
HPP of "Homesh" installed capacity 0,395 MW (Diber	0.395		10kV	32	52	61	37	37	27	6	0	252
HPP of "Zerqan" installed capacity 0,625 MW (Diber)	0.625		6kV	97	95	104	116	95	87	61	56	711
HPP of "Arras" installed capacity 4,8 MW (Diber)	4.800		20kV	0	0	1,280	2,285	1,863	670	9	0	6,108
HPP of "Orgjost" installed capacity 1,2 MW (Kukes)	1.200		10kV	158	592	780	765	736	669	201	69	3,970
HPP of "Lekbibaj" installed capacity 1,4 MW (Tropoje)	1.400		10kV	170	491	555	612	608	524	241	79	3,280
HPP of "Dukagjin" installed capacity 0,64 MW (Shkoder)	0.640		10kV	164	245	100	176	199	209	199	0	1,293
HPP of "Marjan" installed capacity 0,2 MW (Korce)	0.200		10kV	44	44	59	62	2	117	47	22	396
HPP of "Lozhan" installed capacity 0,1 MW (Korce)	0.100		10kV	0	0	0	0	0	0	0	0	0
HPP of "Barmash" installed capacity 0,83 MW (Kolonje)	0.830		10kV	41	89	108	34	68	43	10	0	393
HPP of "Treske 2" installed capacity 0,25 MW (Korce)	0.250	"Balkan Green Energy" shpk	10kV	27	65	116	66	50	28	1	0	352
HPP of "Nikolice" installed capacity 0,7 MW (Korce)	0.700	Daikan Green Energy stipk	10kV	85	97	222	242	204	188	133	63	1,234
HPP of "Funares" installed capacity 1,92 MW (Librazhd)	1.920		10kV	437	462	891	517	447	88	0	0	2,841
HPP of "Lunik" installed capacity 0,2 MW (Librazhd)	0.200		10kV	55	97	114	76	72	13	0	0	427
HPP of "Kerpice" installed capacity 0,42 MW (Gramsh)	0.420		6kV	57	19	22	41	64	69	53	41	366
HPP of "Ujanik" installed capacity 0,63 MW (Skrapar)	0.630		10kV	38	66	119	82	80	38	0	0	423
HPP of "Borsh" installed capacity 0,25 MW (Sarande)	0.250		6kV	62		75	28	52	32	18		335
HPP of "Leshnice" installed capacity 0,38 MW (Sarande)	0.380		10/6kv	54		80	55	36	19	13		343
HPP of "Velcan" installed capacity 1,2 MW (Korce)	1.200		10kV	86	280	490	462	332	224	51	0	1,925
HPP of "Muhur" installed capacity 0,25 MW (Diber)	0.250		6kV	89		98	82	101	13	1	0	490
HPP of "Rajan" installed capacity 1,02 MW (Kolonje)	1.020		10kV	90	129	324	162	114	65	1	0	884
HPP of "Lure" installed capacity 0,75 MW (Diber)	0.750		10kV	92	123	29	95	23	0	0	0	361
HPP of "Gjanç" installed capacity 2,96 MW	2.960	"Spahiu Gjanç" sh.p.k.	35 kV	0	-	0	0	0	340	1,395	1,079	2,814
HPP of "Bogove" installed capacity 2,5 MW	2.500	1	35 kV	41		566	253	284	62	0	0	1,391
HPP of "Xhyre" installed capacity 570 kW	0.570	"Amal" sh.p.k	10kV	123	_	166	184	196	133	77		1,057
HPP of "Stranik" installed capacity 4.6 MW	4.600	"Hidroinvest 1" shpk	35kV	23		1,274	1,184	961	345	21		4,658
HPP of "Zall Tore" installed capacity 3 MW	3.000	Theronivest i shpk	35kV	494	1,176	1,502	1,172	963	544	113	0	5,964
HPP of "Klos" installed capacity 1,95 MW	1.950	"Malido-Energji" shpk	6kV	95	344	451	314	228	54	0	0	1,486
HPP of "Borje" installed capacity 1.5 MW	1.500	"HIDROALBANIA Energji" shpk	35kV	419	1,877	3,180	3,086	3,363	1,768	718	94	14,506
HPP of "Cernaleve" installed capacity 2.95 MW	2.950		35kV	146	809	1,306	1,197	1,329	693	248	84	5,813
HPP of "Cernaleve 1" installed capacity 3.27 MW	3.270	"HIDROALBANIA Energji" shpk	35kV	191		1,478	1,347	1,431	768	266	77	6,468
HPP of "Murdhar 1" installed capacity 2.68 MW	2.680	"HydroEnergy "shpk	10kV	578		1,574	741	400	96	0	0	4,444
HPP of "Murdhar 2" installed capacity 1 MW	1.000	TrydroEnergy supk	10kV	333		941	430	217	59	0	0	2,597
HPP of "Dishnice" installed capacity 0.2 MW	0.200	"Dishnica Energy" shpk	10kV	17	81	102	47	45	31	0	0	324
HPP of "Lubonje" installed capacity 0.3 Mw	0.300	"Elektro Lubonje" shpk	10kV	0	32	49	15	15	0	0	3	115

GE	NERATION	DURING 2016 FROM THE PLANTS (CONNECTED	IN THE	DISTRIBUT	'ION GRI	D (MWh)					
HPP-s and CAPACITIES	MW	COMPANY	CONNECTION	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	2017
HPP of "Peshke" installed capacity 3.43 MW	3.430	"Koka & Ergi Energy Peshk" shpk	35kV	396	1,300	1,777	1,256	953	326	0	0	6,008
HPP of "Labinot -Mal" installed capacity 0.25 MW	0.250	"Ansara Koncension" shpk	6kV	16	31	38	27	20	10	2	1	143
HPP of "Pobreg" installed capacity 12,3 MW		"Energy Plus" shpk	35kV	1,673	4,009	6,398	5,793	6,224	3,693	292	38	28,120
HPP of "Vlushe" installed capacity 14.2 MW	14.200	"HPP of Vlushe" shpk	35kV	1,032	1,752	4,460	2,700	2,146	667	136	20	12,913
HPP of Belesova 1" installed capacity 0.150 MW	0.150	"Korkis 2009" shpk	6kV	0	17	18	0	0	0	0	0	35
HPP of "Faqekuq 1,2" installed capacity (3 MW; 3.4 MW)	6.400	"HP OSTROVICA" shpk	35kV	269	1,263	1,880	1,835	1,581	505	67	0	7,400
HPP of "Shemri" installed capacity 1 MW	1.000	WE 11E "" 1 1	10	31	326	208	141	187	42	2	0	938
HPP of "Mgulle" installed capacity 0.28 MW	0.280	"Erald Energjitik" shpk	10kV	76	248	276	204	149	36	0	0	989
HPP of "Kryezi 1" installed capacity 0.6 Mw	0.600	"Bekim Energjitik" shpk	10kV	0	560	428	184	114	0	0	0	1,287
HPP of "Selishte" installed capacity 2 MW	2.000	"Selishte" shpk	35kV	232	685	966	688	654	213	6	0	3,444
HPP of 'Carshove' installed capacity 1.5 Mw	1.500	"ERMA MP" shpk	10kV	210	377	338	179	139	61	0	0	1,304
HPP of 'Ura e Dashit' installed capacity 1,2MW	1.200	EKMA MP snpk	10kV	407	980	1,259	461	504	207	3	0	3,821
HPP of 'Gizavesh' installed capacity 0.5 MW	0.500	"Dosku Energy" shpk	10kV	219	230	261	270	269	130	0	0	1,379
HPP of "Koka 1" installed capacity 3,2 MW	3.200	"Snow Energy" shpk	35kV	11	436	950	541	490	103	0	0	2,530
HPP of "Stravaj" installed capacity 3,6 MW	3.600	"Stravaj Energji" shpk	35kV	461	1,162	1,560	1,314	909	446	68	6	5,925
HPP of 'Picar 1" installed capacity 0,2 MW	0.200	"Peshku Picar 1" shpk	6kV	21	38	42	42	29	16	0	1	191
HPP of 'Vertop' installed capacity 1,52 Mw	1.520	"Hydro Salillari Energy "shpk	35kv	172	0	412	201	201	77	0	0	1,064
HPP of 'Martanesh' installed capacity 10,5 MW	10.500	"Albanian Power" shpk	35kV	454	1,866	2,840	2,072	1,550	381	27	5	9,195
HPP of 'Verba 1,2" installed capacity (2 MW, 3 MW)	5.000	"Hydro power Plant Of Korca" shpk	35kV	143	437	845	1,639	1,632	706	162	88	5,653
HPP of'Fterra" installed capacity1,08 MW	1.080	"Hidro Borshi" shpk	35kV	921	770	730	598	512	388	319	241	4,479
HPP of 'Ostren i Vogel' installed capacity 0,32 MW	0.320	"Lu & Co Eco Energy" shpk	10kV	80	81	96	84	84	68	45	33	571
HPP of 'Kozel' installed capacity 0,5 MW	0.500	<u> </u>	10kV	98	112	174	177	124	68	0	0	753
HPP of 'Helmes 1" installed capacity 0,8 MW	0.800	"E.T.H.H. "shpk	10kV	70	200	390	208	170	116	0	0	1,154
HPP of 'Helmes 2" installed capacity 0,5, MW	0.500	1	10kV	38	72	238	137	90	83	0	0	659
HPP of 'Qafezeze' installed capacity 0,4 MW	0.400	"Caushi Energji" shpk	10kV	99	174	273	237	178	164	33	20	1,179
HPP of 'Trebisht' installed capacity 1,775 MW	1.775	"SA.GLE.Kompani "shpk	10kV	30	507	684	475	368	125	0	0	2,189
HPP of 'Mollaj" installed capacity 0,6 MW	0.600	"Energji Xhaci" shpk	10kV	0	37	122	0	74	0	0	0	233
HPP of "Tucep" installed capacity 0,4 MW	0.400	"Tucep" shpk	10kV	176	172	164	245	258	247	180	166	1,608
HPP of 'Treska4" installed capacity 3,6 MW	2.600	"HPP of-Treske"shpk	35kV	364	770	1,190	630	479	394	202	137	4,166
HPP of Treska e Re" 5 installed capacity MW	3.600	HPP 01-1reske snpk	35kV	61	137	231	137	112	96	42	20	836
HPP of 'Sotire1 & 2" installed capacity 2,2 MW	2.200	"Hidro Energy Sotire"shpk	35kV	85	143	363	347	472	350	22	1	1,782
HPP of 'Shutine" installed capacity 2,4 MW	2.400	"Shutina energji"shpk	10kV	144	340	323	250	0	0	0	0	1,056
HPP of 'Cekrez 1,2" installed capacity (0,23 MW; 0.43 MW)	0.660	"Zall Herr Energji 2011"shpk	6kV	372	369	391	346	357	357	352	342	2,886
HPP of''Qarr'' installed capacity 1 MW	1.000	"HPP of Qarr & Kaltanj"shpk	35kV	178	408	595	213	296	90	122	126	2,029
HPP of 'Bisak" installed capacity 1,3 MW	1.300	"Bardhgjana" shpk	6kv	27	335	580	341	374	87	0	0	1,742
HPP of 'Shales' installed capacity 1,08 MW	1.080	"C'.1. V	35kV	3	142	327	318	191	121	0	0	1,100
HPP of 'Strelce' installed capacity 1,174 MW	1.174	"Gjoka Konstruksion Energji" shpk	35kV	64	566	804	630	379	342	0	0	2,786
HPP of "Shpelle" installed capacity 400 kW	0.400	"Sarolli" sh.p.k	10kV	32	114	204	188	155	69	22	14	798
HPP of "Treska 1" installed capacity 130 kW	0.130	Star NRG sh.p.k	10kV	55	76	68	57	74	18	0	0	349
HPP of "Bicaj" installed capacity 3,1 MW	3.100	"EN-KU" sh.p.k	10kV	0	0	0	0	0	0	0	0	0
HPP of "Leskovik 1" installed capacity 1072 kW	1.072	"Maksi Elektrik" sh.p.k	10kV	45	42	48	39	32	19	0	0	225
HPP of "Leskovik 2" installed capacity 1100 kW	1.100	тчакы елекшк ы.р.к	10kV	62	56	64	60	50	36	0	0	328

GE	ENERATION	DURING 2016 FROM THE PLANTS	CONNECTED	IN THE	DISTRIBUT	ION GR	D (MWh)				-	
HPP-s and CAPACITIES	MW	COMPANY	CONNECTION	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	2017
HPP of "Orenjë" installed capacity 875 kW	0.875	"Juana" sh.p.k	10kV	62	83	118	74	46	23	0	0	407
HPP of "Tamarë" installed capacity 750 kW	0.750	"WTS Energji" shpk	10kV	74	86	112	100	106	42	0	0	521
HPP of "Benë" installed capacity 1000 kW	1.000	"Marjakaj" shpk	6kV	90	171	187	173	157	0	0	0	779
HPP of "Vithkuq" installed capacity 2,715 MW	2.715	"Favina 1" shpk	35/10kV	213	1,107	1,728	1,087	625	448	139	63	5,409
HPP of "Selce" installed capacity 1600 kW	1.600	"Selca Energji" shpk	10kV	128	487	677	747	714	234	35	0	3,021
HPP of' Kumbull-Merkurth" installed capacity 0.83 Mw	0.830	"DN & NAT Energy"shpk	6kV	26	171	225	287	252	30	0	0	992
HPP of "Sasaj" installed capacity 8,6 MW	8.600	"Energo – Sas" shpk	35kV	2,365	2,251	2,473	2,233	1,510	535	258	334	11,959
HPP of "Tervol" installed capacity 10.6 MW		"HPP of i Tervolit" shpk	35kV	1,163	2,732	4,277	3,721	2,535	1,244	291	173	16,137
HPP of "Radove" installed capacity 2,5 MW	2.500	"MTC Energy" shpk	10kV	525	700	750	400	417	251	134	55	3,231
HPP of "Gurshpat 1"installed capacity 0,84 MW,	0.840	"Gurshpat Energy" shpk	10kV	188	193	302	257	273	95	0	0	1,308
HPP of "Gurshpat 2"installed capacity 0,83 MW	0.830	Guisipat Energy slipk	10kV	233	272	420	322	311	72	0	0	1,630
HPP of Bistrica 3"installed capacity 1,57 MW,	1.570	"Bistrica 3 Energy" shpk	6kv	715	802	867	773	694	619	582	550	5,603
HPP of "Hurdhas 1" installed capacity 1,71MW,	1.710	"Komp Energji" shpk	6kV	256	544	498	365	285	58	0	0	2,006
HPP of "Perrollaj" installed capacity 0,5 MW	0.500	"Fatlum" shpk	10kV	15	92	34	12	0	0	0	0	153
HPP of "Koxheraj" installed capacity 0,62 MW	0.620	"Koxherri Energji" shpk	10kv	69	165	159	115	117	69	0	0	693
HPP of "Kacni" installed capacity 3,87 MW	3.870	"Kisi-Bio-Energji" shpk	20kV	0	390	737	795	474	152	0	0	2,549
HPP of "Lena 1"installed capacity 1,95 MW;,	1.950		35kv									
HPP of "Lena 2" installed capacity 2,3 MW	2.300	"Gama Energy" shpk	35kv	38	1,026	1,246	954	523	105	0	0	3,893
HPP of "Lena 2A" installed capacity 0,25 MW	0.250		35kv									
HPP of "Driza" installed capacity 3,408 MW	3.408	"Mesopotam Energy" shpk	35kv	189	259	277	185	136	90	56	11	1,203
HPP of Strelca 1,2,3 (1.504 MW, 0.325 MW, 3.52 MW)	5.349	"Strelca Energy" shpk	35kv	70	534	1,676	2,002	1,556	833	415	247	7,333
HPP of "Ujanik 2" installed capacity 2,5 MW	2.500	"HP Ujaniku Energy" shpk	35kv	144	444	643	341	348	110	1	0	2,032
HPP of "Nishove" installed capacity 1,36 MW	1.360	"Nishova Energy" shpk	35kv	18	21	45	45	51	27	0	0	207
HPP of "Shtika" installed capacity 1,3 MW	1.300	"Perparimi SK" shpk	10kv	125	199	333	109	9	1	0	0	777
HPP of "Ballenje" installed capacity 1,9 MW	1.900	"Ballenja Power Martanesh" shpk	35kv	0	284	494	335	171	37	0	0	1,320
HPP of Gavran&Gavran 1	2.213	"Gavran Energy" shpk	35kv	0	250	414	346	253	99	0	0	1,362
HPP of Gavran 1		"Gavran Energy" shpk		0	0	0	109	90	81	54	0	334
				22,495	49,050	73,302	59,927	51,481	26,088	9,062	5,296	318,843
Central Fotovoltaik 1 MW (pa sistemuarne sistem)	1.000	"UKKO"sha (Ujsjell.Kanal.Korce)										
	1,800.916											3,343,952
	216.401											

Source: OST, OSHEE

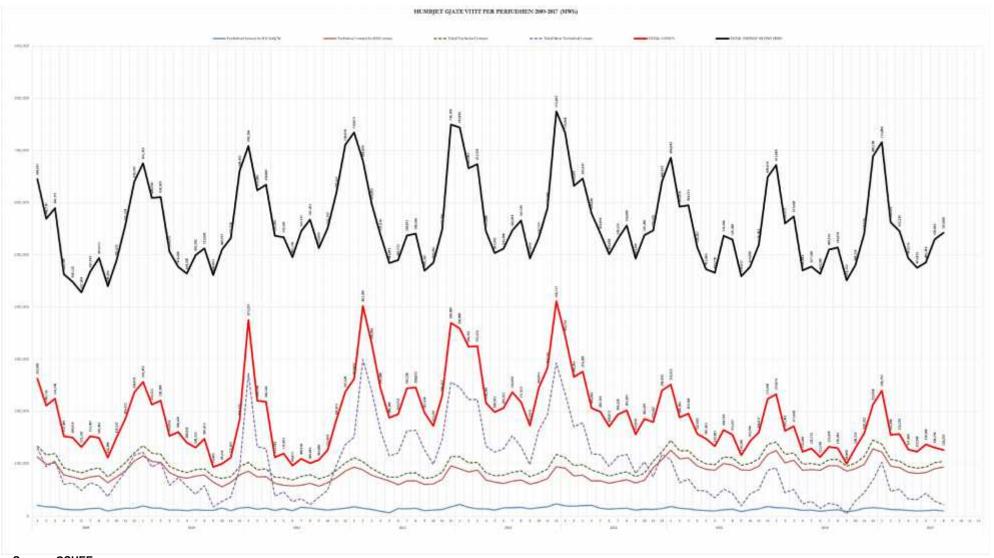
GENERAL REMARK: INFORMATION FROM THIS TABLE ALLOWS, AMONG OTHERS, TO MONITOR MARKET SHARES OD DIFFERENT PRODUCERS AND EXTENT OF MONOPOLIZATION. FOR INSTANCE, HHI WAS DEVELOPED BASED ON THIS INFORMATION (SEE "MM Analyses" AS AN EXAMPLE AS HOW MARKET CONCENTRATION INDEX MAY BE ESTABLISHED)

RECOMMENDATIONS:

It is strongly recommended to stop monthly tracking—mainly due to the number of market participants under purview vs. the resources available at ERE. Quarterly or even annual tracking should already allow for establishing the extent of market monopolization. Also, automation of the process is highly advisable.

Table A1-4. Losses graph

																														10	sun:	2009.3	NIS																																					
			1	14	009	-		- 184						_	18	-				17	10(1)	Tel.	100				-		201	2						1.5	2015		1.0	4		-		28	74 m		A1-		-			20075		181	- 180				201				180	1		-	.18	LT		tert-
Technical Looses o HV Supple		17,000 17		U.M. B	1000	10,250 N	OAU II	HAR III		15,425			0.188	1000	m	10,714	17,887		Т		Т	18,157 W			16310 11	18,494	11,000 3	000	Marri B	11,117	8 858'04	HUNN H	11/10		1,000	H/H	100	1987		mun o	35,846	10,000	20,000	11,600	14455	101	11,890	901	100	14,380	10,578 S	T	1900	11	100		M.IZZ		900		1.1	16,273	311/4	12,000	2000	11,218 4	N 1170	100	WITTO B	B 2
echnical Losses 060 zmes	112.000		18,801	PAJES	14,008	and a	74,367	18,000	14,747	10.00	0.580	18,000	TK-612	18,004	100	Maria.	MARS.	Paris.	M.H.	M.NOT	MAN IN	4,787	57,136	73,487	16,194	100	17,782	100	88,THE	10.00	107.90	TL008	18/10	M GE	1878	100	24,865	100,000	157	7488	TAKE	7,48	27,912	E.M.1	14,000	1000	HENNE WLOST	10.30	1878	110.077	MATH.	10,00	20.00	187	MAN.	10,000	186.429	9220	107.0	M.M.	1911	M.M.	CHEST CO.	18778	101.00	D.N.T.	2012	1000	M,The	
ral Technical topics	113,531	116,947	111211	86,016	200,00	NATA NATA	17,464	128,349	1871	MAN	94,620	11,107	68,310	2460	Man.	34,18	MEAN.	88,101	100	11/06	20,000	20,414	M,784	80,718	100,122	900,388	M(24)	199	2000	22.11	東ス	mon.	10,000	301.100	100,384	N.M.	77,73	30,804	m'a	MARIN VICTOR	11(40)	11/11	887.18	3/11	20,614	MAR	20,000	TOW OUT	THANG	118,140	100,000	11,500	111,146	900,384	118,116	180,340	120,646	10,000	11/411	100,187	2079	11,001	14471	10,00	19770	M,786 W,770	11,114	127,000	100/001	
etal Next echnical Loopes	500,000	34.03	***	ELBY.	00713	0.00	88.743	THEFT	9416	10.20	11.438	7,462	0.00	H a	10.00	36,386	272.540	en in	SE S	60 H	11.39	HB	20,000	1873	138,307	250,538	59962		100,116	2000	108.208	1000	28,891	100	202.000	01700	81709	82763	20.00	207.000	810112	59,10	149,611	NA.NY	10,488	18718	24,748	10,48	urus urus	10,440	25.00	1134	dath same	0.30	10.20	#1740 #1 000	10,000	20.00	4,30	10 M	en.	# SE	8313	0K.0	51,003	20420	40.00	MATE.	200	
DTAL LORSES	162.508	210,728	10.00	16.55	162,807	111,388	291,001	117912	38,310	200,100	162,006	100.00	+30,322	147,511	100	(41,002	134211	120,248	10.10	110,403	Marie .	100,000	100,000	184,672	207,028	662.200	MARKET TO A STATE OF	100.00	184,763	24,010	107,618	239,622	149,404	304,101	100,000	146,741	28,341	241.862	100700	26,007	3430	196,216	200,586	170,872	184,118	HEN	TEAST.	HD/MI	1808	10.00	147,588	10,40	19,50	10.200	20,042	mm.	55123	122,489	16.78	10,04	1111	100,114	20,03	185,348	188,234	127,409.	18,81	100,788	100,000	
TOTAL ENERGY IN	184,007	88,710	442,786	448,118	467,983	11/11/11	1000	HR.THT	11(10)	11.10	900,000	0110	608, 291	11,004	100	110,150	MUSH	ent tea	DA.MI	833,584	HA, PA	585,000	9171	100,000	710,400	10,004	100,000	1070	48,TD	10,00	100,007	14,780	10,300	III III	m.tm	102.945	20,000	545,789	117,516	TALAN.	733,488	HALIFT.	most.	20,000	138,554	400,407	00(41)	10'11	HUAN.	994,776	(1) 463	88,380	100,000	61(96)	1000	Dydda marrin	MAR.	400,000	60,240	SHARK	487.189	HAM	918,710	11,188	14(2)4	00,731 m ims	11/10	111.00	Sht Sap	



Source: OSHEE

GENERAL REMARK: IN TERMS OF MARKET MONITORING THIS TAB IS USEFUL, AMONG OTHERS, TO:

^{1.} Track losses in the distribution. The high level of losses necessitates introduction of an improvement program and its rigid monitoring. **RECOMMENDATIONS:**

1. The readability needs to be improved - for instance consider resignation from showing separate line for MW/HV substations or total energy in the grid as these carry some limited amount of relevance. Consider introduction of a parallel chart showing % of losses.

Table A1-5. Debt status

INVOICES-COLLECTIONS AND THE CHANGE OF THE DEBT STATUS DURING 2014 (000/ALL)

			OLLEGIIONO AND THE	<u> </u>		10 2017 (000/ALL)		
Year 2014	Collections according to 31.12.2013 CEZ Shperndarje	Invoiced 2014	Collections for 2014 invoices	Collections for the 2007-2013 period invoices	Total collections	Collected for the energy invoiced for 2014	The change of collected calculations status during 2014	Obligation remissions with Council of Ministers Decision no. 198, of date 03.04.2014
	71,374,447							
pa hedhur	#REF!	2	5	7	6=5+7	9=(2-5)	10=(2-5-7-a)	а
January	72,385,326	4,899,949	3,593,288	295,782	3,889,070	1,306,661	1,010,880	0
February	73,231,148	4,623,941	1,224,858	2,553,261	3,778,119	3,399,083	845,821	0
March	73,905,562	4,645,564	3,226,836	744,315	3,971,150	1,418,729	674,414	0
April	70,676,446	4,538,921	3,291,530	680,634	3,972,164	1,247,391	- 3,229,116	3,795,873
May	71,544,530	4,190,118	3,345,044	374,413	3,719,457	845,074	868,084	(397,423)
June	72,209,337	4,025,464	3,065,523	295,134	3,360,657	959,941	664,807	
July	72,816,893	4,097,547	3,184,902	305,088	3,489,991	912,644	607,556	
August	73,694,774	4,299,885	3,115,141	311,467	3,426,607	1,184,744	877,881	(4,604)
September	72,527,145	4,065,705	3,343,188	1,069,912	4,413,100	722,518	- 1,167,630	820,235
October	72,630,240	4,280,796	3,647,110	457,224	4,104,334	633,686	103,095	73,367
November	72,771,144	4,504,528	3,459,192.00	904,432	4,363,624	1,045,336	140,904	
December	71,406,047	4,985,556	4,273,473	2,077,180	6,350,653	712,083	- 1,365,097	
Total		53,157,974	38,770,084	10,068,842	48,838,927	14,387,890		4,287,448

		INVOICES-CO	OLLECTIONS AND THE	CHANGE OF THE DEBT	STATUS DURIN	G 2015 (000/ALL)		
Year 2015	Collected according to 31.12.2014 OSHEE	Invoiced 2015	collections for 2015 invoices	Collection for 2007-2014 invoices	Total collections		Change of the collected calculations	Obligation remission
						2015	status during 2015	
	71,406,047	2	5	7	6=5+7	9=(2-5)	10=(2-5-7-a)	а
January	71,336,669	5,549,211	58,385	5,560,203	5,618,588	5,490,826	- 69,378	0
February	70,243,444	5,593,064	4,241,484	2,444,805	6,686,289	1,351,580	- 1,093,225	0
March	70,034,144	5,588,150	4,663,802	1,133,648	5,797,450	924,348	- 209,300	0
April	68,812,916	4,953,074	4,470,298	366,900	4,837,198	482,776	- 1,221,229	1,337,105
May	66,868,972	4,521,837	4,234,873	504,756	4,739,629	286,963	- 1,943,943	1,726,151
June	67,098,219	4,691,930	4,081,633	309,420	4,391,053	610,297	229,247	71,630
July	67,547,043	5,258,700	4,246,167	372,576	4,618,743	1,012,533	448,824	191,133
August	67,611,751	5,241,968	4,481,964	354,383	4,836,347	760,004	64,709	340,913
September	67,453,478	4,835,022	4,700,033	293,262	4,993,295	134,989	- 158,274	0
October	67,286,789	4,683,924	4,541,794	308,818	4,850,612	142,130	- 166,689	0
November	67,959,634	4,991,543	4,020,208	298,490	4,318,698	971,335	672,845	0
December	68,803,189	5,872,243	4,750,948	277,740	5,028,688	1,121,295	843,555	0
Total		61,780,665	48,491,589	12,225,002	60,716,591	13,289,076		3,666,932

		INVOIC	ES-COLLECTIONS INVOICES	S AND THE CHANGE OF TH	F DEBT STATUS DU	JRING 2016 (000/ALL)		
2016	Collected according to 31.12.2015 OSHEE	Invoiced 2016		Collection for 2007-2015 invoices		Collected for invoiced energy during 2016	Change of the collected calculations status during 2016	Obligations Remission
	68,803,189	2	5	7	6=5+7	9=(2-5)		a+b
January	69,383,532	5,987,971	11,010	5,396,619	5,407,628	5,976,962	580,343	0
February	69,618,271	5,445,503	3,744,680	1,455,075	5,199,755	1,700,824	234,739	0
March	69,927,158	5,513,517	4,673,435	531,195	5,204,630	840,082	308,887	0
April	69,788,727	4,826,977	4,641,557	323,851	4,965,408	185,420	- 138,431	0
May	67,042,795	4,835,733	4,504,256	276,918	4,781,174	331,477	- 2,745,932	2,800,490
June	67,501,589	4,525,728	4,203,847	245,816	4,449,663	321,881	458,794	0
July	68,121,673	5,241,459	4,390,083	231,293	4,621,375	851,376	620,084	0
August	68,364,412	5,309,834	4,799,986	267,109	5,067,095	509,848	242,739	0
September	68,350,354	4,844,483	4,650,851	207,690	4,858,541	193,633	- 14,058	0
October	68,499,705	4,834,628	4,480,377	204,901	4,685,278	354,252	149,351	0
November	69,372,496	5,236,378	4,175,054	188,533	4,363,587	1,061,324	872,791	0
December	70,720,061	6,410,681	4,854,705	208,411	5,063,116	1,555,976	1,347,565	0
Total		63,012,893	49,129,839	9,537,411	58,667,251	13,883,054		2,800,490

		INVOIC	ES-COLLECTIONS INVOICES	AND THE CHANGE OF THE	E DEBT STATUS DU	JRING 2017 (000/ALL)		
2017	Collected according to 31.12.2016 OSHEE	Invoiced 2017	Collection for 2017 invoices	Collection for 2007-2016 invoices	Total collection	Collected for invoiced energy during 2017	Change of the collected calculations status during 2017	Obligations Remission
	70,720,061	2	5	7	6=5+7	9=(2-5)		
January	71,449,571	6,192,711	2,680	5,460,521	5,463,201	6,190,031	729,510	0
February	71,348,179	5,323,527	3,823,606	1,601,313	5,424,919	1,499,921	- 101,392	0
March	70,863,992	5,141,318	4,963,971	661,534	5,625,505	177,347	- 484,187	0
April	70,863,942	4,857,464	4,525,615	331,899	4,857,514	331,849	- 50	0
May	70,398,535	4,667,810	4,599,520	533,697	5,133,217	68,290	- 465,407	0
June	70,787,603	4,675,924	4,055,720	231,137	4,286,856	620,204	389,068	0
July	71,320,868	5,435,009	4,599,634	302,110	4,901,744	835,375	533,265	0
August	71,661,546	5,635,939	4,996,203	299,058	5,295,261	639,736	340,678	0
September								
October								
November								
December			_					
Total					•			

Source OSHEE

CONCLUSION: THIS TAB IS NECESSARY, AMONG, OTHERS TO:

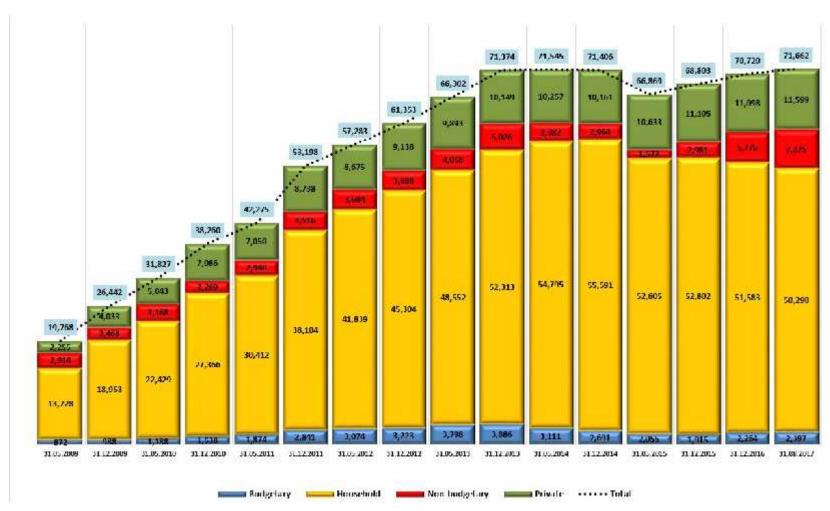
1. Track revenue collection. The high level of non-paid bills necessitates introduction of an improvement program and its rigid monitoring. Uncollected debt is steadily rising and amounts to ~\$620 million and it is likely considerable part of it is unrecoverable.

RECOMMENDATIONS:

1. Monthly tracking and rigid requirement of compliance with the revenue improvement programs is an absolute priority should the electricity market (especially power exchange) be expected to function properly.

Table A1-6. OSHEE's debtors

				Trends of	OSHEE's D	ebtors dur	ing 31MA\	/ 2009 - 3 :	1 AUGUST 2	2017 (000) 000 LEKË))				
Debtors																
Budgetary	etary 872 988 1,188 1,538 1,874 2,841 3,074 3,223 3,798 3,886 3,111 2,691 2,055 1,915 2,264 2,397															
Household	13,728	18,953	22,429	27,366	30,412	38,104	41,839	45,304	48,552	52,313	54,795	55,591	52,605	52,802	51,583	50,290
Non-budgetary	2,914	2,468	3,168	2,269	2,940	3,516	3,694	3,688	4,058	5,026	3,382	2,964	1,577	2,981	5,776	7,375
Private	2,255	4,033	5,043	7,086	7,050	8,738	8,675	9,138	9,893	10,149	10,257	10,161	10,633	11,105	11,098	11,599
Total	19,768	26,442	31,827	38,260	42,275	53,198	57,283	61,353	66,302	71,374	71,545	71,406	66,869	68,803	70,720	71,662



Source: OSHEE

Table A1-7. Effectiveness

DISTRIBUTION OPERATOR PERFORMANCE 2009-2016 (%)

				LO	SSES LE	VEL (%)	2009-20	17				
	Janar	Shkurt	Mars	Prill	Maj	Qershor	Korrik	Gusht	Shtator	Tetor	Nentor	Dhjetor
2009	40.75	37.05	38.05	32.93	33.44	30.75	32.60	30.20	25.34	30.67	33.44	36.89
2010	38.62	35.41	36.90	31.37	35.17	31.45	26.94	29.69	21.47	20.61	22.16	29.05
2011	55.55	38.00	36.95	23.11	24.85	21.29	21.88	19.41	22.95	25.15	32.20	35.70
2012	35.72	59.16	55.23	45.41	38.87	39.77	45.51	45.51	42.09	35.53	41.89	49.32
2013	51.12	48.71	48.29	39.66	39.52	40.33	43.33	38.50	35.08	45.98	48.08	53.04
2014	47.00	42.14	42.78	35.69	36.85	34.10	36.59	36.36	31.67	34.52	32.88	37.54
2015	36.68	31.82	32.88	30.54	31.24	28.60	30.62	29.29	25.30	29.92	30.82	34.5
2016	34.69	29.00	29.93	26.07	26.97	24.35	25.97	25.15	22.12	27.11	29.30	30.99
2017	33.50	27.63	28.66	25.81	25.88	28.31	24.69	23.29				

				Colle	ctions L	evel (%)	2009-2	2017				
	Janar	Shkurt	Mars	Prill	Maj	Qershor	Korrik	Gusht	Shtator	Tetor	Nentor	Dhjetor
2009	69.32	85.95	74.38	86.58	86.31	76.37	75.40	72.46	83.20	80.82	61.77	70.01
2010	55.37	66.28	86.63	89.46	86.70	79.42	74.84	124.98	84.20	70.81	56.15	66.48
2011	67.26	57.61	87.66	71.61	96.73	73.00	65.00	81.00	66.00	63.86	51.47	87.30
2012	59.80	79.20	78.50	78.00	94.70	83.50	91.60	102.90	74.00	98.00	72.60	78.00
2013	61.40	63.70	86.20	80.70	79.10	69.60	87.90	90.10	78.50	84.30	89.00	102.00
2014	84.90	77.10	85.90	85.50	81.90	80.20	86.70	83.60	102.60	101.00	101.90	141.00
2015	112.70	120.50	103.70	86.60	95.70	97.10	98.40	104.70	95.30	100.30	92.20	100.70
2016	92.10	87.00	95.60	90.10	99.10	92.00	94.20	96.70	91.50	96.70	90.30	96.70
2017	85.20	87.60	105.70	94.50	105.70	91.80	104.80	97.40				

				Sales	effectiv	eness (%	b) 2009-2	2017				
	Janar	Shkurt	Mars	Prill	Maj	Qershor	Korrik	Gusht	Shtator	Tetor	Nentor	Dhjetor
2009	41.1%	54.1%	46.1%	58.1%	57.4%	52.9%	50.8%	50.6%	62.1%	56.0%	41.1%	44.2%
2010	34.0%	42.8%	54.7%	61.4%	56.2%	54.4%	54.7%	87.9%	66.1%	56.2%	43.7%	47.2%
2011	29.9%	35.7%	55.3%	55.1%	72.7%	57.5%	50.8%	65.3%	50.9%	47.8%	34.9%	56.1%
2012	38.4%	32.3%	35.1%	42.6%	57.9%	50.3%	49.9%	56.1%	42.9%	63.2%	42.2%	39.5%
2013	30.0%	32.7%	44.6%	48.7%	47.8%	41.5%	49.8%	55.4%	51.0%	45.5%	46.2%	47.9%
2014	45.0%	44.6%	49.2%	55.0%	51.7%	52.9%	55.0%	53.2%	70.1%	66.1%	68.4%	88.1%
2015	71.4%	82.2%	69.6%	60.2%	65.8%	69.3%	68.3%	74.0%	71.2%	70.3%	63.8%	66.0%
2016	60.2%	61.8%	67.0%	66.6%	72.4%	69.6%	69.7%	72.4%	71.3%	70.5%	63.8%	66.7%
2017	56.7%	63.4%	75.4%	70.1%	78.3%	65.8%	78.9%	74.7%	0.0%	0.0%	0.0%	0.0%

Sales effectiveness in the Distribution System (%) 2009-2017



Source: OSHEE

Table A1-8. HV customer

		January	February	March	April	May	June	July	August	September	October	November	December	Total
NR	CUSTOMERS							Invoice	d Energy MW	/h				
	Energjia e faturuar MWh													
1	ALBANIAN CHROME (ACR)	10,055	10,994	12,445	12,335	12,187	12,178	12,515	12,297					95,006
	FERRO CHROME													
2	(FECR)			8	30	34	41	44	1,136					1,293
3	IRTC	4,984	4,493	5,067	5,022	5,365	5,221	1,553	5,128					36,832
4	ANTEA CEMENT	5,972	3,948	10,566	9,879	10,959	10,093	9,313	7,589					68,320
5	FERROKROM BURREL	6,402	5,589	6,345	6,077	6,353	6,279	6,393	5,879					49,317
6	FUSHE KRUJE CEMENT FACTORY	7,676	3,140	3,367	11,730	9,469	12,944	13,366	11,635					73,327
7	COLACEM ALBANIA	525	877	1,340	1,255	1,380	1,057	852	980					8,265
8	KURUM INTERNATIONAL	6.214	15.469	23.595	24.048	26.313	25,421	19,952	20.279					161.290
9	BERALB	36	31	31	26	23	20	20	1,175					1,361
	ENERGJI ASHTA								.,					, , , , , ,
11	(ASHTA 1) Konsum	0	0	0	0	0	0	4	22					26
	ENERGJI ASHTA	_	_	_	_	_	_							
13	(ASHTA 2) Konsum	0	0	0	0	0	0	4	26					29
15	ENERGJI ULEZ (ULEZ) Konsum	2	3	5	0	1	12	11	48					81
	ENERGJI SHKOPET			-										_
17	(SHKOPET) Konsum	0	0	0	0	0	0	0	0					0
	ENERGJI BISTRICE													
19	(BISTRICE) Konsum	0	0	0	0	0	0	0	0					0
	ENERGJI PESHQESH													
21	(AYEN) Konsum	39	4	5	11	21	29	33	38					180
	ENERGJI BANJA (DEVOLL HPP)													
23	Konsum	12	17	16	24	17	15	12	50					163
24	DEVOLLI HPP	1,001	935	1,043	958	1,009	921	1,045	967					7,881
	Monthly total	42,918	45,498	63,832	71,397	73,130	74,230	65,114	67,250					503,370

Source: OST

CONCLUSION: THIS TABLE MAY SERVE THE PURPOSE OF ESTABLISHING MARKET CONCENTRATION OF CONSUMPTION. IT IS VISIBLE THOUGH AT A FIRST GLANCE THAT THE CONSUMPTIONS SIDE IS QUITE FRAGMENTED

Table A1-9. Capacities allocation

	Table	with	Alloc	ation	data o	of Ava	ilabl	e Tra	ansmi	ssion	Capac	city (A	TC)	duri	ng 4-N	M 201	7			
				All	bania- Moi	ntenegro				,	Albania - C	Greece				9	Shqiperi - I	Cosove		
		Hour	ATC offere Auct		ATC solo		Auctio	n price	ATC offer Auct		ATC solo		Auctio	n price	ATC offer Auct		ATC sol		Auction	n price
Auction	Period		Export	Import	Export	Import	Export	Import	Export	Import	Export	Import	Export	Import	Export	Import	Export	Import	Export	Import
Auction	renou	[h]	[MW]	[MW]	[MW]	[MW]	[Euro/MWh]	[Euro/MWh]	[MW]	[MW]	[MW]	[MW]	[Euro/MWh]	[Euro/MWh]	[MW]	[MW]	[MW]	[MW]	[Euro/MWh]	[Euro/MWh]
-	01.01.2017 - 01.10.2017	6,575	100	100	100	100	0.25	0.45	75	75	75	75	3.69	0.25						
Annual	02.10.2017 - 16.10.2017	360	100	100	100	100	0.25	0.45												
	17.10.2017 - 31.12.2017	1,825	100	100	100	100	0.25	0.45	75	75	75	75	3.69	0.25						
January	01.01.2-17 - 31.01.2017	744	100	100	100	100	0.13	0.75	50	50	50	50	3.35	0.41	125	125	125	125	0.22	0.87
Februar	01.02.2017 - 28.02.2017	672	100	100	100	100	0.26	0.75	50	50	50	50	3.25	0.62	125	125	125	125	0.35	1.23
	01.03.2017 - 14.03.2017	336	100	100	100	100	0.40	0.64	50	50	50	50	5.55	0.16	100	125	100	125	0.42	0.46
March	15.03.2017 - 17.03.2017	72	50	50	50	50	0.91	1.64	50	50	50	50	5.55	0.16	100	125	100	125	0.42	0.46
	18.03.2017 - 31.03.2017	335	100	100	100	100	0.43	0.64	50	50	50	50	5.55	0.16	100	125	100	125	0.42	0.46
	01.04.2017 - 16.04.2016	384	100	100	100	100	0.41	0.37							125	125	125	125	0.31	0.22
April	17.04.2017 - 19.04.2017	72							50	50	50	50	7.77	0.03	100	100	100	100	0.36	1.09
April	20.04.2017 - 23.04.2017	96	100	100	100	100	0.41	0.37	30	30	30	30	7.77	0.03	100	100	100	100	0.50	1.09
	27.04.2017 - 30.04.2017	96	100	100	100	100	0.41	0.57							125	125	125	125	0.31	0.26
May	1.05.2017-31.05.2017	744	100	100	100	100	0.39	0.92	105	105	105	105	0.17	1.11	50	50	50	50	5.63	0.12
June	01.06.2017-30.06.2017	720	100	100	100	100	0.11	1.06	105	105	105	105	0.22	1.05	50	50	50	50	5.45	0.07
	1.07.2017-31.07.2017	744	100	100	100	100	0.17	1.87	105	105	105	105	0.07	2.30	50	50	50	50	3.36	0.61
August	1.08.2017-31.08.2017	744	100	100	100	100	0.05	4.61	105	105	105	105	0.04	3.50	50	50	50	50	1.11	2.89
Septemb	per																			
October																				<u> </u>
Novemb	er																			ļ
Decemb	er																			

Source: OST

GENERAL REMARK: INFORMATION FROM THIS TAB IS EXTREMELY USEFUL FOR MARKET MONITORING PURPOSES AS IT SHOWS THE EXTENT OF MARKET DISTURBANCE INTRODUCED BY INTERCONNECTORS' UNAVAILABILITY

RECOMMENDATIONS:

^{1.} For instance ERE's market monitoring function might have been alarmed by the prolonged (January-April unavailability of the Albania-Greece or Albania-Kosovo (May-August) interconnectors). Both events triggered outstandingly high auction prices and OST should have been justifiably asked as for the reasons of these prolonged events.

^{2.} Also, in a similar manner ERE may wish to observe the availability of the most important tie-lines within Albania. For instance, prolonged cases of unavailability of 400, 220 and 110 kV lines evacuating the electricity from generators and/or delivering it to the main consumption centers should trigger questioning OST as to the reasons for these.

Table A1-10 Market participants

	·			PRODUCTION	Р
				TRADER	Т
	Market Participant Register 2017		SUPPLII	ER to enabled customers	S
				UNIVERSAL SUPPLIER	US
			DISTRIBUTION trans	mission + MO + SO=OST	D
1	A&A Group	23X150311-A-A2	54	04.07.2015	T; S
2	Albanian Energy Supplier	54X-AEG-02-1603G	58	26.05.2015	T; S
3	AXPO Albania	23X150330-AA-K	3	20.01.2011	T; S
4	Ayen AS Energji	23X150416-A—N	47	17.12.2014	P; T; S
5	Ayen Energy Trading	23X140426-AY-W	40	04.05.2014	T; S
6	Danske Commodities Albania	23X121120DCALG	21	30.10.2012	T; S
7	Devoll Hydropower	23X150409-DHP5	62	11.06.2015	T; S
8	EFT Albania	23X150302-EAL6	18	27.05.2011	T; S
9	EMIKEL	54X-E-SHPK-16044	56	15.04.2015	T
10	Energija doo Veternik	54X-EDOOV-15-020	68	15.12.2015	T; S
11	Energji Ashta	54X-HECASHTA-059	20	25.05.2012	P
12	Energy Supply-AL	34X-000000017-C	24	15.05.2013	T; S
13	Erdat Lura	54X-HEC-LURA-069	32	17.09.2013	P
14	Future Energy AL	23X150301-FE-3	50	06.03.2015	T; S
15	GEN-I Tirana	23X120709GEN0	4	31.01.2011	T; S
16	Gjo-Spa Power	54X-HEC-LAPAJ075	33	17.09.2013	P
17	Green Energy Trading Albania	23X150702GE3	65	01.07.2015	T
18	Grupi Sistemeve Automatike	22XGSAN	16	09.05.2011	T; S
19	Korporata Elektroenergjitike Shqiptare	23X130918APC-M	12	25.04.2011	P; T
20	KURUM International	23X131115KI1	35	17.12.2013	P; S;T;
21	Alb Energy Market	54X-ALBEM11Y	74	07.07.2017	T, S
22	NOA Energy Trade	23X150630-NE-6	52	10.03.2015	T, S
23	Operatori Shperndarjes Energjise Elektrike	23X130503CS-2	7	25.04.2011	D, US
24	Stravaj Energy	54X-STRAVAJ-E086	38	25.04.2014	P; T
25	WENERG	54X-WENERG10E	64	10.06.2015	P
26	YLLIAD	29XYLLIAD-ALW	6	03.03.2011	T; S
27	Energy Market Albania	54X-ENMARKETAL99	71	23.03.2017	T
28	Grid Energy	54X-GRID-ENERGYR	72	05.04.2017	T; S
29	GAEA-Energjia Alternative e Gjelber	54X-GAEA11-1501R	66	07.12.2015	T; S
30	Energy Financing Team Tirana	54X-EFT-TIRANA-V	4517	24.08.2017	T

Source OST sha

CONCLUSION: THE LIST OF MARKET PARTICIPANTS PUT AGAINST THE PARTIES WHICH ARE ACTUALLY INVOLVED IN ACTIVE TRADING SHOULD BE USEFUL FOR INDENTIFICATION OF REASONS FOR WHICH CERTAIN PARTICIPANTS DO NOT INVOLVE INTO TRADES.

Table A1-11. Energy market transactions

Energy Market Transactions in Open Market by Market Participants [MWh] for 2017

	1			ı								1	1		1	Ī
Nr.	Market Participant		Transaction's type	January	February	March	April	May	June	July	August	September	October	November	December	Total [MWh
			AL-GR Greece - IN	-5,761	-3,812	-367	-407	-1,408	-1,752	-3,816	-7,596					-24,91
			AL-RS (KS) Kosovo - IN	0	0	-1,648	-2,791	-4,154	-1,590	-3,123	-4,522					-17,82
			AL-ME Monte Negro - IN	-620	-1,651	-2,159	-1,700	-4,544	-3,307	-2,321	-6,636					-22,93
		Exchanges/	Total IN	-6,381	-5,463	-4,174	-4,898	-10,106	-6,649	-9,260	-18,754	0	0	0	0	-65,68
		Cross-Border	AL-GR Greece - OUT	1,658	1,049		6,491	10,789	6,908	721						32,67
			AL-RS (KS) Kosovo - OUT	18,986	7,559	8,089	3,259	3,465	7,388	6,618	1,060					56,42
1	DEVOLLI HP		AL-ME Monte Negro - OUT	6,104	40		2,504	5,146	737	2,694						18,67
			Total OUT	26,748	8,648		12,254	19,400	15,033	10,033	2,143		0	0	0	107,77
		Productioni	Production HEC BANIA	20,367			8,076	9,294	9,464	11,933	4,389					86,84
		1 louucuoin	Total Production	20,367	6,545		8,076	9,294	9,464	11,933	4,389		0	0	0	86,84
		Internal	Sold OSHEE	_	3,360	7,430	-	-	1,080	11,160	21,000					44,03
			Sold KESH	_	-	-	720	-	-	-	-					72
		Transactions	Total transaksione	0	3,360	7,430	720	0	1,080	11,160	21,000	0	0	0	0	44,75
			AL-GR Greece - IN	0	0		0	0	-2,827	-8,014	-4,893					-15,73
			AL-RS (KS) Kosovo - IN	-6,620	0	755	-660	-4,575	-1,379	-3,063	-3,479					-20,50
		T 1 /	AL-ME Monte Negro - IN	-26,556	-212		-70	-1,937	-4,461	-1,187	-5,657					-40,08
		Exchanges /	Total IN	-33,176	-212	-733	-730	-6,512	-8,667	-12,264	-14,029	0	0	0	0	-76,32
		Cross-Border	AL-GR Greece - OUT	0	0	0	0	0	0	0	1					
			AL-RS (KS) Kosovo - OUT	937		4,536	3,639	218	1,686	485						19,63
			AL-ME Monte Negro - OUT	50			1,595	0	3,214	8,014	4,732					24,33
			Total OUT	987			5,234	218	4,900	8,499			0	0	0	43,97
		Productioni	Production HEC PESHOESH	8,522		13,077	8,232	6,348	2,708	1,516	1,640					55,13
		Troduction	Total Production	8,522	13,090		8,232	6,348	2,708	1,516	1,640	0	0	0	0	55,13
2	AYEN		Purchases KURUM	-616	-	-3,145	-	-	-	-	-					-3,76
_	111211		Sold NOA	37,200	-	-			-	-	-					37,20
			Sold DANSKE	4,127	3,579		200	78	24	46						11,43
			Sold GEN-I	-	222	72	-	-	-	144	14					45
		T.,	Purchases FUTURE	-	-	-	-	-	-1,260	-	-					-1,26
		Internal	Sold FUTURE	-	-	3,715	-	-	900							4,61
		Transactions	Purchases GRID ENERGY	-	-	-	-	-10	-	-144						-16
			Sold GRID ENERGY	-	-	-	3,528	12,574	5,011	5,235						31,40
			Sold A&A Group	-	-	-	-	-	-	-	3,280					3,28
			Sold OSHEE	-	-	-	-	-	-	-	2,480					2,48
			Sold KESH	40.511	-	- 4.00=	- 0.500	- 40.662	1,800	-	40.050			_		1,80
	ļļ		Total transaksione	40,711	3,801	4,027	3,728	12,642	6,475	5,281	10,820	. 0	. 0	. 0	0	87,48.

Energy Market Transactions in Open Market by Market Participants [MWh] for 2017

Nr.	Market Participant		Transaction's type	January	February	March	April	May	June	July	August	September	October	Novembei	December	Total [MWh]
			AL-GR Greece - IN	-46,848	-34,176			-17,253	-29,198	-33,196						-254,807
			AL-RS (KS) Kosovo - IN	-28,995	-45,147			-56,305	-46,357	-43,236						-310,667
		T1/	AL-ME Monte Negro - IN	-6,465	-36,184		-72,008	-62,966	-44,505	-90,364						-421,169
		Exchanges /	Total IN	-82,308		-142,850		-136,524	-120,060	-166,796		0	0	0	0	-986,643
		Cross-Border	AL-GR Greece - OUT	15,621	43,583		72,559	67,853	68,913							398,437
			AL-RS (KS) Kosovo - OUT	18,048	15,861	1,472	6,349	5,423	5,702	3,163						66,403
			AL-ME Monte Negro - OUT	7,252	8,004	5,215	13,315	3,078	20,098	1,267	23,264					81,493
			Total OUT	40,921	67,448		92,223	76,354	94,713	28,344		0	0	0	0	546,333
3	GEN-I		Sold Konsumatoreve te Kualifikuar	3,682	3,892	16,923	16,261	15,746	14,907	15,182						98,031
١	OLIV I		Sold OSHEE	48,360	57,120	22,290	-	44,640	10,440	116,180	43,320					342,350
			Sold KESH	-	-	-	14,400	-	-	-	-					14,400
		T . 1	Sold GSA	3,920		-	-	-	-	-	-					3,920
		Internal	Purchases ENERGIIA D.O.O VETERN		-18,085	-	-	-	-	-	-					-35,828
		Transactions	Sold ENERGIIA D.O.O VETERNIK	3,168	5,354	-	-	-	-	-	-					8,522
			Purchases AYEN	-	-222	-72	-	-	-	-144						-452
			Purchases KURUM	-	-	-6,269	-	-216	-	-4,386						-14,208
			Sold KURUM	-	-	-	-	-	-	11,620	11,955					23,575
			Total transaksione	41,387	48,059	32,872	30,661	60,170	25,347	138,452	63,362	0	0	0	0	440,310
			AL-GR Greece - IN	0	0	0	0	0	0	0	-9,920					-9,920
			AL-RS (KS) Kosovo - IN	-53,130	-43,755			-41,064	-31,902	-66,720						-386,172
		T 1 /	AL-ME Monte Negro - IN	-18,065	-22,495	-5,685	-7,270		-9,105	-39,579						-182,999
		Exchanges /	Total IN	-71,195	-66,250	-42,705	-30,571	-66,274	-41,007	-106,299	-154,790	0	0	0	0	-579,091
		Cross-Border	AL-GR Greece - OUT	0	0	0	0	0	0	0	0					0
			AL-RS (KS) Kosovo - OUT	0	0	6,690	4,490	0	0	0	0					11,180
			AL-ME Monte Negro - OUT	0	0	290	1,340	0	60	0	0					1,690
			Total OUT	0	0	6,980	5,830	0	60	0	0	0	0	0	0	12,870
4	GSA		Sold Konsumatoreve te Kualifikuar	30,475	25,930		28,476	25,075	27,212	27,089						239,898
4	GSA		Sold OSHEE	44,640	40,320	22,290	-	40,920	2,520	79,210						356,140
			Purchases KESH (Compensation Agreer	-4,450	-6,041	-8,000	-6,443	-6,883	-6,922	-6,658	-6,733					-52,130
			Sold KESH (Compensation Agreement)	4,450	6,041	8,000	6,443	6,883	6,922	6,658	6,733					52,130
		Internal	Purchases KESH	-	-	_	-8,800	-	-	-	-					-8,800
		Transactions	Sold KESH	-	-	_	-	-	3,675	-	-					3,675
			Purchases KURUM	-	-	-33,656	-	-6,417	-2,426	-	-					-42,499
			Sold KURUM	-	-	-	5,065	6,696	9,966	-	-					21,727
			Purchases GEN-I	-3,920	_	_	-	-	-	-	-					-3,920
			Total transaksione	71.195	66.250	35,725	24.741	66.274	40.947	106.299	154.790	0	0	0	0	566,221

Energy Market Transactions in Open Market by Market Participants [MWh] for 2017

Nr.	Market Participant		Transaction's type	January	February	March	April	May	June	July	August	September	October	Novembe	December	Total [MWl
			AL-GR Greece - IN	-20,655	-13,103	-1,648	3 0/12	-12,544	-12,973	-21,857	-10,843				1	-97,50
			AL-RS (KS) Kosovo - IN	-20,033	-1,881		-3,942	-12,344	-12,973	-21,037	-10,043		1			-1.88
			AL-ME Monte Negro - IN	-4,064			-3,125	-15,680	-6,319	-5,788	-27,609					-78,09
			Total IN	-24,719			-7,067	-28,224					0	() (-177,54
			AL-GR Greece - OUT	3,475			6,331	8,371	2,205				U	•	,	47,74
		Closs-Doluci	AL-RS (KS) Kosovo - OUT	12,874		3,714	10,457	5,651	10,399							60,92
			AL-ME Monte Negro - OUT	12,497		572	12,115	5,352	3,142							64,33
5	DANSKE		Total OUT	28,846				19,374	15,746			0	0	0) (173,00
			Sold OSHEE	-	-	-	-	8,928	-	-	-	Ü	Ĭ	·	· ·	8,92
			Purchases KESH	-	_	-	-1,440		-	-	-					-1,44
		Internal	Sold KESH	_	_	-	-	-	3,570	_	_					3,57
			Purchases AYEN	-4,127	-3,579	-3,385	-200	-78	-24	-46	-					-11,43
		Transactions	Purchases KURUM	-	-	-	-20,196	-	-	-	-					-20,19
			Sold NOA	-	-	-	-	-	-	3,500	21,608					25,10
			Total transaksione	-4,127	-3,579	-3,385	-21,836	8,850	3,546	3,454	21,608	0	0		ol o	4,53
				-				-								-
			AL-GR Greece - IN	-	-	0	_	-	0	-	-					
			AL-RS (KS) Kosovo - IN	-	-	0	-	-	0	-	-					
			AL-ME Monte Negro - IN	-	-	0	-	-	0	-	-					
			Total IN	0	0	0	0	0	0	0	0	0	0		0)
		Cross-Border	AL-GR Greece - OUT	-	-	0	-	-	0	-						
_			AL-RS (KS) Kosovo - OUT	-	-	3,715	-	-	0		-					3,71
6	FUTURE		AL-ME Monte Negro - OUT	-		0	-	-	0		-					
			Total OUT	0	0	3,715	0	- 0	0	U	0	0	0		(3,71
			Purchases KESH	-	-	-	-	-	-1,260		-					-1,20
		Internal	Sold KESH	-	-		-	-	900		-					90
		Transactions	Purchases AYEN	-	-	-3,715	-	-	-900		-					-4,61
			Sold AYEN	-	-	-3,715	-	-	1,260	-	-					1,20
			Total transaksione	U	0	-3,/15	U	0	U			U	- 0		,	-3.71
			AL-GR Greece - IN	0		0		0	0	-3,500	-2,480		1			-5,98
			AL-RS (KS) Kosovo - IN	0		0	-	0	0	-3,500	-2,480				1	-5,98
			AL-ME Monte Negro - IN	0	-	-11,145	-	-15,541	-2,100	-5,250	-15,600		1			-49,63
			Total IN	0	-	-11,145	- 0	-15,541	-2,100				0			-55,61
			AL-GR Greece - OUT	0	-	-11,145	-	-13,341	-2,100 0	-0,/30	-10,000	U	U		,	-55,0
		Cross-Border	AL-RS (KS) Kosovo - OUT	0		<u> </u>	-	0	0	<u> </u>	0					
7	NOA		AL-ME Monte Negro - OUT	0		0		0	0	1 6	1 0		 		<u> </u>	
'	110/1		Total OUT	0	- 0	0	- 0	0	0	0		0	0			
	ŀ		Sold OSHEE	37,200		11,145	-	15,541	-	12,250	39,688	0	1	,		115,82
		1	Sold KESH			-		-	2,100		37,000				t	2,10
		Internal	Purchases DANSKE	- -		-		-	2,100	-3,500	-21,608	<u> </u>			t	-25,10
			Purchases AYEN	-37,200						-5,500	-21,000				t	-37,20
			Total transaksione	-37,200	- 0	11,145	- 0	15,541	2,100	8,750	18,080	0	1	(1	55,6

Energy Market Transactions in Open Market by Market Participants [MWh] for 2017

Nr.	Market Participant		Transaction's type	January	February	March	April	May	June	July	August	September	October	November	December	Total [MWh]
			Liv on a													L
			AL-GR Greece - IN	-	-	-	-	-	-	-	0					(
			AL-RS (KS) Kosovo - IN	-	-	-	-	-	-	-	-3,720					-3,720
		Exchanges /	AL-ME Monte Negro - IN		-	-	-	-	-	-	0					(
			Total IN	0	0	0	0	0	0	0	-3,720	0	0	0	0	-3,720
	40.40	Cross-Border	AL-GR Greece - OUT	-	-	-	-	-	-	-	0					
8	A&A Group		AL-RS (KS) Kosovo - OUT	-	-	-	-	-	-	-	0					
			AL-ME Monte Negro - OUT Total OUT	-	-	-	-	-	-	-	0	0	_			9
			Sold OSHEE	0	0	0	0	0	Ü	U	0	Ü	U	U	U	7.000
		Internal			-	-	-	-	-		7,000					7,000
		Transactions	Purchases AYEN Total transaksione	-	- 0	- 0	- 0	- 0	-	-	-3,280 3,720		0	0	0	-3,280 3,720
			1 otal transaksione	U	U	U	U	U	U	U	3,/20	U	U	U	U	3,/20
			AL-GR Greece - IN	0	0	0	0	0	0	0	0					
			AL-RS (KS) Kosovo - IN	-1,900	v				-	-479	-161					-5,990
			AL-ME Monte Negro - IN	-1,900	-133	-550	0			-4/9	0					-4,090
		Exchanges /	Total IN	-1,900			-72	0		-479	-161		0	0	0	-10,080
		Cross-Border	AL-GR Greece - OUT	0	0		2,400	0	0,100	0	0		0	U	0	3,600
		Closs-Doluci	AL-RS (KS) Kosovo - OUT	0	ŏ	v	2,100	0		0	0					3,000
			AL-ME Monte Negro - OUT	0	-		2,480			Ö	0					18,920
			Total OUT	0		,				0			0	0	0	22,520
			Purchases GSA (Compensation Agreeme	-4,450	-6,041	-8,000		-6,883		-6,658	6,733	Ů	·	Ů		-38,664
			Sold GSA (Compensation Agreement)	4,450		8,000	6,443	6,883		6,658	-6,733					38,664
9	KESH		Purchases GSA	-	-	-	-	-	-3,675	-	-					-3,675
			Sold GSA	-	-	-	8,800	-	-	-	-					8,800
			Purchases DEVOLL	-	-	-	-720	-	-	-	-					-720
		Internal	Purchases GEN-I	-	-	-	-14,400	-	-	-	-					-14,400
			Purchases DANSKE	-	-	-	-	-	-3,570	-	-					-3,570
		Transactions	Sold DANSKE	-	-	-	1,440	-	-	-						1,440
			Purchases FUTURE	-	-	-	-	-	-900	-	-				-	-900
			Sold FUTURE	-	-	-	-	-	1,260	-	-					1,260
			Purchases AYEN	-	-	-	-	-	-1,800	-	-					-1,800
			Purchases NOA	-	-	-	-	-	-2,100	-	-					-2,100
			Total transaksione	0	0	0	-4,880	0	-10,785	0	0	0	0	0	0	-15,665

Shenime:

^{1.} HV Customers in open market changes for the specific month depending on the bilateral contracts
2. Mark (-) is used for the received energy in grid; (+) for the delivered energy from grid.

	ENE	RGY IMP	ORTI BY	OSHEE	sha (M	Wh) (IN OP	EN MARI	KET)					
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2017
AXPO DOO BEOGRAD	-11,160	-10,080	-11,145		-11,160	-1,080	-11,160	-8,680					-64,465
EFT AG	-44,640	-57,120	-22,290		-44,640	-10,080	-131,720	-189,415					-499,905
DEVOLL HYDROPOWER		-3,360	-7,430			-1,080	-11,160	-21,000					-44,030
GEN-I	-48,360	-57,120	-22,290		-44,640	-10,440	-116,180	-43,320					-342,350
GSA shpk	-44,640	-40,320	-22,290		-40,920	-2,520	-79,210	-126,240					-356,140
NOA Energy Trade	-37,200		-11,145		-15,541		-12,250	-39,688					-115,824
GRID ENERGY					-7,440		-3,720						-11,160
AYEN Energy Trade								-2,480					-2,480
DANSKE COMMODITIES					-8,928								-8,928
HSE								-16,264					-16,264
A&A Group of Companies						·		-7,000					-7,000
KESH sh.a						·							
Total	-186,000	-168,000	-96,590		-173,269	-25,200	-365,400	-454,087					-1,468,546

Source: KESH, OST, OSHEE

CONCLUSION: IT IS HARD TO ESTABLISH THE REASON FOR COLLECTING THE INFORMATION FROM THE UPPER PART OF THIS TAB. IT DOES NOT SEEM TO BE USEFUL FOR MARKET MONITORING PURPOSES PLUS IS QUITE LABORIOUS TO DEVELOP. Second table (i.e. the one at the bottom) ALLOWS FOR ESTABLISHING OF MARKET SHARES OF CERTAIN TRADERS.

Table A1-12. MM analyses, market concentration

Market Concentration					
GENERATION DURING 2016 FROM	THE PLANTS	CONNECTED I	N THE TRAI	NSMISSION	GRID (MWh)
		TOTAL	MARKET		
		PRODUCED	SHARE:	Square of s	shares
	754,654				
"KESH" sha	1,024,466	2,280,087	0.754	5,681	
	500,966				
"Kurum International" sh.a.	199,400	199,400	0.066	43	
Transmittendiena en.a.	100,100	100,100	0.000	10	
"Energji Ashta" shpk	127,633	127,633	0.042	18	
"Ayen As Energji"sha	52,093	52,093	0.017	3	
"Devoll Hydropower" sha	86,315	86,315	0.029	8	
"HPP of Bishnica 1,2 "shpk	5,115	5,115	0.002	0	
"Wenerg " shpk	7,232	7,232	0.002	0	
"DITEKO" shpk	2,761	43,237	0.014	2	
DITERO SIIPR	40,476	45,257	0.014	2	
"Power Elektrik Slabinje" shpk	20,178	20,178	0.007	0	
"Euron Energy" shpk	89,924	89,924	0.030	9	
Euron Energy Shipk	0	09,924	0.030	9	
"Energy partners Al" shpk	9,464	9,464	0.003	0	
"C & S Construction Energy" shpk	15,831	15,831	0.005	0	
"C & S Energy" shpk	14,200	14,200	0.005	0	
"Gjo.Spa.POWER"shpk	25,051	25,051	0.008	1	
"Lengarica & Energy" shpk	8,192	8,192	0.003	0	
"Erdat Lura" shpk	19,179	19,179	0.006	0	
"Gjure Rec" shpk	7,220	7,220	0.002	0	
"Prelle Energji"	14,758	14,758	0.005	0	
TOTAL:		3,025,109		5767	

GENERATION DURING 2016 FROM	/ THE	PLANTS CONNEC	TED IN THE DISTRIBUTI	ON GRID (MWh))
"HPP of Lanabregas" sha		22,142	22,142	0.069	48
"EMUZEL 2002" ab a k		1,610	2,021	0.006	0
"EMIKEL 2003" sh.p.k		411	2,021	0.006	0
"Albania Green Energy" sh.p.k		15,571	15,571	0.049	24
		982			
		252			
		711			
		6,108			
		3,970			
		3,280			
		1,293			
		396			
		0			
		393			
#F = 0 F = 1 - 1		352	07.000	0.000	-,
"Balkan Green Energy" shpk		1,234	27,368	0.086	74
		2,841			
		427			
		366			
		423			
		335			
		343			
		1,925			
		490			
		884			
		361			
"Spahiu Gjanç" sh.p.k.		2,814	2,814	0.009	1
"Wonder power" sha		1,391	1,391	0.004	0
"Amal" sh.p.k		1,057	1,057	0.003	0
•		4,658	4,658	0.015	2
"Hidroinvest 1" shpk		5,964	5,964	0.019	3
"Malido-Energji" shpk		1,486	1,486	0.005	0
		14,506			
		5,813	26,786	0.084	71
"HIDROALBANIA Energji" shpk		6,468	·		
<u> </u>		4,444	7.044	0.000	_
"HydroEnergy "shpk		2,597	7,041	0.022	5
"Dishnica Energy" shpk		324	324	0.001	0
"Elektro Lubonje" shpk		115	115	0.000	0
"Koka & Ergi Energy Peshk" shpk		6,008	6,008	0.019	4

GENERATION DURING 2016 FROM THE PLANTS CONNECTED IN THE DISTRIBUTION GRID (MWh)									
"Ansara Koncension" shpk	143	143	0.000	0					
"Energy Plus" shpk	28,120	28,120	0.088	78					
"HPP of Vlushe " shpk	12,913	12,913	0.041	16					
"Korkis 2009" shpk	35	35	0.000	0					
"HP OSTROVICA" shpk	7,400	7,400	0.023	5					
"Facial Facinities along	938		0.000	0					
"Erald Energjitik" shpk	989	1,927	0.006	0					
"Bekim Energjitik" shpk	1,287	1,287	0.004	0					
"Selishte" shpk	3,444	3,444	0.011	1					
"FD844 84D" - L L-	1,304	5.405	0.040	2					
"ERMA MP" shpk	3,821	5,125	0.016	3 -					
"Dosku Energy" shpk	1,379	1,379	0.004	0					
"Snow Energy" shpk	2,530	2,530	0.008	1					
"Stravaj Energji" shpk	5,925	5,925	0.019	3					
"Peshku Picar 1" shpk	191	191	0.001	0					
"Hydro Salillari Energy "shpk	1,064	1,064	0.003	0					
"Albanian Power" shpk	9,195	9,195	0.029	8					
"Hydro power Plant Of Korca" shpk	5,653	5,653	0.018	3					
"Hidro Borshi" shpk	4,479	4,479	0.014	2					
"Lu & Co Eco Energy" shpk	571	571	0.002	0					
3, 1	753								
"E.T.H.H. "shpk	1,154	2,566	0.008	1					
·	659	1							
"Caushi Energji" shpk	1,179	1,179	0.004	0					
"SA.GLE.Kompani "shpk	2,189	2,189	0.007	0					
"Energji Xhaci" shpk	233	233	0.001	0					
"Tucep" shpk	1,608	1,608	0.005	0					
	4,166								
"HPP of-Treske"shpk	836	5,002	0.016	2 -					
"Hidro Energy Sotire"shpk	1,782	1,782	0.006	0					
"Shutina energji"shpk	1,056	1,056	0.003	0					
"Zall Herr Energji 2011"shpk	2,886	2,886	0.009	1					
"HPP of Qarr & Kaltanj"shpk	2,029	2,029	0.006	0					
"Bardhgjana" shpk	1,742	1,742	0.005	0					
	1,100	,							
"Gjoka Konstruksion Energji" shpk	2,786	3,885	0.012	1 -					
"Sarolli" sh.p.k	798	798	0.003	0					
Star NRG sh.p.k	349	349	0.001	0					
"Mokai Floktvik" ob p.k	225	550	0.000						
"Maksi Elektrik" sh.p.k	328	553	0.002	0 -					
"Juana" sh.p.k	407	407	0.001	0					

GENERATION DURING 2016 FROM	THE	PLANTS CONN	ECTED IN THE DISTRIB	UTION GRID (M	Wh)			
"WTS Energji" shpk		521	521	0.002	0			
"Marjakaj" shpk		779	779	0.002	0			
"Favina 1" shpk		5,409	5,409	0.017	3			
"Selca Energji" shpk		3,021	3,021	0.009	1			
"DN & NAT Energy"shpk		992	992	0.003	0			
"Energo – Sas" shpk		11,959	11,959	0.038	14			
"HPP of i Tervolit" shpk		16,137	16,137	0.051	26			
"MTC Energy" shpk		3,231	3,231	0.010	1			
"Gurshpat Energy" shpk		1,308	2,939	0.009	1 -			
Guisilpat Ellergy Slipk		1,630	2,939	0.009				
"Bistrica 3 Energy" shpk		5,603	5,603	0.018	3			
"Komp Energji" shpk		2,006	2,006	0.006	0			
"Fatlum" shpk		153	153	0.000	0			
"Koxherri Energji" shpk		693	693	0.002	0			
"Kisi-Bio-Energji" shpk		2,549	2,549	0.008	1			
"Gama Energy" shpk		3,893	3,893	0.012	1			
"Mesopotam Energy" shpk		1,203	1,203	0.004	0			
"Strelca Energy" shpk		7,333	7,333	0.023	5			
"HP Ujaniku Energy" shpk		2,032	2,032	0.006	0			
"Nishova Energy" shpk		207	207	0.001	0			
"Perparimi SK" shpk		777	777	0.002	0			
"Ballenja Power Martanesh" shpk		1,320	1,320	0.004	0			
"Gavran Energy" shpk		1,362	1,362	0.004	0			
"Gavran Energy" shpk		334	334	0.001	0			
TOTAL:		318,843	318,843	1.00	419			
GRAND TOTAL:		<u>0</u>	<u>0</u>					
HHI of producers:		HHI:	Conclusion:					
1) At the transmission level:		<u>5767</u>	Heavily monopolized i	<u>market</u>				
2) At the distribution level:		<u>419</u>	_					

This table contains sample analysis of HHI index for Albania, based on 8-month electricity market shares data for 2017. While doing this, it calculates HHIs separately for: (i) transmission - level generators (where the dominance of KESh is clearly visible) and for (ii) distribution level (where considerable extent of competition exists).

ANNEX 2. AGENCY FOR THE COOPERATION OF ENERGY REGULATORS (ACER) FORMS—ANNOTATED

Legend

All words indicated with a "*" are listed in the glossary.

Glossary	Definition
Activated balancing energy	Energy activated by Transmission System Operators to perform Balancing.
ATC	Available Transmission Capacity: is that part of Net Transfer Capacity (see
	below), which remains available for further commercial activity after each phase of
	the transmission capacity allocation procedure;
Balancing reserves	Balancing reserves refer to all resources, if procured ex ante or in real time, or
	according to legal obligations, which are available to the TSO for balancing
	purposes;
Capacity request	A capacity request is the act of asking for permission to physically transfer a specific amount of
	power (in MW) over the interconnection for a specific hour of the day.
Congestion	Situation in which an interconnection linking national transmission networks cannot accommodate
	all physical flows resulting from international trade requested by market participants, because of a
	lack of capacity of the interconnectors and/or the national transmission systems concerned;
Congestion revenues	Net Revenues resulting from the allocation of scares interconnection capacity.
Counter trading	Countertrading means a cross-zonal exchange initiated by system operators between two bidding
	zones to relieve physical congestion between those zones. The precise generation or load pattern
	alteration is not pre-defined.
Curtailments	If the sum of monthly and yearly auctioned capacities is larger in a specific hour then the Day
	ahead NTC value in that hour.
DA prices	Day ahead prices from power exchanges.

Glossary	Definition
FBMC	Flow-based market coupling
FCR	Frequency containment reserves
FRR	Frequency restoration reserves
FTR	Financial transmission rights
ID	Intra-day.
Imbalance prices	The price in each Imbalance Settlement Period for Imbalance in each direction.
Imbalance volume	The difference between the position of a Balance Responsible Party, the allocated Volume of all injections and withdrawals covered by this Balance Responsible Party and any imbalance adjustment applied by the Transmission System Operator within a given Imbalance Settlement Period.
LT	Long term, including monthly and yearly.
N-1 violation	A situation, i which at least one Contingency from the Contingency List can lead to deviations from Operational Security Limits, even after effects of Remedial Actions (source: ICS methodology 2013)
Nominations	Commercial schedules or nominations: the exchange program sent by an agent, to one of the two concerned TSOs, relating to the power, expressed in MW, that it wishes to use under a programming authorization.
NA	Not available: It is used to indicate when information in a certain table cell is not provided because the answer is not available. Not to be confused with NAP, see below.
NAP	Not applicable: It is used to indicate when information in a certain table cell is not provided because it does not apply to a particular case in question. Not to be confused with NA, see above.
NRA	National Regulatory Authority.
NTC	The NTC (Net Transfer Capacity) corresponds to the maximum power transfer value possible between two areas without violating security standards applicable in both areas whilst taking into account the technical uncertainties on future network conditions. The NTC value is computed at different timeframes (e.g. year-ahead, month-ahead, week-ahead, D-2, D-1, intra-day) by each Transmission System Operator, and on congested borders agreed with their neighbor. The D-1 NTC is the NTC seen from day ahead. This value is the update of the D-2 NTC including the latest update of the TRM. D-2 NTC is for the commonly used calculation of the day ahead Available Transmission Capacity, or D-1 ATC. In some regions where there is no allocation of long term capacity rights prior to the day ahead allocation D-1 NTC equals D-1 ATC
PTR	Physical transmission rights
Redispatching	Redispatching means a measure activated by one or several system operators by altering the generation and/or load pattern in order to change physical flows in the transmission system and relieve a physical congestion. Specifically, this refers to a TSO requesting, when congestion

Glossary	Definition
	appears, some generators (or certain consumers) to start or increase production and some other
	generators to stop or reduce production, in order to maintain the network security.
RR	Restoration reserves
TRM	Transmission Reliability Margin.
UIOLI	Use it or lose it
UIOSI	Use it or sell it

GENERAL REMARK: VOCABULARY/TABLE OF ABBREVIATIONS IS USEFUL FOR MARKET PARTICIPANTS' UNDERSTANDING OF WHICH INFORMATION NEEDS TO BE FILLED IN

Contact information	
Contracting Party	
NRA (name)	
Contact person for this questionnaire	
Email address	

GENERAL REMARK: INFORMATION FROM THIS TAB IS USEFUL FOR ESTABLISHING THE DIRECT RESPONSIBILITY FOR DATA SUBMISSION

Wholesale and Balancing Market Overview

Please indicate NAP if "not applicable" and NA if data "not available"

.c mai ii not applicable and r	in in data mot avanable		
		2015	2016
Balancing capacity contra	ected abroad (MW)		
Balancing energy contract	ted abroad (MWh)		
System requirements of rese	erve capacity (annual		
average, MW) (all type	es of reserves)		
Contracted reserve capacity	(MW, annual average)		
Average prices paid for contra	cted balancing reserve		
capacity (€/	MW)		
Market Share of largest provide	r of balancing energy for		
all types of rese	erves (%)		
Market Share of largest provide			
reserve capacity for all typ			
Electricity traded through bila			
Electricity volume traded clos			
(other than bilateral (long	g-term) contracts)		
Number of wholesale market	Generator		
participants (please specify	Supplier		
how many generators, traders,	`		
eligible consumers, suppliers	supplier)		
and etc.)	Eligible consumer		
Total number of N-	1 violations*		

^{*}In case there is no N-1 violation records in your country please indicate total number of blackouts + brownouts referring to this fact

Months	wholesale energy prices in Euro/MWh (monthly average)	Balancing energy prices in Euro/MWh (monthly average)	Total Balancing energy activated in national balancing market (MWh)	Total Balancing energy activated from neighboring balancing markets (MWh)	System peak load (MW)	End-consumption (MWh)
Jan-15						
Feb-15						
Mar-15						
Apr-15						
May-15						
Jun-15						
Jul-15						
Aug-15						
Sep-15						
Oct-15						
Nov-15						
Dec-15						
Jan-16						
Feb-16						
Mar-16						
Apr-16						
May-16						
Jun-16						
Jul-16						
Aug-16						
Sep-16						
Oct-16						
Nov-16						
Dec-16						

GENERAL REMARK: INFORMATION FROM THIS TAB IS USEFUL FOR MARKET MONITORING PURPOSES - ESPECIALLY DEVELOPMENTS ON BOTH DAM AND BALANCING MARKET, AS WELL AS HOW BM TRANSACTIONS MAY OR MAY NOT BE PHASING OUT THE DAM TRANSACTIONS. IT ALSO ALLOWS FOR ESTABLISHING THE DOMINANT PARTIES ON BOTH MARKETS' FLOORS. ALSO, MONTHLY TRACKING INTERVALS ARE THE CORRECT METHOD. THIS SHOULD FIND A PLACE IN MARKET MONITORING CONDUCTED BY ERE.

			Total System Imbalance	Volum	es of activa	ted balas	cing energy reserve		ancing time	e unit and	type of	The Control of the Co				of their final pe	mes of BRPs depending osition (MWb): Note that uid equal-column V less W	Imbalance prices	Imbalance prices per balancing time unit (nurse/MWh)					
			System indesence before any action or believe in being an entry.	Volcens	I as beside him		y per balans sould be repo			series (WWI	All Volum	The senacing Indicates and solved Enough Indicates (Indicates Song) provides of Positive Indicates exception of energy, register	For unwest seadshine a province price means that the IDIP recessor manay and respilates. For there would requisite a qualitary price reason that the IDIP page and negative means that the				Such of the extension regarded in ordered II is now much of the extension to expect by TeV's library to an activation to the extension by TeV's library to the extension of the			jes twincing taxe self no/VMN)				
-68	twieneng	Market ine	activative has been leave by the 2000 Postdee seams eurplus, of evergy, regative return defail.	,	си		HR	**	1981		HA	Note: ACE is an instanteneous value. In this	ACE IN MOTOR MATER AND		ec.	(Please add two	more columns to the right in for generation and o		fferent installance prices					
chate	time unit citart	sent (excl time)	Ingative means deport	igwire:	-townwan)	upward	Overeuri	speed	downward	treage	downeard	column the apprepared ACE, in MAN, during a given time unit is requested.	Movement	downward	Append.	downwart	Appearab	downwest	spens t	(corwed)	surplus datal intratonce of 'long' BSPs)	shartago (kital intisiisma sif Valuri (ISPs)	surples (tung BRPs), visually abount to be used to BRPs	shortage (short BRPs), stuarty amount charged to BRPs

GENERAL REMARK: INFORMATION FROM THIS TAB IS USEFUL FOR MARKET MONITORING PURPOSES - ESPECIALLY DEVELOPMENTS ON THE BALANCING MARKET. THIS SAID IT IS NOT PRACTICAL FOR ERE TO ANALYZE HOURLY INFORMATION. INSTEAD, IT SHOULD CONCENTRATE MORE ON TRACKING MONTHLY TOTALS, AVERAGE AND MAXIMUMS. COLUMNS W AND V DO NOT CONTAIN USEFUL INFORMATION AND SHOULD BE DISCARDED.

Curtailment

	Year	Compensation for curtailments*	Number of curtailment cases for all borders	Curtailed Capacity (MW)	Compensation for auction cancellations (€)	Capacity buying back costs (€)	Amount of buying back capacity (MW)
	Border 1						
2015	Border 2						
	Border n						
	Border 1						
2016	Border 2						
	Border n						

^{*} Compensation for curtailments paid by the TSO to capacity holder (traders).

Congestion revenues

Year	Congestion revenue accrued in Euros	Total amount of congestion revenue spent for guaranteeing the actual availability of the allocated capacity (€)	Total amount of congestion revenue spent for maintaining or increasing interconnection capacities through network investments (€)	Total amount of congestion revenue taken into account as income by the regulatory authorities when calculating network tariffs (€)	Incurred cost for congestion remedial action (€)						
2015											
2016											

GENERAL REMARK: INFORMATION FROM THIS TAB IS USEFUL FOR MARKET MONITORING PURPOSES - ESPECIALLY LOOKING AT HOW THE IMPROVEMENTS IN THE CONGESTED ASSETS ARE IMPLEMENTED. HOWEVER, IT SHOULD BE MORE GRANULAR, IE. CONTAIN MORE DETAILED INFORMATION REGARDING EXPENDITURES MADE IN RELATION TO PARTICULAR CONGESTED ASSETS.

Remedial actions applied by the TSOs, assocsiated costs and received compensations from other TSOs or other bodies [€] (Deadline for submission for this sheet: 1-July-2017)

Note: the detailed questions regarding use and corresponding costs of remedial actions, including definitions, are in line with requirements coming from the Regulation No 543/2013 from 14 June 2013 on submission and publication of data in electricity markets and amending Annex I to Regulation No 714/2009 (Transparency Regulation'). Two additional questions are added i.e. on whether implemented remedial action was successfull and on compensation received from other TSOs. The data on remedial actions are to be used for assessment of the total amount of implemented remedial actions, the total costs of them having impact on social welfare, and on how implemented remedial actions correspond to N-1 violations (see question on 'N-1 violations').

† Do not include remedial actions taken for only balancing purposes, only the network congestion-related ones

				Redispatching (cross-border, internal - internal meaning within a control area or between control areas within a country)*						_ Did the applied	If N-1 violation was not	
Date (for the 2015-2016 year timeframe)	Hour (Start time)	Hour (End time)	Congestion identified in: 1 "D-1 or earlier", 2-"ID"	redispatching: 1-	If applicable, border affected including direction of redispatching (e.g. Montenegro- ->Serbia)	The reason for the action (1-"Load flow overload",2- "Voltage level adjustment", 3"Other")	Generation capacity decrease/increase (MW)	Average power of the requested action (MW)	Total energy of the requested action (MWh)	Affected plant (e.g. name of the power plant)	action(s) prevent and/or remedy the (N-1) violation? Y (yes) or N (no)	avoided, please indicate the ID of the N-1 violation reported in the first column of the N-1 violations sheet.
1.1.2015	0:00	2:00	1	1		1	increase	250	500	name	у	
1.2.2015	2:00	4:00	1	2		2	decrease	150	300	name	У	
7.2.2016	5:00	7:00	1	2	FR->DE	3	increase	100	200	name	У	
8.1.2016	3:00	4:00	2								Υ	

GENERAL REMARK: THE SOURCE FOR THIS INFORMATION SHOULD BE THE TSO (DISPATCH). INFORMATION FROM THIS TAB IS USEFUL FOR MARKET MONITORING PURPOSES - ESPECIALLY ON HOW THE DISPATCHER TACKLES CONGESTIONS. HOWEVER, IT IS NOT PRACTICAL FOR ERE TO ANALYZE HOURLY INFORMATION. INSTEAD, IT SHOULD CONCENTRATE MORE ON TRACKING MONTHLY TOTALS, AVERAGES AND MAXIMUMS. COLUMNS B, C, D ARE NOT USEFUL. WHAT CURRENTLY COLUMNS E, F, G, H, I,, J, K, L CONTAIN SHOULD BE TRANSFORMED CORRESPONDINGLY - I.E. SO THAT INFORMATION ON NUMBER/EXTENT OF EVENTS IS TRACKED RATHER THAN EACH INDIVIDUAL CONGESTION. COLUMNS FROM M ONWARDS SHOULD BE DISCARDED AS NOT CONTAINING MUCH IMPORTANT INFORMATION - ERE GETS IT THROUGH TARIFF APPLICATIONS IN ANY CASE.

			n a given month om:	Total compensation received from other
Year	Month	Redispatching* (cross border and internal) †	Any other remedial action †	TSOs or other bodies related to applied remedial actions (in a given month) †
		[€]	[€]	[€]
	January			
	February			
	March			
	April			
	May			
2015	June			
2013	July			
	August			
	September			
	October			
	November			
	December			
	January			
	February			
	March			
	April			
	May			
2016	June			
2010	July			
	August			
	September			
	October			
	November			
	December			

Main characteristics of redispatching arrangements	
How many times and how long ahead of delivery the need for remedial actions are assessed?	
Are redispatching actions combined with actions for other purposes (e.g. enabling sufficient balancing reserves)? Please answer with YES/NO and please specify if your answer is YES.	
Please, indicate the system used to price redispatching actions, i.e. the remuneration received by generators for internal or cross-border redispatching. a) pay-as-bid; b) marginal cost pricing; c) regulated (please specify); d) other (please specify).	
How are the costs of redispatching recovered by the TSOs? a) with network tariffs; b) other (please specify)	
Are redispatching costs socialized (e.g. allocated proportionally to the consumption level of end-consumers) or are they allocated differently (please specify)?	

Number and duration of N-1 violations* (Deadline for submission for this sheet: 1-July-2017)

Note: the data on N-1 violations are to be used for assessment on how unscheduled (loop) flows influence the safety of network operation and how they correspond to use of different remedial actions (see question on 'Remedial actions').

Please inform only on N-1 violations which occurred in real time. N-1 violations during the planning stage are not to be reported

be reported	u.				
Occurrence of (N-1) violation* (for the 2015 - 2016 year timeframe)			Was the N-1 violation* caused by unscheduled flows (estimation by TSO)?		
ID	Start	time	End time		130)!
ID -	Date	Hour	Date	Hour	Yes(Y) or No (N)
1					
2					
3					
5					
etc					

GENERAL REMARK: THE SOURCE FOR THIS INFORMATION SHOULD BE THE TSO (DISPATCH). INFORMATION FROM THIS TAB IS USEFUL FOR MARKET MONITORING PURPOSES - ESPECIALLY ON HOW THE DISPATCH TACKLES N-1 EXCURSIONS. HOWEVER, IT IS NOT PRACTICAL FOR ERE TO ANALYZE HOURLY INFORMATION. INSTEAD, IT SHOULD CONCENTRATE MORE ON TRACKING MONTHLY TOTALS, AVERAGES AND MAXIMUMS. FOR INSTANCE, ERE MAY REQUEST THE INFORMATION CONCERNING TOTAL MONTHLY N-1 EXCURSIONS, THEIR OVERALL LENGTH AND THE LONGEST ONE.

ANNEX 3. PROPOSED ADDITIONAL DATA COLLECTION FORMS

Annex A. All electricity Market Participants (data actual at the moment of reporting)	
A.1.1 General contact data	
Name of the Market Participant:	
Postal address:	
Types of licenses issued:	
Telephone number(s):	
Fax number(s):	
E-mail:	
Website:	
A.1.2 Contact for the purpose of reporting	
Name and Surname:	
Telephone number(s):	
Fax number(s):	
E-mail:	

To be submitted on occurrence of changes

A. All electricity Marke	et Participants (data actual at the moment of reporting)
A.2.1. Composition of the	he Board
A.2.1.1. Chairman	
Name and Surname:	
Representing:	
A.2.1.2. Member	
Name and Surname:	
Representing:	
A.2.1.3. Member	
Name and Surname:	
Representing:	
A.2.1.4. Member	
Name and Surname:	
Representing:	
A.2.1.5. Member	
Name and Surname:	
Representing:	
A.2.1.6. Member	
Name and Surname:	
Representing:	
Website:	
A.2.1.7. Member	
Name and Surname:	
Representing:	
A.2.1.8. Member	
Name and Surname:	
Representing:	
A.2.1.9. Member	
Name and Surname:	
Representing:	
A.2.2. Composition of the	he Management
A.2.2.1. General Directo	or
Name and Surname:	
A.2.2.2. Director in cha	rge
Name and Surname:	
Function held:	
A.2.2.3. Director in cha	rge
Name and Surname:	
Function held:	
A.2.2.4. Director in cha	rge
Name and Surname:	
Function held:	

A.2.2.5. Director in cha	rge
Name and Surname:	
Function held:	
A.2.2.6. Director in cha	rge
Name and Surname:	
Function held:	
A.2.2.7. Director in cha	rge
Name and Surname:	
Function held:	
A.2.2.8. Director in cha	ırge
Name and Surname:	
Function held:	
Function held:	

To be submitted on occurrence of changes

- 1	A. All Market Participants (data actual at the end of the most recent year, all cases where the value of the shares or financial obligations exceeds [25 000 000 euro (EUR)])					
A.3.1 Information on the Ownership						
1. Information on shares held in the Market Participant's owner's equity:	Fill in the data in the columns below for each case:					
Name of the shareholder:						
Full address:						
Value of the shares held (000 000 EUR):						
Share in the voting rights:						
Share in the rights to profits:						
2. Information on shares held by the Market Participant:	Fill in t	the data in the colu	mns below for each	case:		
Name of the company that the shares are held:						
Full address:						
Value of the shares held (000 000 EUR):						
Share in the voting rights:						
Share in the rights to profits:						

A.3.2 Information on bo	onds, notes, credits, loans and other financial obligations				
1. Information on obligations of the	Fill in the date in the columns below for each case.				
Market Participant:	Fill in the data in the columns below for each case:				
Character of the					
obligation (bonds, notes,					
credits, loans, etc.):					
Name of the creditor:					
Full address:					
Obligations' value to					
maturity ('000 EUR):					
Years to maturity:					
Forecast interest to be					
paid in a next 12 months					
period: 2. Information on					
obligations held by the	Fill in the data in the columns below for each case:				
Market Participant:	Thi in the data in the columns below for each case.				
Character of the					
obligation (bonds, notes,					
credits, loans, etc.):					
Name of the debtor:					
Full address:					
Obligations' value to					
maturity ('000 EUR):					
Years to maturity:					
Forecast interest to be					
collected in a next 12					
months period:					

B. Generation (repeat for each public network connected p	ower plant)		
B.1.1. Plant actual versus planned availability			
Dispatch Unit name or reference:			
Plant Operating Factor		2016	2017
Total number of units in the Plant		1.0	1.0
Total hours all units collectively were dispatched per period:			
Average annual operating factor (%):		0.0	0.0
B.1.2. Plant availability and shutdowns (most recent			
period)			
Unit technical shutdowns by cause	Number of	Duration	Lost Energy Production
	Incidents	(hours)	(MWh)
Total Shutdowns:	0	0	0
Planned shutdowns:			0
Short notice* power cuts:			0
Accidental** power cuts:			0
Shutdowns for reasons outside operator's control:			0
Unit technical power reductions by cause			I
Total Power Reductions:	0	0	0
Planned power reductions:			0
Short notice* power reductions:			0
Accidental** power reductions:			0
Power reductions for reasons outside operator's control:			0
Nominal Power of Unit (MVA):			
Total Energy Generated (MWh):			
Total Available Potential Energy Generation (MWh):			0
Planned Energy Losses*** (MWh):			0
Unplanned Energy Losses*** (MWh):			0
Other Energy Losses*** (MWh):			0
Gross Capacity Factor (%):			n/a
Unplanned Capability Loss Factor (%):			n/a

Fill in data for each dispatchable unit in a separate sheet

**** Insert 'X' where the service is unavailable

^{* &}quot;short notice" means less than three days notice to dispatcher
** "Accidental" means less than one hour's notice to dispatcher
*** The term "Energy Losses" has been retained but should be understood to mean "loss of energy production" rather than distribution/transmission energy

B. Generation		
B.3.1. Costs		
	2016	201
Total costs of:	<u>0</u>	
1. Generation of:	0	
a) Electricity for bilateral contracts with OST and OShEE:		
b) Electricity for bilateral contracts with other parties:		
c) Electricity for the power exchange Market Participants:		
d) Electricity for ancillary and other system services:		
e) Costs of electricity generation unassigned directly to power		
plants:		
f) Financial expenses:		
Interest on Loans:		
Other Financial Expenses:		
2. Other (non-core) activities:		
out of that for financial and investment activities:		
B.3.2. Revenues		
c) Electricity for the power exchange Market Participants:		
d) Electricity for ancillary and other system services:		
e) Costs of electricity generation unassigned directly to power		
plants:		
2. Non-core activities:		
out of that for financial and investment activities:		
B.3.3. Profits		
Total profits from:	<u>0</u>	
1. Generation:	<u>0</u>	
a) Electricity for bilateral contracts with OST and OShEE:		
b) Electricity for bilateral contracts with other parties:		
c) Electricity for the power exchange Market Participants:	0	
d) Electricity for ancillary and other system services:	0	
e) Costs of electricity generation unassigned directly to power		
plants:	0	
2. Non-core activities:	0	

_C. OST		
C.1.1. Delivered Electricity and Electricity Losses		
	2016	2017
Average cost of obtaining electricity to cover losses (EUR):		
C.1.2. Connections and disconnections to electricity System	Transmissi	ion
Number of new customers connected during period:		
Number of customers connected at the end of period:		
Number of disconnections in a period:	0	
of which, number disconnected for non-payment		
of which, number disconnected for safety reasons		
of which, connections no longer required		
of which, disconnections for other reasons		
Number of connections refused:	0	
due to: breach of law:		
due to: grid code breach:		
due to: other:		
Number of transit contracts entered into:		
Number of requests for interconnections by non- Albanian operators:		
C.1.3. Network characteristics		
C.1.3.1. Length of network circuits by voltage level	,	
Length of 400kV circuits (km):		
Length of 220kV circuits (km):		
Length of 110kV circuits (km):		
Length of circuits other voltages (specify):		
Total length (km):	0	
Of which Interconnector circuits (km)		
C.1.3.2. Substations	,	
Total number of substations:		
C.1.3.3. Transformers		
AT 400/220 kV (pcs)		
AT 110/MV (pcs)		
Trafo units 400/220 kV (pcs)		
Trafo units 220/110 kV (pcs)		
Trafo units 110 kV / MV (pcs)		

C.1.4. Connections and disconnections to electricity Transmission System	
Number of new customers connected during the period:	
Number of customers connected at the end of period:	
Number of disconnections in period:	
Number of connections refused:	
Number of transit contracts entered into:	
Number of requests for interconnections by non- Albanian operators:	

Total costs:	2016	
Total costs:		2017
Total Costs	0	2017
Total costs of transmission:	0	
1. Transmission of electricity:	0	
a. Direct costs, incurred on:		
Substations:		
Lines:		
Electricity losses:	0	
Technical losses:	0	
fixed		
variable		
Non-technical losses (including billing system errors):		
Connection costs:		
b. Costs of electricity transmission unassigned directly to abovementioned:		
c. Financial expenses:	0	
Interest on Loans:		
Other Financial Expenses:		-
2. Other (non-core) activities:		-
out of that for telecomm activities:		
out of that for financial and investment activities:		
C.3.2. Revenues		
Total revenues:	<u>0</u>	
1. Transmission:	0	
a) Fixed rates:		
b) Variable rates:		
c) Connection charges:		
2. Non-core activities:		
out of that for telecomm activities:		
out of that for financial and investment activities:		
C.3.3. Profits		
<u>Total profits:</u>	<u>0</u>	•
1. Transmission:	0	
a) Fixed rates:		
b) Variable:		
c) Connection charges:		
2. Non-core activities:		
out of that for telecomm activities:		

D. OST		
D.1.1. National Electricity System - National Power	Balance	
	Actual	
	2016	2017
Available capacity (MW):		
Load (MW):		
margin against the peak load MW:	n/a	n/a
Surplus/deficit in relation to maximum load (MW):	0	0
Transportable capacities:	0	0
importable capacity (MW):		
exportable capacity (MW):		
Effective surplus of exchanges (MW):	0	0
D.1.2. National Electricity System - System quality state	tatistics	
Number of N-1 excursions:		
System Quality:		
Number of frequency excursions:		
Number of voltage excursions:		

spring out from OST?)			
D.2.1. Costs			
		2016	201
Total costs:	_	<u>0</u>	
Total costs of transmission operation:		0	
1. Transmission Operation of electricity - cost to obtain ancillary services:		0	
Frequency control:			
Voltage control:			
Reactive power:			
Spinning reserve:			
Cold Reserve:			
Outages:			
2. Costs of electricity transmission operation unassigned directly to			
abovementioned:			
Financial expenses:		0	
Interest on Loans:			
Other Financial Expenses:			
3. Other (non-core) activities:			
out of that for financial and investment activities:			
D.2.2. Revenues			
Total profits:			
1. Transmission Operation:			
a) Fixed rates:			
b) Variable rates:			
2. Non-core activities:			
out of that for financial and investment activities:			
D.2.3. Profits			
Total profits:	_		
1. Transmission Operation:			
a) Fixed rates:			
b) Variable rates:			
2. Non-core activities:			

E. OShEE		
E.1.1. Delivered Electricity and Electricity Losses		
	Actual	
	2016	2017
Electricity distributed and delivered:		
Electricity accepted into system (GWh)		
Electricity delivered to:		
connected customers (GWh):		
licensed electricity operators (GWh):		
Total electricity delivered (GWh):	0	
Electricity lost:		
Average distribution losses (%):	n/a	n/a
Average cost of obtaining electricity to cover losses:		
E.1.2. Connections and disconnections to electricity D	istribution	System
Number of new customers connected during the period:	0	
of which, connected at LV, including:	0	
smart meters:		
single zone meters:		
pre-paid meters:		
temporary meters:		
Number of customers connected at the end of period:		
of which, connected at LV, including:		
smart meters:		
single zone meters:		
pre-paid meters:		
temporary meters:		
Number of disconnections during period:	0	
of which, number disconnected for non-payment:		
of which, number disconnected for theft:		
of which, number disconnected for safety reasons:		
of which, connections no longer required:		
of which, disconnections for other reasons:		
Number of connections refused:	0	
due to breach of law:		
due to distribution code breach:		
due to other:		
Number of transit contracts entered into:		

Number of requests for interconnections by non- Albanian operators:		
E.1.3. Network characteristics		
E.1.3.1. Geographic area served:		
E.1.3.2. Length of network circuits by voltage level		
Length of 66kV circuits (km):		
Length of 33kV circuits (km):		
Length of 11kV circuits (km):		
Length of Low Voltage (LV) circuits (km):		
Length of underground cables (km):		
Length of circuits other voltages (specify):		
Total length (km):	0	(
E.1.3.3. Transformers in commission:		
Number (pcs):		
Aggregate capacity:		

E.2.1. Electricity System Availability & Security			
		2016	2017
Number of supply interruptions due to faults:			
Total supply interruptions due to faults:			
E.2.2. Period events			
Events broken down into classes of Customers:	LV Househ		Total:
Number of requests for new connection:			
Number of requests for connection, for which, period between the request's recording and receiving of technical connection permit, is less than 30 days:			
Number of requests for distribution contracts:			
Number of requests for distribution contracts, resolved within 15 working days:			
Number of meters inspected:			
Number of faulty meters exchanged:			
Number of connections inspected:			
Number of illegal connections/meter tampering's detected:			
Number of cases referred to the responsible authorities:			
E.2.3. Period electricity sales/deliveries			
Electricity delivered (per MWh payments):			
Load/Demand - Charged Units (per kW payments):			
Basic Charge (per customer):			
E.2.4. Period events (data forecast for first year of a tariff application)			
Events broken down into classes of Customers:	LV Househ		Total:

Number of requests for new connection:		0
Number of requests for distribution contracts:		
Number of disconnections:		(
E.2.3. Period electricity sales/deliveries (MWh, data forecast for first year of a tariff application)		
Electricity sold - Flat rate (MWh):		(
Electricity sold - Flat rate (MWh): Demand Charges (kW):		

E. OShEE (information as at end of 2017)			
E.3.1. Costs			
	LV - Households	LV- commercial	Total:
Total costs:	<u>0</u>	<u>0</u>	0
Total costs of distribution operation:	0	0	0
1. Distribution of electricity:	0	0	0
Direct costs, incurred on:	0	0	0
Substations/Transformers:			
Lines:			
Electricity losses:	0	0	0
Technical losses:			
Non-technical losses (including billing system errors):			0
Connection costs:			0
2. Own costs of electricity distribution, unassigned to abovementioned:			
3. Other (non-core) activities:			0
out of that for financial and investment activities:			0
E.3.2. Revenues			
	LV - Households	LV- commercial	Total:
Total revenues:	<u>0</u>	<u>0</u>	<u>0</u>
1. Revenues from the distribution of electricity activity:			0
a) Fixed rates:			
b) Variable rates:			
c) Connection charges:			0
out of that, contributions:'			
2. Revenues from non-core activities:			
out of that for financial and investment activities:			

_	E.3.3. Profits			
_		LV - Households	LV- commercial	Total:
	Total profits:			0
	a) Fixed rates:			0
	b) Variable:			0
	c) Connection charges:			0
	2. Non-core activities:			
	out of that for financial and investment activities:			

OST that will deal with physical and/or financial		
Trade in electricity		
F.1.1. Costs		
	2016	2
Total costs:	<u>0</u>	
Total costs of Trading and market operation activity:	0	
1. Trading of electricity:	0	
Salaries and Benefits:		
Depreciation Expenses:		
Insurance Expenses:		
Tax and Contribution Expenses:		
out of that for license fee:		
Materials and Supplies:		
General and Administration Expenses:		
out of that for communication:		
out of that for rent:		
out of that for travel:		
out of that for consulting fees and expenses:		
Other Expenses:		
Financial expenses:	0	
Interest on Loans:		
Other Financial Expenses:		
2. Other (non-core) activities:		
out of that for financial and investment activities:		
F.1.2. Revenues		
Total revenues:	0	
1. Trading:	0	
a) Fixed rates:		
b) Variable rates:		
2. Non-core activities:		
out of that for financial and investment activities:		
F.1.3. Profits		
Total profits:	0	
1. Trading:	0	
a) Fixed rates:		
b) Variable rates:		
2. Non-core activities:		

G.1.1. Range of payment arrangements			
Reporting Period (from):		to:	
	Acti	ual	Forecas
	2016	2017	2018
Number of customers using each type in a year			
Payment Terms Offered:	0	0	
pre-paid:			
monthly credit:			
bi- monthly credit:			
quarterly credit:			
bi-quarterly credit:			
specify other terms of payment offered:			
Payment Methods Offered:	0	0	
cash:			
specify other payment methods offered e.g. checks:			
Payment Points Offered:	0	0	
company's (or shared) customer service offices:			
post offices:			
banks:			
hypermarket cash desks:			
specify other payment methods offered:			
G.1.4. Billing arrangements			
Total number of bills issued:	0	0	
of which, number based on estimated readings:			
of which, number based on supplier readings:			
other (specify):			
Percentage of estimated or customer-reported readings:			

ANNEX 4. ERE MARKET MONITORING— PROPOSED ONLINE DATA COLLECTION AND RETRIEVAL SYSTEM

ERE Need for System

We have discussed with ERE's Market Monitoring Department its need to develop an automated means of collecting electricity sector data that ERE is required to obtain as part of its market monitoring duties under the PSL, and to use to prepare reports. ERE wishes to develop an online data collection and retrieval system that:

- Is accessible by each electricity sector entity that is required to provide data,
- Enables each such entity to input that data,
- Enables ERE to access all data and produce required reports, and
- Provides an easy means of knowing whether data is provided within the required timeframe.

Presently, ERE collects data via direct exchanges with contacts within the relevant entities, using detailed spreadsheets that ERE has developed. ERE then uses this data to prepare reports. The preparation of spreadsheets and the collection of data, and then the analysis and adaptation of it into reports is time-consuming and labor intensive. Collection, especially, relies on relationships and ERE taking the lead. This old-fashioned system needs to be upgraded because the electricity sector is rapidly developing and becoming more complex due to the introduction of the Albania Power Exchange (APX); market coupling with Kosovo; and greater numbers of participants, regulatory instruments, and contracts.

ERE proposes a far more efficient means of collecting data—through an online software system developed for ERE. ERE is seeking assistance with the funding of the development of the software to establish the online data system, or at least with identifying the data and reports required and entities having duties to provide it (see Phase 1 below).

Because the development and implementation of an online data collection system will take two to three years, it should commence soon.

The data collected, while essential to conduct market monitoring, does not necessarily need to relate solely to this activity. The system would continue to be developed over time.

Three important elements lie behind the need for an online data collection system:

- 1. The vital importance of ensuring transparency throughout the sector.
- 2. The need to facilitate ERE's performance of its market monitoring and other roles.
- 3. The need to require relevant entities to assume responsibility for performing their own data-related duties.
- 4. The benefits to ERE in enabling it to better perform its role in providing data to other agencies.

The basis for this requirement is the many duties imposed on ERE under the PSL to perform market monitoring and other data collection functions.

Proposed Phases

Phase 1

- Confirm the data required to be collected. Although 90% of data required is known and collected (via the old-fashioned "social network" system), there is other data not yet collected that is required under the PSL. Additionally, there is data required to be collected under secondary legislation, including the new Market Rules and related rules and agreements.
- 2. Confirm from which entity the data must be collected.
- 3. Identify data that is confidential to the disclosing party and therefore to be protected—devise mechanism to enable entities to self-identify and protect.
- 4. Identify data that is required to be used by ERE in reports ERE prepares and that can be pulled from the system. Presently, ERE assesses data provided and uses it to create reports that then must be approved by the ERE board. Enabling data to be pulled directly from the system will benefit ERE in that responsibility for its accuracy will lie with the entity that input the data (and ERE will no longer be placed in the position of certifying it). Some of this work will require deciding exactly what data is required for certain reports (e.g., PSL Article 19[k] requires ERE to produce "quarterly based reports relating to electricity market operation."
- Phase 2 Develop software system of data collection and retrieval. This could probably be done by a local IT company working closely with ERE. Options in this regard appear to be:
 - 1. Hire a software developer locally who can be hired to develop the software.
 - 2. Purchase an existing software system used elsewhere that is similar, if one can be found and purchased, and adapt it. Romania developed a similar system, only its system is internal to the regulator. ERE's proposed system is an external platform allowing data to be input directly by the relevant entities. Montenegro might also have a system that is useful (we are investigating this).
 - 3. ERE funds some of the costs.

It does not appear that other systems in use in the sector—for instance, the TSO uses software from Damas (digital asset management software) that is used by the SEE CAO to allocate capacity and calculate losses—are capable of being adapted or would cause compatibility issues.

Phase 3

Conduct education program for entities required to use the system. While entities now have a good understanding of information required, data provision comes mostly from ERE urging through the "social network" method. Each entity needs to understand that it has the primary obligation to provide data. This will require ensuring that a responsible person within the entity is tasked with compliance. Note that the PSL already requires entities to provide data with significant consequences for failing to comply with data provision duties, including large fines and loss of license.

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