

**ANNUAL  
MANAGEMENT REPORT  
2011  
SC HIDROELECTRICA SA**

## 1. IDENTIFICATION DATA

Annual report according to the provisions of the Order of Ministry of Public Finances no. 3055/2009;  
For the financial year ended at: December 31, 2011;  
Date of the report: May 25, 2012;  
Name of the company is: SC HIDROELECTRICA SA;  
Registered office: Bucharest, 3 Constantin Nacu, 2nd District, postal code 020995;  
Phone/fax number: 0213032500; 0213032564;  
Taxpayer identification number: 13267213;  
Company registration number: J40/7426/2000;  
Subscribed and paid in capital: Lei 4,449,514,450.

## 2. GENERAL

"Hidroelectrica" SA, a hydropower generation company, was established based on the Romanian Government Decision no. 627/July 13, 2000 and was managing, at the end of 2011, 13 operating subsidiaries with no legal personality spread all over the country, as follows:

1. Bistrița Hydropower Subsidiary - Piatra Neamț – 13 Lt. Drăghiescu Street;
2. Buzău Hydropower Subsidiary - 1 Dorin Pavel Street;
3. Curtea de Argeș Hydropower Subsidiary – 82-84 Basarabilor;
4. Cluj Hydropower Subsidiary – 1 Taberei Street;
5. Hațeg Hydropower Subsidiary – 38 bis Progresului Street;
6. Porțile de Fier Hydropower Subsidiary - 2 I.C. Bibicescu Street;
7. Râmnicu Vâlcea Hydropower Subsidiary – 11 Decebal Street;
8. Sebeș Hydropower Subsidiary – 9 Alunului Street;
9. Slatina Hydropower Subsidiary – 158 Tudor Vladimirescu Street;
10. Târgu Jiu Hydropower Subsidiary – 1 Prelungirea Vasile Alecsandri;
11. Oradea Hydropower Subsidiary – 34 Ogorului Street;
12. Caransebeș Hydropower Subsidiary – 2A Splai Sebeș Street;
13. Sibiu Hydropower Subsidiary – 45 Rahova Street.

In addition, SC Hidroelectrica SA is the sole shareholder of 8 "Hidroserv" SA companies, subsidiaries for repairs and services (established by the Romanian Government Decision no. 857/2002), which have legal personality, as follows:

1. SC "Hidroserv" Bistrița SA - 13 Locotenent Drăghiescu Street;
2. SC "Hidroserv" Cluj SA – 1 Taberei Street;
3. SC "Hidroserv" Curtea de Argeș SA – 1 Barajului Street;
4. SC "Hidroserv" Hațeg SA – 38 bis Progresului Street
5. SC "Hidroserv" Porțile de Fier SA - 2 Calea Timișoarei Street;
6. SC "Hidroserv" Râmnicu Vâlcea SA – 269 Calea București Street;
7. SC "Hidroserv" Sebeș SA - 9 Alunului Street;
8. SC "Hidroserv" Slatina SA – 158 B Tudor Vladimirescu Street.

### Object of activity of SC Hidroelectrica SA

SC Hidroelectrica SA is the most important electric power generator among the electric power generating companies existent on the energy market (approximately 24.5 % of the total consumption in the system in an average hydrological year) and the main system service generator (approximately 74 % of the total).

SC Hidroelectrica SA manages 274 hydropower plants and pumping stations with a total installed capacity of 6,443.30 MW and an annual output of 17.46 TWh in an average hydrological year and 5,218 employees.

The main activities of the company are:

- Power generation in hydropower plants and sale of electric power;
- Provision of system services for the National Energy System;
- Provision of management services for the waters from its own reservoirs by supplying gross water, flow regulation, flood control, flow supply and other common water management services;

- Support of Danube River navigation by ship locking;
- In the hydropower developments located on the inland waters, which are managed by the company, SC Hidroelectrica SA performs the control and provides the recession of flood curves for the by-pass of catastrophic flows.  
In case that the increased flows endanger property and human lives, through the National Committee for Emergency Situations, the company contribution to the limitation and removal of such situations is very important.

### 3. MANAGEMENT OF THE COMPANY

Between January 1, 2011 and February 23, 2011, the company was managed by the Board of Directors which was appointed by the Decisions of the Shareholders' General Assembly no. 1/March 10, 2009, no. 33/July 13, 2009, no. 10/April 26, 2010, no.35/November 30, 2010, no. 1/January 10, 2011 with the following structure:

- |    |                          |                |
|----|--------------------------|----------------|
| 1. | ȘERBAN Tudor             | - Chairperson; |
| 2. | TRIHENEA Constantin      | - Member;      |
| 3. | RAICU Ionica             | - Member;      |
| 4. | ORLANDEA Dumitru         | - Member;      |
| 5. | DAVID Mihai              | - Member;      |
| 6. | DOGARU Marius – Cristian | - Member;      |
| 7. | DRAGOI Bogdan            | - Member.      |

By the Decision of the Shareholders' General Assembly, Mr. Stanisteanu Sergiu and Ms. Truta Oana have been appointed as members, resulting the following structure:

- |    |                     |                |
|----|---------------------|----------------|
| 1. | ȘERBAN Tudor        | - Chairperson: |
| 2. | TRIHENEA Constantin | - Member;      |
| 3. | TRUTA Oana          | - Member;      |
| 4. | RAICU Ionica        | - Member;      |
| 5. | ORLANDEA Dumitru    | - Member;      |
| 6. | DAVID Mihai         | - Member;      |
| 7. | STANISTEANU Sergiu  | - Member.      |

Between December 8, 2011 and December 29, 2011, the company was managed by the board of directors, having the following structure:

- |    |                      |                |
|----|----------------------|----------------|
| 1. | ȘERBAN Tudor         | - Chairperson; |
| 2. | ZACHIA ZLATEA Dragoș | - Member;      |
| 3. | TRUTA Oana           | - Member;      |
| 4. | RAICU Ionica         | - Member;      |
| 5. | ORLANDEA Dumitru     | - Member;      |
| 6. | DAVID Mihai          | - Member;      |
| 7. | STANISTEANU Sergiu   | - Member.      |

According to the legal provisions, for each meeting of the Board of Directors, an extract of the minutes was prepared, which reflects the discussions and suggestions made during the meeting and which was signed by the members of the board, and the minutes, registered in the Official Register of the Minutes of the Meetings, signed by the Chairperson of the Board of Directors, 1 member (General Manager of SC Hidroelectrica SA) and the secretary of the Board of Directors which prepared it (according to the Decision of the Board of Directors no. 13/2009).

The Register of the Minutes of the Meetings is available at the secretary of the Board, where all the documents, which were submitted to discussions and to approval/endorsement, as well as the Decisions of the Board of Directors given in 2011, are also available. The agenda of the meetings was related mainly to the solving of the main objectives of the company's activity, as follows:

- Approval of the note regarding the organizational structure and composition of the management team of the company as a result of the introduction into the Trades and Positions Register of the position of *project manager*;

- Approval of the technical and economic documentation of the investment objective and the completion of this objective - "Poneasca Small Hydropower Plant - Updating of the Feasibility Study - Hydropower Subsidiary Caransebeș";
- Approval of the technical and economic documentation of the investment objective and the completion of this objective - "Ruieni Fall. Extension of 110 kV Station - Ruieni Hydropower Plant – Caransebeș Hydropower Subsidiary";
- Approval of the technical and economic documentation of the investment objective and the completion of this objective – "Removal of seepage losses – Gilău Hydropower Plant - Florești II Hydropower Plant Diversion";
- Information regarding the investment programme for the 1<sup>st</sup> quarter of 2011 of SC Hidroelectrica SA;
- Note on solving the notification by which the restitution in kind of a real estate - land with an area of 5,000 sqm is requested;
- Approval of issuing a decision regarding the restitution in kind of a real estate - land with a total area of 1,182.2 sqm and Bran Vechi Small Hydropower Plant;
- The statement of expenses related to the business trips abroad of the specialists of Hidroelectrica SA and the efficiency of the trips in 2010, as well as the endorsement of the budget necessary for the trips abroad of the specialists of Hidroelectrica SA in 2011;
- Approval of registering as costs of the amount of Lei 25,000 representing the equivalent value of the fine of ANRE (*National Energy Regulatory Authority*), as well as filing a complaint to the court against the report of findings and penalties;
- Approval of updating the Rules of the Internal Committee for the analysis and assessment of the notifications submitted based on Law no. 10/2001 republished with the subsequent amendments and additions;
- Information regarding the Final report of the contract no. 162/2010 - consultancy services in view of increasing the level of performance of the managers of Hidroelectrica SA;
- Approval of the permanent employment of the economic and commercial deputy manager of Hațeg Hydropower Subsidiary;
- Approval of the organizational structure and the Rules concerning the Organization and Operation of SC Hidroelectrica SA, valid starting with March 30, 2011;
- Approval of appointing the manager of the Assets Directorate within the Executive Management of Hidroelectrica SA starting with March 14, 2011;
- Approval of withdrawing the Note no. 4699/March 2, 2011 on appointing the manager of the Operating Directorate from the management team of the Executive Management of SC Hidroelectrica SA;
- Endorsement of the updating of the national prices valid on December 31, 2010 for the investment "Sebeș Regulating Reservoir – 1<sup>st</sup> stage" and "2<sup>nd</sup> stage";
- Approval of the technical and economic documentation of the investment objective and the completion of this objective - "Cut-off bay 110 KV Ciunget Sadu V overhead power line in Jidoaia connection point and installation of ground wire on Ciunget Jidoaia section";
- Endorsement of updating the national prices valid on December 31, 2010 for the general estimate of the investment "Galbeni Reservoir. Performance of sealing and strengthening of the right bank dyke in area 0 ~ 3 km;
- Approval, according to the provisions of Order no. 2906/2010 of the Minister of Economy, Commerce and Business Environment, as well as of the Articles of Incorporation of the Power Generation Company – SC Hidroelectrica SA, Annex 4.1 to the Romanian Government Decision no. 627/July 31, 2000 with the subsequent amendment and additions, of the name and content of 9 projects suggested in view of setting up IPP type project companies: HidroSchitu Golești Project, HidroBârsa Project, HidroTimiș Project, HidroCriș Project, HidroMureșul Superior Project, HidroArieș Project, HidroStrei Project, HidroBuzău Project, HidroBuzău Aval Project;
- Approval of issuing a decision regarding the awarding of remedies by equivalent for the real estate - land with an area of 550 sqm, located in Gilău Commune, Cluj County;
- Approval of issuing a decision regarding the rejection of the notification for the real estate - land with an area of 260 sqm, located in Gilău Commune, Cluj County;
- Endorsement of registering with the Trade Register Office of Bucharest Court of Law of the place of business belonging to the Hațeg Hydropower Subsidiary;
- Approval of decommissioning of several intangible assets, amortized and not entirely amortized fixed assets included in the assets of Curtea de Argeș Hydropower Subsidiary;
- Approval of decommissioning of a fixed asset included in the assets of Râmnicu Vâlcea Hydropower Subsidiary;

- Approval of the final financial terms and conditions related to the credit facilities granted by the European Bank for Reconstruction and Development for financing the renewal works for Stejarul Bicz Hydrowpower Subsidiary;
- Information regarding the hydrological situation in 2011;
- Information regarding the renegotiation of the electric power supply agreement;
- Approval of concluding a contract for investment credit with ING Bank in view of financing the investment works which are in different stages of execution;
- Approval of trading a Zero Cost Collar (100 % of the volume) type hedging instrument in view of guaranteeing a minimum tariff for the entire energy volume to be supplied for a period of 2 years to SC Alro SA;
- Information regarding the Draft Report of the World Bank, "Functional Review" dated April 7, 2011 and the opinion of SC Hidroelectrica SA regarding its content, submitted to the Ministry of Economy, Commerce and Business Environment and the World Bank;
- Endorsement of the financial statements for 2010 and the analysis of the necessity to post on SC Hidroelectrica SA web site the annual report of the management, the financial statements for 2010 according to the provisions of Law no. 31/1990;
- Approval of updating according to the national prices valid on December 31, 2010 of the general estimate of the investment "Complete transformation of Racova Hydrowpower Plant in a diversion hydrowpower plant without its own reservoir";
- Approval of technical and economic documentation of the investment objective "Ruieni Hydrowpower Plant. Upgrading of indoor equipment";
- Approval of preparing the list with the micro hydrowpower plants suggested for privatization and with micro hydrowpower plants which remain included in the assets of Hidroelectrica SA;
- Approval of participation in the competition POSCCE-A2-02.1.1-2010-2 as well as the financial contribution of EUR 80,000 of SC Hidroelectrica SA;
- Approval of the payment of 2011 annual membership fees to the associations/organizations in which SC Hidroelectrica SA is a member, meaning: INTERNATIONAL HYDROPOWER ASSOCIATION and INTERNATIONAL NETWORK on SMALL HYDROPOWER;
- Endorsement of participation of SC HIDROELECTRICA SA, as founding member, in setting up the professional organization "Centrul Roman al Energiei" (*Romanian Energy Center*);
- Approval of decommissioning of several fixed assets of Buzău Hydrowpower Subsidiary, Râmnicu Vâlcea Hydrowpower Subsidiary and the executive management of SC Hidroelectrica SA;
- Endorsement of the delivery versus payment of the "Automated railway crossing equipment (SAT) at 340+890 km" located on Piatra - Olt - Podul Olt railway from the assets of SC Hidroelectrica SA - Sibiu Hydrowpower Subsidiary to the state public domain under the management of the Ministry of Transport and Infrastructure;
- Approves the issuing of a decision to reject the notification no. 2350/November 14, 2011 submitted by Ms. Gosa Octavia Steluța and Mr. Maier Ioan;
- Approval of issuing a decision regarding the awarding of remedies by equivalent for the real estate - land with an area of 640 sqm, located in Bulz Commune, Munteni Village, Bihor County;
- Approval of sponsoring with the amount of Lei 600,000 the Romanian Boxing Federation in view of organizing the fight for the IBF super middleweight world champion title;
- Information regarding the termination of several electric power sale and purchase agreements with thermal energy producers;
- Information regarding the development, discussions and negotiations between Hidroelectrica SA and FSLI Petrom regarding the adapting of the individual employment contract to the Labour Law;
- Approval of the court action filed against the National Administration Romanian Waters for the unfair increase of water tariff, as well as against ANRE for the acknowledgement of the real cost of hydroelectric power;
- Approval of the technical and economic documentation of the investment objective "Vânători Hydrowpower Plant. Upgrading and securing works at the headrace";
- Approval of the technical and economic documentation of the investment "Upgrading of hydro generator no. 2 Răureni Hydrowpower Plant, no. 2 Dăești Hydrowpower Plant, no. 2 Strejști Hydrowpower Plant";
- Approval of the "Memorandum of understanding regarding the cooperation between E.ON Romania SRL and SC Hidroelectrica SA in view of analyzing several retrofitting projects from Hidroelectrica portfolio as well as several hydrowpower investment projects and identifying those which are eligible to be developed and/or renewed in the future by the parties;

- Endorsement of selling the land related to Blidari 1 - 4 micro hydropower plants with a total area of 9,283.7 sqm, according to the documents mentioned to SC ESPE ENERGIA SRL – the owner of these micro hydropower plants based on the asset sale and purchase agreement no. 130/2004;
- Approval of permanent employment of the manager of Assets Directorate, Mr. Marcel Hodoroga, starting with July 13, 2011;
- Acknowledges the Order of the Ministry of Economy, Commerce and Business Environment no. 1285/June 23, 2011 on the "Analysis of the method of organizing the activity of managers – delegation of powers regarding the management of the economic agent";
- Approval of extending for a period of 3 years the lease agreement concluded with SC COSMOTE RMT SA for a land with an area of 24 sqm at the base of the telecommunication mast and an area of approximately 2 sqm at its upper part which is under the management of Curtea de Argeş Hydropower Subsidiary;
- Acknowledges the information made by the General Manager regarding the signing of the loan agreement with EBRD for the retrofitting of Stejaru Bicz Power Plant;
- Approval of the list with Hidroelectrica specialists suggested for traveling abroad between June 27, 2011 and July 3, 2011;
- Endorsement of the documentation based on which the land ownership certificates for the lands included in the assets of SC Hidroelectrica SA - Râmnicu Vâlcea Hydropower Subsidiary (Furnica Catchment, Goata II Catchment, Balindru II Catchment, Recea Catchment, Jiet Catchment, Groapa Seacă II Catchment and escarpment canal) will be obtained;
- Approval of Note no. 14578/July 11, 2001 on the request of annulment by the Extraordinary General Shareholders' Meeting of SC Hidroelectrica SA of the Decision no. 46/October 23, 2009 by which the delivery versus payment of Târgu Mureş Small Hydropower Plant to the Local Council of Târgu Mureş Municipality, following the notice of the Local Council no. 104/58479/June 8, 2011 by which it stops any actions regarding the purchase of the real estate owned by the city;
- Rejection of the notification no. 215/September 10, 2001 filed by Ms. Croitorescu Elena and no. 412/October 24, 2001 filed by Ms. Marinaş Elena;
- Approval of the technical and economic documentation and of the technical and economic indicators of the investment objective "Râul Mare Retezat Hydropower Development, Gura Apelor Dam, greening and sanitation by clearing the basin of Gura Apelor Reservoir, between 1,000.00 and 1,078.5 meters above sea-level heights";
- Information regarding the investment programme of SC Hidroelectrica SA for 2011 and the achievements of the first 6 months;
- Information regarding the analysis and inspections performed on site regarding the situation of the investment – Bacău Hydropower Plant – Upgrading the riprap and waterproofing of the headrace, tailrace and loading bay;
- Information on the actions taken by the company against ANAR (*National Administration Romanian Waters*) and ANRE (*National Energy Regulatory Authority*) regarding the unfair increase of water tariff, as well as the acknowledgement of this increase of tariff for the processed water in the price of electricity delivered on the regulated market;
- Information presented by Marsh Romania regarding the third party liability insurance for executive managers and administrators;
- Information on the Strategy for the renewing of the hydropower plants associated to the Middle Old River;
- Approval of removing from the office of Economic and Commercial Deputy Manager of Haţeg Hydropower Subsidiary of Ms. Manuela Tina Feder and the reappointment of Ms. Tuducea Hermina in this position;
- Information regarding the negotiation of several contracts on the electric power competitive market;
- Approval of the Rules concerning the Organization and Operation of SC Hidroelectrica SA, version August 2011, updated, and the provisions of Commission Directive 114/2008, Government Emergency Ordinance no. 98/2010 on identifying, designation and protection of critical infrastructures and of the Orders of the Ministry of Economy, Commerce and Business Environment no. 2076/2010 and no. 1178/2011;
- Information regarding the electric power generation/supply activity in the context of the low hydraulicity in 2011;
- Approval of the technical and economic documentation of the investment objective "Upgrading of hydro generator no. 2 Oieşti Hydropower Plant", "Retrofitting of 110 kV station of Oieşti Hydropower Plant", "Upgrading of hydro generator HG 1 – Sasciori Hydropower Plant";

- Approval of the technical and economic documentation of the investment objective "Transformation of Cerbureni Hydropower Plant into a diversion one";
- Endorsement of the proposal regarding the participation of SC Hidroelectrica SA in 4 projects and proceeding with the procedures regarding the setting up of 4 IPP type-companies: HidroSchitu Golești, HidroTimiș, HidroBuzău, HidroBârsa;
- Authorizing the executive management of Hidroelectrica SA to hire a specialized consultant which will provide legal and/or economic advice for the Negotiation Committee and Hidroelectrica SA and an ANEVAR (*National Association of Romanian Valuers*) chartered valuer which will perform the assessment of the contribution in kind of SC Hidroelectrica SA to the new IPP type company according to the international assessment standards;
- Approval of holding by Hidroelectrica of a minimum share of 51 % in the IPP type company;
- Endorsement of the documents prepared in view of obtaining the ownership certificated for 2 secondary intake enclosures of Bistrița Hydropower Subsidiary (Bolovaniș Compensating Basin, Neagra Compensating Basin);
- Endorsement of the documentation prepared in view of obtaining the ownership certificates for 8 secondary intake enclosures from Râmnicu-Vâlcea Hydropower Subsidiary (Garcu 1 Secondary Catchment, Garcu II Secondary Catchment, Izvorul Floarei Secondary Catchment, Căprărețu Secondary Catchment, Găujani Secondary Catchment, Herța Secondary Catchment, Țiganu Drept Secondary Catchment, Țiganu Stâng Secondary Catchment);
- Information regarding the situation of the main economic and financial indicators on June 30, 2011;
- Approval of the start of procedures for the selection of a financial adviser which will assist Hidroelectrica in finalizing the strategy to access the international financial markets (bond issue, capital increase and/or listing on a stock exchange);
- Request of Proprietatea Fund to amend the Memorandum of Association of SC Hidroelectrica SA;
- Approval to trade the shares of SC Hidroelectrica SA in the 1st category on the market managed by SC Bursa de Valori Bucharest;
- Approval of decommissioning and capitalization of several fixed assets belonging to SC Hidroelectrica SA – Cluj Hydropower Subsidiary, Târgu Jiu Hydropower Subsidiary, Bistrița Hydropower Subsidiary;
- Approval of the increase of the share capital with Lei 8,546,800 representing lands for which ownership certificates have been obtained;
- Approval of issuing a decision to reject the notification regarding the request for pecuniary compensation for a real estate - land with an area of 7,310 sqm and 2,460 sqm, being already solved by Râmnicu Vâlcea City Hall;
- Approval of issuing a decision to reject the notification regarding the real estate - buildings compulsory purchased and demolished with an area of 80 sqm;
- Information regarding the answer of the Ministry of Environment and Forests and the National Administration Romanian Waters at the request of SC Hidroelectrica SA regarding the cost of water;
- Endorsement of the agreement in principle regarding the transfer of a land with an area of 16.34 ha from the state public domain leased to SC Hidroelectrica SA - Porțile de Fier Hydropower Subsidiary by the Ministry of Economy, Commerce and Business Environment to the public domain of Mehedinți County – Mehedinți County Council;
- Approval of applying the force majeure clause by Hidroelectrica in all electric power sale contracts provided the force majeure certificates from the Romanian Chamber of Commerce are obtained;
- Endorsement of the draft of government decision on the approval of the strategy to select the investors for setting up a pumped storage hydropower plant at Tarnița - Lăpușești;
- Endorsement of holding by Hidroelectrica of a minimum share of 51 % of the share capital of the company which will develop and manage the Pumped Storage Hydropower Plant Tarnița – Lăpușești;
- Endorsement of the technical and economic documentation including the feasibility study with the main technical and economic indicators of the investment objective - "Upgrading the hydro generators of Răcăciuni Hydropower Plant";
- Decides that during the period of applying the force majeure clause in all its electric power sale and purchase contracts, Hidroelectrica SA will no longer buy electric power from other sources and will generate the energy delivered to its clients only from its own sources;
- Approval of the decision of the executive management not to enforce the Decisions of ANRE (*National Energy Regulatory Authority*) no. 2481/October 6, 2011 and no. 2487/October 6, 2011 by which Hidroelectrica is obliged to deliver the hourly quantities communicated by these;

- Approval of the technical and economic measures to diminish the expenses at the level of Hidroelectrica SA in the 4<sup>th</sup> quarter of 2011 in view of diminishing the effects of the drought;
- Information regarding the consultations with the union and the approval of enforcing reduced working hours for the technical, economic, scientific and administrative (TESA) personnel during the 4<sup>th</sup> quarter of 2011 as a result of activating the force majeure clause starting with September 30, 2011;
- Endorsement of the documentation prepared in view of obtaining the ownership certificates for the lands included in the assets of SC Hidroelectrica SA (Salhis Crossing, Nimăiești Small Hydropower Plant – the Plant, Nimăiești Small Hydropower Plant – Pociovaliștea Compensating Basin, Boga 2 Small Hydropower Plant - Valea Rea Catching and Compensating Basin, Boga 2 Small Hydropower Plant – Oșelu Catching and Compensating Basin, CET Baraj Small Hydropower Plant and CET Restituție Small Hydropower Plant from Bihor County);
- Approval of extending the lease contract with SC Vodafone SA for a period of 5 years for the equipment located on the surge tank of Siriu Dam included in the assets of SC Hidroelectrica SA – Buzău Hydropower Subsidiary;
- Approval of extending the lease contract with SC Vodafone Romanian SA with a period of 5 years for an area of 26 sqm needed for the assembly of the two antenna installed for a data transmission repeater together with the related equipment, included in the assets of SC Hidroelectrica SA - Buzău Hydropower Subsidiary;
- Approval of issuing a decision regarding the rejection of the notification for a real estate - land with an area of 250 sqm, located in Gilău Commune, Cluj County;
- Information regarding the position of Unvers Federation related to the suggestion to diminish the expenses within SC Hidroelectrica SA as a result of activating the force majeure clause;
- Information regarding the suggestions of Unvers Federation to diminish the expenses during the period of the force majeure clause;
- Information regarding a contract for a line of credit in amount of Lei 120,000,000 concluded with Banca Transilvania for supporting the current operating activity;
- Acknowledging the validity of the Approval of force majeure no. 1240/September 27, 2011 issued by the Romanian Chamber of Commerce and Industry;
- Decides the maintaining of the force majeure clause in the electric power sale and purchase agreements of SC Hidroelectrica SA until the date when the operating hydrological conditions will change;
- Requests the preparing and presentation by the Legal Department of a legal opinion regarding the decision of the Management Board of the Romanian Chamber of Commerce and Industry by which the approval of the force majeure was recalled and authorizes the executive management to submit a criminal complaint against the president of the Romanian Chamber of Commerce and Industry and of the Management Board of the Romanian Chamber of Commerce and Industry as a result of the abusive decision to recall the approval regarding the force majeure situation;
- Information regarding the technical and economic measures to diminish the expenses in October in view of diminishing the effects of the drought;
- Approval of removing from the office of the managers of Hațeg Subsidiary and Slatina Subsidiary;
- Approval of the Rules concerning the Organization and Operation of SC Hidroelectrica SA, version dated October 2011;
- Approval of decommissioning and capitalization of several completely amortized fixed assets belonging to Bistrița Hydropower Subsidiary, Caransebeș Hydropower Subsidiary, Hațeg Hydropower Subsidiary, Oradea Hydropower Subsidiary, Porțile de Fier Hydropower Subsidiary, Sibiu Hydropower Subsidiary, Slatina Hydropower Subsidiary, Târgu Jiu Hydropower Subsidiary;
- Approval of issuing a decision to reject the Notification no. 201/April 30, 2001 because it is no longer motivated being solved by Râmnicu Vâlcea City Hall;
- Approval of DALI documentation with the main technical and economic indicators regarding the investment – Galbeni Hydropower Plant. Securing the Siret Village Jetty";
- Information regarding the payment of taxes and other amounts due by SC Hidroelectrica SA for the final or temporary set aside from the forestry real estate of the land necessary for continuing the investment objectives declared as "national interest public utility";
- Approval of the technical and economic documentation including the feasibility study with the main indicators regarding the investment "Upgrading the current and voltage reducers from the 220 kV stations of Gâlceag and Sugag Hydropower plants";
- Information regarding the placing on the aluminum market of an execution order based on the hedging contract which facilitates the risk transfer for the negative fluctuation of the incomes derived from the commercial contract with ALRO SA;



- Authorizing the executive management of SC Hidroelectrica SA to initiate all the legal measures which are necessary for protecting its rights and interests in the relations with the National Administration "Romanian Waters" Banat and to obtain the support of the Ministry of Economy, Commerce and Business Environment for an intervention to the Ministry of Environment and Forests in view of harmonization of the orders issued by the two of them with the applicable organic laws;
- Approval of the note regarding the development of the regulated contracts of SC Hidroelectrica SA in November 2011;
- Approval of the technical and economic documentation including the feasibility study with the main indicators related to the investment - "Upgrading works at the electrical installation related to the hydromechanical equipment and at the hydraulic drive installation related to Porțile de Fier I and Gogoșu Porțile de Fier II Weir Dam" - Porțile de Fier Hydropower Subsidiary;
- Endorsement of the technical and economic indicators related to the completion of the investment objective "Hydropower Development of Jiu River on Livezeni Bumbești Reach" according to the general estimate updated and supplemented on July 1, 2011 in relation with the national prices valid on June 30, 2011;
- Approval of reorganization of Sibiu Hydropower Subsidiary, Curtea de Argeș Hydropower Subsidiary, Slatina Hydropower Subsidiary and Râmnicu Vâlcea Hydropower Subsidiary by returning to the organizational structure existent prior to the Decision of Extraordinary General Shareholders' Meeting no. 19/2010;
- Approval of purchasing consultancy services for the completion of the programme regarding the reorganization and restructuring of Hidroelectrica and Hidroserv Subsidiaries with the observance of the provisions of Government Ordinance no. 34/2006;
- Approval of the completion of the investment objective - "Râureni Hydropower Plant and Strejești Hydropower Plant. Updating of Hydro-unit 2" according to the national prices valid on November 1, 2011;
- Approval of hiring Lucia Mușat Private Low Practice in view of filing the penal complaint against Mr. Mihail Vlasov, president of the Romanian Chamber of Commerce and Industry;
- Information regarding the third party liability insurance for executive managers and administrators as a result of assessing the offers to be presented by the economic agents. This contract will be concluded until the middle of December 2011;
- Approval of the new structure of the Secretary of the Board of Directors starting with November 17, 2011;
- Approval of participation of SC Hidroelectrica SA, by an application for joinder as a party with a personal interest, in a litigation included in file no. 6372/2011 entered on the list of the Appeal Court of Bucharest, aimed to the annulment of the Government Decision no. 1202/2010 on updating the amount of specific contributions for the management of water resources, as a result of the extremely negative impact that the water price increase has on the economic results of the company;
- Approval of removing from the office of the Technical Deputy Manager of Argeș Hydropower Subsidiary and of the Chief Engineer of Vidraru Hydroelectric Plant and appointing other employees for these offices;
- Authorizes the Ministry of Economy, Commerce and Business Environment to organize, on behalf of Hidroelectrica, the service purchase procedure in view of selecting a top management recruiter for the selection of the future general manager of Hidroelectrica;
- Approval of the organizational measures of SC Hidroelectrica SA according to the Order of the Ministry of Economy, Commerce and Business Environment no. 3129/December 6, 2011;
- Approval of the changes made in the structure of the management team of Hațeg Hydropower Subsidiary;
- Endorsement of participation of SC Hidroelectrica SA in the share capital of the company which will develop and manage the Pumped Storage Hydropower Plant Târnița – Lăpușești with a minority or majority share;
- Annulment of the decision no. 11/2011 subparagraph 2 regarding the "Participation of Hidroelectrica SA with a minimum share of 51 % in the share capital of the company that will develop and manage the objective: Pumped Storage Hydropower Plant Târnița – Lăpușești";
- Approval of extending the lease contract concluded with SC Vodafone Romania SA with a period of 5 years for a land area of 4 sqm necessary to install 3 panel antennas together with the equipment of the GSM station, area included in the assets of Hidroelectrica, Curtea de Argeș Hydropower Subsidiary;

- Approval of extending the lease contract concluded with BCR with a period of 3 years for a space with an area of 2 sqm located in Colonia Definitivă Porțile de Fier II Commercial Center;
- Approval of extending the lease contract concluded with SC Andritz Hydro GmbH Viena - Porțile de Fier II Subsidiary with a period of 1 year for a space with an area of 246 sqm located in Colonia Definitivă Porțile de Fier II Commercial Center;
- Approval of extending the lease contract concluded with SC Andritz Hydro GmbH Ravensburg - Porțile de Fier II Subsidiary with a period of 1 year for a space with an area of 77 sqm located in Colonia Definitivă Porțile de Fier II Commercial Center;
- Endorsement of changing the Article 7 paragraph 2 of the Memorandum of Association of SC Hidroelectrica SA;
- Approval of the payment of the annual membership fee to the National Association of Romanian Exporters and Importers;
- Approval of appointing the Manager of the Operating Directorate starting with December 8, 2011,
- Approval of the participation of SC Hidroelectrica SA on the electric power market in 2012, authorization of the General Manager to start negotiations with all the partners in the electric power sale and purchase contracts under development in view of obtaining more favourable terms for the company, starting from the request to terminate the bilateral contracts which were not traded by OPCOM at the first possible term;
- Appointing of a *Temporary Administrator* starting with December 9, 2011, until the convening of the General Shareholders' Meeting;
- Note regarding the results of negotiating the electric power sale and purchase contracts executed on the competitive market, according to the powers given by the Decision of the Board of Directors no. 17/2011;
- Approves the dispute of the Decision of ANRE (*National Energy Regulatory Authority*) no. 2742/November 4, 2011 and the Decision no. 22743/November 4, 2011 by which the regulated quantities related to the period November 7 – November 30, 2011 are changed and the applying in the procedure to allocate the electric power from own sources of the provisions from the initial decisions, Decisions of ANRE no. 907/March 30, 2011 and no. 984/April 1, 2011, respectively;
- Note regarding the changing of the structure of the management team of Hațeg Hydropower Subsidiary;
- Approval of the value of the fixed asset - "Automated railway crossing equipment at km 340+890" in view of deliver versus payment from the assets of SC Hidroelectrica SA - Sibiu Hydropower Subsidiary to the state public domain managed by the Ministry of Transport;
- Suggestions and organizational measures for SC Hidroelectrica SA according to the Order of the Ministry of Economy, Commerce and Business Environment no. 3251/December 20, 2011;
- Note regarding the results of negotiating the electric power sale and purchase contracts executed on the competitive market, according to the powers given by the Decision of the Board of Directors no. 18/2011;
- Approval of the Rules concerning the Organization and Operation of SC Hidroelectrica SA, version dated December 2011;
- Note regarding the changing of the structure of the management team of Slatina Hydropower Subsidiary;
- Endorsement of changing the name of a place of business from "Chemp Aștileu I cu Barajul Vadu Crișului" to "Chemp Aștileu I" as well as the updating of its mailing address;
- Endorsement of updating the mailing address of several registered places of business: Munteni Hydropower Plant, Tileagd Hydropower Plant, Aștileu II Hydropower Plant, Dragan Dam, Boga 2 Small Hydropower Plant, Piatra Bulz Small Hydropower Plant, Lugașu Hydropower Plant and Sacadat Hydropower Plant;
- Information regarding the request of Proprietatea Fund regarding the strategy of the company related to the bilateral contracts;
- Information regarding the stages of the selection of an intermediary for the Primary Public Offering and the activity to be performed by it.

In 2011, by its activity, the Board of Directors of SC Hidroelectrica SA established and met the main objectives of the company, which were planned in exercising the management activity.

#### **4. LAWS, REGULATIONS**

In 2011, the economic and financial activity of the company was performed by applying both the primary laws related to the economic agents and the secondary laws specific to the energy field.

- **Primary laws**

- a. Accounting Law no. 82/1991, republished with the subsequent amendments and additions;
- b. Orders of the Minister of Public Finance for the implementation of the Accounting Law:
  - ▶ Order of the Minister of Public Finance no. 3055/2009 for the approval of the accounting regulations in compliance with the European Directives;
  - ▶ Order of the Minister of Public Finance no. 1826/2003 on the approval of the Statements regarding several measures related to the organization and conducting of management accounting (Official Gazette no. 23/January 12, 2004);
  - ▶ Order of the Minister of Public Finance no. 2861/2009 on the approval of the Rules regarding the organization and performance of the inventory of elements such as assets, payables and equities (Official Gazette no. 704/October 20, 2009);
  - ▶ Order of the Minister of Public Finance no. 3512/2008 on the financial and accounting documents (Official Gazette no. 870/December 23, 2008);
  - ▶ Order no. 52/January 16, 2012 on the main issues related to the preparing and submitting of the annual financial statements and the annual reports to the local units of the Ministry of Public Finance;
  - ▶ Order of the Minister of Public Finance no. 2869/2010 for the amendment and supplementation of some accounting regulations;
  - ▶ Order of the Minister of Public Finance no. 1121/July 4, 2006 on the implementation of the International Financial Reporting Standards (Official Gazette no. 602/July 12, 2006);
- c. Taxation Law - Law no. 571/2003 with the subsequent amendments and additions;
- d. Decision no. 44/January 22, 2004 for the approval of the Implementing rules for the implementation of Law no. 571/2003 on the Taxation Law with the subsequent amendments and additions;
- e. Law no. 31/1990 on the companies, republished with the subsequent amendments and additions (republished in the Official Gazette no. 1066/November 17, 2004);
- f. Law no. 13/2007 on electric power.

- **Secondary laws:**

Orders of ANRE (*National Energy Regulatory Authority*):

The main legislative acts on which the supply activity is based are the following:

- The Commercial Code approved by ANRE Order no. 25/2004;
- Rules for the supply of electric power to the end users approved by the Government Decision no. 1007/2004;
- Performance standard for the electric power supply service at regulated tariffs;
- Full opening of the electric power market - Government Decision no. 638/2007;
- Procedure for changing the electric power supplier approved by ANRE Order no. 14/2011;
- Law no. 220/October 27, 2008 on establishing the system for the promotion of energy generation from renewable energy sources, with the subsequent amendments and additions (republished in the Official Gazette no. 577/August 13, 2010).

**Licenses:**

- ▶ LICENSE no. 932/May 27, 2010 for the supply of electric power;
- ▶ LICENSE no. 332/July 24, 2001 for electric power generation;
- ▶ LICENSE no. 333/July 24, 2001 for providing engineering system services.

**5. OVERALL ASSESSMENT**

**ACHIEVEMENTS OF YEAR 2011 WHICH CERTIFY THE ACKNOWLEDGEMENT OF THE NATIONAL AND INTERNATIONAL VALUE OF HIDROELECTRICA COMPANY:**

Hidroelectrica, although was faced in 2011 with a severe drought, had an approximate market share of approximately 23.75 % from the total electric power output of the National Power System, in profitable conditions, by efficiently managing the water resources.

Hidroelectrica is the main stability factor for the national power system by supplying engineering system services of approximately 80 % of the domestic demand.

The 2011 turnover of the company is of 3,020,592 thousand Lei (EUR 699 million\*).

The achieved investment programme had a value of Lei 1,526,053 thousand (EUR 353 million), being materialized mainly in the following achievements:

• **Investment objectives which were commissioned in 2011:**

- Bistra Poiana Mărului, Ruieni, Poiana Ruscă Hydropower Developments, Râul Alb Catchment and Small Hydropower Plant - 2 horizontal Francis type hydro-units;
- Renewing the wastewater treatment plant of Porțile de Fier II Hydropower Plant and Porțile de Fier I Hydropower Plant permanent colony;
- Consolidating and arranging the area downstream Curtea de Argeș Dam which was damaged after the floods of June 2005, renewing the sports facilities which were affected by the floods;
- Increasing the level of operating safety for Frunzaru Reservoir and Galbeni Reservoir;
- Performing the sealing and consolidation of the right bank dyke in the area km 0 - km 3. Overhauling works for Galbeni Reservoir;
- Bacău Hydropower Plant - Upgrading the riprap and waterproofing of the headrace and loading bay;
- Upgrading the installation for general and own services (Hydro-unit 2) of Zavideni Hydropower Plant, automation and monitoring;
- Upgrading hydro generator no. 2 -Zavideni Hydropower Plant and Ionești Hydropower Plant;
- Upgrading the installation for general and own services (Hydro-unit 2) of Ionești Hydropower Plant, automation and monitoring;
- Upgrading the hydro-unit no. 1 - Vaduri Hydropower Plant;
- Extending the warning and alarm system of Curtea de Argeș Hydropower Subsidiary and the analysis of the compatibility of the existent system, Stage II - Albești - Rotunda Reach;
- Fiber optic voice and data communication system between the plants downstream Vidraru Dam and the hydro-dispatch center, Stage I – Oești-Vidraru Reach;
- Fiber optic voice and data communication system between the places of business of Sebeș Hydropower Plant and the dispatch center;
- Commissioning of 5 units on the Lower Olt River to which the 10 finalized in 2010 are added, so that 15 units from the 20 suggested to be retrofitted were operational at the end of 2011;
- In Caransebeș Hydropower Subsidiary, the commissioning of Râul Alb Micro Hydropower Plant (2 x 0.4 MW on June 24, 2011 with a project energy  $E_p = 1.5$  GWh/year);
- In Porțile de Fier, the re-commissioning of the Hydro-unit 2 of Porțile de Fier II Hydropower Plant after retrofitting (on May 26, the new capacity was of 31.4 MW, the old capacity was of 27 MW).

• **Ongoing investment objectives, in different stages, performed in 2011**

- Bistra Poiana Mărului, Ruieni, Poiana Ruscă Hydropower Development, Sebeșul Mare – Ruieni Secondary Headrace, Sebeșel – Cuntu Reach;
- Cerna – Belareca Hydropower Development, Herculan Hydropower Plant (Cornereva Dam – minimum energy level of 490 meters above sea-level);
- Surduc-Siriu Hydropower Development, Surduc Fall Nehoiașu II Hydropower Plant - unit 1;
- Jiu River Hydropower Development on Bumbesti-Livezeni Reach, Dumitra Hydropower Plant and Bumbesti Hydropower Plant;
- Runcu-Firiza Hydropower Development, Firiza I and II Hydropower Plant;
- Strei River Hydropower Development on Subcetatea Simeria Reach, Bretea Hydropower Plant;
- Pașcani Hydropower Development on Siret River;
- Siret River Hydropower Development on Cosmești–Movileni Reach, Cosmești Hydropower Plant.

• **Investment objectives to be commissioned in 2012**

- Hydropower Development of Olt River, on Conretu – Avrig Reach, Robești Hydropower Plant – 2 Kaplan type hydro-units;
- Olt River Hydropower Development, Cornetu-Avrig Reach; Racoviță Hydropower Plant;
- Rastolița Hydropower Development, Rastolița Hydropower Plant (minimum energy dam - normal water level 720.00 meters above sea-level)

• **Performance of retrofitting programme in 2011**

*Completion of retrofitting works and commissioning of:*

- Hydro-unit 1 Frunzaru Hydropower Plant
- Hydro-unit 2 Frunzaru Hydropower Plant
- Hydro-unit 1 Rușănești Hydropower Plant
- Hydro-unit 2 Rușănești Hydropower Plant

- Hydro-unit 1 Izbiceni Hydropower Plant
- Hydro-unit 3 Lotru Ciunget Hydropower Plant
- Hydro-unit 2 PdF II Hydropower Plant
- Object 2 PdF I Lock

*Preparing the awarding documentation for the Retrofitting Project for: Stejaru Hydropower Plant; Slatina Hydropower Plant; Hydro-unit 1 Remeți Hydropower Plant*

*Preparing the feasibility study for promoting the Retrofitting Project of Vidraru Hydropower Plant;*

*Awarding the retrofitting contract for the Retrofitting Project of Hydro-unit 1 Remeți Hydropower Plant;*

- \* *At an exchange rate of Lei 4.3197.*

*Open tender and awarding the consultancy contract for the Retrofitting of Stejaru Hydropower Plant;*

*Starting the tender procedure for awarding the Retrofitting Contract for Stejaru Hydropower Plant.*

- **Objectives to be retrofitted in 2012**

*Completion of retrofitting works and commissioning of:*

- Hydro-unit 3 Rușănești Hydropower Plant
- Hydro-unit 4 Rușănești Hydropower Plant
- Hydro-unit 2 Izbiceni Hydropower Plant

*Completion of retrofitting and commissioning works for:*

- Hydro-unit 3 Izbiceni Hydropower Plant
- Hydro-unit 6 PdF II Hydropower Plant
- Object 3 (navigation resuming) PdF I Lock

*Performance of retrofitting works and preparing the commissioning of Hydro-unit 4 Izbiceni Hydropower Plant;*

*Preparing the awarding documentation for the Project of retrofitting the equipment of Tismana Hydropower Plant;*

*Awarding the retrofitting contract for the Project of retrofitting the equipment of Tismana Hydropower Plant;*

*Awarding the retrofitting contract for the Project of retrofitting Stejaru Hydropower Plant;*

*Final acceptance of 7 retrofitted hydro-units.*

- **Identifying and performing the projects of collaboration with international organization and financial institutions in view of obtaining international support and financing:** In the last year, important steps have been made as regards the collaboration with international financial institutions, such as EIB or EBRD – the biggest investors and multilateral creditors – in view of their implication in the financing of the Romanian energy sector.

Thus, in 2011, Hidroelectrica contracted from EBRD a loan in amount of EUR 110 million for the renewing of six units of Stejaru Bicaș Hydropower Plant – a 50 years old hydropower plant with a total installed capacity of 210 MW, built on Bistrița River.

- **Absorption of structural and cohesion funds** – taking into account the fact that this is one of the top priorities of the Romanian Government, being a key resource for the mid and long term development of the Romanian economy and society, as well as a central element of the budget sustainability from the point of view of the investment strategy and of the non-refundable funds, in 2011, efforts have been made for the optimum use of this opportunity.

In 2011, the project submitted in the context of the Sectoral Operational Programme "Increase of the Economic Competitiveness" (OSP IEC), Major Intervention Field 2 "Recovery of the renewable energy resources for the production of green energy", project which implies the recovery of the hydropower potential of Neagra Sărului River, was analyzed by the selection committee, and Hidroelectrica answered to all clarifications and requests received from the Intermediate Body for Energy.

The project which is aimed to the setting up of two new micro hydropower plants on intermediate reaches not used until now of the fall and the upgrading of other 9 existent objectives in view of creating a new operating cycle, has a value of approximately Lei 112,906,733, out of which, the requested non-refundable financial support is of Lei 38,232,355.

By the letter of the Ministry of Economy, Commerce and Business Environment - Intermediate Body for Energy no. 146405/March 30, 2011, the notification that the project of Hidroelectrica "Optimum recovery of the hydropower potential of Neagra Sarului River" received the approval to be co-financed from the European Regional Development Fund (ERDF) for a value of Lei 38,232,355, VAT excluded, which represents 45 % of the total eligible expenses of the Project.

## **6. PARTICULARITIES OF THE OPERATING CONDITIONS OF THE HYDROPOWER DEVELOPMENTS IN 2011**

In 2011, SC HIDROELECTRICA SA generated in its own equipment a gross electric power output of 14,710 GWh.

As a result of the unfavourable hydrological conditions (both on Danube and on the inland waters), the value of the energy generated at terminals **was with approximately 15.8 % under the value of an average hydrological year** which is of approximately 17,465 GWh.

The total quantity of energy supplied from own equipment was of 14,281 GWh.

The energy generated in the hydropower plants in 2011 was obtained, 90.5 %, from the natural inflow, and the rest of 9.5 % from destocking the reserve of the big developments (between December 31, 2010 and December 31, 2011, a decrease of approximately 1,391 GWh of the reserve of the big reservoirs being registered).

**In 2011 also, the operation of the hydropower plants was performed, in fact, in mixed conditions, by the regulated market and the competitive market, in the context in which, according to the Government Decision 638/June 26, 2007 published in the Official Gazette no. 427/June 27, 2007, the market was, at least from a theoretical point of view, entirely open.**

As regards the energy market, 2011 can be characterized as the sixth calendar year of implementation of the new **Commercial Code, approved before (according to ANRE (National Energy Regulatory Authority) no. 25/2004)** in which centralized energy markets (**DAM** – "Day-Ahead Market", **MBCEPA** - Market of Bilateral Contracts Established by Public Auction, **GCM** – "Green Certificates Market" managed by OPCOM SA and **BM** – "Balancing Market" managed by OPE within CN Transelectrica) have operated.

**Starting with September 30, 2011, the force majeure situation was established, as a result of the extended drought manifested even from April 2011. The priorities are the provision of system engineering services, the observance of the provisions regarding the operation of water developments on border waters (Danube, Prut) and the supply of returned flow and utilities. The contracts with several suppliers have been executed in force majeure conditions, proportionally, according to the daily-realized output.**

In 2011, in Hidroelectrica, **59 operational dispatchable units (DU)** existed, on the structure of which, the daily operating schedules have developed.

The structures of unit configurations classified as **prime uncontrollable output – PUO** (plants under 10 MW, which do not have daily regulating possibilities) and of unit configurations classified as **prime controllable output – PCO** (plants under 10 MW, which have daily regulating possibilities). Starting with December, Law no. 220/2008 has entered into force, occasion with which the managed hydropower developments which could be classified as RES – "Renewable Energy Sources" and the energy generation of which benefited from certificates (GC) traded on GCM – "Green Certificates Market, managed by OPCOM (according to the provisions of the new law with the subsequent amendments and additions) have been identified.

The software, which allows the preparing of production offers of the company on the centralized markets, has continued to be improved at the head office of Hidroelectrica.

The hydrological situation had a very unfavourable evolution for the generation of hydropower, starting with April and until the end of the year. The synthesis of hydrological data indicates for 2011 the lowest global hydrology of inland waters in the last 16 years. The water reserve from the big developments registered during the year, which is directly influenced by the unfavourable hydrological situation registered in the Danube River and in the inland waters was used for covering the water needed to be used downstream the developments, the volume of system services necessary for the safe operation of the National Power System and the supply necessary to overcome the winter period of 2011 – 2012.

**ECONOMIC AND FINANCIAL INDICATORS**

The economic and financial activity of SC Hidroelectrica SA was performed in correlation with the indicators included in the Budget of Income and Expenditure approved by Government Decision no. 401/2011 (Appendix).

The result of the activity performed in 2011 financial year reflects a profitable activity, even exceeding the forecasted indicators (turnover), but with a profit which is diminished in comparison with the that specified in the budget for income and expenditure for 2011, much under the results of 2010, situation which is generated by the severe drought, which was accentuated in the second part of 2011.

- Lei -

Indicators	Achievements 2010	Planned for 2011	Actual 2011
Turnover	3,273,700,089	2,906,750,000	3,020,591,574
Operating income	3,287,073,869	2,966,750,000	3,047,049,417
Operating expenses	2,784,283,899	2,881,750,000	2,885,890,248
Operating result	502,789,970	85,000,000	161,159,169
Financial revenues	124,531,358	100,000,000	137,945,263
Financial expenses	237,066,421	100,000,000	259,494,488
Financial result	(112,535,063)	0	(121,549,225)
Total revenues	3,411,605,227	3,066,750,000	3,184,994,680
Total expenses	3,021,350,320	2,981,750,000	3,145,384,736
Gross profit (loss)	390,254,907	85,000,000	39,609,944

The turnover for 2011 was diminished compared with 2010 due to the diminishing of electric power generation with approximately 50 %, the cause being the severe drought, which imposed the enforcement of the force majeure clause starting with September 30, 2011.

The outturn of the financial year was diminished by the negative financial result, the evolution of exchange rates and the significant expenses for the interests of the contracted credits.  
The company has suffered a net loss from the differences of exchange rate and interests in amount of Lei 27,916,649.

	Indicators	2009	2010	2011
<b>1.</b>	<b>Summary indicators on the balance sheet date (Lei)</b>			
	a) GROSS PROFIT	65,508,042	390,254,907	39,609,944
	b) EBITDA	789,513,459	1,349,893,559	873,581,226
	c) EBIT	134,639,725	475,675,389	140,282,934
	d) TURNOVER	2,420,799,964	3,273,700,089	3,020,591,574
	e) EQUITY	16,481,226,078	16,748,999,173	16,489,796,972
<b>2</b>	<b>Profitability indicators (%)</b>			
	a) EBITDA in total sales	32.61 %	41.23 %	28.92 %
	b) EBITDA in equities	4.79 %	8.06 %	5.30 %
	c) EBIT in total sales	5.56 %	14.53 %	4.64 %
	d) EBIT in equities	0.82 %	2.84 %	0.85 %
	e) Gross profit rate	2.71 %	11.92 %	1.31 %
	f) Rate of return of equities	0.29 %	1.75 %	0.04 %
<b>3</b>	<b>Liquidity indicators (%)</b>			
	a) Indicator of current liquidity	22 %	28 %	23.18 %
	b) Indicator of immediate liquidity	18 %	23 %	19.21 %
<b>4</b>	<b>Risk indicators</b>			
	a) Indicator of debt ratio	0.09	0.11	0.15
	b) Interest coverage ratio	1.95	5.57	1.38
<b>5</b>	<b>Activity indicators (days)</b>			
	a) Days sales outstanding	25.4	24.7	33
	b) Days payable outstanding	127	80	110

Values of **EBITDA and EBIT indicators** and their share of the **total sales** express the capability of the company to generate, by its ordinary activity, enough cash to cover its current needs.

In 2011, the values of these indicators were lower in comparison with 2010 due to the diminishing of the company profit caused by the severe drought, which also lead to the activation of force majeure. 90 % of the profit was allocated to the dividends for the shareholders (Ministry of Economy, Commerce and Business Environment and Proprietatea Fund, respectively). In this conditions, the company was aiming to bank credits in order to invest more.

The **liquidity indicators** express the measure in which the company may obtain the necessary liquidities in order to provide for the payment of current obligations and its short-term debts, respectively.

From the analysis of the liquidity indicators result that their diminishing in comparison with 2010, due, mainly to the increase of current liabilities for the suppliers, in the context of a severe drought started even from April 2011, fact which lead to a significant diminishing of the collections.

**Risk indicators** are represented mainly by the debt ratio and reflect the ratio between the debt capital and equity of the company.

In 2011, the value of this indicator has diminished compared to 2010, the company maintaining the possibility to contact credits in the next period, not having a significant risk coefficient.

Activity indicators provide information regarding:

- Input or output cash flow rate for the company;
- Company's capability to control the working capital;
- Days payable outstanding.

From the analysis of these management indicators, a financial balance results at the level of company, established mainly by the following:

- The period necessary to collect the receivables has increased due to the change of electric energy supply ratio, meaning its diminishing on the regulated market and competitive market (by activating the force majeure clause) and increasing on the balancing market (dispatch order), being collected after 90 days;
- The period necessary to pay the suppliers has increased compared to 2010 mainly due to the use of own sources for the investment activity, to the credit contracting only in the 2<sup>nd</sup> half-year of 2011 and to the decrease of liquidities in the last 4 months of the year caused by the severe drought.

## **7. ELECTRIC POWER OUTPUT OF HIDROELECTRICA FOR THE NATIONAL POWER SYSTEM**

### **I.1. Evolution of electric power consumption and generation in 2011.**

Total installed capacity in the National Power System in 2011 was of 21,717 MW out of which 7,091 MW in coal power plants, 5,519 MW in hydrocarbon power plants, 6,528 MW in hydropower plants, 1,413 MW in nuclear plant, 1,140 MW in wind power plant, 26 MW in biomass power and 1 MW in solar power plant.

The domestic electric power consumption of Romania in 2011 was of 60,027 MW, with 3.75 % higher than the value registered in 2010 (57,864 GWh).

The electric power generation output in 2011 was of 61,931 GWh, out of which 25,795 GWh generated in coal power plants, 8,043 GWh in hydrocarbon power plants, 11,747 GWh in the nuclear power plant, 14,954 GWh in hydropower plants (out of which 14,710 GWh in the hydropower plants which are managed by SC Hidroelectrica SA), 1,208 GWh in wind power plants, 184 GWh in biomass power plants and 1 GWh solar power plants.

The structure of electric power plant according to the type of primary energy used is shown in Figure I.1.1.



The electric power generated in SC Hidroelectrica A plants represented 23.75 % of the total output of the country. The share of the output generated by Hidroelectrica plants compared with the total output of the National Power System ranged between 32.4 % (April) and 12.4 % (December).

The output generated in 2011 in its hydropower plants was with 25.85 % (5,132 GWh) lower than that generated in the previous reporting year, 2010. Table I.1.1 presents the participation to the monthly coverage of the load charge of the National Power System of the Romanian generators (according to the type of fuel). In Figures I.1.2 and I.1.3, the participation to the National Power System load chart coverage is depicted (with and without taking into consideration the export loads).

Figure I.1.1

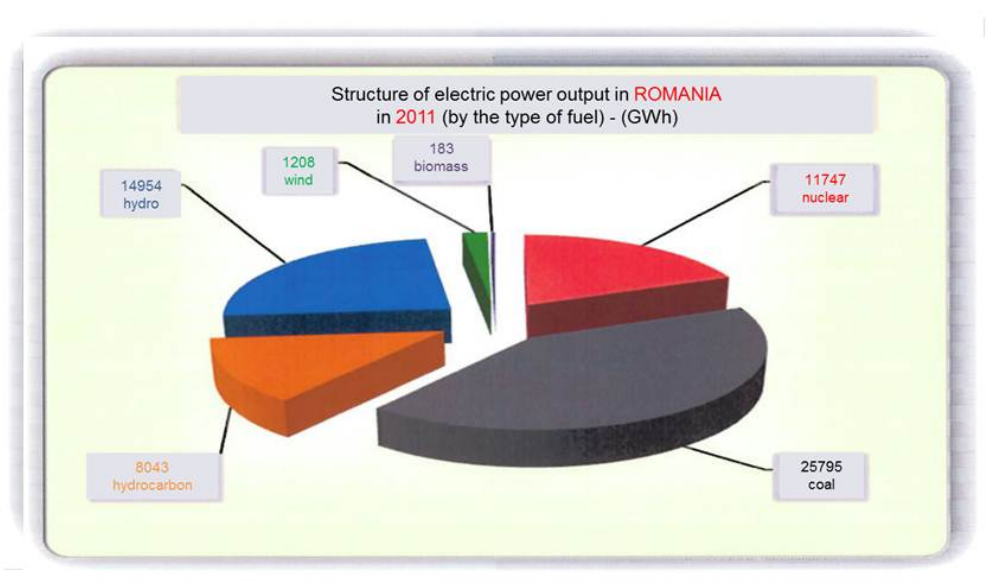


Table I.1.1 [GWh]

Month	Total consumption	Nuclear energy	Coal energy	Hydrocarbon energy	Hydro energy	Wind power	Biomass energy	Total output	Export (-)	Import (+)
January	5,645	1,009	2,182	987	1,882	57	14	6,131	-559	73
February	5,208	953	2,105	856	1,539	107	13	5,573	-468	103
March	5,382	1,054	2,234	765	1,587	128	17	5,785	-507	104
April	4,723	1,022	1,816	484	1,656	115	15	5,108	-464	79
May	4,714	627	2,191	437	1,545	79	16	4,895	-420	239
June	4,543	978	1,979	353	1,231	94	14	4,649	-289	183

July	4,735	1,029	1,968	383	1,290	62	14	4,746	-274	263
August	4,688	1,028	1,982	287	1,264	100	15	4,676	-286	298
September	4,664	965	2,316	459	916	74	15	4,745	-339	258
October	4,980	1,052	2,386	661	700	135	16	4,950	-350	380
November	5,351	1,010	2,416	1,130	682	97	16	5,351	-469	469
December	5,394	1,020	2,220	1,241	662	160	18	5,321	-417	490
<b>Total 2011</b>	<b>60,027</b>	<b>11,747</b>	<b>25,795</b>	<b>8,043</b>	<b>14,954</b>	<b>1,208</b>	<b>183</b>	<b>61,930</b>	<b>-4,842</b>	<b>2,939</b>

We have to mention that, from the total energy output of 61,931 GWh, the photovoltaic energy represented 1 GWh.

In figure I.1.2, the share from the total output of the monthly energy quantities generated according to the type of fuels is depicted. Compared with 2010, it could be seen an increase of the wind power share and the emergence of the biomass energy in the balance with a significant value. In addition, in the second part of the year, the increase of the share of the monthly energy obtained from coal and hydrocarbon can be seen as a result of the decrease of the share of hydropower due to the extended drought.

Figure I.1.2

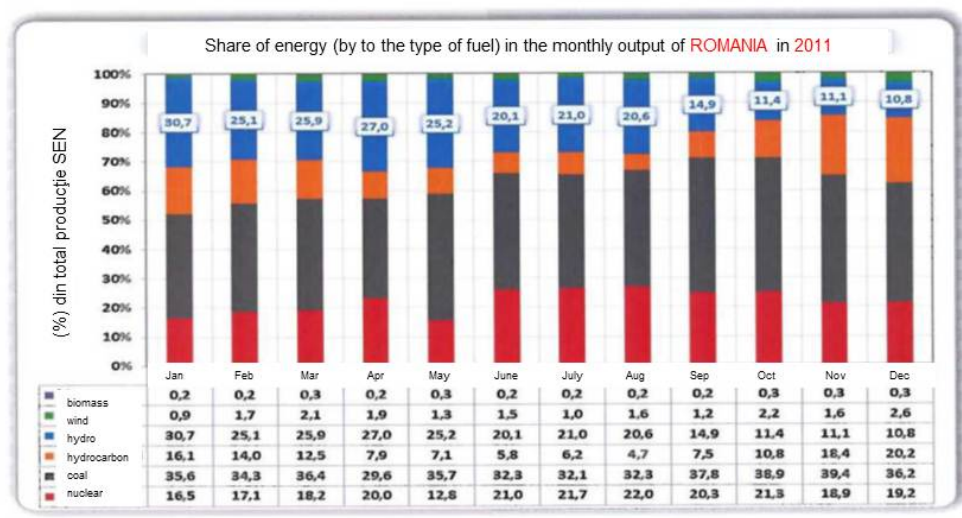
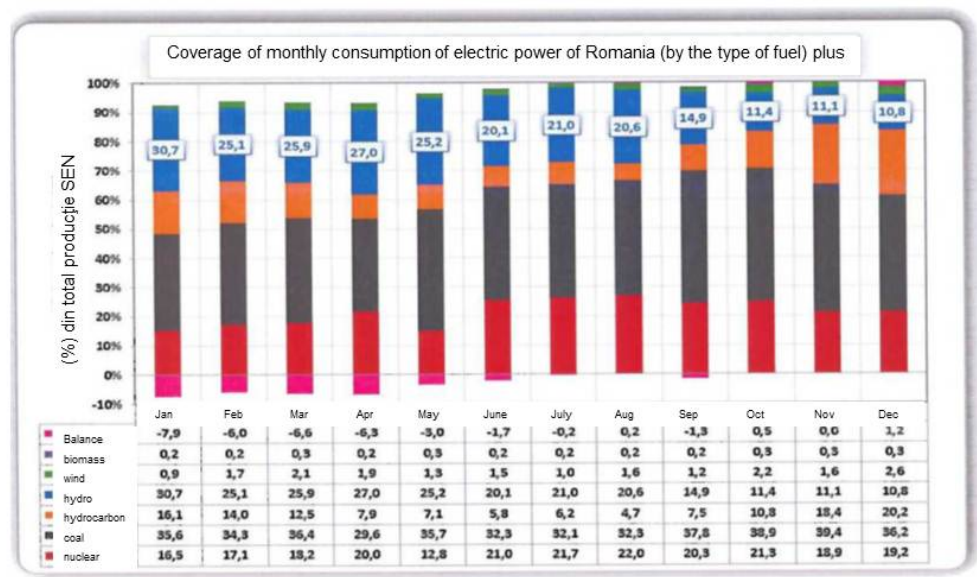


Figure I.1.3



## I.2 Power generation of SC Hidroelectrica SA

The gross energy generation of SC Hidroelectrica SA was of 14,710 GWh and was generated in subsidiaries according to Table I.2.1. The power generation in hydropower plants in 2011 was obtained, 90.5 %, based on the natural inflow and 9.5 % based on destocking from the main developments, being registered a decrease of the reserves of the big reservoirs in amount of 992 GWh (the energy reserve of the big reservoirs decreased from 2,109 GWh on December 31, 2010 to 1,117 GWh on December 31, 2011).

## I.3. Supply of system engineering services

### Hidroelectrica is the main stability factor for the National Power System

The volume of the system services provided by SC Hidroelectrica SA in the national power system is shown in the following table:

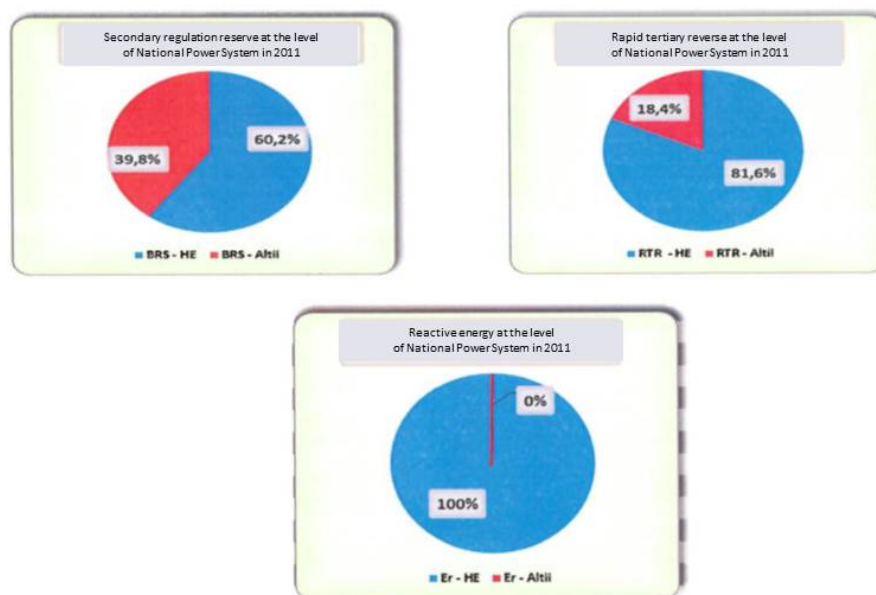
Service name	Measuring unit	Contracted	Actual	Actual/contracted (%)
Secondary regulating reserve	hMW	1,964,580	1,964,580	100
Rapid tertiary reserve	hMW	4,981,996	4,981,996	100
Reactive energy delivered or input from the grid in the secondary voltage regulation range	MVarh	15,920	15,920	100

In the next table, the volume of the system services delivered in 2011 at the level of the National Power System

Service name	Measuring unit	Contracted National	Actual National	Actual Hidroelectric	Actual Hidroelectric
--------------	----------------	---------------------	-----------------	----------------------	----------------------

		Power System	Power System	a	a (%)
Secondary regulating reserve	hMW	*3,505,000	3,263,155	1,964,580	60.2
Rapid tertiary reserve	hMW	*6,225,160	6,104,398	4,981,996	81.6
Reactive energy delivered or input from the grid in the secondary voltage regulation range	MWArh	15,920	15,920	15,920	100

\* Contracted values – National Power System



In providing the system services, we have to mention the special contribution of Porțile de Fier I - Danube and Ciunget – Lotru developments. In the table below, the contribution of the main regulating plants to the provision of the secondary regulating service in 2011 is shown.

Plant (development)	Qualified SRR <sub>max</sub>	Range	SR
	[MW]	[hMW]	[%]
Stejaru (Izvorul Muntelui)	26	0	0.00
Mărișelu (Fântânele)	30	0	0.00
Corbeni (Vidraru)	80	1081	0.05
Ciunget (Vidra)	474	674,484	28.20
Gâlceag (Oașa)	44	88	0.00
Șugag (Tău)	24	2,340	0.10
Râul Mare (Gura Apelor)	16	0	0.00
Porți de Fier 1 (Porți de Fier)	780	1,713,856	71.65
Total without PdF	694	677,993	28.35
Total with PdF	1,474	2,391,849	100.00
Total invoiced range in 2011		1,964,580	

HE output in 2011	14,710 GWh
-------------------	------------

As a result of the regulations regarding the quality of domestic generators as system service suppliers (Transelectrica procedure PO TEL-07 V OS-DN/154/2001), Hidroelectrica also continued in 2011 the programme for certifying its units.

Compared with the previous reporting year, the situation is unchanged. Currently, Hidroelectrica has obtained the certification for the following system services:

1. Frequency – power secondary regulation -> 26 hydro-units;
2. Rapid tertiary reserve -> 95 hydro-units;
3. Regulation of reactive power in the secondary voltage regulation range -> 28 hydro-units;
4. National Power System Restoring -> 5 hydro-units.

We would like to mention that the qualifying process is permanent, for each unit, which is qualified to supply certain system services, needs the capability to perform the system services for which it was initially certified has to be reconfirmed periodically, by tests. The large number of hydro-units within the portfolio makes impossible the simultaneous qualification of all units. Each year, a testing schedule is prepared in view of confirming or reconfirming several units for different system services.

#### **I.4. Dynamics of the installed capacity in Hidroelectrica in 2011. Participation of hydropower plants to the energy balance**

On December 31, 2011, in SC Hidroelectrica SA sites, 591 plants were operations, with a capacity of 6,443.30 MW (Table I.4.1).

Compared with 2010, the installed capacity in the hydropower plants of SC Hidroelectrica SA, an increase in 5.19 MW has been registered a result of the commissioning of new units or of retrofitting, as follows:

- In Caransebeş Hydropower Subsidiary, the commissioning of Râul Alb Micro Hydropower Plant (2 x 0.4 MW on June 24, 2011 with a project energy  $E_p = 1.5$  GWh/year);
- In Poziș de Fier Hydropower Subsidiary, the commissioning of retrofitted Hydro-unit 2 of Poziș de Fier II Hydropower Plant (on May 26, the new capacity is of 31.4 MW, the old capacity was of 27 MW).

The operational 6,443.30 MW of SC Hidroelectrica SA were installed in 274 power and pumping stations (out of which 140 small hydropower plants and micro hydropower plants  $\leq 4$  MW, 23 hydropower plants  $> 4$  MW but hydropower plants  $\leq 10$  MW, 106 hydropower plants  $> 10$  MW). The number of operational units is of 591 (out of which 287 in plants with an installed capacity  $\leq 4$  MW, 46 in plants  $> 4$  MW but  $\leq 10$  MW, 247 in hydropower plants  $> 10$  MW) and 11 are pumping units (Table I.4.1).

From the total of 6,239.95 MW of installed capacity on December 31, 2011, in plants of more than 4 MW – mainly included in the assets of SC Hidroelectrica SA prior to July 1, 2002 and to which the PO-HE-DE-06 was applied, a permanent power diminishing of 308.61 MW was registered, resulted from the failure to complete the investment works, design flows of the turbines or generators, operating limitations of the reservoirs, pressure drops on headraces which are higher than that specified in the design etc., the result being that the power available in the hydropower plants of more than 4 MW to be 5,931.34 MW.

The temporary reductions of the available capacity were in 2011 of 1,020.59 MW, having the following causes:

- Technical causes 0.55 MW;
- Hydrological causes 154.05 MW;
- Scheduled repairs 644.15 MW;
- Unscheduled repairs 107.78 MW;
- Other causes 114.06 MW.

Thus, the capacity supplied in 2011 was of 4,910.75 MW (with approximately 224 MW higher than the value of the previous year, 2010).

The summary of the installed capacities, available and provided for the plants of more than 4 MW is shown in Table I.4.2.

From the total installed capacity of 111.858 MW of the plants of less than 4 MW, permanent power reductions of 25.269 MW have been registered, the value of the maximum available power being of 86.589 MW.

The participation of the hydropower plants to the peak power coverage is shown in Table I.4.5 and in Figure I.4.1.

Table I.4.5.

Maximum value of peak power generated by HE:	Date: April 13, 2011	Peak consumption 8,328 MW
3,707 MW		Hydropower: 44.5 %
Maximum share of HE participation to the peak load:	Date: January 2, 2011	Peak consumption 7,673 MW
43,8 %		Total hydro: 3,364 MW

The internal consumption for generation and transformation at the level of Hidroelectrica SA was of 172,654 MWh representing 1.17 % from the gross output.

The maximum value (percent from the output at terminals) of the internal consumption for generation and transformation was registered in Sebeş Subsidiary (3.73 %), and the minimum value was registered in Porțile de Fier Subsidiary (0.55 %). In general, the mentioned percentage of the internal consumption for generation and transformation was higher than the 2010 value (0.98 %) due to the use of the power units in system service conditions (adjustments).

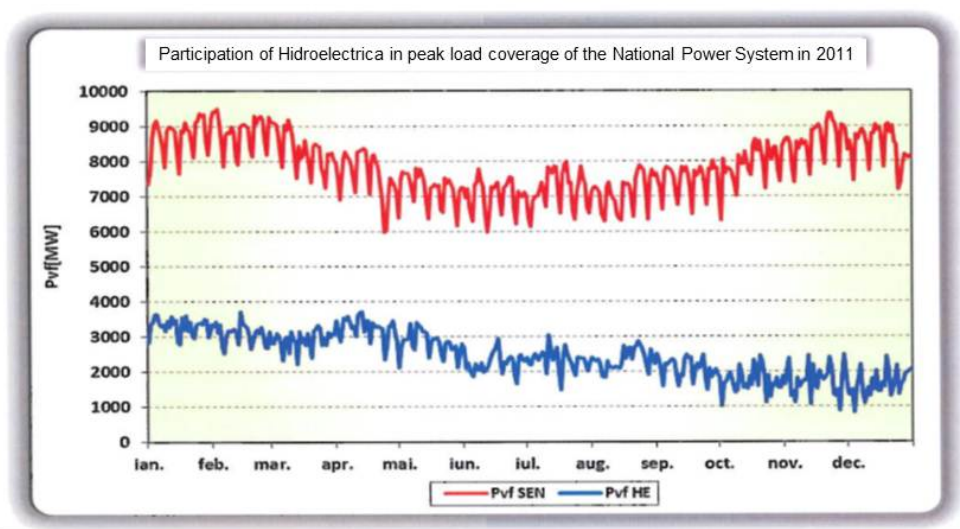


Figure I.4.1

#### I.5. Units qualified for power generation.

Until October 2011, no changes have occurred in the list of units which are qualified for prime generation, in the period January – October, a number of 10 units managed by Hidroelectrica benefiting from the green certificate-incentive system (Marga Small Hydropower Plant (Hydro-unit 2), Zervești Small Hydropower (Hydro-unit 1 + Hydro-unit 2), Vălenii de Munte Hydropower Plant (Hydro-unit 1 + Hydro-unit 2), Fughiu Hydropower Plant (Hydro-unit 1 + Hydro-unit 2), Bistrița Prislop Small Hydropower (Hydro-unit 1 + Hydro-unit 2), Godeanu Small Hydropower Plant 2 (Hydro-unit 1 + Hydro-unit 2), Vălenii de Munte Micro Hydropower Plant (Hydro-unit 1 + Hydro-unit 2), Obreji de Capâlna Micro Hydropower Plant (Hydro-unit 1), Zăbala Small Hydropower 4A (Hydro-unit 1 + Hydro-unit 2 + Hydro-unit 3 + Hydro-unit 4), Cugir Micro Hydropower Plant (Hydro-unit 1)).

Starting with December 2011, a new support scheme for the ERS generators, based on ANRE (*National Energy Regulatory Authority*) Order no. 220/2008 entered into force. On this occasion, 124 plants (with installed capacities of less than 10 MW including) managed by SC Hidroelectrica SA were certified for the new support scheme (Annex 16 of the ANRE Order no. 220/2008).

## Gross power generated by the hydropower subsidiaries in 2011 [MWh]

Table I.2.1

N o.	Month Subsidiary	January	Februar y	March	April	May	June	July	August	Septem ber	Octobe r	Novemb er	Decembe r	Total 2011	Share (%)
1	Bistrița	172,090	172,452	175,060	148,857	148,665	117,457	149,634	148,600	149,365	95,275	90,092	74,261	1,641,808	11.2
2	Buzău	53,246	35,789	41,765	57,796	52,724	37,952	54,325	37,835	24,681	20,374	14,496	17,046	448,029	3.0
3	Caransebeș	21,665	15,665	19,959	19,628	17,534	4,123	9,274	13,793	13,281	4,078	1,146	5,693	145,839	1.0
4	Cluj	86,781	68,538	74,210	66,640	48,268	15,181	23,271	31,001	16,161	13,996	18,515	14,728	477,290	3.2
5	Curtea de Argeș	106,861	116,269	111,069	97,863	111,759	85,189	79,609	86,665	59,959	37,813	43,390	37,720	974,166	6.6
6	Hațeg	14,502	9,408	31,919	60,610	88,928	63,550	69,721	46,263	11,384	5,543	7,607	7,948	417,383	2.8
7	Oradea	56,234	34,790	33,045	42,358	30,615	17,542	12,494	61,540	25,186	8,132	3,683	7,212	332,831	2.3
8	Porțile de Fier	854,647	560,645	588,765	549,141	461,423	472,345	453,357	473,680	321,092	367,659	297,991	359,888	5,760,633	39.2
9	Râmnicu Vâlcea	303,443	312,596	329,687	346,145	329,657	236,972	236,839	178,989	171,263	78,376	133,551	57,784	2,715,302	18.5
10	Sebeș	45,381	71,353	5,249	75,082	68,003	13,227	42,103	65,406	56,330	19,918	25,022	21,389	508,463	3.5
11	Sibiu	29,999	22,842	30,589	44,763	45,224	50,371	46,355	29,811	12,902	11,759	9,274	10,179	344,068	2.3
12	Slatina	63,396	60,420	79,680	83,702	82,861	78,725	71,910	47,592	27,651	17,064	20,791	29,237	663,029	4.5
13	Târgu Jiu	45,158	38,059	41,960	35,513	31,238	16,018	15,462	20,318	14,963	8,789	8,000	5,188	280,666	1.9
<b>14</b>	<b>TOTAL</b>	<b>1,853,403</b>	<b>1,518,826</b>	<b>1,562,957</b>	<b>1,625,098</b>	<b>1,516,899</b>	<b>1,208,652</b>	<b>1,264,354</b>	<b>1,241,493</b>	<b>904,218</b>	<b>683,776</b>	<b>673,558</b>	<b>648,273</b>	<b>14,709,507</b>	<b>100</b>



## Cumulative situation regarding the hydropower objectives included in the assets of SC Hidroelectrica SA on December 31, 2011

Table I.4.1.

N o .	SUBSIDIAR Y	Small hydropower plant (micro hydropower plant)				Hydropower plant				Hydropower plant				PUMPING STATIONS			TOTAL		
		Pi <= 4 MW				4 MW < Pi <= 10MW				Pi > 10 MW				Pi [MW ]	No. of stati ons	No. of units	Pi [MW]	Ep [GWh/ye ar]	No. of plants
		Pi [MW]	Ep [GWh/ye ar]	No. of plants	No. of units	Pi [MW]	Ep [GWh/ye ar]	No. of plants	No. of units	Pi [MW]	Ep [GWh/ye ar]	No. of plants	No. of units						
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	16	17	18
1	Bistrița	23.76	75.47	30	56	4.10	14.00	1	2	598.00	1,568.35	18	43	0.0	0	0	625.86	1,657.82	49
2	Buzău	6.55	23.38	9	16	33.15	121.65	4	7	177.25	459.40	8	19	0.0	0	0	216.95	604.43	21
3	Cluj	11.19	34.61	19	55	20.4<1	36.00	3	9	298.50	537.40	4	7	0.0	0	0	330.13	608.01	26
4	Curtea de Argeș	9.75	36.34	14	34	66.74	167.60	10	18	525.10	972.15	18	38	0.0	0	0	601.59	1,176.09	42
5	Hățeg	6.03	18.48	12	23	0.00	0.00	0	0	507.52	883.02	13	27	0.0	0	0	513.54	901.50	25
6	Oradea	13.16	47.92	10	23	20.00	41.10	2	4	194.00	390.00	4	8	10.0	1	2	237.16	479.02	17
7	Porțile de Fier	0.00	0.00	0	0	0.00	0.00	0	0	1,462.80	6,561.00	3	16	0.0	0	0	1,462.80	6,561.00	3
8	Râmnicu Vâlcea	3.83	11.89	4	7	0.00	0.00	0	0	1,109.90	2,737.00	14	29	61.5	3	7	1,175.23	2,748.89	21
	Sebeș	0.25	1.90	2	2	4.25	6.00	1	3	342.00	600.00	3	6	20.0	1	2	366.50	607.90	7
1 0	Slatina	0.00	0.00	0	0	0.00	0.00	0	0	379.00	889.00	8	26	0.0	0	0	379.00	889.00	8
1 1	Târgu Jiu	3.37	8.10	3	5	10.00	20.00	1	1	179.60	442.60	4	10	0.0	0	0	192.97	470.70	8
1 2	Caransebeș	6.94	24.20	11	17	7.00	25.00	1	2	181.00	330.10	2	4	0.0	0	0	194.94	379.30	14
1 3	Sibiu	27.01	B6,S2	26	49	0.00	0.00	0	0	119.60	294.40	7	14	0.0	0	0	146.64	381.22	33
1 4	TOTAL	111.86	369.11	140	287	165.68	431.35	23	46	6,074.27	16,664.42	106	247	91.5	5	11	6,443.30	17,464.88	274

**Available and supplied capacities in 2011**

(plants with installed capacities &gt; 4 MW)

Table I.4.2.

No.	SUBSIDIARY	Pi	Permanent reductions				P <sub>d</sub>	Temporary reductions						P <sub>supl.</sub>
			P <sub>perm red</sub>					P <sub>temp red</sub>						
			Equip. failure	Maint. works	Other causes	Total (3+4+5)		Technica l causes	Hydrol. causes	Other causes	Sch. Rep. P <sub>sch rep</sub>	Rep. P <sub>acc res</sub>	Total (8+...12)	
[MW]														
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	BISTRITA	602.1	0	0	29.8	29.8	572.3	0	27.04	50.23	36.47	11.46	125.2	447.1
2	BUZAU	210.4	0	0	0.25	0.25	210.15	0	0	0,07	22.8	1.93	24.8	185.35
3	CARANSEBES	188	0	0	5.5	5.5	182.5	0	0	0.32	76.87	0.46	77.65	104.85
4	CLUJ	318.94	3.5	0	0	3.5	315.44	0	0	0	48.48	8.02	56.5	258.94
S	CURTEA DE ARGEŞ	591.84	0	0	2.25	2.25	589.59	0	0	59,13	63.26	2.35	124.74	464.85
6	HATEG	507.52	135	0	12.8	147.8	359,72	0	0	0	27,26	59.87	87.13	272.59
7	ORADEA	214	14	8	0	22	192	0	0	0	18.19	0	18.19	173.81
8	PORTILE DE FIER	1,462.80	0	D	0	0	1,462.80	0	126,67	0.36	107.9	9.29	244.22	1,218.58
9	RAMNICU VALCEA	1,109.90	17,5	0	0	17.5	1,092.40	0	0.34	0	91.71	5,4G	97.51	994.89
10	SEBES	346.25	0.07	0	16	16.07	330.18	0.55	0	1.18	58.36	0	60.09	270.09
11	SIBIU	119.6	0	0	0	0	119.6	0	0	2.77	12,88	2.78	18.43	101.17
12	SLATINA	379	57,64	0	0	57.64	321.36	0	0	0	70.94	5.66	76.6	244.76
13	TARGU JIU	139.6	0	5.5	0.8	6.3	183.3	0	0	0	9.03	0,5	9.53	173.77
14	TOTAL	6,239.95	227.71	13.5	67.4	308.61	5,931.34	0.55	154.05	114.06	644.15	107.78	1,020.59	4,910.75

Acc. PO-HE-DE-0

## 8. MAINTENANCE ACTIVITY

The maintenance activity of SC Hidroelectrica SA represents the main support for the operation of hydropower objectives in safe operational conditions. The importance of this activity lies in the following features:

- Maintains the hydropower equipment in safe operational conditions;
- Re-commissioning of damaged or malfunctioning equipment;
- Provides good occupational health and safety conditions for the operational personnel;
- Eliminates the risk factors for environment and civil society;
- Provides for the enforcement of some legal requirements.

The activity maintenance is performed 90 % by Hidroserv subsidiaries, where SC Hidroelectrica SA has 100 % of the shares.

### 1. Performance of the physical maintenance schedule

In 2011, maintenance works have been scheduled for the hydropower units for an annual average capacity of 550.5 MW, an average capacity of 536.9 MW being obtained. Physically, 165 maintenance works have been scheduled, out of which 4 CIV (control prior to the flood), 51 LN1 (1<sup>st</sup> level works), 63 LN2, 36 LN3, 11 LN4, 115 maintenance works being finished in 12 months, out of which 3 CIV, 40 LN1, 49 LN2, 22 LN3, 1 LN4. A number of 12 works (1 LN2, 2 LN3 and 9 LN4) are under development and will be finished in 2012. A number of 145 OT (downtime) representing an annual average capacity of 191 MW for the hydro-units which were decommissioned for the execution of works for works at equipment and buildings connected operationally to them.

During 2011, the level 4 work for the upgrading of Hydro-unit 2 – Ionești Hydropower Plant – Râmnicu Vâlcea Hydropower Subsidiary was finalized.

For 24 hydro-units, the downtime related to the maintenance works exceeded the period provided for in the maintenance schedule. Out of which, the hydro-units with the longest periods of works were the following:

#### **Bistrița Hydropower Subsidiary - Stejaru Hydropower Plant – Hydro-unit 4 – level 3 work - 50 days**

- Disassembling the generator rotor;
- Reinforcing the stator windings;
- Redoing and grinding the cavitation areas of the turbine rotor;
- Replacing the sealing of upper shafts of AD blades;
- Replacing AD bushing.

#### **Bistrița Hydropower Subsidiary - Zănești Hydropower Plant – Hydro-unit 1 – level 3 work - 80 days**

- Reconditioning the turbine rotor at UMARO Roman – delayed delivery;
- Removal of water leakage – AD blades.

#### **Buzău Hydropower Subsidiary - Călimenești Siret Hydropower Plant – Hydro-unit 1 – level 3 work - 204 days**

- Redoing the stator windings after 2 consecutive ruptures.

#### **Cluj Hydropower Subsidiary - Mărișelu Hydropower Plant – Hydro-unit 2 – level 3 work - 84 days**

- Replacing 220 kV line.

#### **Curtea de Argeș Hydropower Subsidiary - Vidraru Hydropower Plant – Hydro-unit 3 – level 3 work - 33 days**

- Making holes for the fixing wedges of blades of director device;
- Manufacturing wedges for the blades of the director device.

#### **Curtea de Argeș Hydropower Subsidiary - Pitești Hydropower Plant – Hydro-unit 2 – level 3 work - 69 days**

- Restoring the insulation of exciter rotor.

#### **Curtea de Argeș Hydropower Subsidiary - Dobrești Hydropower Plant – Hydro-unit 2 – level 2 work - 231 days**

- Non-destructive testing of turbine rotor;
- Remedying the failures observed following the non-destructive testing (the remedy took place at General-Turbo).

**Curtea de Argeş Hydropower Subsidiary - Dobreşti Hydropower Plant – Hydro-unit 3 – level 2 work - 57 days**

- Replacing 4 Pelton cups;
- Manufacturing and replacing all fixing wedges for the cups.

**Râmnicu Vâlcea Hydropower Subsidiary - Malaia Hydropower Plant – Hydro-unit 1 – level 3 work - 109 days**

- Grinding turbine shaft at UCM Reşiţa;
- Redoing the gaps of the hydrogenerator by moving the stator from its position, and restoration of statoric frame.

**Târgu Jiu Hydropower Subsidiary - Clocotiş Hydropower Plant – Hydro-unit – level 2 work - 60 days**

- Replacing the rotor labyrinth;
- Remedy of the crack in the turbine cap.

The extension of the periods of downtimes for maintenance works was mainly the result of the fact that, after disassembling several subassemblies of the hydro-units and finding several defects, the total disassembling and the transport of the equipment to the supplier (UCM Reşiţa) in order to be repaired were necessary.

The water engineering structures represents an important asset category the function of which is the operation of the hydropower objectives. In 2011, maintenance and overhauling works amounting Lei 63,224,962 (approximately 22 % of the total) have been performed.

In the table and figure below, it is shown:

**Summary of the actual works on hydro-units included in 2011 maintenance schedule**

	Scheduled 2011						Actual 2011						
	Level 1 work	Level 2 work	Level 3 work	Level 4 work	Control prior to the flood	Total	Level 1 work	Level 2 work	Level 3 work	Level 4 work	Control prior to the flood	Total	%
Average capacity during maintenance 9MW)	13.2	149.4	179.5	201.1	7.4	550.5	19	1367	167.4	205.8	8	536.9	97
No. of maintenance works	51	63	36	11	4	165	40	49	22	1	3	115	70

**2. Performance of the value maintenance schedule.**

In 2011, in the income and expenditure budget of SC Hidroelectrica SA, for the maintenance works at the basic hydropower units, buildings, PRAM-AMC power equipment, hoisting and transport equipment, a total amount of Lei 348,675,000 was provided for, a total amount of Lei 293,004,096 being used, out of which, for level 4 maintenance works the amount is Lei 34,427,310.

The value of construction works is of Lei 63,224,962, representing 22 % of the total used value for the maintenance works.

The summary of the value of the works is shown, by subsidiaries, in the following table and figure:

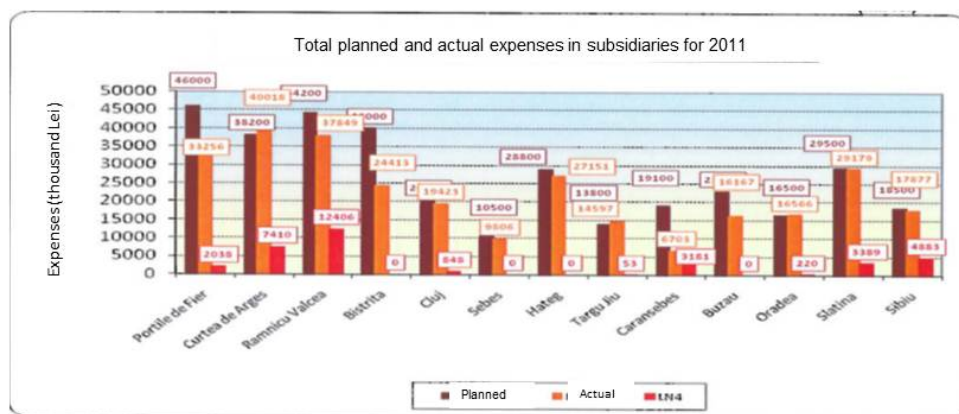
**Summary of the value by maintenance funds - 2011**

(Lei)

Subsidiary	Scheduled 2011	Actual 2011		
		Total out of which:	Level 4 work	Level 1, 2, 3 work, MC, LC
Porțile de Fier	46,000,000	33,255,940	2,038,296	31,217,644
Curtea de Argeş	38,200,000	40,018,065	7,410,365	32,607,700
Râmnicu Vâlcea	44,200,000	37,848,852	12,406,284	25,442,568

Bistrița	40,000,000	24,413,313	-	24,413,313
Cluj	20,500,000	19,422,600	847,607	18,574,993
Sebeș	10,500,000	9,805,594	-	9,805,594
Hățeg	28,800,000	27,150,779	-	27,150,779
Târgu Jiu	13,800,000	14,596,618	52,542	14,544,076
Caransebeș	19,100,000	6,703,313	3,181,004	3,522,309
Buzău	23,000,000	16,167,356	-	16,167,356
Oradea	16,500,000	16,565,575	219,561	16,346,014
Slatina	29,500,000	29,179,390	3,388,631	25,790,759
Sibiu	18,500,000	17,876,701	4,883,020	12,993,681
Executive	75,000	-	-	-
Total	348,675,000	293,004,096	34,427,310	258,576,786

(thousand Lei)



The specific costs for maintenance at the level of subsidiaries are shown in the following table and diagram:

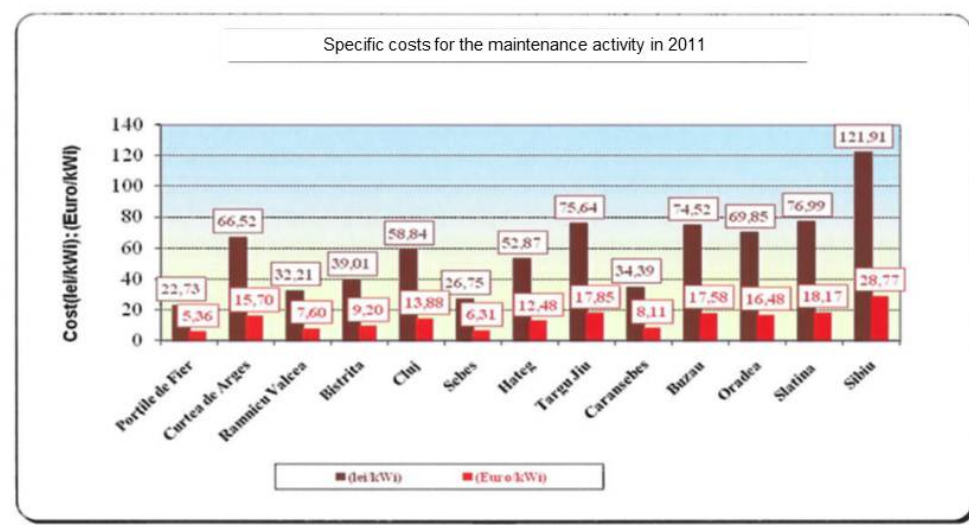
**Specific costs for the maintenance activity for equipment and buildings, by the installed capacity, performed in 2011**

No.	Subsidiary	Total costs	Specific cost (Lei/kW <sub>i</sub> )	Specific cost (€/kW <sub>i</sub> )
1	Porțile de Fier	33,255,940	22.7	5.4
2	Curtea de Argeș	40,018,065	66.5	15.7
3	Râmnicu Vâlcea	37,848,852	32.2	7.6
4	Bistrița	24,413,313	39.0	9.2
5	Cluj	19,422,600	58.8	13.9
6	Sebeș	9,805,594	26.8	6.3
7	Hățeg	27,150,779	52.9	12.5

8	Târgu Jiu	14,596,618	75.6	17.8
9	Caransebeș	6,703,313	34.4	8.1
10	Buzău	16,167,356	74.5	17.6
11	Oradea	16,565,575	69.9	16.5
12	Slatina	29,179,390	77.0	18.2
13	Sibiu	17,876,701	121.9	28.8
	Total	293,004,096	45.5	10.7

2011 average exchange rate for € → Lei 4.2379/€ 1

\*The unit cost for maintenance in relation with the energy quantity generated is of Lei 20/MWh



## 9. INVESTMENT ACTIVITY

The continuous development of the energy market, as well as the opportunities which appear in the energy field represent for Hidroelectrica SA new challenges regarding the preparation of policies for maintaining and reinforcing the position of main electric power generator and system services, responsible for the environment and civil society, all these in conditions of maximum efficiency and profitability.

### Sources of financing the investment programme in 2011

According to the Budget of Income and Expenditures of "Hidroelectrica" in 2011, the following sources for financing the investments have been established.

		Planned	Actual
1.	Own sources of SC Hidroelectrica SA	860,000 thousand Lei	978,328 thousand Lei
2.	Bank credits	640,000 thousand Lei	547,725 thousand Lei

3. Budget allowances	10,000 thousand Lei		
Total investment financing sources	1,510,000 thousand Lei	1,526,053 thousand Lei	

Subsidiary	Actual investments	Out of which the biggest share is represented by:	
		C+M	Equipment and others
Bistrița	205,454,628	178,077,709	5,583,809
Buzău	73,529,026	69,638,095	3,890,931
Caransebeș	159,524,092	134,710,242	13,353,434
Cluj	134,069,980	113,643,681	20,426,299
Oradea	6,615,192	4,000,000	2,615,192
Curtea de Argeș	26,232,094	24,466,321	1,765,773
Hățeg	64,584,296	44,452,585	10,676,798
Porțile de Fier	158,561,684	60,798,970	54,158,219
Râmnicu Vâlcea	57,876,570	10,460,712	46,061,840
Sibiu	232,209,355	202,275,545	11,205,074
Slatina	321,003,900	85,677,790	206,174,704
Sebeș	14,205,648	11,986,396	2,219,252
Târgu Jiu	59,864,583	43,114,889	16,749,694
Executive	12,301,846	-	12,301,846
TOTAL	1,526,052,894	983,302,934	407,182,867

In view of achieving the established objectives and motivated by the results obtained during time, year after year, the investment activity within the company is aimed to ensuring a sustainable development by optimum strategic guidelines and responsible decisions regarding the promoted projects and includes:

1. Development activity;
2. Retrofitting activity.

### 9.1. DEVELOPMENT ACTIVITY

The main objective of the development activity is to create new production capacities, in view of maintaining and strengthening the leader position of Hidroelectrica SA on the electric power market and providing the system services.

The optimum development of the hydropower potential in the context of implementing the sustainable development represents the mission of the department involved in coordination, guidance and control of investment and development activity within Hidroelectrica SA. The intended objective is the efficient management of the investment funds allocated by the annual Budget of incomes and expenses of the company.

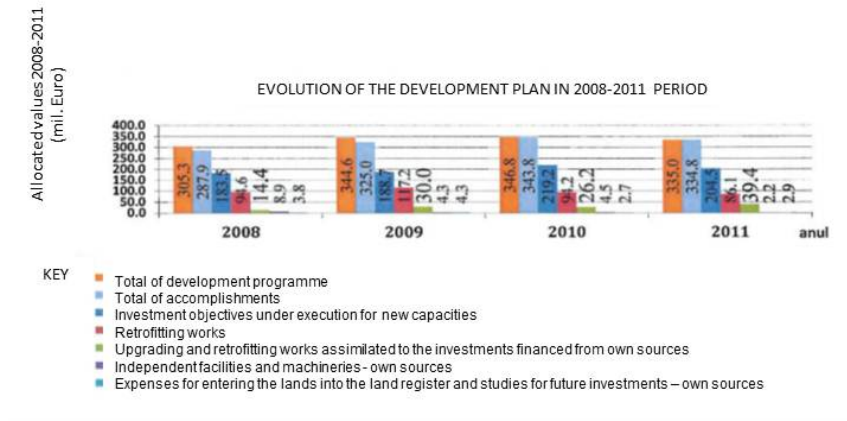
In this context, the implementation of the commissioning programme suggested for the prime hydropower objectives for the period 2012 ÷ 2020 will ensure the supplementation of the installed capacity in the hydropower plants with 343.46 MW and of the power output for an average hydrological year of 1,141.0 GWh/year, the investment necessary for the execution of works to be executed on January 1, 2011 being of approximately 1,042.76 million €. €.

In the table below, the method of using the investment sources by investment objectives and subsidiaries is shown:

The criteria based on which the investment funds approved for 2011 have been distributed:

- The development, retrofitting and upgrading strategy for the period 2005 ÷ 2025 of SC Hidroelectrica SA;
- The actual state of execution and the priority order in financing the capacities that will be commissioned in the period 2011 + 2012 and in the future, until 2020;
- The energy and economic efficiency of the ongoing hydropower objectives;
- Increase of the degree of use of investment resources for the financing of the works for renewing, upgrading and increasing the operational safety of the hydropower plants;

- Promoting and financing the overhauling works for the structures and installations existent in view of maintaining operational the electric power generation capacities within the hydropower plants;
- Promoting the investments for environmental protection works;
- Provision of the financial resources for the renewing and upgrading of the dispatch centers, administrative seats, facilities and independent equipment necessary in the production studies, of the studies regarding the future investments.



## Investment objectives

The investment objectives of the company for 2011, which were commissioned, or for which actual states important in view of implementing the commissioning programme according to the Development Strategy of Hidroelectrica SA have been reached are the following:

### A. INVESTMENT OBJECTIVES, WHICH WERE COMMISSIONED IN 2011

#### A.1. New hydropower capacities

- **Hydropower development of Olt River, on Cornetu-Avrig Reach. Robești Hydropower Plant**

2 Kaplan type hydro-units with  $P_{\text{total installed}} = 27.1 \text{ MW}$  and  $E_{\text{average}} = 74.63 \text{ GWh/year}$ .

On December 20, 2011, works have been finalized and technological tests have started for the hydro-unit no. 1 with hydraulic pressure test, and during the first quarter of 2012, its commercial operation will start.





Figure 1. Robești Hydropower Plant – view downstream the plant



Figure 2. Robești Hydropower Plant – view downstream the dam

- **Bistra Poiana Mărului Hydropower Development, Ruieni, Poiana Ruscă. Râul Alb Catchment and Small Hydropower Plant**

2 horizontal Francis type hydro-units with  $P_{\text{total installed}} = 0.8 \text{ MW}$ ;  $E_{\text{average}} = 1.5 \text{ GWh/year}$ .



#### A.2. Environmental investments

In 2011, the following investments aimed to solving several environmental issues have been finalized;

- **Renewing the wastewater treatment plant for the permanent colony of Porțile de Fier II Hydropower Plant;**
- **Renewing the wastewater treatment plant of Porțile de Fier I Hydropower Plant;**
- **Strengthening and developing the area downstream Curtea de Argeș Dam, damages as a result of August 2005 floods.**
- **Renewing the sports facilities affected by the floods.**

#### A.3. Works for increasing the safety of the hydropower structures:

- **Frunzaru Reservoir. Increase of the operational safety;**

- **Galbeni Reservoir; Performing the sealing and strengthening of the right bank dyke in the area km 0 - km 3. Overhauling works;**
- **Bacău Hydropower Plant - Upgrading the riprap and waterproofing of the headrace and loading bay.**

Within these investment objectives, the main types of works were: replacing the bituminous sealing between the partings of the walls made of concrete slabs of the channel/reservoir, re-concreting of the damaged slabs, deep sealing (Kelly shield/piling) etc.

#### **A.4. Upgrading equipment and installation**

- **Upgrading the installation for general and own services (Hydro-unit 2) of Zavideni Hydropower Plant, automation and monitoring;**
- **Upgrading the hydro-generator no. 2 of Zavideni Hydropower Plant;**
- **Upgrading the hydro-generator no. 2 of Ionești Hydropower Plant;**
- **Upgrading the installation for general and own services (Hydro-unit 2) of Ionești Hydropower Plant, automation and monitoring;**
- **Upgrading the hydro-unit no. 1 of Vaduri Hydropower Plant.**

Within these investment objectives, the existent equipment, affected by obsolescence and wear and tear, have been replaced with new equipment, upgraded, by observing the applicable rules/regulations in view of increasing the reliability and operational safety of the plants.

#### **A.5. Warning and alarm system, for accident cases, at SC HIDROELECTRICA SA dams and fiber optic communication systems**

- **Extending the warning and alarm system of Curtea de Argeș Hydropower Subsidiary and analyzing the compatibility of the existent system. Stage II - Albești – Rotunda Reach;**

This system was implemented by observing the applicable legal provisions regarding the emergency situations and is aimed to the warning of the population located in the area downstream de reservoirs of the development in case of accidents at the dams managed by SC HIDROELECTRICA SA.

- **Argeș River Hydropower Development. Fiber optic voice and data communication system between the plants located downstream Vidraru Dam and the hydro-dispatch center. Stage II – Oești- Vidraru Reach**
- **Fiber optic voice and data communication system between the places of business of Sebeș Hydropower Plant and the dispatch center.**

### **B. ONGOING PRIME INVESTMENT OBJECTIVES**

#### **B.1. Ongoing investment objectives, the important stages of which have been finalized in 2011**

- **Bistra Poiana Mărului, Ruieni, Poiana Ruscă Hydropower Development, Sebeșul Mare – Ruieni Secondary Headrace, Sebeșel – Cuntu Reach**

The headrace has a total power contribution of 35.07 GWh/year, and, currently, the Sebeșel – Ruieni Main Headrace is operational, with a power contribution of 12.95 GWh/year, and in 2011, the final reach, Sebeșel – Cuntu will be finalized, which will add 22.12 GWh/year up to the total project power.

Suggested commissioning date

- 2012

- **Cerna-Belareca Hydropower Development. Herculan Hydropower Plant. (Cornereva Dam – minimum energy level – 490 meters above sea level)**

The development is composed of: Herculan Dam located on Cerna River, Cornereva Dam located on Belareca River, Cornereva-Herculan Main Headrace, Herculan Pressure Area and Herculan Hydropower Plant located at the downstream toe of the dam with the same name.

Currently, Herculan Dam and Herculan Hydropower Plant with 2 units of 2 MW and 5 MW are operational.

The works at the Belareca Fall – Cornereva Dam, Cornereva-Herculan Main Headrace, Herculan Pressure Area, Herculan Hydropower Plant (unit no. 3 with Pi of 14.7 MW) are under development.

Suggested commissioning date

4<sup>th</sup> quarter of 2015

- **Surdac-Siriu Hydropower Development, Surduc Fall Nehoișu II Hydropower Plant - unit 1**

Surdac Weir Dam produces a reservoir with a total volume of approximate 600,000 m<sup>3</sup> and a live storage of approximately 360,000 m<sup>3</sup>.

Surdac-Nehoișu Main Headrace has a length of approximately 17 km, installed debit of 26 m<sup>3</sup>/s and an interior diameter of 4,00 m, while the penstock pipe has L = 2.6 km and Di = 4000 ÷ 3100 mm;

The pressure area and Nehoiășu Hydropower Plant – Surduc Fall (same location as the existent plants, Nehoiășu – Siriu), equipped with two Francis units of 55 MW,  $E_m = 300$  GWh/year.  
Suggested commissioning date 4<sup>th</sup> quarter of 2015

- **Jiu River Hydropower development on Bubești-Livezeni Reach. Dumitra Hydropower Plant and Bubești Hydropower Plant**

Jiu River Hydropower Development on Livezeni-Bumbești Reach includes two fall steps related to the two hydropower plants with pressure intake diversion, located in the Jiu River Pass area, at the confluence of East Jiu with West Jiu, and Bumbești Locality.

**Dumitra Hydropower Plant**

- $P = 24.50$  MW
- $E = 92.00$  GWh/year

**Bumbești Hydropower Plant**

- $P = 40.50$  MW
- $E = 167.00$  GWh/year

Suggested commissioning date  
quarter of 2013

Dumitra Hydropower Plant 4<sup>th</sup>

Bumbești Hydropower Plant 4<sup>th</sup> quarter of 2014

- **Runcu-Firiza Hydropower Development. Firiza I and II Hydropower Plant**

Runcu + Firiza Hydropower Development capitalizes the hydropower potential available by the development of Runcu Reservoir and the use of gross fall of 365.00 m existent between Runcu Reservoir and Strâmtori Reservoir.

Strâmtori Reservoir was developed ('1970) for the supply with drinkable and industrial water of Baia mare Municipality and Runcu Reservoir is under execution. These objectives are managed by National Administration "Romanian Waters" and does not have a power function. In 1989, it was decided that the power potential resulted from the level difference between the two reservoirs has to be used, so that, by Decree no. 95/1989, the development of the investment objective "Runcu Development" was initiated.

The project implies the taking over, by headraces, of the flow from Runcu Reservoir (National Administration Romanian Waters), processing for power generating in the two power plants (Firiza I and II – SC Hidroelectrica SA) and its returning in Strâmtori Reservoir (National Administration Romanian Waters) in view of supplying water to the end users.

Suggested commissioning date Firiza I Hydropower Plant 4<sup>th</sup> quarter of 2014  
Firiza I Hydropower Plant 4<sup>th</sup> quarter of 2015

- **Strei River Hydropower Development on Subcetatea Simeria Reach. Bretea Hydropower Plant**

In order to capitalize the hydropower potential of Strei River on Subcetate-Simeria Reach, initially, the development of a cascade made of 7 hydropower plants with an average installed capacity of 12 MW/plant and 3 reservoirs was designed. As a result of updating the hydrological data and water consumption in the field, an optimized diagrams of the development was adopted (first three in the initial scheme and the next 4 with optimized diagrams, installed capacity under 10 MW and giving up to Bacia Reservoir).

Bretea Hydropower Plant is a diversion plant located on Strei River, downstream Plopi Hydropower Plant and upstream Strei Hydropower Plant. It is equipped with 2 hydro-units with Kaplan type turbine which uses the installed flow of the plant of 100 mc/s, with a fall of 15.5 m.

$P_{\text{installed}} = 12.3$  MW;

$E_{\text{average}} = 28.2$  GWh/year

Suggested commissioning date

2<sup>nd</sup> quarter of 2014

- **Pașcani Hydropower Development on Siret River**

The investment objective "Pașcani Development on Siret River, in Iași and Suceava counties" was approved as complex use development by Decree no. 403/December 12, 1985, in the stage "Explanatory note and order note", after which, the execution project was prepared which was approved by the Decision of the Council of Ministers in 1986 (S.234/VI).

The investment objective - "Pașcani Hydropower Plant on Siret River" was approved by the Decree of the State Council no. 24/1989 with the aim of capitalizing the energy of the fall developed by Pașcani Dam.

$P_{\text{installed}} = 11.0 \text{ MW};$

$E_{\text{average}} = 24.9 \text{ GWh/year}$

Suggested commissioning date

4<sup>th</sup> quarter of 2016

**- Siret River Hydropower Development on Cosmești – Movileni Reach. Cosmești Hydropower Plant**

Siret River Hydropower Development on Cosmești-Movileni Reach is an investment objective with complex features, which supplements Siret Development downstream Călimănești with two more fall steps, as follows: Cosmești Hydropower Plant (step I) and Movileni Hydropower Plant (step II).

$P_{\text{installed}} = 41.8 \text{ MW};$

$E_{\text{average}} = 130.10 \text{ GWh/year}$

Suggested commissioning date

4<sup>th</sup> quarter of 2016

**B.2. Investment objectives to be commissioned in 2012**

**- Hydropower development of Olt River, on Cornetu-Avrig Reach. Robești Hydropower Plant**

2 Kaplan type hydro-units with  $P_{\text{total installed}} = 27.1 \text{ MW}$  and  $E_{\text{average}} = 74.63 \text{ GWh/year}$ .

State of actual achievements on December 31, 2011 98 %

Suggested commissioning date

1<sup>st</sup> quarter of 2016

**- Olt River Hydropower Development, Cornetu-Avrig Reach. Racoviță Hydropower Plant.**

$P_{\text{installed}} = 31.5 \text{ MW};$

$E_{\text{average}} = 73.99 \text{ GWh/year}$

State of actual achievements on December 31, 2011 85 %

Suggested commissioning date

4<sup>th</sup> quarter of 2012

**- Rastolița Hydropower Development. Rastolița Hydropower Plant (minimum energy dam - normal water level - 720.00 meters above sea level)**

$P_{\text{installed}} = 35.2 \text{ MW};$

$E_{\text{average}} = 94.6 \text{ GWh/year}$

State of actual achievements on December 31, 2011 85 %

Suggested commissioning date

4<sup>th</sup> quarter of 2012



Figure 3. Rastolița Hydropower Development



Figure 4. Rastolița Hydropower Development - view upstream the dam

### C. NATIONAL INTEREST INVESTMENT OBJECTIVES

#### - **Tarnița-Lăpușești Pumped Storage Hydropower Plant**

The investment objective implies the building of a pumped storage hydropower plant with an installed capacity of 1000 MW, located in Tarnița-Lăpușești, Cluj County and includes mainly the following:

- 4 units of 250 MW, underground plant operating in pump and generator conditions;
- Already existent, lower Tarnița Da, 80 million cubic meter;
- Upper Lăpușești Dam, 10 million cubic meter - will be built;
- Gross fall of 550 m.

Currently, the consultancy contract signed in view of selecting investors and setting up a company for the development of Tarnița-Lăpușești Pumped Storage Hydropower Plant is under development. Works are deemed to start in 2013.

#### - **Olt River Hydropower Development, Izbiceni-Danube Reach. Izlaz Hydropower Plant**

Islaz Hydropower Development is the last fall step on the Olt River, at 3.5 km upstream from its confluence with the Danube River. It is a river development, which includes a hydropower junction (dam + hydropower plant), longitudinal dams at the edge of the lake, directed upstream, following the natural flow of River Olt, with a length of approximate 11,500 m on each bank.

Stages prior to the beginning of works:

- Obtaining the lands which are necessary for the development by compulsory purchase order for public betterment;
- Obtaining the environmental endorsement;
- Obtaining the building permit;

The beginning of the works is foreseen for 2013.

### 9.1.4. DEVELOPMENT ACTIVITY ORGANIZATION

#### 9.1.4.1 PRIMAVERA software



In 2011, the programme regarding the system for planning, tracking, control and management of documents and projects, started in 2010, has continued. The aim is to have a sole database at the level of the entire executive unit. Thus, a computer system was implemented having the following objectives:

- Planning and dynamic tracking of projects by establishing stages and activities for each time period;
- Establishing and tracking the schedules for finalizing the project stages in order to observe the time schedule in correlation with the efficient use of costs and resources;
- Automatic update of the project state and establishing in each moment the real state in which the project is, as regards time, resources and costs;
- Structuring the investments in an enterprise Project Structure EPS type schedule at the level of the entire company (including at the level of subsidiaries) which offers the company management the possibility to make corporate type analyses for any number of projects simultaneous;
- Defining and consolidating in the system if the budgets for each project, summarized and consolidated at the level of the entire company;
- Observing the undertaken dates for the fulfillment of investments and observing the budgets;
- Exact description of sequences and identifying the key events;
- Strict control during the execution stages;
- Analysis of the results and substantiating the decisions by "What-if" type scenarios



#### 9.1.4.2. IPP type partnerships

During 2011, the procedure for the setting up of an IPP type company according to the provisions of the Order of the Ministry of Economy, Commerce and Business Environment no. 2906/2010, with the involvement of domestic or foreign investors. Thus, at the level of Hidroelectrica, 9 such companies have been defined, having in their structure existent micro hydropower plants and new projects for the development of several river reaches.

No.	IPP Name	Pi (MW)	E (GWh/year)
1	IPP 1 - HIDRO SCHITU GOLEȘTI	5.02	23.46
2	IPP 2 - HIDRO TIMIȘ	16.46	72.38

3	IPP 3 - HIDRO BUZĂU	14.72	67.55
4	IPP 4 - HIDRO BĂRSA	14.50	55.00
5	IPP 5 - HIDRO CRIȘ	21.70	99.64
6	IPP 6 - HIDRO UPPER MUREȘ	24.07	115.18
7	IPP7 - HIDROARIES	7.77	38.91
8	IPP 8 - HIDRO DOWNSTREAM BUZĂU	84.38	349.70
g	IPP 9 - HIDRO STREI	25.34	94.38
	TOTAL	213.96	916.2

## 9.2. RETROFITTING ACTIVITY

### Porțile de Fier I

Within the contract - "General overhaul and upgrading in view of increasing the safety and capacity of the 6 hydro-units of Porțile de Fier I Hydropower Plant", performed during the period 1997 – 2007, the six hydro-units equipped with vertical Kaplan turbines, with the rotor diameter of 9.5 m, rated capacity of 175 MW and the auxiliary equipment of the plant have been retrofitted.

The last unit, Hydro-unit 1, was commissioned on March 25, 2007, and the contract is still under development for the performance of several works in view of fulfilling by the contract of all the undertaken guarantees.

By the retrofitting works, the following objectives have been finalized:

- Increase of the unit capacity of the units from 175 MW to 194.4 MW, meaning an installed capacity increase of 6 x 19.4 MW per plant;
- Increase of the weighted average efficiency with 1.22 %;
- Increase of the turbine capacity with 690 m<sup>3</sup>/s per plant, and an increase of secondary regulating range of 237 MW/h per plant.

The financing was made from own sources and bank credits which are being repaid.

### Porțile de Fier II

Within this contract, the retrofitting of the 10 bulb hydro-units (8 in Porțile de Fier II Hydropower Plant II and 2 in Gogoșu Hydropower Plant), as well as of the auxiliary equipment of the plants is provided for. The most important increases of the technical parameters obtained as a result of the retrofitting is:

Parameter	Prior to the retrofitting	After retrofitting
Installed capacity of the 10 hydro-units	270 MW	314.4 MW
Unit installed capacity	27 MW	31.4 MW
Project energy	1.307 GWh/year	1,441 GWh/year
Installed flow per unit	425 m <sup>3</sup> /s	475 m <sup>3</sup> /s
Increase of the turbine efficiency		+2.2 %

Until December 31, 2011, the retrofitting works at the 6 units have been finalized, with the increase of the installed capacity per plant with 6 x 4.4 MW = 26.4 MW and the retrofitting works at the 7<sup>th</sup> group have started.

No.	Hydro-unit no.	Date of decommissioning	Date of commissioning acceptance	Date of final acceptance
1	Hydro-unit 4	March 22, 2004	December 22, 2005	March 14, 2008
2	Hydro-unit 3	January 16, 2006	January 14, 2007	February 26, 2009
3	Hydro-unit 5	January 15, 2007	January 26, 2008	February 03, 2010
4	Hydro-unit 7	February 14, 2008	March 6, 2009	March 24, 2011
5	Hydro-unit 8	March 3, 2009	May 19, 2010	May 2012
6	Hydro	April 19, 2010	May 27, 2011	May 2013

	-unit 2			
--	---------	--	--	--

According to the schedule of execution of the retrofitting works, the contract will be finalized in 2015. Its financing is made from own sources.

**Lower Olt: Ipotești Hydropower Plant; Drăgănești Hydropower Plant; Rusănești Hydropower Plant; Frunzaru Hydropower Plant; Izbiceni Hydropower Plant.**

The contract for the retrofitting of the 5 hydropower plant, with a total of 20 reversible bulb hydro-units (turbine-pump) on Lower Olt Reach (Ipotești Hydropower Plant, Drăgănești Hydropower Plant, Frunzaru Hydropower Plant, Rusănești Hydropower Plant, Izbiceni Hydropower Plant) was signed in 2004, and the retrofitting works actually started in 2006 and will be finalized in 2013.

By the retrofitting of the 20 hydro-units divided in groups of four in each five plants: Ipotești Hydropower Plant, Drăgănești Hydropower Plant, Frunzaru Hydropower Plant, Rusănești Hydropower Plant, Izbiceni Hydropower Plant, the following are envisaged: to make available the entire installed capacity of 284 MW, to obtain pump conditions, to increase the efficiency with 2 % and to prepare the equipment for a new life cycle. The installed capacity in pump conditions is of 201 MW. The retrofitted hydro-units may function in pumping conditions, contributing to the flattening of the load curve of the National Power System.

The state of the contract development is the following:

- Works have been finalized and 15 hydro-power have been re-commissioned until the end of 2011;
- 2 hydro-units (Hydro-unit 3 on September 7, 2011 and Hydro-unit 4 on November 7, 2011) in Rusănești Hydropower Plant and Hydro-unit 2 (on February 14, 2011) and Hydro-unit 3 (December 5, 2011) in Izbiceni Hydropower Plant have been decommissioned in order to be retrofitted, and the works will be finalized during 2012;
- The last hydro-unit on Lower Olt Reach, Hydro-unit 4 of Izbiceni Hydropower Plant will be handed over in order to be retrofitted at the beginning of 2012, and the works will be finalized at the beginning of 2013.

Plant	Unit no.	Date of decommissioning	Date of commissioning acceptance
IPOSEȘTI	Hydro-unit 1	October 23, 2006	September 10, 2008
	Hydro-unit 2	April 23, 2008	November 19, 2008
	Hydro-unit 3	November 24, 2008	November 6, 2009
	Hydro-unit 4	October 13, 2008	September 8, 2009
DRĂGĂNEȘTI	Hydro-unit 1	August 24, 2007	December 11, 2008
	Hydro-unit 2	March 9, 2007	September 19, 2008
	Hydro-unit 3	October 20, 2008	October 14, 2009
	Hydro-unit 4	December 2, 2008	December 16, 2009
FRUNZARU	Hydro-unit 3	January 13, 2008	April 27, 2009
	Hydro-unit 4	February 28, 2008	June 19, 2009
	Hydro-unit 1	September 20, 2010	August 4, 2011
	Hydro-unit 2	August 9, 2010	October 4, 2011
RUȘĂNEȘTI	Hydro-unit 1	September 27, 2010	August 30, 2011
	Hydro-unit 2	November 23, 2010	October 25, 2011
	Hydro-unit 3	September 7, 2011	August 14, 2012
	Hydro-unit 4	November 7, 2011	October 9, 2012
IZBICENI	Hydro-unit 1	January 3, 2011	November 30, 2011
	Hydro-unit 2	February 14, 2011	January 26, 2012
	Hydro-unit 3	December 5, 2011	November 27, 2012

Financing is made from own sources and bank credits.

**Ciunget Lotru Hydropower Plant**

In 2007, retrofitting works have been started at the hydropower objective - Lotru-Ciunget Hydropower Plant, which were finalized in 2011.



No.	Hydro-unit no.	Date of decommissioning	Date of commissioning acceptance
1	2	March 13, 2009	February 19, 2010
2	1	October 30, 2009	August 26, 2010
3	3	March 11, 2010	February 4, 2011

Under this contract, the retrofitting of the 3 Pelton hydro-units of 170 MW each, of the auxiliary equipment and of the overground control room of the plant (plant dispatch) was provided for.

Currently, the hydro-units and the retrofitted auxiliary installation are in warranty period.  
The main technical parameters are:

Parameter	Prior to the retrofitting	After retrofitting
Installed capacity of the hydropower plant	510 MW (3 x 170 MW)	510 MW (3 x 170 MW)
Project energy	890 GWh/year	900 GWh/year
Installed flow of the plant	80 m <sup>3</sup> /s	80 m <sup>3</sup> /s
Turbine efficiency increase		+1 %

The financing is from the World Bank.

### Portile de Fier I Lock

The necessity to renew the Romanian lock resulted, mainly, from the following issues:

- The technical state, pointed out especially by the findings made during the last decommissioning – general overhaul in the period 1999 – 2000, showed that it is necessary to renew all the equipment and installation of the lock;
- The necessity to rebuild some parts of the structure which were affected in time by vessels or by meteorological phenomena (upstream port control line – bank, waterproofing etc.).

The contract for the renewing of the Romanian lock, signed on June 6, 2006 with Romenergo SA Bucharest specified that the works are executed in 3 stages of navigation stoppage, the works being grouped accordingly in 3 "objects".

The periods of navigation stoppage have been agreed with the Serbian partner in view of ensuring the navigation on Danube River, by the lock on the Serbian bank in these periods.

In the first stage (June 4, 2007 – September 15, 2008), the navigation was stopped through the Romanian lock and the works related to "**Object 1**" have been performed.

The second stoppage was during the period May 1, 2009 – May 1, 2010 and the works related to "**Object 2**" have been performed.

On June 1, 2011, the Romanian lock was decommissioned in view of executing the retrofitting works related to "**Object 3**". The works which are necessary to resume navigation will be accepted in 2012, and the contract will be finalized in 2013.

We would like to mention that the work will be executed using mainly own resources, although the Government Decision no. 956/2004 for the approval, the financing from the state budget with approximately EUR 25 million was provided for.

### Retrofitting of Remeti Hydropower Plant

Even from the commissioning of Remeti Hydropower Plant, it was established that both hydro-units of Remeti Hydropower Plant have reached the design parameters:  $P = 50$  MW,  $U_n = 10.5$  kV,  $\cos \varphi = 0.9$ , and that the temperature of the statoric windings exceeded highly the maximum allowed temperature of 120 °C, reaching approximately 150 °C.

In these conditions, during the years, in view of reaching the design parameters, solutions have been searched in order to remove the deficiencies and, during the revisions and maintenance works, the cooling system of the generators have been analyzed in view of its improvement.

The results of these actions were not as expected, the power contribution obtained being not significant. Thus, the active power load of the units of Remeti Hydropower Plant is limited to:

P = 40 MW for hydro-unit 1 and P = 42 MW for hydro-unit 2 and in these conditions, the two units of Remeti Hydropower Plant operate with low efficiency and with important losses of hydropower, and implicitly, economic losses.

In 2011, the Purchase Documentation was finalized and the contract with Hidroserv Cluj was signed for renewing by general overhauling with upgrading at Hydro-unit 1 of Remeti Hydropower Plant, including the control panels, protections, related measurement and automation, and until the end of 2012 the retrofitting works for this unit will be finalized.

It is foreseen that the retrofitting works at Hydro-unit 2 (including its related equipment) and at the general equipment of Dragan plant and dam will be continued.

The retrofitting works are aimed to the improvement of the design parameters, respectively:

- Increasing the unit capacity of the units from 50 MW to 54.4 MW;
- Ensuring the increased operational reliability and safety;
- Increasing the operational efficiency of the hydro-units;
- Increasing the annual average power output of the plant from 94 GWh/year to 101.6 GWh/year.

The financing is made from own sources.

### **Stejaru Hydropower Plant**

Stejaru Hydropower Plant, the first large power plant built in Romania, it is equipped with six vertical Francis units (4 x 27.5 MW + 2 x 50 MW) commissioned between 1960 and 1962.

All the equipments had come to the end of their life cycle, with a high degree of obsolescence and wear and tear, and the plant was highly exploited, units having between 135,000 and 210,000 operating hours.

In 2011, the Loan agreement for retrofitting Stejaru Hydropower Plant was signed with European Bank for Reconstruction and Development, contract which implies, together with the contracting of retrofitting works, the contracting of consultancy and technical assistance services.

In September 2011, the invitation to tender for the awarding of the retrofitting contract was posted. The tendering procedure observes the rules and policies of EBRD, being a process which is organized in two stages, without prequalification.

The deadline for submitting the technical offers related to stage 1 was established for January 31, 2012, and the retrofitting contract awarding is foreseen for August-September 2012.

The main retrofitting works to be executed during the period of contract development (2012-2019) are the following:

- Replacing the electromechanical equipment of the 6 hydro-units (turbines, generators and auxiliary systems);
- Renewing the hydromechanical equipment and penstock pipes;
- Upgrading the electrical equipment, measuring devices and control system;
- Retrofitting the stations of 110/220 kV.

The financing is from the European Bank for Reconstruction and Development.

### **Retrofitting of Slatina Hydropower Plant**

At the end of 2011, the Technical and Economic Council of Hidroelectrica endorsed the Awarding Documentation for the execution of the retrofitting works for Slatina Hydropower Plant.

It is foreseen that in the first half of 2012, the procedure for purchasing the retrofitting works will be launched. The promotion of this investment is justified by the tests made regarding the state of the structure and of the pieces of equipments that serve the hydropower plant.

By the optimum solution adopted, that to equip the plant with new upgraded classic bulb type units and a new power release transformer, the aims are the followings:

- Increasing the hydro-units efficiency;
- Improving the current operating parameters;
- Providing the technical conditions necessary for remote monitoring and operating;

- providing, in quality and safety conditions, the system services requested by DEN (*National Energy Dispatching System*).
  - Diminishing the own technological consumption of the plant;
  - Increasing the reliability and availability of equipment and installation of the plant.
- The financing is made from own sources.

## 10. PURCHASING ACTIVITY

The purchasing activity results both in awarding the contracts related to the investment programme and the purchases made for the proper development of generation and maintenance activity.

The activity has been performed according to the applicable laws in the field of public purchase, to the other legal regulations and by observing the principles on which the awarding of the public purchase contract is based.

In performing the purchases, the Budget for incomes and expenses of SC Hidroelectrica SA for 2011, both for subsidiaries and the head office has been taken into account. The Annual programme of the approved public purchases, the Investment programme for 2011, the Maintenance programme for 2011 and the regular re-analyzing of the purchase opportunities in relation with the technical and economic situation existent during 2011 (Annex).

The structure of public procurement contracts awarded in 2011

- Lei-

	INVESTMENTS	GENERATION	TOTAL
Goods	46,079,095	17,311,147	63,390,242
Services	24,927,345	55,995,783	80,923,128
Works	45,566,886	2,079,424	47,646,310
<b>TOTAL</b>	<b>116,573,326</b>	<b>75,386,354</b>	<b>191,959,680</b>

## Schedule

	Value of the contracts		Procedure used									
			Open or restricted procedure		Request for tender		Negotiated procedure without publication of a contract notice		Negotiated procedure without publication of a contract notice		Direct purchase, contracts excepted from the enforcement of the Government Emergency ordinance no. 34	
	No. of procedure	Value (Lei)	No. of procedure	Value (Lei)	No. of procedure	Value (Lei)	No. of procedure	Value (Lei)	No. of procedure	Value (Lei)	No. of procedure	Value (Lei)
	(1+3+5+7+9)	(2+4+6+8+10)	1	2	3	4	5	6	7	8	9	10
HEADQUARTERS	67	32,310,147	27	25,529,304	3	497,220	9	5,104,005	0	0	28	1,179,618
BISTRITA HYDROPOWER SUBSIDIARY	359	67,086,167	38	36,658,871	8	254,894	25	27,009,901	0	0	291	8,756,662
BUZAU HYDROPOWER SUBSIDIARY	840	7,302,500	13	4,310,270	0	0	14	1,120,390	0	0	817	3,865,980
CARANSEBES HYDROPOWER SUBSIDIARY	33	5,475,000	12	536,000	0	0	17	4,853,000	0	0	5	146,000
CLUJ HYDROPOWER SUBSIDIARY	242	2,971,196	62	2,619,992	0	3	3	229,000	0	0	177	122,201
CURTEA DE ARGES	335	4,433,869	14	1,341,140	15	217,072	19	936,496	0	0	290	2,398,410

HYDROPOWER SUBSIDIARY												
HÂTEG HYDROPOWER SUBSIDIARY	228	3,938,619	4	674,382	4	222,325	9	1,177,000	0	0	213	1,964,412
PORȚILE DE FIER HYDROPOWER SUBSIDIARY	273	9,449,301	4	391,850	8	965,250	22	5,920,520	0	0	242	2,548,976
RÂMNICU VÂLCEA HYDROPOWER SUBSIDIARY	378	32,805,216	4	13,299,040	5	235,450	23	17,283,940	0	0	347	2,228,126
SEBEȘ HYDROPOWER SUBSIDIARY	222	1,582,633	0	0	3	177,015	6	384,000	0	0	216	2,771,121
SIBIU HYDROPOWER SUBSIDIARY	83	5,668,892	2	1,569,553	8	1,353,835	1	539,721	0	0	72	2,205,783
SLATINA HYDROPOWER SUBSIDIARY	238	2,860,892	9	795,320	0	0	7	840,000	0	0	224	2,244,132
TÂRGU JIU HYDROPOWER SUBSIDIARY	78	2,281,010	20	793,692	2	151,093	8	844,895	0	0	51	666,330
ORADEA HYDROPOWER SUBSIDIARY	125	1,926,011	8	469,496	0	0	8	445,695	0	0	110	1,110,300
TOTAL	3,527	191,959,630	217	88,988,909	56	4,074,157	171	66,688,563	0	0	3,083	32,208,051

## 11. ACTIVITY REGARDING THE OBTAINING OF TITLE DEEDS FOR THE LAND

The main directions of activity of this field are the following:

- The activity of obtaining the lands necessary for the development, upgrading and operating of the hydropower objectives as well as the land register works (identification, buying, registration in the Land Register and lease of lands from the third parties);
- Providing data for promoting the drafts of regulatory acts regarding the obtaining of lands for investments according to the legal provisions;
- Collecting and managing information, from a technical and legal point of view, as regards the state of the lands belonging to SC Hidroelectrica SA and of its subsidiaries;
- Obtaining the ownership certificates for the land managed by SC Hidroelectrica Sa, as well as for the micro hydropower plants taken over by the Government Decision no. 554/2002 and Government Decision no. 1016/2002. In 2011, as the result of the activity performed, 32 ownership certificates for the lands have been obtained.

The main objectives are:

- a) Preparing, coordination and control of the following types of documentations:
  - Documentation for the identification of the lands necessary for the investment objectives;
  - The Land Register documentations according to the applicable ANCPI (*National Agency for Cadastre and Land Registration*) Rules, in view of promoting the Government Decision regarding the approval of locations and launching the expropriation procedures for the private real estates included in the expropriation corridor of the investment objectives for the public betterment, based on Law no. 255/2010 and of the Implementing rules approved by the Romanian Government Decision no. 53/February 1, 2011 with the subsequent amendments and additions.

In 2011, right after the publication of the Implementing rules for Law no. 255/2010, the land register documentation began to be prepared including the expropriation range for Rastolița Hydropower Development public betterment investment objectives which was accepted and endorsed by OCPI (*Office for Cadastre and Land Registration*) Mureș. The land Register documentation, together with the list of private property real estates to be expropriated and the individual amounts estimated by an certified valuer, related to the estimated compensations for the private property real estates located within the expropriation corridor will be the base of promoting the government decision for the approval of location and launching the expropriation procedures for the private property real estates included in the expropriation corridor of the public utility work - Rastolița Hydropower Development.

Also, the land register documentation began to be prepared so that the Offices for Cadastre and Land Registration accept and endorse the expropriation ranges in view of promoting the government decision for the approval of launching the expropriation procedures provided for in Law no. 255/2010 and of the Implementing Rules, for the following investment objectives:

  - Siret River Hydropower Development on Cosmești – Movileni Reach;
  - Runcu-Firiza Hydropower Development;
  - Olt River Hydropower Development, Izbiceni-Danube Reach, SLAZ Hydropower Plant;
  - Documentation for final occupation of agricultural and forest lands;
  - Documentation for temporary occupation of lands (lease);
  - Documentation for setting aside of agricultural and forest land, according to the applicable laws (Law no. 18/1991 of the land fund, republished, Law no. 26/1996 - Forestry Code etc.).
- b) Acquiring the ownership certificates for the lands based on the Romanian Government Decision no. 834/1991 and of Criteria no. 2665/1C/311/1992;
- c) Registering in the land Book of the legal acts and facts regarding the land and buildings for investment objectives according to Law no. 7/1996 of Cadastre and Real Estate Advertising, republished and the Order of ANCPI (*National Agency for Cadastre and Land Registration*) no. 634/2006, amended and supplemented.
- d) Participation in analyses and on site inspection of topographic and cadastral documentation based on which the ownership certificates for the lands will be obtained;
- e) Control of documentation received from hydropower subsidiaries (topographic and cadastral part).

- f) Inventory of the proofs of registration in the land register and of the ownership certificates obtained from the line ministries for Hidroelectrica SA.

<b>Situation of the ownership certificates for lands and proofs of registration in the land register during the period 2001 - 2011</b>							
No.	Subsidiary	Total number of certificates issued within the period		Number of proofs of registration in the land register for the certificates		Area (ha)	
		2001-2011	Out of which in 2011	2001-2011	Out of which in 2011	2001-2011	Out of which in 2011
1	Bistrița	39	2	24	-	839.23	0.26
2	Buzău	43	-	42	-	315.02	-
3	Caransebeș	21	-	6	-	52.24	-
4	Cluj	48	-	36	-	86.45	-
5	Curtea de Argeș	105	-	70	-	346.97	-
6	Hățeg	37	-	20	-	68.17	-
7	Oradea	42	7	30	-	254.79	1.80
8	Porțile de Fier	23	-	12	-	19.95	-
9	Râmnicu Vâlcea	98	20	71	6	44.87	3.13
10	Sibiu	36	3	24	-	26.65	2.53
11	Sebeș	33	-	32	-	24.30	-
12	Slatina	23	-	19	-	114.40	-
13	Târgu Jiu	41	-	30	-	180.76	-
	<b>TOTAL</b>	<b>589</b>	<b>32</b>	<b>416</b>	<b>6</b>	<b>2373.82</b>	<b>7.72</b>

For 2012, the approval by the Ministry of Economy, Commerce and Business Environment of *obtaining the title deeds for assets belonging to the state public domain, leased by SC Hidroelectrica SA, as well as the approval of the funds necessary for this activities* are foreseen.

After the obtaining of the approval of the Ministry of Economy, Commerce and Business Environment, the preparing of the cadastral documentation for each real estate (dam, dike, reservoir, lock etc.), according to the applicable ANCPI Regulations and the inventory of the LEGAL ACTS based on which the land have been obtained (expropriation decrees, transfer orders, decisions of the county councils, government decisions, concession contract etc.).

## 12. OPERATING ACTIVITY

The operating activity of the company was performed based on the provisions of the Romanian Government Decision nr. 627/2000, ANRE (*National Energy Regulatory Authority*) licenses no. 932/2010 for the supply of electric power, no. 332/2001 for the generation of electric power, no. 333/2001 for providing engineering system services, of the Law on energy no. 13/2007, of the orders and decisions of ANRE and of the Budget for incomes and expenses approved by the Government Decision no. 401/2011.

### Operating income

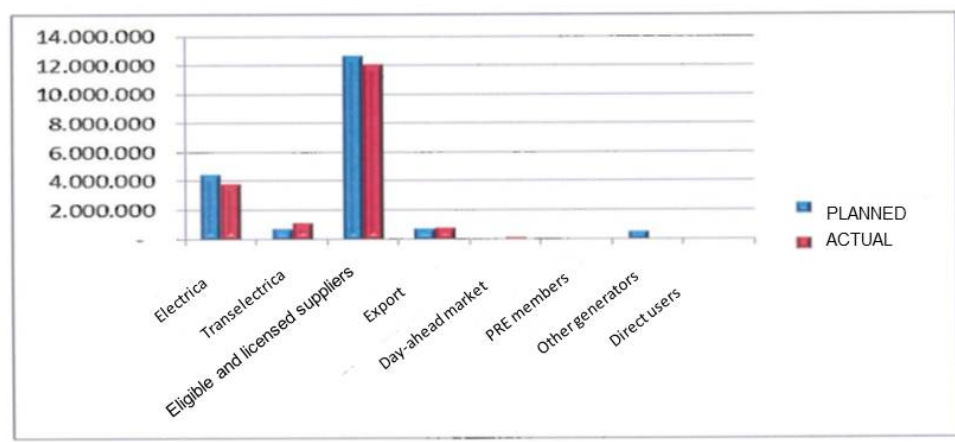
The operating income was obtained as follows:

INDICATORS	Measuring unit	PLANNED	ACTUAL	DIFFERENCE
	0	1	2	3(2-1)
1. Total electric power delivered (A+B+C) out of which:	MWh Lei	19,333,000 2,501,750,000	18,269,579 2,540,264,281	-1,063,421 38,514,281
A. Electric power delivered on the	MWh	4,500,000	3,868,726	-631,274

regulated market, out of which:	Lei	385,500,000	334,050,831	-51,449,169
Supply to captive consumers and distribution operators (Electrica)	MWh Lei	4,500,000 385,500,000	3,868,726 334,050,831	-631,274 -51,449,169
B. Electric power delivered on the competitive market, out of which:	MWh Lei	13,435,000 1,746,550,000	12,891,972 1,711,713,812	-543,028 -34,836,188
Eligible and licensed suppliers	MWh Lei	12,685,000 1,624,983,000	12,075,293 1,580,845,306	-609,707 -44,137,694
Export	MWh Lei	750,000 121,567,000	816,679 130,868,506	66,679 9,301,506
C. Electric power delivered on other markets, out of which:	MWh Lei	1,398,000 369,700,000	1,508,881 494,499,638	110,881 124,799,638
Other generators	MWh Lei	598,000 89,700,000	39,068 5,361,420	-558,932 -84,338,580
Day-ahead market	MWh Lei		161,721 33,510,613	161,721 33,510,613
Transelectrica (balancing market)	MWh Lei	800,000 280,000,000	1,141,145 375,460,712	341,145 95,460,712
PRE members	MWh Lei		144,511 70,999,968	144,511 70,999,968
Direct users	MWh Lei		22,436 9,166,925	22,436 9,166,925
2. System services, transmission, market management	Lei	405,000,000	450,226,551	45,226,551
out of which:				
Delivered to Transelectrica SA, voltage/power secondary regulating, power reserves, provision of the reactive power and voltage regulating)	Lei	355,000,000	286,834,213	-68,165,787
System, transmission and market management services on the competitive market	Lei		133,957,238	133,957,238
Reinvoiced transmission for the electric power sold on the regulated market	Lei	50,000,000	29,435,100	-20,564,900
3. Green certificates	Lei		8,687,827	8,687,827
4. Emission reduction units	Lei		11,062,633	11,062,633
5. Industrial water services	Lei		1,062,468	1,062,468
6. Other services	Lei		12,807,920	12,807,920
7. Other exploiting revenues		60,000,000	22,937,737	-37,062,263
<b>TOTAL OPERATING INCOME (1+2+3+4+5+6+7)</b>	<b>Lei</b>	<b>2,966,750,000</b>	<b>3,047,049,417</b>	<b>80,299,417</b>

In terms of quantity, the state of the energy delivery is the following:





The structure of quantities and incomes from deliver electric power is the following:

#### A) REGULATED MARKET

CLIENT	HYDROPOWER PLANT (installed capacity > 10 MW)		REINVOICED TRANSMISSION
	QUANTITY (MWh)	VALUE (Lei)	VALUE (Lei)
ENEL DISTRB. MUNTENIA	34,482	2,945,240	292,134
MUNTENIA N. FURIZARE	285,621	20,642,821	2,404,655
MUNTENIA N. DISTRIB	75,023	6,090,147	636,988
E.ON MOLDOVA DISTRIBUȚIE	119,125	8,417,799	1,011,844
TRANSILV. N FURIZARE	162,419	12,008,967	1,366,833
TRANSILV. N DISTRIB	34,258	2,887,341	290,026
TRANSILV. S. FURIZARE	55,925	4,639,648	471,322
TRANSILV. S. DISTRIB	28,729	2,390,853	243,451
ENEL DISTRIB BANAT	80,462	6,197,266	684,080
CEZ DISTRIBUȚIE	159,997	11,898,572	1,354,550
CEZ VÂNZARE	408,275	29,860,337	3,450,937
ENEL ENERGIE	570,118	41,922,937	4,812,917
ENEL DISTRIB DOBROGEA	20,659	1,666,130	175,457
E.ON ENERGIE ROMÂNIA	867,611	63,437,260	7,333,710
ENEL ENERGIE MUNTENIA	266,832	20,216,338	2,249,127
ELECTRICA FURNIZARE	314,579	23,572,317	2,657,069
<b>TOTAL</b>	<b>3,484,115</b>	<b>258,793,973</b>	<b>29,435,100</b>

CLIENT	HYDROPOWER PLANT (installed capacity < 10 MW)		
	Prime uncontrollable output	Prime controllable output	Green certificates (Prime uncontrollable)

					output + Prime controllable output)	
	QUANTIT Y (MWh)	VALUE (Lei)	QUANTIT Y (MWh)	VALUE (Lei)	QUANTIT Y (MWh)	VALUE (Lei)
MUNTENIA N. FURNIZARE	10,528	2,089,233	38,108	7,479,490	2,132	281,360
TRANSILV. N. FURNIZARE	47,764	9,669,854	8,383	1,645,150	2,364	312,100
TRANSILV. S. FURNIZARE	14,216	2,796,078	18,784	3,686,622	346	45,624
CEZ VÂNZARE	25,476	5,237,310	18,462	3,623,193	1,410	186,055
ENEL ENERGIE	12,037	2,363,824	48,365	9,492,056	4,336	572,302
E.ON ENERGIE ROMÂNIA	18,426	3,627,618	40,945	8,035,571		-
ELECTRICA FURNIZARE	31,267	6,238,733	37,808	7,418,589	3,454	456,095
<b>TOTAL</b>	<b>159,714</b>	<b>32,022,650</b>	<b>210,855</b>	<b>41,380,671</b>	<b>14,042</b>	<b>1,853,536</b>

**B) COMPETITIVE MARKET****ELIGIBLE CONSUMERS AND INDEPENDENT SUPPLIERS**

The structure of quantities and incomes from the electric power delivered to eligible consumers and their independent supplier is the following:

CLIENT	QUANTITY (MWh)	VALUE (Lei)	TG (Lei)	TL (Lei)
ALRO	2,494,572	322,474,743	21,083,736	
LUXTEN	260,429	36,749,921	2,199,488	
ELSID TITU	172,587	17,776,442	1,489,509	1,870,801
ENERGY HOLDING	2,155,802	280,254,262	18,208,043	
EUROPEC	320,876	45,305,166	2,710,038	
ELECTROMAGNETICA	891,105	124,957,529	7,526,976	
ELECTROCARBON	156,412	16,110,487	1,344,873	1,136,168
ARCELOR MITTAL Galați	1,424,126	185,466,868	12,032,090	
ALPIQ RomIndustries (ex Buzmann Industries)	999,988	129,998,480	8,449,621	
EFT ROMÂNIA	1,043,408	136,686,454	8,800,830	
ELECTRICA	398,300	51,779,000	3,355,941	
ALPIQ RomEnergie (ex EHOL Distribution)	1,571,913	204,348,748	13,279,270	
CNH Petroșani	141,869	22,725,205	1,428,392	1,771,821
CLMB - Patinoar Brașov	1,240	173,584	13,863	18,032
Societatea Națională a Sării	20,561	2,887,064	211,091	251,270
OMV Petrom (energy for tests)	22,105	3,151,353	189,940	
<b>TOTAL</b>	<b>12,075,293</b>	<b>1,580,845,306</b>	<b>102,323,701</b>	<b>5,048,092</b>

**EXPORT**

The structure of quantities and incomes from exported electric power in 2011 is the following:

CLIENT	QUANTITY (MWh)	VALUE (Lei)
ATEL	155,616	25,344,254

EFT	661,063	105,524,252
<b>TOTAL</b>	<b>816,679</b>	<b>130,868,506</b>

**C) ELECTRIC POWER DELIVERED TO OTHER MARKETS****OTHER GENERATORS**

The structure of quantities and incomes from the electric power delivered to other producers is the following:

BILATERAL CONTRACTS, for mutual help of the producers.

CLIENT	QUANTITY (MWh)	VALUE (Lei)	TG (Lei)
CET BRAȘOV	13,574	2,039,690	114,330
NUCLEARELECTRICA	25,494	2,987,387	220,013
<b>TOTAL</b>	<b>39,068</b>	<b>5,027,077</b>	<b>334,343</b>

**DAY-AHEAD MARKET (DAM)** – In 2011, Hidroelectrica SA sold on the Day-ahead Market, a quantity of 161,721 MWh, amounting Lei 33,510,613. The transactions were made using the platform managed by CN. Transelectrica – OPCOM SA, together with OPCOM SA. OPCOM SA acts both as buyer and seller for all the transactions made on the day-ahead market.

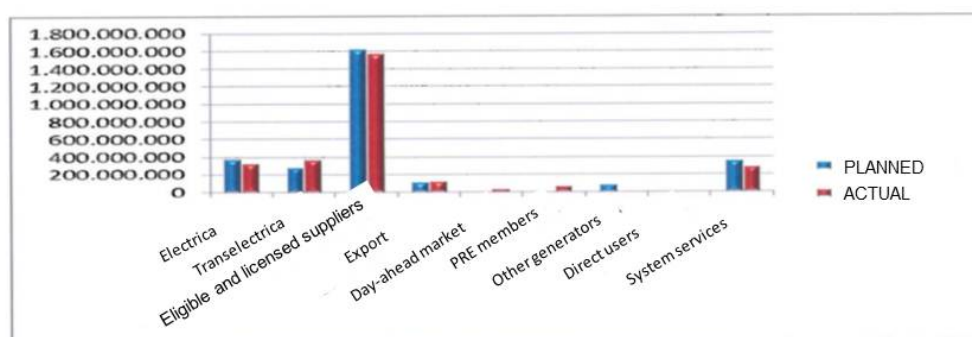
**BALANCING MARKET** – In 2011, Hidroelectrica SA, as part which is responsible for the balancing, has a number of 22 members, out of which 7 small generators (4 small generators qualified with prime uncontrollable production - Romelectro, Romenergohidro, ANAR and SGAS, and 3 small generators qualified with prime controllable production - ECOGEN, General Energetic, UPB).

In 2011, Hidroelectrica SA invoiced on the balancing market (Transelectrica), a quantity of 1,141,145 MWh amounting Lei 375,460,712

**OTHER SERVICES PROVIDED TO THE CLIENTS**

CLIENT	POWER RESERVE (Lei)	SYSTEM SERVICES (Lei)	MARKET MANAGEMENT SERVICE (Lei)	DISTRIBUTION SERVICES (Lei)
ALRO	224,957			
ELSID TITU	262,800	2,098,082	47,282	
ENERGY HOLDING	1,653,079			
ELECTROCARBON	219,000	1,784,585	41,874	
EHOL DISTRIBUTION	1,250,979			
CNH Petroșani		2,232,060	50,384	13,930,414
CLMB - Patinoar Brașov		21,819	488	134,008
Societatea Națională a Sării		327,581	7,438	2,298,617
<b>Total services on competitive market</b>	<b>3,610,815</b>	<b>6,464,127</b>	<b>147,466</b>	<b>16,363,039</b>
<b>TRANSELECTRICA</b>		<b>286,834,213</b>		

In terms of value, the situation of the energy delivery and system services is as follows:



In 2011, the average price for the delivery of the electric power was of 139.1 Lei/MWh, out of which, in the regulated market of 86.3 Lei/MWh, and, respectively, on the competitive market (including export and balancing market) of 153.2 Lei/MWh.

We would like to mention that all the prices on the competitive market are above the annual average production and delivery cost.

The annual average price for the delivery of electric power on the regulated market was of 86.3 Lei/MWh, below the annual average production cost.

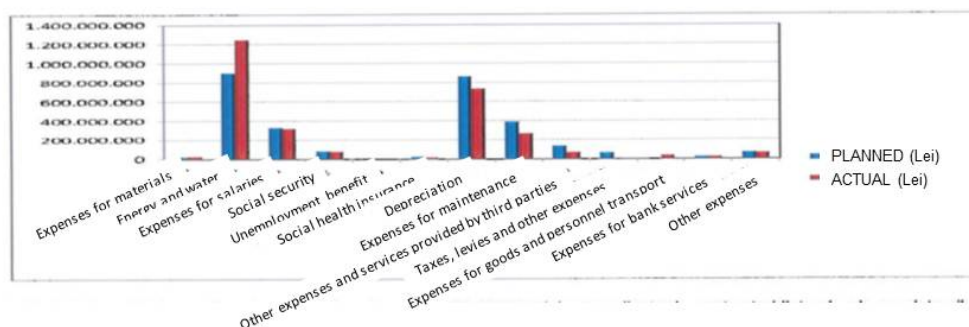
### Operating costs

The operating costs were lower than the operating income, the difference being of Lei 161,159,169, generating the profit of the company.

Their structure is the following:

(Lei)					
INDICATORS	ACTUAL 2010	PLANNED 2011	ACTUAL 2011	DIFFERENCE 2011-2010	DIFFERENCE from planned 2011
0	1	2	3	4 (3-1)	5(3-2)
Cost of materials	28,360,408	22,306,000	24,562,705	(3,797,703)	2,256,705
Cost of energy and water, out of which:	851,098,996	895,282,000	1,250,364,347	399,265,352	355,082,348
Gross processed water	125,314,459	250,000,000	303,036,185	177,721,727	53,036,185
Purchased	499,947,332	464,000,000	770,840,185	270,892,853	306,840,185

energy					
Services related to electric power delivery	225,837,205	181,282,000	176,487,977	(49,349,228)	(4,794,022)
Cost of salaries	318,514,319	329,950,000	316,948,058	(1,566,261)	(13,001,942)
Cost of social security	76,631,761	80,825,729	77,059,158	427,397	(3,766,571)
Cost of unemployment benefit	2,412,491	4,507,604	2,403,927	(8,564)	(2,103,677)
Cost of social health insurance	17,937,768	21,667,817	17,862,245	(75,523)	(3,805,572)
Cost of depreciation	874,218,171	860,000,000	733,575,227	(140,642,944)	(126,424,773)
Cost of maintenance	349,339,063	387,000,000	270,529,763	(78,809,300)	(116,470,237)
Other costs and services provided by third parties	69,942,951	130,282,000	66,650,056	(3,292,895)	(63,631,944)
Taxes, levies and other expenses	5,547,136	25,121,000	7,897,285	2,350,148	(17,223,715)
Cost of goods and personnel transport	30,932,904	35,000,000	33,308,372	2,375,468	(1,691,628)
Cost of banking services	10,160,846	20,000,000	19,041,978	8,881,132	(958,022)
Other expenses	149,187,085	69,807,850	65,687,127	(83,499,958)	(4,120,723)
<b>Total</b>	<b>2,784,283,899</b>	<b>2,881,750,000</b>	<b>2,885,890,248</b>	<b>101,606,349</b>	<b>4,140,248</b>



- Costs of the purchased energy in amount of Lei 770,840,185 have been performed by bilateral contracts, on the day-ahead market and balancing market, according to the rules of the energy market. These expenses have been provided in the budget of incomes and expenses in view of diminishing the hydrological risk.

#### Purchased energy

NAME OF THE SUPPLIER	Bilateral contracts		Balancing market		TG
	QUANTITY (MWh)	VALUE (Lei)	QUANTITY (MWh)	VALUE (Lei)	VALUE (Lei)
Termoelectrica	616,696	144,524,714			4,526,551
Societatea Națională Nuclearelectrică SA	738,393	107,066,985			
Electrocentrale Deva	146,451	34,269,534			1,074,950
Complex Energetic Turceni	560,350	116,195,100			5,187,161
Electrocentrale Paroseni	32,256	7,580,160			236,759
Complex Energetic Craiova	551,340	121,294,800			5,634,695
SNLO	264,920	47,103,262			
OMV Petrom	261,868	17,566,996			1,835,695
Membrii PRE			4,326	563,841	
Transelectrica			863,149	145,068,512	
OPCOM	70,880	11,110,470			
<b>TOTAL</b>	<b>3,243,154</b>	<b>606,712,021</b>	<b>867,475</b>	<b>145,632,353</b>	<b>18,495,811</b>

- In 2011, the amount of the specific contributions for the management of water resources, as it was amended starting with December 10, 2010 according to the Government Ordinance no. 1202/December 2, 2010 when the amount of contribution multiplied with 4.23 times from Lei 0.26/1000 mc according to the Government Ordinance no. 238/April 2010 to Lei 1.1/1000 mc according to the Government Ordinance no. 1202/December 2, 2010.

The analysis of the effect of the increase in case of electric power generation in hydropower plants shows the following issues:

- In the cost of the generated MWh, the share of the gross water cost increases from approximately Lei 5/MWh to approximately Lei 21/MWh;
  - At the level of the specific cost per generated MWh, the increase, due to the share of the processed gross water, is of approximately 17 %.
- The cost of depreciation decreased due to the fact that the company, according to the Government Decision no. 2139/2004 (Article 5) and to the accounting policy adopted by the accounting policy manual, adjusted the depreciation of the assets which did not operate due to the enforcement of the force majeure clause starting with September 30, 2011, the cause being the severe drought with which the company had faced even from April 2011. Its recovery will be made by recalculating the depreciation percentage in the following periods, without changing their lifetime.
  - Starting with September 30, 2011, due to the extended drought which led to the diminishing of the power output with approximately 50 % in the 4th quarter of the year, the force majeure clause was activated in all the sale and purchase contracts.  
In order to close 2011 financial year in profitability conditions, a series of technical and economic actions have been made to reduce the expenses to that which are strictly necessary, without influencing the performance of the production activity of the company in safety conditions in view of not exceeding the revenues obtained, measures which were also presented to the Board of Directors of the company.
  - In 2011, the annual average cost for the generation of electric power was of 108.74 Lei/MWh, and the annual average cost of delivery which also includes the purchase of electric power was of 129.74 Lei/MWh.

### 13. FINANCIAL ACTIVITY

The financial activity registers a net loss of Lei 121,549,226 as follows:

	2010	2011	(Lei) ± Differences
Expenses with interests related to contracted credits	85,420,482	102,926,484	17,506,002
Other financial expenses (unfavourable exchange rate differences)	151,645,939	156,568,004	4,922,065
Total financial expenses	237,066,421	259,494,488	22,428,067
Total financial revenues	124,531,358	137,945,263	13,413,905
<b>Financial result (loss)</b>	<b>(112,535,063)</b>	<b>(121,549,225)</b>	<b>(9,014,162)</b>

The financial expenses of the company in 2011 have registered an increase in comparison with 2010, continuing to be influenced unfavourable by the national currency depreciation in relation with the currencies of the credits of the company and reflected in the exchange rate according to which the payable have been reassessed in foreign currency in 2011.

In view of diminishing the foreign currency risk, the company wishes to have a financial policy which will correlate better the rate between the foreign currency receipts and payments by using specific bank instruments (hedging).

The expenses for interests represents the interests due and/or paid for short term loans and for medium and long term loans which are not capitalized (accounting treatment which is adopted by the company in the Manual of accounting policies and procedures).

In 2011, the company has not exceeded the debt ratio ( $<3$ ), so that, according to Article 23 of the updated Taxation Law could not deduct entirely the expenses with the exchange rate difference and the interests related to the loans.

#### 14. TOTAL ASSETS AND DEBTS

Total assets and debts represent the interdependency between the economic and financial results, being represented by the total assets and the total payables of the company.

##### Balance sheet items

For the period 2010-2011, the balance sheet items are the following:

(Lei)			
Name of the indicator	31,12,2010	31,12,2011	% 2011/2010
Intangible assets	1,694,302	5,958,115	351.66
Tangible assets	19,600,149,789	20,272,677,782	103.43
Capital assets	65,350,657	60,444,956	92.49
Non-current assets - Total	19,667,194,748	20,339,080,853	103.42
Inventories	79,468,118	104,831,148	131.92
Receivables	297,117,456	418,078,203	140.71
Short-term financial investments	-	11,795,247	-
Cash and bank accounts	99,891,960	77,151,977	77.24
Current assets - Total	476,477,534	611,856,575	128.41
Accrued expenses	790,917	11,385,684	1,439.55
Payables to be paid in a period of one year	1,728,953,811	2,639,156,284	152.64
Current assets, net current liabilities, respectively	(1,251,718,332)	(2,015,937,787)	161.05
Total assets minus current liabilities	18,415,476,416	18,323,143,066	99.50
Payables to be paid in a period of more than one year	1,280,019,426	1,507,594,882	117.78
Provisions	101,973,829	84,718,971	83.08
Deferred incomes	211,155,248	201,847,627	95.59
Capital and reserves			
Subscribed and not paid in share capital	31,004,422	24,983,220	80.58
Subscribed and paid in capital	4,440,967,650	4,449,514,450	100.19
Reevaluation reserves	11,175,780,197	10,976,882,712	98.22
Reserves	870,128,312	1,038,744,669	119.38
Retained earnings	(41,791,118)	(5,124,460)	12.26
Result of the financial year	292,368,000	6,444,266,220	
Distribution of profit	(19,458,290)	(1,647,885)	8.47
Shareholders' equity	16,748,999,173	16,489,796,972	98.45
Public patrimony	73,361,712	39,208,376	53.45
<b>Total equity</b>	<b>16,822,360,885</b>	<b>16,529,005,348</b>	<b>98.26</b>

**Tangible assets** – have registered in 2011 an increase, compared with the previous year, caused, mainly, by the following commissioning works:

- Bistra Poiana Mărului, Ruienii, Poiana Ruscă Hydropower Development. Râul Alb Catchment and Small Hydropower Plant – 2 horizontal Francis type hydro-units;
- Strengthening and developing the area downstream Curtea de Argeș Dam which was damaged as the result of the floods of June 2005. Renewing the sports facilities which were affected by the floods;
- Increasing the level of operating safety for Frunzaru Reservoir and Galbenii Reservoir;
- Performing the sealing and strengthening of the right bank dyke in the area km 0 - km 3. Overhauling works at Galbenii Reservoir;
- Bacău Hydropower Plant - Upgrading the riprap and waterproofing of the headrace and loading bay;
- Upgrading the installation for general and own services (Hydro-unit 2) of Zavidenii Hydropower plant, automation and monitoring;



- Upgrading the hydro generator no. 2 - Zavideni Hydropower Plant and Ionești Hydropower Plant;
- Upgrading the installation for general and own services (Hydro-unit 2) of Ionești Hydropower Plant, automation and monitoring;
- Upgrading the hydro-unit no. 1 - Vaduri Hydropower Plant;
- Commissioning of 5 units on the Lower Olt to which the 10 finalized in 2010 are added, so that 15 units from the 20 suggested to be retrofitted are operational at the end of 2011;
- In Caransebeș Hydropower Subsidiary, the commissioning of Râul Alb Micro Hydropower Plant (2 x 0.4 MW on June 24, 2011, with a project energy  $E_p = 1.5$  GWh/year);
- In Porțile de Fier Hydropower Subsidiary, the re-commissioning of the Hydro-unit 2 of Porțile de Fier II Hydropower Plant after retrofitting (on May 26, the new capacity was of 31.4 MW, and the old capacity was of 27 MW).

**Receivables** - have registered an increase compared with December 31, 2010, caused by the VAT refund and by clients within the energy sector.

**Short term debts** – have been higher on December 31, 2011 than on December 31, 2010, being caused by:

- Contracting of new short term loans;
- Increasing the limit of the existent credits;
- Distribution of dividends to the shareholders.

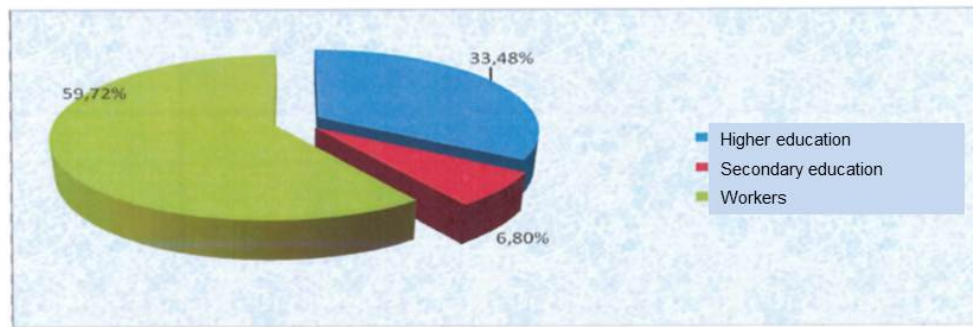
**Long term debts** – have increased in 2011 compared to 2010 due to the contracting of new credits for the investments provided for in the Budget of incomes and expenses.

**Subscribed and paid in share capital** – on December 31, 2011 have increased, compared to December 31, 2010 with Lei 8,546,800, representing an increase of the share capital with the ownership certificates for the lands.

## 15. HUMAN RESOURCES AND COMMUNICATION ACTIVITY

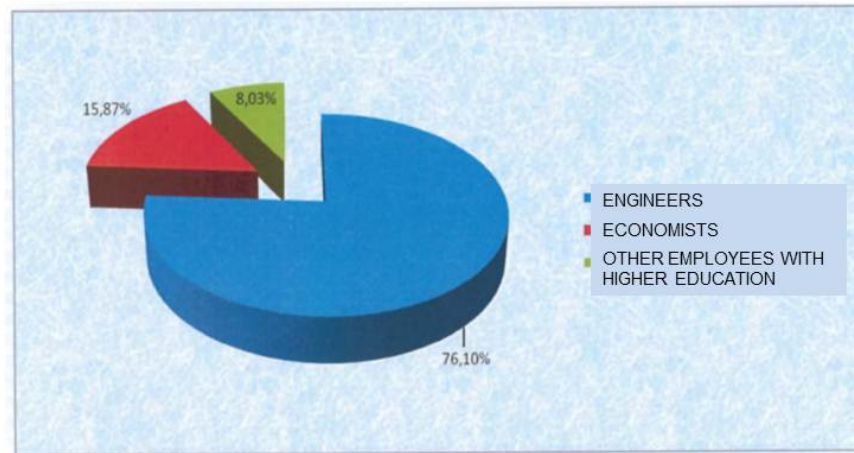
In 2011, the human resources activity was aimed on increasing the quality of the vocational training process, of the performance level of the company managers, by creating partnerships with educational institutions with the aim of increasing the quality of vocational training.

The structure of SC Hidroelectrica SA in 2011 by the vocational training includes: 33.48 % - higher education personnel, 6.80 % - medium education personnel and 59.72 % - workers, according to Diagram no. 1:



**Diagram no. 1**

From the total of the company's personnel with higher education, 76.10 % are engineers, 15.87 % economists and 8.03 % - other employees with higher education, according to Diagram no. 2:



**Diagram no. 2**

The main results in the field of human resources in 2011 are the following:

**1. Constant concern for the growth of quality of basic and advanced vocational training process**

In 2011, programmes for basic and advanced vocational training of quality employees, taking into account the training area which contributed to their development according to the company's strategy: Lessons of technical English, training courses for quality, environmental protection, occupational safety auditors, courses for the improvement of organizational processes or for the improvement of the management performances. In 2011, 1.005 employees participated in different types of training offered by authorized trainers, the costs amounting to Lei 1,214,939.

Based on its own internal training procedure, the entire personnel are trained in the fields which are imposed by the laws applicable to the sector or professional field.

**2. Growth of performance level of managers - vital for a company which aims to extend its involvement at regional and European level**

Starting with 2010, Hidroelectrica and Gallup Romania have started to develop a project regarding the *improvement of performances of the company's managers*. The project, which is new for Hidroelectrica, was aimed to a target group of 100 managers and potential managers. Gallup implemented in Hidroelectrica the talent philosophy - using employees in the fields where they are *natively talented*. Using Gallup proprietary instruments, the *management potential of each employees from the target group* was assessed. Also, depending of the training needs established, the 100 managers and potential managers have participating in training sessions offered by the best training company on the Romanian market in the last two consecutive years: *Ascendis* company.

The contract with *Gallup company* has also continued in the first quarter of 2011 when the same group was assessed as regards the internal clients of the company. The leadership potential of the top management was also assessed. Gallup has developed for Hidroelectrica management assessment

instruments which became proprietary for the company, the assessment continuing to be made by internal trainers trained by Gallup. Therefore, the training has become sustainable and continues to be implemented by Hidroelectrica by its own efforts.

**3. Targeting efficiency and cost reduction -> Implementing the continuous improvement philosophy into the organization - KAIZEN, within POSDRU777/3.2/A/61491 Project, financed by European funds.**

In August 2010, the implementation of the first project financed by structural funds has started in Hidroelectrica. The project is developed together with *Kaizen Institute - IKAR Management Consult, a subsidiary of Kaizen Global. The contract, which is financed by POSDRU (Sectoral Operational Programme Human Resources Development) will continue until April 2012 and will contribute to the training of 17 % of the company's employees. The project budget is of Lei 1,465,000 out of which: Non-refundable financial contribution – Lei 865,000 (59.05 %) and Hidroelectrica contribution – Lei 600,000 (49.95 %).*

The project for the basic and advanced vocational training of the company's personnel developed by Hidroelectrica achieved its established objectives and is in the final stage, of disseminating the obtained results.

The main objective of the project financed by European funds was to create a core of specialists and managers in process improvement, certified by CNFPA (*National Council for Adult Vocational Training*) which will continue to train Hidroelectrica employees until 2014.

The main results of the project, in 2011, were the following:

- Making aware 120 employees as regards continuous process improvement principles (December 2010 – January 2011);
- Training of 45 specialists in process improvement, certified by the National Council for Adult Vocational Training (February – June 2011);
- Training of 15 managers in process improvement, certified by the National Council for Adult Vocational Training (September – November 2011);
- Preparing the strategy and work procedures for implementing the continuous process improvement philosophy in Hidroelectrica (December 2011).

**4. Private scholarships**

One of the long term strategic objectives of Hidroelectrica is to provide the personnel which are necessary in the next years, as regards the number, and the categories and qualifications.

To train an expert in the hydropower field implies a long period of basic and advanced vocational training. This is why Hidroelectrica had decided to offer private scholarships to the best students of the power and hydropower departments of the universities, since 2003.

In the academic year 2010-2011, 22 private scholarships have been offered, and in 2011-2012 academic year, 13 private scholarships are offered. The scholarship is of lei 600 (the period of summer holiday is excluded). This is an investment in people, even before they become employees of the company.

**5. Communication**

The process of Hidroelectrica rebranding was concluded in 2011, process which is reflected by the assimilation of rules and adapting of all the communication materials by the executive management and subsidiaries, according to the Identity manual of Hidroelectrica.

The communication activity of Hidroelectrica in 2011 was manifested by organizing events in subsidiaries, participating in conferences, seminars in the energy field. In this context, we have to mention the Energeticist's Trophy, the annual event of Hidroelectrica during which the best experts by trades compete and are awarded. The 15<sup>th</sup> edition took place in July 2011, in Sibiu Subsidiary.

The Communication and Public relations team of Hidroelectrica contributed permanently to the improvement of external and internal communication of the company and wished to continue to do the same in the future.

**16. ACTIVITY RELATED TO ENVIRONMENTAL QUALITY, OCCUPATIONAL HEALTH AND SAFETY**

In 2011, the second monitoring audit took place, after the recertification of the Integrated Management System in 2009. The audit took place in June and included 2 subsidiaries (Oradea and Buzău) and the Executive Management of the Company.

The monitoring audit follows the implementation and maintaining of the Integrated Management System, both at the level of subsidiaries, and of the Executive Management.

In 2011, the Audit report of SRAC included 8 improvement recommendations, valid both at the level of the Executive Management and of the audited subsidiaries, regarding the three standards on which the respective system is based, SR EN ISO 9001: 2008; SR EN ISO 14001:2005 and SR OHSAS 18001:2008.

The monitoring audit of 2011 was the last audit before the new recertification which will come in 2012. At the end of 2011, all the hydropower objectives are in compliance with the authorization requirements, according to the national laws in the field; thus, from the total of 231 hydropower objectives which need to be authorized, 218 objectives have valid environmental permits, with periods between 2012 and 2021, and 13 objectives are being reauthorized, according to the legal provisions.

The main measures, as regards the environmental protection, taken in 2011 are the following:

- Bistrița Hydropower Subsidiary, Buzău Hydropower Subsidiary, Oradea Hydropower Subsidiary have taken corrective measures in order to remove the effects of the floods;
- Bistrița Hydropower Subsidiary, Buzău Hydropower Subsidiary, Caransebeș Hydropower Subsidiary, Curtea de Argeș Hydropower Subsidiary, Hațeg Hydropower Subsidiary, Sibiu Hydropower Subsidiary, Slatina Hydropower Subsidiary and Târgu Jiu Hydropower Subsidiary have performed several preventive works regarding flood protection;
- Landscaping works have been performed in Caransebeș Hydropower Subsidiary, Oradea Hydropower Subsidiary, Sibiu Hydropower Subsidiary and Târgu Jiu Hydropower Subsidiary;
- Caransebeș Hydropower Subsidiary have performed works for returning to the natural fund of the lands which were occupied temporarily by the construction works for hydropower structures;
- Works for the sanitation of the water surface took place in Bistrița Hydropower Subsidiary, Caransebeș Hydropower Subsidiary, Cluj Hydropower Subsidiary, Hațeg Hydropower Subsidiary, Sebeș Hydropower Subsidiary and Târgu Jiu Hydropower Subsidiary;
- Works for land protection against erosion took place in Buzău Hydropower Subsidiary, Caransebeș Hydropower Subsidiary, Hațeg Hydropower Subsidiary, Sibiu Hydropower Subsidiary Slatina Hydropower Subsidiary;
- Control measures and laboratory analyses were performed at Hațeg Hydropower Subsidiary, Porțile de Fier Hydropower Subsidiary, Râmnicu Vâlcea Hydropower Subsidiary, Sebeș Hydropower Subsidiary and Slatina Hydropower Subsidiary.

Cost of the works performed for environmental protection in 2011 amounted 54,445,075.87 lei (approximately 12.8 million EUR).

We mention that the value of the works which are entirely aimed to the environmental protection is of Lei 5.89 million, the difference being included in maintenance and investment works with a high feature of environmental protection.

Within SC Hidroelectrica SA, occupational prevention and protection services are organized and operational, both at the level of the company's executive, and at the level of subsidiaries. The occupational prevention and protection departments organized within the company are served by workers which have the competencies imposed by the provisions of Law no. 319/2-06 on the occupational health and safety and of the Implementing rules of this Law.

In view of providing the information, participation and consultation of the employees in preparing and implementing the occupational health and safety decisions, both at the level of company and at the level of each subsidiaries within SC Hidroelectrica SA, an Occupational Health and Safety Committee is organized and operates, according to the legal requirements.

By implementing the measures provided for in the prevention and protection plan, approved at the level of Hidroelectrica for 2011, the compliance with the legal provisions on occupational health and safety was taken into account, in 2011, no situation of imminent danger for the safety of the workers occurred, in connection with the activities performed by them at their work place.

The value of the Prevention and protection plan for 2011 was of Lei 12,666,841. At the level of SC Hidroelectrica SA, the programme for occupational health and safety measures for 2011 was accomplished, 59.3 % - as a value and 71.6 % - physical.

From the analysis made by the Occupational Health and Safety Committee at the level of Hidroelectrica (March 2, 2012), it was established that the measures provided for were implemented by its own efforts, for some measures, the necessary was provided for from the existent inventories, and for others, contracts are under development, and will be completed in the first quarter of 2012 (for example, Purchase of individual protection equipment was started in August 2011, and the effective purchase is performed in 2012)

## 17. ACTIVITY OF COOPERATION AND INTERNATIONAL RELATIONS

The main objective of Hidroelectrica is the development of a sustainable power system, and the active and supported international cooperation, together with attracting non-refundable funds represent the main methods to achieve this aspiration.

In 2011, the cooperation activity was aimed to the following activities:

- Promoting businesses with foreign partners;
- Strengthening the current cooperation relations;
- Identifying and performing collaboration projects with international organizations and financial institutions in view of obtaining international support and financing;
- Promoting the bilateral economic cooperation;
- Ensuring a sustainable cooperation at intergovernmental level;
- Absorption of structural and cohesion funds;
- Launching the strategic refocus process of the organization;
- Intensifying the relations with the specific international bodies;
- Dissemination of the best practices in the hydropower field.

## 18. ACTIVITY OF INTERNAL CONTROL

The control activity was performed in compliance with the Order no. 439/mARCH 11, 2010, Rules governing the organization and operation of SC Hidroelectrica SA and the Specific operational procedure.

According to this procedure, the control activities are the following:

- a) Planned control activities based on the annual control programme, approved by the General Manager;
- b) The control activities at the level of subsidiaries and branches of SC Hidroelectrica SA is made based on the decision of the General Manager or, as the case may be, on the Decision of the Board of Directors for:

- Controls ordered as a result of several complaints, petitions, claims submitted for solving by the General Manager;
- Immediate controls, ordered by the General Manager.

The control activity is performed in the context of quality assurance. In this regard, the operational procedure "**CONTROL AND INSPECTION OF THE ACTIVITIES WITHIN SC HIDROELECTRICA SA**", PO-HE-DCI-01.

For all the fields of activity controlled, in view of performing an uniform control in all the subsidiaries and branches of SC Hidroelectrica SA in 2011, control subjects have been prepared.

In this regard, the following subjects approved by the unit management have been prepared:

- Subjects regarding the analysis and control of activities and installation belonging to the hydropower subsidiaries;
- Subjects regarding the control of maintenance activity;
- Subjects regarding the control of human resources activity;
- Subjects regarding the control of investment activity;
- Subjects regarding the main objectives of the financial management control and the main legal provisions;

- Subjects for control of contracting the purchase of raw materials, materials and spare parts, existent inventories, compliance of the consumption rules;
- Control in the field of occupational health and safety.

The control activity was also extended to other fields, according to the necessities established during the control.

In which hydropower subsidiary, there is a "Financial Management Control" (FMC), where several employees are working (auditors).

During the controls, the method in which the respective structure (FMC) is organized and the employees (auditors from the hydropower subsidiaries and Hidroserv branches) fulfill their duties was also verified.

Controls are executed based on the control programme prepared in each subsidiary, programme which includes the control of the following: Pay offices, warehouses, storages and, in a lesser extent, the method of awarding the public purchase contracts etc.

During the period of performing all the control activities, discussions took place with the employees of the controlled entities regarding the performance of activities, motivation of the actions made and of the decisions taken for solving the technical and organizational issues.

For consulting the laws, Government decisions and other regulatory acts, "Legis" software is used.

In the period January 1, 2011 – December 31, 2011, the following controls took place:

**1. Planned controls**

- 1.1. Control made at Poștile de Fier Hydropower Subsidiary between January 1 and January 28, 2011.
- 1.2. Control made at Oradea Hydropower Subsidiary between February 14 and March 4, 2011.
- 1.3. Control made at Curtea de Argeș Hydropower Subsidiary between May 2 and May 20, 2011.
- 1.4. Control made at Hațeg Hydropower Subsidiary between July 25 and August 12, 2011.
- 1.5. Control made at Sibiu Hydropower Subsidiary between September 5 and September 23, 2011.
- 1.6. Control made at SC Hidroserv SA, Poștile de Fier between October 10 and October 28, 2011.
- 1.7. Control made at SC Hidroserv SA Curtea de Argeș between November 14 and December 1, 2011.

**2. Controls made at the order of the General Manager of SC Hidroelectrica SA**

- 2.1. Control made at Buzău Hydropower Subsidiary between March 14 and April 1, 2011.
- 2.2. Control made at the executive of SC Hidroelectrica SA Bucharest between May 25 and June 1, 2011.
- 2.3. Control made at Slatina Hydropower Subsidiary and SC Hidroserv Slatina SA between June 6 and June 24, 2011.
- 2.4. Control made at Piatra Neamț Hydropower Subsidiary between June 6 and June 17, 2011 and July 25 and July 27, 2011.

Analyzing the control activity for 2011 of the Internal Control Directorate, we can argue that this was performed in good conditions, including all the control subjects and that by this activity, the forecasted objectives have been attained.

The control activity performed in this period was intense and with its help, an important number on nonconformities was discovered, and the enforcement of the adopted measures contributed to the improvement and perfecting of the activity of SC Hidroelectrica subsidiaries.

**19. INTERNAL AUDIT ACTIVITY**

The internal public audit in 2011 was performed based on the Internal public audit programme, approved by the General Manager of SC Hidroelectrica SA, according to the applicable legal regulations.

Within the programme, all the 8 internal audit missions have been performed, meaning:

- a) 4 missions with the subject: "Financial management" performed at Slatina Hydropower Subsidiary, Bistrița Hydropower Subsidiary, Cluj Hydropower Subsidiary and Oradea Hydropower Subsidiary;

- b) 3 missions with the subject: "Document flow within the economic departments" performed in Buzău Hydropower Subsidiary, Hațeg Hydropower Subsidiary and Sebeș Hydropower Subsidiary;  
c) 1 advising mission with the subject: "Implementing the internal/management control system" performed at Curtea de Argeș Hydropower Subsidiary.

a) Within the internal audit missions regarding the financial management, the following objectives have been pursued:

- Financial activity organization;
- Financial activity coordination;
- Financial obligations of the subsidiary;
- Treasury management;
- Financial activity control;
- Document filing.

The team of internal auditors considered that most of the audited objectives audited are functional, in some subsidiaries, the financial activity control was considered as "to be improved", and in two subsidiaries, was considered "critical" - regarding the fact that they did not set up a proper space for filing the financial and accounting documents.

b) Within the internal audit missions regarding the document flow in the economic departments, the pursued objectives were the following:

- Financial and accounting activity organization;
- Flow of standardized documents;
- Content and flow of non-standardized documents;
- Flow of documents from outside the subsidiary;
- Financial and accounting activity control;
- Document filing.

The majority of audited objectives were considered as functional.

In some branches, the control of financial activities received the classification "to be improved", in this regard, recommendations were made regarding the training by authorized trainer of employees empowered to endorse the preventive financial control and to identify and assess the risks in the economic field and to prepare the Register of risks.

c) Within the advising mission, the subsidiary was analyzed and advised regarding the following objectives:

- Organizing the activity regarding the implementation of the internal/management control system;
- Status of implementing the Programme for the development of internal/management control;
- The state of implementing the internal/management control standards;
- Risk management within the entity;
- Preparing the information and reports regarding the implementation of the internal/management control system;
- The efficiency resulted from the implementation of the internal/management control system;

Following the analysis of the mentioned objectives, in the internal audit activity seminars have been organized regarding the general requirements related to the 25 internal/management control standards, as well as actual case studies regarding the Standard 07 - Objectives and Standard 11 - Risk management.

As a conclusion, the internal public audit activity performed in 2011 included all the issues in the programme, in an alert pace, making the necessary recommendations for the identified problems which led and will lead to the improvement of activity of SC Hidroelectrica SA.

## **20. RISK MANAGEMENT**



The changes of laws and regulations determined the company to approach the risk management issue in a proactive manner which continues to be developed.

According to the Order of the Ministry of Public Finance no. 946/2005 for the approval of the Internal code control including management/internal control standards in the public entities and for the development of the management control system, supplemented and updated, in the subsidiaries and the executive management of Hidroelectrica decisions for the appointment of commissions in view of monitoring, coordination and methodological guidance for the implementation process of the management/internal control standards have been issued.

Both the subsidiaries and the executive management of Hidroelectrica have prepared measure programmes for the internal/management control system development.

On February 17, 2011, the Ministry of Public Finance issued the Order no. 1649 for the amendment and supplementation of the Order of the Public Finance Minister no. 946/2005 for the approval of the Internal control code, including the management/internal control standards in the public entities and for the development of the management control systems.

As a result of this order, reports regarding the self-assessment of the state of implementation of internal control/management standards and the synthetic situation of the self-assessment.

The major importance risks have been identified and the methods of their management and mitigation have been identified, as follows:

Legislative risk – amendment of laws – the existence of Hidroelectrica SA as separate operational entity is established by the current legislative provisions. The amendment of the government strategy and, consecutively, of the laws, could have a radical impact on the operational objectives and on the company's management structure.

Hidroelectrica cannot do much for mitigating and diminishing this risk. The management of this risk implies the maintaining of the close relations between the operating management, Board of Directors and key shareholders.

In 2011, Decision no. 1024 dated October 12 on some measures for the reorganization of electric power generators under the authority of the Ministry of Economy, Commerce and Business Environment, by setting up the SC Complexul Energetic Oltenia SA repeals the Decision no. 56/2010 for setting up of the CN Electra SA and CN Hidroenergetica SA.

### **Hydrological risk**

Hydrological situation – The level of output is limited by the installed capacity and by the predominant hydrological situation. The dry weather affects the capability to generate and to fulfill the contractual duties, while the humid weather offers the occasion to try to increase at maximum the incomes from the supplementary output. If Hidroelectrica cannot change the hydrological situation, the company may attenuate the risks as follows:

- Monitoring the conditions and their tendencies in order to obtain the best data which will be used for forecasts and estimates;
- A prudent approach of the contractual obligations;
- Monitoring the markets for maximum incomes from the sales outside the contracts, in case of an excess;
- Taking into consideration the diversification strategies, by alternative generation sources, including the non-conventional sources.

### **Financial instruments and risk management**

#### **Risk related to the economic environment**

The process of adjusting the values according to the risk which took place on the international financial markets in the last years affected their performance, including the Romanian financial and banking market leading to a growth as regards the future economic evolution.

The trading partners of the company may be affected by liquidity crisis situations which could affect their capability to pay their current liabilities. The deterioration of the operating conditions of the creditors could also affect the management of cash flow forecast and the analysis of the depreciation

of the financial and non-financial assets. Based on the available information, the management implemented revised estimates of the future cash flows in its depreciation policy.

Identification and assessment of the investments which were influenced by a less liquid crediting market, analysis of the observance of the crediting contracts and of other contractual obligations lead to other challenges.

The management of the company cannot forecast the events which may affect the Romanian banking sector and the subsequent effect on the tendency of the economic operator to consumption.

#### **Price risk**

Although according to the Government Decision no. 638/June 20, 2007, starting with July 1, 2007, the energy market should have opened entirely to all the consumers, in fact, this thing never took place. In this context, the company has to implement precautionary clauses regarding the increase of electric power delivery tariffs for the contracts which were previously concluded on the competitive markets and to manage the rate production cost - delivery tariff of the electric power and to obtain profit.

Currently, the price of the electric power delivered on the regulated market to the 5 electric power supply and distribution subsidiaries and of the services provided by the company is not based on the supply/demand ration, but it is periodically revised by ANRE (*National Energy Regulatory Authority*).

#### **Interest rate risk**

The operational cash flows of the Company are affected by the variations of the interest rates mainly due to the foreign currency loans contracted with external financing banks.

The changes which may occur in the exchange rates and in the level of rates and interests, meaning its increase, may affect the company.

The cash risk determined by the interest rate is the risk that the interest and, as a result, the expense for it to fluctuate in time. The company has significant long term loans, with variable interest rates which may expose the company both to the price risk and to the cash risk.

On the date of this financial statement, the company does not entered into derivative instruments on the financial market and does not purchase financial instruments for the coverage of such risks.

#### **Risks in the field of human resources**

The provision of the necessary and proper personnel, as regards the number, the categories of personnel and the qualifications, represents a permanent concern of the company management. This objective is influence by several difficulties in attracting qualified operating personnel and by the diminishing of the physical and psychical abilities of the operational personnel.

In view of mitigating the effects of this risk, the company has chosen to collaborate with the educational system, by offering scholarships to the best students in order to encourage a proper number of graduates to come to Hidroelectrica.

As regards the risks related to personnel training, these are resulted from several difficulties in providing external quality training, the number of training providers which is limited and some tendencies to standardize the training.

#### **Foreign currency risk**

The currency used on domestic market is Romanian Leu, and for the foreign loans, the financing costs are expressed in different foreign currencies. As a result, the foreign currency loans are subsequently expressed in Lei. The differences resulted are included in the profit and loss account and do not influence the cash flow until the moment of liquidating the debt.

On the date of these financial statements, the company does not enter and does not purchase financial instruments for covering the foreign currency risk.

#### **Legislative risks**

The fiscal controls are frequent in Romania, and included details controls of accounting books of the tax payers. Such controls sometimes take place after months or even years after establishing the

payment obligations. The penalties conditions have a positive nature. As a result, depending on the results of these controls, the companies may have taxes and supplementary fines due. Moreover, the taxation laws are changed frequently, and the authorities are often inconsistent in interpreting the laws. Nevertheless, the company's administrators think that proper reserves have created for all the significant tax related obligations.

### **The real value of the financial instruments**

The financial instruments hold to maturity are included in the balance sheet as cost of purchase or redemption, as the case may be. The real value is the value at which the financial instrument may be exchanged in regular transactions, other than those determined by wind-up or compulsory sale. The real values are obtained from the prices settled on the market or the cash flow models, as the case may be.

On December 31, the cash and other cash on hand, trade receivables and payables and short term payables are close to their real value due to their short term maturity.

## **21. LITIGATION**

- Litigations related by the activation by Hidroelectrica SA of the force majeure clause in all the active electric power sale and purchase agreements, both on the regulated and on the competitive market.
  - Litigation resulted following the issuing by the Management Board of the Romanian Chamber of Commerce and Industry of Resolution no. 5/2011 by which the Approval of force majeure clause no. 1240/2011 was revoked, after the absolute nullity of this act was established.
  - According to the applicable legal provisions in this field, Hidroelectrica SA filed a prior complaint to the Romanian Chamber of Commerce and Industry and also requested the Appeal Court of Bucharest to suspend the Resolution no. 5/2011 until the settlement of the litigation on the merits.
    - On the trial date December 8, 2012, the Appeal Court of Bucharest admitted the request of Hidroelectrica SA and decided to suspend the Resolution no. 5/2011, solution which was maintained in appeal by the High Court of Cassation and Justice also.
  - Following the answer of the Romanian Chamber of Commerce and Industry to the prior complaint, Hidroelectrica SA submitted a claim to the Appeal Court of Bucharest for the annulment of Resolution no. 5/2011, litigation which is under development.
  - Energy Holding SRL submitted a claim against Hidroelectrica SA by which it asked the company be ordered to pay some compensations representing the difference between the price at which Hidroelectrica SA delivered electric power and the price at which Energy Holding SRL purchased the electric power which was not delivered by Hidroelectrica SA during the period of activation of the force majeure clause (October 2011 – April 2012). The litigation is pending before the Court of Law of Bucharest.
- Litigations generated by the failure to come to an agreement between ELSID SA, ELECTROCARBON SA and Hidroelectrica SA on the occasion of annual negotiation of the electric power price for 2010.

As a result of this situation, Hidroelectrica SA has notified ELSID SA and ELECTROCARBON SA about the unilateral termination of the electric power sale and purchase agreements concluded with these companies, with a prior notice of 30 days, according to the applicable contractual provisions.

By judge's orders issued by the Court of Law of Dâmbovița and Court of Law of Ilt, Hidroelectrica SA was asked to be ordered to continue the delivery of electric power until the delivering of a judgment on the substance/irrevocable judgment on the substance.

At the same time, both ELSID SA and ELECTROCARBON SA filed complaints to the court of law for the annulment of the two termination statements. In the lower court, both the Court of Law of Dâmbovița and the Court of Law of Ilt admitted the complaints of the two companies

After exercising the right of appeal, the litigations proceeded as follows:

- Court of Appeal of Craiova admitted the appeal of Hidroelectrica SA and changed the decision ruled by Court of Law of Ilt, meaning it rejected the complaint of ELECTROCARBON SA;
- Court of Appeal Ploiești rejected the appeal of Hidroelectrica SA;

- EELCTROCARBON SA appealed in cassation against the judgment of Craiova Court of Appeal. Hidroelectrica SA appealed in cassation against the judgment of Ploiești Court of Appeal. Both filed are on the docket with the High Court of Cassation and Justice.
- Trade disputes generated by the lack of liquidity for the payment at the maturity of the invoices issued by the suppliers (debits and land charges and/or interest).
- Litigations generated by the compulsory purchase order for public betterment in view of developing the investment objective – “Hydropower development of Strei River, on Subcetate-Simeria Reach” in which the owners/heirs of the lands affected by the investment request compensations for the land and for the impossibility of use.
- Litigations generated by the solving of the notifications received by the company regarding Law no. 10/2001.
- Labour litigations related to the following issues:
  - Updating with the inflation rate + legal interest of some money dues related to the period 2006-2007, paid by the company in the period 2008-2009;
  - Issuing of certificates for the activity performed in labour group I or II.
- Litigations generated by ANRE (*National Energy Regulatory Agency*), respectively:
  - Decision by which the quantity of electric power delivered by Hidroelectrica SA in the regulated market in 2012 was approved, without specifying the price;
  - Decisions regarding the quantities of electric power for the period October-November-December 2011, after the activation of the force majeure clause;
  - Action for the recovery of the difference between the price which is acknowledged by ANRE for the electric power delivered on the regulated market and the real production price of Hidroelectrica SA for 2011;
  - Contestation against the offence notice issued by ANRE for the failure to observe by Hidroelectrica SA of some obligations to report to ANRE - allowed the appeal.
- Litigation generated by the approval by the Romanian Government of the Government Decision no. 1201/2010 by which the tariff for processed water was increased substantially, 4.23 times - the action was rejected. Against the judgment of Bucharest Court of Appeal was filed an appeal.

## 22. RATING

On April 2, 2012, Moody's downgraded the rating from Ba1 stable in 2010 to Ba1 negative in 2011.

The evolution of the rating is the following:

	<b>Moody</b>	<b>Standard &amp; Poor:</b>	<b>Remarks</b>
2004	Ba3 stable	BB - stable	In 2004, Hidroelectrica obtained the company rating from the two rating companies.
2005	Ba1 stable	BB - stable	In January 2005, the company's rating was updated.
2006	Ba1 stable	BB positive	In 2006, the company's rating remained the same.
2007	Ba1 stable	BB positive	After its visit to Bucharest and the analysis of the activity in 2006, Standard and Poor's financial assessment agency decided to upgrade the rating for long term crediting activity from BB – to BB with positive outlook.
2008	Ba1 stable	BB stable BB negative trend	April 3, 2008 (November 2008)
2009	Ba1 stable		February 24, 2009

2010	Ba1 stable		March 28, 2011
2011	Ba1 negativ e		April 2, 2012

The altering of the rating outlook compared to the previous year, 2011 occurs in the context of increasing the operational costs (water) and the current drought which led to diminished financial results.

### 23. SUBSEQUENT EVENTS

- The company, as a result of the Government Decision no. 38/2012 on the approval of the strategy for the privatization of SC Hidroelectrica SA, made the first steps in listing a package of newly issued shares amounting 10 % of the existent share capital of the company, on the Bucharest Stock Exchange. Under the guidance of some specialized representative of the Ministry of Economy, Commerce and Business Environment, the company has chosen, after a public selection procedure, the consortium of financial intermediaries that will provide the support during the entire procedure for the preparing of listing the share on the stock exchange. After signing the Letter of Agreement with the winner consortium including: BRD Societe Generale, Citigroup Global Markets Limited and Intercapital, the financial due diligence and legal due diligence procedures will start with the aim of collecting valid and comprehensive information about the company in order to prepare the Issuing Prospectus. The date estimate for listing the share of SC Hidroelectrica SA on BVB is October 2012.
- The European Commission, following the claim/complaint submitted by Fondul Proprietatea SA also, notified the Romanian Government, as well as other public authorities about the formal beginning of the investigations regarding several sale and purchase contracts concluded between Hidroelectrica SA and 4 industrial producers (ArcelorMittal, Alro Slatina, Elsid SA and Electrocarbon SA), 8 electric power suppliers (Alpiq Romindustries, Alpiq Romenergie, Energy Holding SRL, Electrica SA, Electromagnetica SA, EFT, Euro - PEC SA, Luxten), as well as two 2 thermal energy producers (Electrocentrale Deva and Termoelectrica SA).
- The decisions regarding the formal beginning of investigations were registered in the State Aid Register kept by DG Competition under no. SA 33451, SA 33475, SA 33581, SA 33623, SA 33624, dated April 25, 2012.
- Currently, the Commission only issued preliminary opinions, the measures connected to the state aid will be ruled by Final Decisions (positive, if the state aid is confirmed, negative if it is not confirmed or it is conditioned).
- The Commission wishes to establish if Hidroelectrica indirectly subsidized the clients by selling them electric power at a price which is lower than the price level or bought electric power from them at a price higher than the market level.

The Board of Directors considers that , because of the results registered until now, the company is strengthening its position as leader on the energy market and appreciates the soundness of the decisions taken, the anticipative vision of the management, the value of the strategic guidance which are represented by:

- Increase of energy and economic efficiency in generating electric energy;
- Capitalization of the undeveloped hydropower potential and attracting of private capital in the development and retrofitting projects;
- Diversification and capitalization of the provided system services;
- Increasing the degree in which the hydropower potential of the country is used by creating new production capacities, from 49 % in 2005 to 62 % in 2025;
- Upgrading the operational production capacities to the level of international performances, increasing the operational safety;
- Integration into the European system of specific activities, by observing the environmental protection requirements;
- Increasing the operational safety of the water management structures;

- Optimizing the operation of the energy installation included in the assets of the Company;
- Justification and phasing of the repair, upgrading and retrofitting works within the hydropower developments;
- Analysis of the efficiency of the new investment works based on specific technical and economic indicators;
- Implementing the private management.

CHAIRPERSON  
OF THE BOARD OF DIRECTORS  
REMUS VULPESCU  
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GENERAL MANAGER  
DRAGOS ZACHIA-ZLATEA  
*[Illegible signature]*